



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

<b>CEN WORKSHOP AGREEMENT</b>	<b>CWA 15464-5:2005</b>
<b>Humanitarian Mine Action - EOD Competency Standards - Part 5: Competency for EOD level 3</b>	
<b>Date of approval: 2005-07-05</b>	<b>CEN/WS 013</b>

2005-12-07

WI: WS013005

Sehr geehrte Mitglieder,

Dear Members,

Chers Membres,

aufgrund des erreichten technischen Konsens und der positiven Übereinstimmung eines Arbeitskreises von Vertretern interessierter Kreise senden wir Ihnen den Text der o.g. CEN-Fachvereinbarung.

Further to the technical consensus reached and favourable agreement by a Workshop of representatives of interested parties, please find enclosed the text of the above mentioned CEN Workshop Agreement.

Suite à l'établissement d'un consensus technique et à l'accord favorable d'un Workshop de représentants des parties intéressées, nous vous prions de trouver, ci-joint, le texte du CEN Workshop Agreement mentionné ci-dessus.

Das durch den Arbeitskreis verfolgte Verfahren in der Entwicklung dieser Fachvereinbarung wurde von den nationalen Mitgliedern von CEN angenommen, aber weder die nationalen Mitglieder von CEN noch das CEN-Management-Zentrum können für den technischen Inhalt dieser CEN-Fachvereinbarung oder mögliche Widersprüche zu Normen oder Gesetzen verantwortlich gemacht werden.

The formal process followed by the workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

Le processus formel mis en oeuvre par le Workshop pour le développement de ce Workshop Agreement a été entériné par les Membres nationaux du CEN, mais ni les Membres nationaux du CEN, ni le Centre de Gestion du CEN ne peuvent être tenus pour responsables du contenu technique de ce CEN Workshop Agreement ou de possibles divergences avec des normes ou avec la législation.

Eine List der Einzelpersonlichkeiten und Organisationen, die den technischen Konsens, vertreten durch diese CEN-Fachvereinbarung, unterstützten, ist im CEN-Management-Zentrum verfügbar. Kommentare oder Vorschläge von Anwendern dieser CEN-Fachvereinbarung sind willkommen und sollten an das CEN-Management-Zentrum gesandt werden.

A list of the individuals and organizations which supported the technical consensus represented by this CEN Workshop Agreement is available to purchasers from the CEN Management Centre. Comments or suggestions from the users of this CEN Workshop Agreement are welcome and should be addressed to the CEN Management Centre.

La liste des individus et des organisations qui ont soutenu le consensus technique représenté par ce CEN Workshop Agreement est disponible auprès du Centre de Gestion du CEN. Commentaires et suggestions de la part des utilisateurs de ce Workshop Agreement sont bienvenus, et doivent être adressés au Centre de Gestion du CEN.

Diese Fachvereinbarung wird in Übereinstimmung mit den Entscheidungen des Verwaltungsrates und der Resolution CA 31/1997 verteilt.

This Workshop Agreement is circulated in accordance with the decisions of the Administrative Board and Resolution CA 31/1997.

Ce Workshop Agreement est distribué selon les décisions du Conseil d'Administration et selon la Résolution CA 31/1997.

Diese CEN-Fachvereinbarung kann in keiner Weise als eine durch CEN und ihre Mitglieder entwickelte offizielle Norm betrachtet werden.

This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its Members.

Ce Workshop Agreement ne peut en aucun cas être considéré comme une norme officielle du CEN et de ses Membres.

Mit freundlichen Grüßen

Yours faithfully

Veuillez agréer, Chers Membres, l'expression de nos sentiments distingués.

STEPHEN RUSSELL  
Director, Standards

Enclosures

**CEN**

**CWA 15464-5**

**WORKSHOP**

December 2005

**AGREEMENT**

---

ICS 95.020

English version

## Humanitarian Mine Action - EOD Competency Standards - Part 5: Competency for EOD level 3

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its Members.

This CEN Workshop Agreement is publicly available as a reference document from the CEN Members National Standard Bodies.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

---

© 2005 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No.:CWA 15464-5:2005 D/E/F

