

# IFE Level 4 Certificate in Fire Science and Fire Safety

## Unit 7: Civil Emergency and Disaster Management

Unit Reference Number: A/505/5937

### Introduction

This unit focuses on the specialist understanding and knowledge required by those who operate in civil emergency and disaster management contexts. It covers planning for contingencies, responding to civil emergencies and disasters and engaging with other organisations and stakeholders.

### Learning Outcomes

Candidates who achieve this unit should be able to:

- explain roles and responsibilities of different organisations and determine strategies to engage with relevant partners in responding to civil emergency and disaster contexts
- explain and apply the principles that underpin contingency planning
- assess situations and determine appropriate responses
- explain and assess the support available for rescuers and victims

### Unit Status

Optional

### Content

#### 1. Resilience and Contingency Planning

Assessment Objective	Knowledge, Understanding and Skills
1.1 Explain how to plan the resilience of an organisation to operate during non-fire related emergencies	<ul style="list-style-type: none"> <li>• Non-fire related emergencies to include: pandemic flu, extreme weather conditions, animal/bird incident</li> <li>• Communication with, and integration of service with, local community</li> <li>• Environmental responsibilities</li> <li>• Health protection of responders</li> </ul>
1.2 Understand the planning principles involved in mitigating the effects of civil emergencies	<ul style="list-style-type: none"> <li>• The parameters of major civil emergencies and disasters and the escalation process from major incident to international disaster</li> </ul>

<p>1.3 Understand the role of the International Labour Organisation and its Code on the "Prevention of Major Industrial Accidents" in Europe (this code is incorporated in Seveso III and UK COMAH Regulations)</p>	<ul style="list-style-type: none"> <li>• UN/ECE Convention on Trans-Boundary effects of Industrial Accidents</li> <li>• Higher &amp; Lower Tier sites</li> <li>• On-site and off-site plans</li> <li>• Separation of humans living in close proximity to hazard</li> <li>• Communications - local/national</li> </ul>
<p>1.4 Review lessons learned from previous disasters and assess how these can be used in planning and responding</p>	<ul style="list-style-type: none"> <li>• Procedures to record incident events</li> <li>• Investigation models</li> <li>• Accessing reports and information on national and international disasters</li> </ul>
<p>1.5 Define the terms 'Contingency Planning', 'Emergency Response', 'Disaster Recovery' and 'Business Continuity' and explain how they relate to each other</p>	<ul style="list-style-type: none"> <li>• Business continuity cycle</li> <li>• Preparation of plans linked to operational capability (anticipation, risk assessment, pilot, review, train, implementation)</li> </ul>
<p>1.6 Detail other government /international departments or agencies which should or could be involved in responding to emergencies and explain their appropriate roles and length of involvement</p>	<ul style="list-style-type: none"> <li>• Police</li> <li>• Ambulance</li> <li>• Healthcare</li> <li>• Coroner</li> <li>• Environment</li> <li>• Marine</li> <li>• Air/Rail/Highways</li> <li>• Local Resilience Forums</li> <li>• Local Government</li> <li>• Government</li> <li>• Religious</li> <li>• International</li> <li>• Voluntary</li> <li>• Chemical</li> <li>• Biological</li> <li>• Radiological</li> <li>• Nuclear</li> </ul>
<p>1.7 Explain the term 'Combined Response' and list the principles necessary to establish effective 'Call Out' arrangements</p>	<p>Incidents to include:</p> <ul style="list-style-type: none"> <li>• Rail accidents</li> <li>• Aircraft accidents</li> <li>• Chemical accidents</li> <li>• Coastal or inland waterways pollution incidents</li> <li>• Severe storms and flooding</li> </ul>