## Contents

Page

Foreword .....	3
<b>1 KNOWLEDGE BASE .....</b>	<b>4</b>
1.1 Explosive Ordnance Recognition .....	4
1.2 Explosives Theory and Safe Handling of Explosives Ordnance .....	4
1.3 Methods of Disposal .....	4
1.4 Safety Precautions .....	5
1.5 Storage and Transportation of Explosives .....	5
1.6 Management of Demolition Sites .....	5
1.7 Management .....	5
<b>2 EQUIPMENT .....</b>	<b>5</b>
2.1 Gather and prepare search or explosive ordnance disposal equipment .....	5
2.2 Operate search or explosive ordnance disposal equipment .....	6
2.3 Maintain search or explosive ordnance disposal equipment .....	6
2.4 Manage search or explosive ordnance disposal equipment .....	7
<b>3 MANAGEMENT .....</b>	<b>7</b>
3.1 Initial Threat Assessment .....	7
3.2 Threat assessment .....	7
3.3 Assess the explosive ordnance-related risks .....	7
3.4 Gather and analyse information on the location of explosive ordnance .....	8
3.6 Develop plans to minimise explosive ordnance-related risks .....	9
3.7 Use local and other information to locate affected areas .....	10
3.9 Define the specific area to be searched .....	10
3.10 Record the possible location and general disposition of explosive ordnance .....	11
3.11 Identify and establish working relationships .....	11
3.12 Allocate explosive ordnance disposal resources .....	12
3.13 Respond to developing events and imperatives .....	12
3.14 Evaluate the effectiveness of explosive ordnance disposal operations and programmes .....	13
3.15 Provide advice on explosive ordnance disposal-related matters .....	13
<b>4 LOCATING AND SAFE ACCESS .....</b>	<b>14</b>
4.4 Ensure the accurate recording of the possible location and general disposition of explosive ordnance .....	14
4.5 Detect the possible presence of explosive ordnance and other risks .....	14
4.6 Locate explosive ordnance or confirm their absence .....	15
4.7 Identify the specific hazards posed by the environs in which explosive ordnance are located .....	15
4.8 Gain safe access to explosive ordnance .....	16
<b>5 TRANSPORTATION OF EXPLOSIVE ORDNANCE .....</b>	<b>17</b>
5.1 Determine whether to move explosive ordnance .....	17
5.2 Move explosive ordnance within the designated area .....	17
5.3 Transport explosive ordnance for analysis and/or disposal .....	17
<b>6 FINAL DISPOSAL .....</b>	<b>18</b>
6.1 Confirm the threat posed by explosive ordnance .....	18
6.2 Implement protective measures .....	19
6.4 Dispose of explosive ordnance .....	19
<b>7 REMEDIATION .....</b>	<b>20</b>
7.1 Provide advice on the remediation of cleared areas .....	20
7.2 Contribute to the remediation of cleared areas .....	21
<b>8 POST TASK ACTIVITIES .....</b>	<b>21</b>
8.1 Complete post task recording and reporting .....	21
8.2 Provide supplementary information, statements or reports .....	22

## Foreword

This CEN Workshop Agreement has been prepared under a mandate and funded by EC DG AIDCO.

The following organisations have been members of the workshop and contributed to the CWA. Belgian Armed Forces, Danish Demining Group, French Armed Forces, Geneva International Centre for Humanitarian Demining, International School for Security and Explosives Education, Mines Advisory Group, MAG, NATO Standardisation Agency, Science Technology and Manufacturing Technologies Alliance (SEMTA) and the Standards Setting Body for Explosives, Munitions and Search Occupations (SSB for EMSO), Spanish Armed Forces, Swedish EOD and Demining Centre, SWEDEC, Swedish Rescue Services Agency, Swiss EOD Centre, Turkish Armed Forces, United Kingdom Department for International Development, United Nations Mine Action Services, UNMAS.

The secretariat was held by SIS Swedish Standards Institute.

The final review/endorsement round for this CWA was successfully closed during the final meeting of 2005-07-05.

The final text of this CWA was submitted to CEN for publication on 2005-10-27.

This CWA will be handed to the Geneva International Centre For Humanitarian Demining, GICHD for integration into the International Mine Action Standards (IMAS) collection.”

This CEN Workshop Agreement is publicly available as a reference document from the National Members of CEN: AENOR, AFNOR, BSI, CSNI, CYS, DIN, DS, ELOT, EVS, IBN, IPQ, IST, LVS, LST, MSA, MSZT, NEN, NSAI, ON, PKN, SEE, SIS, SIST, SFS, SN, SNV, SUTN and UNI.

## **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
- 1.1.4 Mines- detailed
- 1.1.5 Submunition - generic
- 1.1.6 Submunition - detailed
- 1.1.7 Air Dropped Weapons - generic
- 1.1.8 Air Dropped Weapons - detailed
- 1.1.9 Guided Weapons - generic
- 1.1.10 Guided Weapons - detailed
- 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.
- 1.2.6 Movement of Explosive Ordnance

### **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
- 1.3.7 Detonation by propagation – pit lay out

- 1.3.8 Low Order Techniques
- 1.3.9 Disposal by Burning
- 1.3.10 Render safe procedures in accordance with the relevant authoritative documents.

#### **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

#### **1.6 Management of Demolition Sites**

- 1.6.1 Selection and layout of disposal site
- 1.6.2 Management of disposal site

#### **1.7 Management**

- 1.7.1 Quality Assurance
- 1.7.2 Quality control
- 1.7.3 Operational site management
- 1.7.4 Incident / accident investigation

## **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;

## **CWA 15464-5:2005 (E)**

- 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.

## **2.4 Manage search or explosive ordnance disposal equipment**

- 2.4.1 Individuals must demonstrate that they carry out regular inspections of the servicing log for all equipment in use;
- 2.4.2 Individuals must demonstrate that they monitor defects through a defect reporting schedule;
- 2.4.3 Individuals must demonstrate that they manage the consumption and order of consumables through the organisation's logistic system;
- 2.4.4 Individuals must demonstrate that they ensure all personnel comply with operational requirements and organisational procedures;
- 2.4.5 Individuals must explain the equipment management system for their organization;
- 2.4.6 Individuals must explain the equipment's normal functioning and acceptable limits of deviation;
- 2.4.7 Individuals must explain the correct use of equipment, operational requirements and organisational procedures;
- 2.4.8 Individuals must explain how to report any defective equipment and the importance of following up;
- 2.4.9 Individuals must explain importance of ensuring a simple and effective logistics supply chain.

## **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.

### **3.2 Threat assessment**

- 3.2.1 Individuals must demonstrate that they identify and gather the relevant information;
- 3.2.2 Individuals must demonstrate that they use information that is complete, valid, accurate and reliable;
- 3.2.3 Individuals must demonstrate that they can use simple threat analysis tools;
- 3.2.4 Individuals must demonstrate that they can justify their decisions;
- 3.2.5 Individuals must explain methods and sources of gathering intelligence material;
- 3.2.6 Individuals must explain a simple threat analysis tool/system;
- 3.2.7 Individuals must explain decision making process.

### **3.3 Assess the explosive ordnance-related risks**

- 3.3.1 Individuals must demonstrate that they identify accurately what is at risk;
- 3.3.2 Individuals must demonstrate that they identify objectively what is the likely nature of the risks;
- 3.3.3 Individuals must demonstrate that they identify objectively the potential consequences of the risk and of non-action;



## **CWA 15464-5:2005 (E)**

- 3.3.4 Individuals must demonstrate that they challenge or confirm the mission or objectives when appropriate to do so;
- 3.3.5 Individuals must demonstrate that they carry out any necessary research to refine their understanding of the matter;
- 3.3.6 Individuals must demonstrate that they consult relevant interested parties and agencies on their draft risk assessment;
- 3.3.7 Individuals must demonstrate that they revise their risk assessment, incorporating consultees' feedback into their assessment;
- 3.3.8 Individuals must demonstrate that they record accurately and validate effectively their risk assessment;
- 3.3.9 Individuals must explain the overall strategy, their mission and objectives;
- 3.3.10 Individuals must explain a comprehensive appreciation of the potential consequences of explosive ordnance;
- 3.3.11 Individuals must explain the potential impact of changing operational priorities and tempos;
- 3.3.12 Individuals must explain what may be at risk;
- 3.3.13 Individuals must explain what are the acceptable risks;
- 3.3.14 Individuals must explain the role, capabilities, modus operandi and limitations of interested parties and agencies;
- 3.3.15 Individuals must explain whom to consult and the relevance of their contributions;
- 3.3.16 Individuals must explain risk assessment techniques;
- 3.3.17 Individuals must explain methods of minimising risks;
- 3.3.18 Individuals must explain methods of recording and validating their risk assessment;
- 3.3.19 Individuals must explain operational requirements and organisational procedures.

### **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 their 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 their 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;
- 3.4.13 Individuals must explain who are the interested parties and their likely interest;
- 3.4.14 Individuals must explain how to communicate effectively with interested parties;
- 3.4.15 Individuals must explain how to carry out a threat assessment and why it is important to do so;
- 3.4.16 Individuals must explain what are their 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.

### **3.6 Develop plans to minimise explosive ordnance-related risks**

- 3.6.1 Individuals must demonstrate that they establish what resources they have and what they need;
- 3.6.2 Individuals must demonstrate that they establish the nature of the contributions of other agencies;
- 3.6.3 Individuals must demonstrate that they review all practical options and select the optimum course of action for the circumstances;
- 3.6.4 Individuals must demonstrate that they develop a plan in accordance with organisational requirements;
- 3.6.5 Individuals must demonstrate that they consult on their draft plan, revising it as necessary in the light of feedback received;
- 3.6.6 Individuals must demonstrate that they record and validate their plan in accordance with organisational requirements;
- 3.6.7 Individuals must demonstrate that they communicate their plan to those who need to know;
- 3.6.8 Individuals must explain what are the potential risks;
- 3.6.9 Individuals must explain what are the acceptable levels of risk;
- 3.6.10 Individuals must explain their capabilities, limitations and resources and those of any relevant agencies;
- 3.6.11 Individuals must explain methods of minimising risks;
- 3.6.12 Individuals must explain operational requirements and organisational procedures;
- 3.6.13 Individuals must explain planning techniques;
- 3.6.14 Individuals must explain communication techniques;
- 3.6.15 Individuals must explain whom should be consulted and why;
- 3.6.16 Individuals must explain who is likely to be affected by their plan;
- 3.6.17 Individuals must explain the time-scales in which they are operating.