## 2. Disaster Management

Assessment Objective	Knowledge, Understanding and Skills
2.1 Define the term 'disaster' and explain types of disaster that can occur and what can be done to mitigate their effects	<ul style="list-style-type: none"> <li>• Manmade</li> <li>• Natural</li> </ul>
2.2 Detail the phases of disaster and explain the interaction of the agencies involved	<ul style="list-style-type: none"> <li>• Response</li> <li>• Recovery</li> <li>• "Disaster Management Cycle"</li> </ul>
2.3 Assess the problems of command and control in the early stages of a major civil disaster	<ul style="list-style-type: none"> <li>• Disaster response where an act of terrorism is suspected</li> <li>• Terrain</li> <li>• Communication</li> <li>• Access</li> </ul>
2.4 Explain the principles of good site management at the scene of a major civil disaster and the factors to be taken into account	<ul style="list-style-type: none"> <li>• Incident boundaries</li> <li>• Cordons</li> </ul>
2.5 Explain the strategic, tactical and operational levels of command and control and give an example of each	<ul style="list-style-type: none"> <li>• Gold</li> <li>• Silver</li> <li>• Bronze</li> </ul>
2.6 Describe the relevance of 'dynamic' risk assessment in managing major civil emergencies or disasters and highlight the significant factors involved	<p>Mnemonics: SAD CHALETS, ETHANE</p> <p>SAD CHALETS:</p> <ul style="list-style-type: none"> <li>• Survey</li> <li>• Assess</li> <li>• Disseminate</li> <li>• Casualties</li> <li>• Hazards</li> <li>• Access</li> <li>• Location - The precise location of the incident</li> <li>• Emergency services</li> <li>• Type of Incident</li> <li>• Start the Log</li> </ul> <p>ETHANE:</p> <ul style="list-style-type: none"> <li>• Exact location</li> <li>• Type</li> <li>• Hazards</li> <li>• Access</li> <li>• Numbers</li> <li>• Emergency services</li> </ul>
2.7 Describe and evaluate the various communications options available in a major disaster/civil emergency and the means for insuring their availability	<ul style="list-style-type: none"> <li>• Organisational/inter-organisational</li> <li>• Voluntary/External</li> </ul>

<p>2.8 Explain the processes to be followed and actions to be taken in the closure of an incident and identify factors to be taken into account</p>	<ul style="list-style-type: none"> <li>• Scaling down</li> <li>• Stand down</li> <li>• Site safety/clearance</li> <li>• Equipment audit</li> <li>• Documentation</li> <li>• Debrief and personnel support</li> </ul>
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### 3. Voluntary Assistance

Assessment Objective	Knowledge, Understanding and Skills
<p>3.1 Explain the key roles of voluntary organisations in the primary response to major civil emergencies and disasters</p>	<ul style="list-style-type: none"> <li>• Support of victims and the emergency service personnel</li> </ul>
<p>3.2 Assess the input of volunteers and explain how this can be maximised during the various phases of disaster</p>	<ul style="list-style-type: none"> <li>• Types of voluntary support</li> <li>• Duration of disaster and ability to maintain support through recovery phase</li> <li>• Advantages/disadvantages of voluntary assistance</li> <li>• Engagement with volunteers</li> </ul>
<p>3.3 Show by schematic means the core aspects in which organised volunteers can assist the statutory authorities involved in disaster response</p>	<ul style="list-style-type: none"> <li>• Liaison between emergency services and responding agencies</li> </ul>

### 4. Support for Victims and Rescuers

Assessment Objective	Knowledge, Understanding and Skills
<p>4.1 Review the social impact (physical and psychological) of disasters and discuss the means of control and mitigation</p>	<ul style="list-style-type: none"> <li>• Effects of disasters on communities and how this can be managed</li> <li>• How communities can be helped in the recovery phase of disasters</li> </ul>
<p>4.2 Explain how rescuers can be affected by disasters</p>	<ul style="list-style-type: none"> <li>• Definition of 'Critical Incident Stress' in the context of rescue workers and ways in which the effects of it can be minimised</li> <li>• Definition of 'Post Traumatic Stress Disorder' and ways in which the public and rescuers become affected by it</li> <li>• DSM IV definition and support structures</li> </ul>
<p>4.3 Understand the difficulties in dealing with the victims of a major civil disaster remote from the centre of the population</p>	<ul style="list-style-type: none"> <li>• Access</li> <li>• Transport</li> <li>• Utilities</li> <li>• Shelter</li> <li>• Weather</li> </ul>