**3.7 Use local and other information to locate affected areas**

- 3.7.1 Individuals must demonstrate that they are within the correct vicinity;
- 3.7.2 Individuals must demonstrate that they gather, analyse and interpret local information in order to re-assess the extent of the task;
- 3.7.3 Individuals must demonstrate that they ensure that their definition of the area meets operational requirements, organisational procedures and local conditions;
- 3.7.4 Individuals must demonstrate that they record and communicate their definition of the affected area clearly;
- 3.7.5 Individuals must explain how to interpret information (e.g maps, charts, drawings or photographic images etc);
- 3.7.6 Individuals must explain sources of information and how to access them;
- 3.7.7 Individuals must explain different methods of confirming that they are in the correct location;
- 3.7.8 Individuals must explain the different audiences and their communication needs;
- 3.7.9 Individuals must explain how to communicate with different audiences;
- 3.7.10 Individuals must explain the importance of checking that their audience has understood them.

**3.9 Define the specific area to be searched**

- 3.9.1 Individuals must demonstrate that they assess and validate any additional information they receive;
- 3.9.2 Individuals must demonstrate that they communicate the definition of the area to be searched clearly and in the appropriate format;
- 3.9.3 Individuals must demonstrate that they ensure that their definition meets operational requirements and organisational procedures;
- 3.9.4 Individuals must demonstrate that they assess and are able to describe satisfactorily the local environment and secondary hazards if there are any;
- 3.9.5 Individuals must demonstrate that they identify and describe accurately the potential access routes to the area;
- 3.9.6 Individuals must explain who needs to know what information and the nature of their interest;
- 3.9.7 Individuals must explain the different methods of communication and when each might be appropriate;
- 3.9.8 Individuals must explain how to interpret information (e.g. maps, charts, drawings or photographic images);
- 3.9.9 Individuals must explain the requirements of their operational directive and organisational procedures;
- 3.9.10 Individuals must explain any local factors that should be taken into account;
- 3.9.11 Individuals must explain the capabilities and limitations of personnel and equipment.

### **3.10 Record the possible location and general disposition of explosive ordnance**

- 3.10.1 Individuals must demonstrate that they ensure that the information is recorded in the appropriate format;
- 3.10.2 Individuals must demonstrate that they ensure that the records meet operational requirements and organisational procedures;
- 3.10.3 Individuals must demonstrate that they communicate the recorded areas to appropriate authority;
- 3.10.4 Individuals must demonstrate that they ensure that the records are updated or amended as necessary;
- 3.10.5 Individuals must explain the appropriate formats for recording information (e.g maps, charts, drawings, or photographic images);
- 3.10.6 Individuals must explain operational requirements and organisational procedures;
- 3.10.7 Individuals must explain who are the authorities and what are their communication needs;
- 3.10.8 Individuals must explain the different methods of communicating information (e.g. written reports, emails, and fax).

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

- 3.11.1 Individuals must demonstrate that they identify accurately who are the interested parties;
- 3.11.2 Individuals must demonstrate that they establish accurately the role and likely nature of interest of the interested parties;
- 3.11.3 Individuals must demonstrate that they establish objectively the contribution and capabilities they require of interested parties and the contribution they require of them (if any);
- 3.11.4 Individuals must demonstrate that they decide objectively with whom they will establish a working relationship;
- 3.11.5 Individuals must demonstrate that they agree communication arrangements and working practice if required in accordance with organisational procedures;
- 3.11.6 Individuals must demonstrate that they develop and maintain the relationship, altering the terms of reference if required;
- 3.11.7 Individuals must demonstrate that they formalise the working arrangements when appropriate to do so;
- 3.11.8 Individuals must demonstrate that they deal with interested parties in a way that maintains or enhances their organisation's reputation;
- 3.11.9 Individuals must demonstrate that they communicate effectively with interested parties in a way that is likely to appeal to the nature of their interest;
- 3.11.10 Individuals must explain who the interested parties may be, the nature of their interest and their aspirations;
- 3.11.11 Individuals must explain the possible contribution that interested parties could make;
- 3.11.12 Individuals must explain the factors affecting their decision as to whether to establish working relationships;
- 3.11.13 Individuals must explain operational requirements and organisational procedures;

## **CWA 15464-5:2005 (E)**

3.11.14 Individuals must explain the different types of working relationship (e.g. contracted, informal);

3.11.15 Individuals must explain communication techniques;

3.11.16 Individuals must explain their personal level of authority.

### **3.12 Allocate explosive ordnance disposal resources**

3.12.1 Individuals must demonstrate that they identify from the plan and source suitable explosive ordnance disposal resources to be allocated;

3.12.2 Individuals must demonstrate that they prioritise their allocation of explosive ordnance disposal resources to meet their objectives;

3.12.3 Individuals must demonstrate that they identify the destination of explosive ordnance disposal resources and arrange for their distribution;

3.12.4 Individuals must demonstrate that they ensure that any special distribution and storage conditions are available if necessary;

3.12.5 Individuals must demonstrate that they confirm that the explosive ordnance disposal resources have reached their destination in a serviceable condition;

3.12.6 Individuals must demonstrate that they manage the allocation of explosive ordnance disposal resources in accordance with organisational procedures;

3.12.7 Individuals must demonstrate that they establish an effective replenishment system;

3.12.8 Individuals must explain the requirements of the plan;

3.12.9 Individuals must explain any hazardous and non-hazardous resources required and any attendant constraints for their movement and storage;

3.12.10 Individuals must explain their role in the supply and distribution systems;

3.12.11 Individuals must explain operational requirements and organisational procedures;

3.12.12 Individuals must explain the demands of task management.

### **3.13 Respond to developing events and imperatives**

3.13.1 Individuals must demonstrate that they monitor the operation effectively;

3.13.2 Individuals must demonstrate that they identify and evaluate the possible impact of changes on the operation, if any;

3.13.3 Individuals must demonstrate that they consult on and revise the plan and implement any changes as necessary;

3.13.4 Individuals must demonstrate that they communicate effectively any changes to be implemented to those who need to know;

3.13.5 Individuals must demonstrate that they confirm that the changes have been implemented as required;

3.13.6 Individuals must explain the requirements of the plan;

3.13.7 Individuals must explain monitoring techniques;

- 3.13.8 Individuals must explain task management;
- 3.13.9 Individuals must explain the possible effects of change on their operation;
- 3.13.10 Individuals must explain possible methods of responding to change;
- 3.13.11 Individuals must explain how to assess the benefits of different courses of action.

### **3.14 Evaluate the effectiveness of explosive ordnance disposal operations and programmes**

- 3.14.1 Individuals must demonstrate that they monitor the operational teams effectively;
- 3.14.2 Individuals must demonstrate that they collect and analyse objectively information received including feedback and progress reports when possible;
- 3.14.3 Individuals must demonstrate that they draw out the successes of the operation and the lessons learned for future reference;
- 3.14.4 Individuals must demonstrate that they review and make recommendations for refinements to current procedures;
- 3.14.5 Individuals must demonstrate that they implement effectively any immediately necessary changes, obtaining approval where necessary;
- 3.14.6 Individuals must demonstrate that they record their findings and report their recommendations through the appropriate channels;
- 3.14.7 Individuals must demonstrate that they ensure the effectiveness of relevant training;
- 3.14.8 Individuals must explain operational requirements and organisational procedures;
- 3.14.9 Individuals must explain monitoring techniques and procedures;
- 3.14.10 Individuals must explain the scope for change;
- 3.14.11 Individuals must explain their personal level of authority;
- 3.14.12 Individuals must explain what immediate changes are required.

### **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;
- 3.15.4 Individuals must demonstrate that they liaise effectively with other agencies to enable them to provide the necessary information;
- 3.15.5 Individuals must demonstrate that they ensure that their advice is consistent with other collaborating organisations qualified to give such advice as required;
- 3.15.6 Individuals must explain customer needs and how they may use the information;
- 3.15.7 Individuals must explain a comprehensive technical understanding of explosive ordnance-related matters;

## **CWA 15464-5:2005 (E)**

- 3.15.8 Individuals must explain sources of information and how to access them;
- 3.15.9 Individuals must explain what format is appropriate for giving advice;
- 3.15.10 Individuals must explain effective communication techniques;
- 3.15.11 Individuals must explain operational requirements and organisational procedures;
- 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**

### **4.4 Ensure the accurate recording of the possible location and general disposition of explosive ordnance**

- 4.4.1 Individuals must demonstrate that they ensure that the information is recorded in the appropriate format;
- 4.4.2 Individuals must demonstrate that they ensure that the records meet operational requirements and organisational procedures;
- 4.4.3 Individuals must demonstrate that they communicate the recorded areas to appropriate authority;
- 4.4.4 Individuals must demonstrate that they ensure that the records are updated or amended as necessary;
- 4.4.5 Individuals must explain the appropriate formats for recording information (e.g. maps, charts, drawings, or photographic images);
- 4.4.6 Individuals must explain operational requirements and organisational procedures;
- 4.4.7 Individuals must explain who are the authorities and what are their communication needs;
- 4.4.8 Individuals must explain the different methods of communicating information (e.g. written reports, emails, and fax).

### **4.5 Detect the possible presence of explosive ordnance and other risks**

- 4.5.1 Individuals must demonstrate that they draw up a plan of action in line with operational requirements and organisational procedures;
- 4.5.2 Individuals must demonstrate that they implement the plan and re-evaluate it as necessary;
- 4.5.3 Individuals must demonstrate that they take prompt, corrective action in the event of problems arising;
- 4.5.4 Individuals must demonstrate that they use alternative methods to corroborate their evidence when appropriate;
- 4.5.5 Individuals must demonstrate that they challenge inconsistencies or anomalies of information;
- 4.5.6 Individuals must explain the planning process;
- 4.5.7 Individuals must explain the capabilities and limitations of resources;

- 4.5.8 Individuals must explain operational requirements and organisational procedures;
- 4.5.9 Individuals must explain why a particular detection method and certain resources are appropriate to the occasion;
- 4.5.10 Individuals must explain the probable nature and extent of the risk or hazard;
- 4.5.11 Individuals must explain what is the best use of personal protective equipment;
- 4.5.12 Individuals must explain the basis on which they might challenge the accuracy or consistency of information.