	<ul style="list-style-type: none"> <li>• Food</li> </ul>
4.4 Describe the direct and indirect losses to the community that can occur following a major civil emergency	<ul style="list-style-type: none"> <li>• Physical</li> <li>• Psychological</li> <li>• Civil and organisational structures</li> </ul>

## 5. Training

Assessment Objective	Knowledge, Understanding and Skills
5.1 Assess how the lessons learned from disasters can be disseminated locally, nationally and internationally	<ul style="list-style-type: none"> <li>• Formal – inquiries</li> <li>• Informal – social media</li> </ul>
5.2 Describe in detail the methods of training available to test contingency plans and how these may be tested	<ul style="list-style-type: none"> <li>• Discussion</li> <li>• Table top</li> <li>• Live</li> </ul>
5.3 Assess the merits of different types of modelling	<ul style="list-style-type: none"> <li>• Fault Tree</li> <li>• Event Tree</li> <li>• Isomorphic</li> <li>• Soft Systems</li> <li>• Computer</li> </ul>
5.4 Review key training topics which should form the core of successful planning objectives in national disaster preparedness - Plan, Check, Do	<ul style="list-style-type: none"> <li>• Policy</li> <li>• Organise</li> <li>• Plan</li> <li>• Monitor</li> <li>• Audit</li> <li>• Review</li> </ul>
5.5 Evaluate the salient points of organising a large scale exercise involving all responders to a major aircraft disaster	<ul style="list-style-type: none"> <li>• Causation</li> <li>• Location</li> <li>• Time</li> <li>• Resources</li> </ul>
5.6 Explain the safety considerations to be given to the management of a major incident and the implications for training	<ul style="list-style-type: none"> <li>• Statutory obligations</li> </ul>

## 6. Information and the Media

Assessment Objective	Knowledge, Understanding and Skills
6.1 Understand the objectives of the media at major disasters and the methods that could be used to optimise their use	<ul style="list-style-type: none"> <li>• Informing the public</li> <li>• Appeals for support</li> </ul>
6.2 Assess the benefits and implications of liaison with the media before,	<ul style="list-style-type: none"> <li>• Media information as evidence and learning tool</li> </ul>

during and after a major disaster	<ul style="list-style-type: none"> <li>Advantages and disadvantages of the use of social media communications</li> </ul>
6.3 Describe the set up of the Media Centre at a major incident and the liaison arrangements with the emergency services	<ul style="list-style-type: none"> <li>Immediate needs of the media in the early stages of civil disasters</li> </ul>
6.4 Understand the role of the Press Officer and how best to optimise this as a resource	<ul style="list-style-type: none"> <li>Operational logistics of the mass media at a major incident and appropriate control of their attendance</li> <li>Factors to be considered in running a Press Conference during a major disaster</li> </ul>
6.5 Explain the means of self regulating the media to minimise the effects on a traumatised community	<ul style="list-style-type: none"> <li>National/International press agreements</li> </ul>

## 7. Victim Identification and Recovery

Assessment Objective	Knowledge, Understanding and Skills
7.1 Describe the methods used to identify dead bodies and assess the relative merits associated with each	<ul style="list-style-type: none"> <li>Role of the forensic scientist in the identification of bodies</li> <li>Work of forensic odontology at a major disaster and describe the problems that severely dismembered bodies present in identification</li> </ul>
7.2 Explain the factors to be taken into account in setting up a temporary mortuary	<ul style="list-style-type: none"> <li>Health and safety legal considerations to be taken into account when planning and establishing a temporary mortuary</li> <li>Hazards of handling human remains at the site of a disaster and at the temporary mortuary</li> <li>Importance of understanding religion, race and culture when discussing death with relatives of disaster victims</li> </ul>
7.3 Understand the roles of specialist personnel	<ul style="list-style-type: none"> <li>The coroner (or other appropriate legal officer) in disaster work and the legal powers required to preserve evidence</li> <li>The role of the embalmer/funeral director in a mass disaster</li> <li>Understand the role of the pathologist in a disaster</li> </ul>