#### **4.6 Locate explosive ordnance or confirm their absence**

- 4.6.1 Individuals must demonstrate that they use appropriate equipment effectively to the recognised standards and manufacturer's instructions;
- 4.6.2 Individuals must demonstrate that they mark the location of the explosive ordnance if required to do so;
- 4.6.3 Individuals must demonstrate that they plot the location of the explosive ordnance to the prescribed accuracy if required to do so;
- 4.6.4 Individuals must demonstrate that they use appropriate sources of information to confirm their findings;
- 4.6.5 Individuals must demonstrate that they confirm that the area has been searched within the stated criteria;
- 4.6.6 Individuals must explain how to use the equipment;
- 4.6.7 Individuals must explain what is the best use of personal protective equipment if required;
- 4.6.8 Individuals must explain the capabilities of the search method used;
- 4.6.9 Individuals must explain the interaction between suites of equipment;
- 4.6.10 Individuals must explain when and why it may be appropriate to mark and plot the location of explosive ordnance;
- 4.6.11 Individuals must explain sources of information and their various strengths and weaknesses;
- 4.6.12 Individuals must explain what follow-on action is appropriate;
- 4.6.13 Individuals must explain the stated criteria for searching the area and their implications.

#### **4.7 Identify the specific hazards posed by the environs in which explosive ordnance are located**

- 4.7.1 Individuals must demonstrate that they carry out an appropriate survey of the local environment and record their findings;
- 4.7.2 Individuals must demonstrate that they contact relevant agencies and other sources of information where necessary to amplify their understanding of the potential hazard, taking into account any impact of contaminants in the vicinity;
- 4.7.3 Individuals must demonstrate that they establish objectively the nature of any personal hazard;
- 4.7.4 Individuals must demonstrate that they assess accurately the feasibility of the operation;



## **CWA 15464-5:2005 (E)**

- 4.7.5 Individuals must demonstrate that they take all possible action where appropriate to manage the hazards;
- 4.7.6 Individuals must demonstrate that they report their recommendations in accordance with operational procedures;
- 4.7.7 Individuals must explain what kind of survey may be appropriate and why;
- 4.7.8 Individuals must explain the possible effect of the hazard;
- 4.7.9 Individuals must explain which agencies may be relevant and why;
- 4.7.10 Individuals must explain what can be done to minimise the hazard to an acceptable level or eliminate it;
- 4.7.11 Individuals must explain the capabilities, limitations and availability of resources;
- 4.7.12 Individuals must explain operational requirements and organisational procedures.

### **4.8 Gain safe access to explosive ordnance**

- 4.8.1 Individuals must demonstrate that they identify the likely threat posed by the explosive ordnance when possible;
- 4.8.2 Individuals must demonstrate that they take optimum practical precautions to manage the hazards posed by the environs within organisational procedures and the current constraints;
- 4.8.3 Individuals must demonstrate that they select and use appropriate resources and personal protective equipment that is likely to be suitable for the task;
- 4.8.4 Individuals must demonstrate that they plan to gain access to the explosive ordnance by the optimum route;
- 4.8.5 Individuals must demonstrate that they implement the plan and re-evaluate it with regard to additional hazards;
- 4.8.6 Individuals must demonstrate that they consult local agencies and individuals when appropriate;
- 4.8.7 Individuals must demonstrate that they mark the access route when appropriate to do so;
- 4.8.8 Individuals must demonstrate that they pinpoint the position of the explosive ordnance to such proximity as to enable it to be identified;
- 4.8.9 Individuals must explain the capabilities and limitations of the resources;
- 4.8.10 Individuals must explain operational requirements and organisational procedures;
- 4.8.11 Individuals must explain what type of personal protective equipment may be appropriate;
- 4.8.12 Individuals must explain which agencies and other sources of information may be relevant;
- 4.8.13 Individuals must explain the range of likely hazards they may be expected to encounter in the circumstances.

## **5 TRANSPORTATION OF EXPLOSIVE ORDNANCE**

### **5.1 Determine whether to move explosive ordnance**

- 5.1.1 Individuals must demonstrate that they determine whether it is desirable to move the explosive ordnance;
- 5.1.2 Individuals must demonstrate that they ensure that their decision as to whether or not to move the explosive ordnance is based upon, the status of the explosive ordnance; operational expediency; an assessment of secondary hazards; the practicality of transporting the explosive ordnance; an assessment of the risks to the local environs;
- 5.1.3 Individuals must explain the nature of the risk posed by moving the explosive ordnance;
- 5.1.4 Individuals must explain the nature of the risk posed by secondary hazards;
- 5.1.5 Individuals must explain why it might be desirable to move the explosive ordnance;
- 5.1.6 Individuals must explain the availability of suitable transport.

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

- 5.2.2 Individuals must demonstrate that they develop an effective plan as to how they will move the explosive ordnance;
- 5.2.3 Individuals must demonstrate that they liaise effectively with other agencies and individuals;
- 5.2.4 Individuals must demonstrate that they confirm the availability of resources to implement the plan;
- 5.2.5 Individuals must demonstrate that they ensure that their plan meets operational requirements and organisational procedures;
- 5.2.6 Individuals must demonstrate that they consider and action the safety procedures if appropriate;
- 5.2.7 Individuals must demonstrate that they implement the plan, and assess its effectiveness, adapting it where necessary;
- 5.2.8 Individuals must explain the functioning of the explosive ordnance and the relevant "render safe" procedures;
- 5.2.9 Individuals must explain what constitutes the "designated area";
- 5.2.10 Individuals must explain operational requirements and organisational procedures;
- 5.2.11 Individuals must explain the capabilities, limitations and uses of the resources;
- 5.2.12 Individuals must explain with whom they should maintain effective liaison and why;
- 5.2.13 Individuals must explain the effects of a successful plan and the consequences of an unsuccessful one.

### **5.3 Transport explosive ordnance for analysis and/or disposal**

- 5.3.1 Individuals must demonstrate that they develop an effective plan to move and transport the explosive ordnance;
- 5.3.2 Individuals must demonstrate that they liaise effectively with other agencies and individuals;
- 5.3.3 Individuals must demonstrate that they confirm the availability of resources to implement the plan;

## **CWA 15464-5:2005 (E)**

- 5.3.4 Individuals must demonstrate that they ensure that their plan meets operational requirements and organisational procedures;
- 5.3.5 Individuals must demonstrate that they consider and action the safety procedures if appropriate;
- 5.3.6 Individuals must demonstrate that they implement their plan, re-assessing its effectiveness and adapting it as necessary;
- 5.3.7 Individuals must explain the functioning of the explosive ordnance and relevant “render safe” procedures;
- 5.3.8 Individuals must explain the requirements of statutory instruments for the packaging and transportation as appropriate;
- 5.3.9 Individuals must explain their destination and the optimum route;
- 5.3.10 Individuals must explain operational requirements and organisational procedures;
- 5.3.11 Individuals must explain the capabilities, limitations and uses of the resources;
- 5.3.12 Individuals must explain with whom to maintain effective liaison and why they should do so;
- 5.3.13 Individuals must explain the effect of a successful plan and the consequences of an unsuccessful one.

## **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);
- 6.1.2 Individuals must demonstrate that they achieve a positive identification of the fusing systems and their status;
- 6.1.3 Individuals must demonstrate that they establish objectively the status by the optimum means when possible to do so;
- 6.1.4 In the event that a positive identification isn't possible individuals must demonstrate that they are able to assess the status of the explosive ordnance, inspecting and recording sufficient details enabling them to carry out further research aiming at a positive identification where possible;
- 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;
- 6.1.9 Individuals must explain changing operational tempos and priorities;
- 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;
- 6.1.13 Individuals must explain the responsibilities, capabilities and limitations of other agencies;
- 6.1.14 Individuals must explain operational requirements and organisational procedures;
- 6.1.15 Individuals must explain to whom to report threats posed by hazardous non-explosive ordnance.

## **6.2 Implement protective measures**

- 6.2.2 Individuals must demonstrate that they define objectively what protective measures are required that are consistent with the threat;
- 6.2.3 Individuals must demonstrate that they draw up and execute an implementation plan in accordance with operational requirements and organisational procedures;
- 6.2.4 Individuals must demonstrate that they confirm the availability of resources to implement the protective measures;
- 6.2.5 Individuals must demonstrate that they consult relevant documents and people to determine accurately what measures are required;
- 6.2.6 Individuals must demonstrate that they maintain effective liaison with and advise other agencies and individuals to ensure that the required protective measures can be implemented;
- 6.2.7 Individuals must demonstrate that they take into account the possible impact on the environment of the protective measures;
- 6.2.8 Individuals must demonstrate that they evaluate the effectiveness of their plan, adapting it where necessary;
- 6.2.9 Individuals must demonstrate that they can plan and implement evacuation;
- 6.2.10 Individuals must explain changing operational tempos and priorities;
- 6.2.11 Individuals must explain improvisation techniques;
- 6.2.12 Individuals must explain how to use the appropriate agencies to optimum effect;
- 6.2.13 Individuals must explain how to brief their team and other relevant people;
- 6.2.14 Individuals must explain the capabilities, limitations and uses of the resources and protective measures;
- 6.2.15 Individuals must explain sources of technical information;
- 6.2.16 Individuals must explain how to interpret technical information;
- 6.2.17 Individuals must explain what is the minimum safety distance for various threats;
- 6.2.18 Individuals must explain when and why they might review and change the minimum safety distance.

## **6.4 Dispose of explosive ordnance**

- 6.4.1 Individuals must demonstrate that they, under supervision, can dispose of single explosive ordnance items in situ;

## **CWA 15464-5:2005 (E)**

- 6.4.2 Individuals must demonstrate that they can dispose of multiple explosive ordnance items;
- 6.4.3 Individuals must demonstrate that they determine the action required for disposal;
- 6.4.4 Individuals must demonstrate that they develop an effective plan for the disposal of the explosive ordnance;
- 6.4.5 Individuals must demonstrate that they confirm the availability of resources to implement the plan;
- 6.4.6 Individuals must demonstrate that they ensure that their plan meets operational requirements and organisational procedures;
- 6.4.7 Individuals must demonstrate that they action or complete the “render safe” or “final disposal” procedures as appropriate, re-assessing their plan’s effectiveness and adapting it where necessary;
- 6.4.8 Individuals must demonstrate that they action or complete the final disposal procedures as appropriate, re-assessing their plan’s effectiveness and adapting it where necessary;
- 6.4.9 Individuals must demonstrate that they record and report the disposal as required;
- 6.4.10 Individuals must explain the functioning of the explosive ordnance and the relevant “render safe” procedures;
- 6.4.11 Individuals must explain operational requirements and organisational procedures;
- 6.4.12 Individuals must explain the capabilities, limitations and uses of resources;
- 6.4.13 Individuals must explain with whom to maintain effective liaison and why they should do so;
- 6.4.14 Individuals must explain the effect of a successful disposal and the consequences of an unsuccessful disposal.

## **7 REMEDIATION**

### **7.1 Provide advice on the remediation of cleared areas**

- 7.1.1 Individuals must demonstrate that they establish objectively the effect of the operation on the environment;
- 7.1.2 Individuals must demonstrate that they obtain all necessary information from other agencies to establish the nature and extent of the effect;
- 7.1.3 Individuals must demonstrate that they provide advice that is: realistic; practicable; objective;
- 7.1.4 Individuals must demonstrate that they communicate in a way that their audience can readily understand;
- 7.1.5 Individuals must demonstrate that they maintain an ongoing and accurate record of their findings and actions taken as appropriate;
- 7.1.6 Individuals must explain the effects of search or disposal operations;
- 7.1.7 Individuals must explain who are their audiences and their likely communication needs;
- 7.1.8 Individuals must explain the information and recording requirements of the operational requirements and organisational procedures.

## **7.2 Contribute to the remediation of cleared areas**

- 7.2.1 Individuals must demonstrate that they define accurately the areas in which they can contribute effectively;
- 7.2.2 Individuals must demonstrate that they establish objectively the limits of their responsibility if not previously agreed;
- 7.2.3 Individuals must demonstrate that they agree with relevant parties what action will be taken;
- 7.2.4 Individuals must demonstrate that they develop a remediation plan to the agreed standard;
- 7.2.5 Individuals must demonstrate that they implement and evaluate the remediation plan, adapting it where necessary;
- 7.2.6 Individuals must demonstrate that they liaise with any external quality assurance agencies when appropriate to do so;
- 7.2.7 Individuals must demonstrate that they confirm that the area has been cleared to the required standard;
- 7.2.8 Individuals must explain what are the relevant legal requirements;
- 7.2.9 Individuals must explain different methods of area remediation;
- 7.2.10 Individuals must explain their responsibilities, capabilities, limitations and resources;
- 7.2.11 Individuals must explain what are the agreed standards;
- 7.2.12 Individuals must explain who are the relevant parties and their areas of interest;
- 7.2.13 Individuals must explain the role of external quality assurance agencies.

## **8 POST TASK ACTIVITIES**

### **8.1 Complete post task recording and reporting**

- 8.1.1 Individuals must demonstrate that they establish objectively what is needed;
- 8.1.2 Individuals must demonstrate that they identify and gather the relevant information;
- 8.1.3 Individuals must demonstrate that they identify the audiences for the report;
- 8.1.4 Individuals must demonstrate that they use information that is complete, valid, accurate and reliable;
- 8.1.5 Individuals must demonstrate that they ensure that their report meets the requirements of the organisational procedures;
- 8.1.6 Individuals must demonstrate that they present their report in the appropriate format;
- 8.1.7 Individuals must demonstrate that they produce their report within the agreed timescale;
- 8.1.8 Individuals must demonstrate that they record their report and keep on file;
- 8.1.9 Individuals must explain reporting skills;
- 8.1.10 Individuals must explain the different audiences for the report and their requirements;

## **CWA 15464-5:2005 (E)**

- 8.1.11 Individuals must explain what format is appropriate;
- 8.1.12 Individuals must explain the reason for the timescale for presenting their report;
- 8.1.13 Individuals must explain the importance of accurate record keeping.

### **8.2 Provide supplementary information, statements or reports**

- 8.2.1 Individuals must demonstrate that they establish what kind of information is needed and the purpose to which it will be put;
- 8.2.2 Individuals must demonstrate that they establish accurately the required format of the reports;
- 8.2.3 Individuals must demonstrate that they collect and analyse information that is accurate and reliable;
- 8.2.4 Individuals must demonstrate that they present their report in the required format;
- 8.2.5 Individuals must demonstrate that they ensure that their report meets the specification within the necessary constraints;
- 8.2.6 Individuals must demonstrate that they meet any time requirements;
- 8.2.7 Individuals must demonstrate that they record their report and keep on file;
- 8.2.8 Individuals must explain what constraints might apply;
- 8.2.9 Individuals must explain the uses of their report;
- 8.2.10 Individuals must explain what format is appropriate;
- 8.2.11 Individuals must explain whether any time limits apply;
- 8.2.12 Individuals must explain the importance of accurate record keeping.