



THE INSTITUTION OF FIRE ENGINEERS
Founded 1918 • Incorporated 1924

IFE Level 3 Certificate for Operational Supervisory Managers in Fire and Rescue Services (VRQ)

Introduction

The **IFE Level 3 Certificate for Operational Supervisory Managers in Fire and Rescue Services** has been developed by the Institution of Fire Engineers (IFE) and Greater Manchester Fire and Rescue Service. The content and structure of the qualification has been established to reflect the knowledge, understanding and skills required by those preparing for promotion to the role of Operational Supervisory Manager in the Fire and Rescue Service.

The structure has been developed to cover the content of the relevant National Occupational Standards for Operations in the Community and Incident Command and also to include the broader range of knowledge and understanding identified by the IFE unit in Fire Service Operations and Incident Command - UK.

Unit 1 of the qualification addresses the underpinning knowledge and understanding required by individuals seeking to undertake incident management roles. This unit is assessed by external examination and requires candidates to demonstrate that they have developed a broad range of technical knowledge and understanding and can apply this to identify risks and to manage diverse fire and rescue situations. Unit 2 of the qualification focuses on practical skills and requires candidates to demonstrate that they can use their knowledge and understanding to make decisions and implement solutions in realistic fire and rescue scenarios including escalating and crisis situations.

Aims of the Qualification

The **IFE Level 3 Certificate for Operational Supervisory Managers in Fire and Rescue Services** has been designed to:

- recognise critical knowledge and understanding relevant to Fire Service Operations and particularly incident command and fire
- recognise, via practical assessment, the skills required to manage incidents
- signal that individuals have the potential for progression to positions at the operational supervisory management level
- motivate individual learners by providing recognition of the skills, knowledge and understanding that they have achieved via study and operational experience

Note: achievement of the qualification does not confirm competence in incident management but confirms that candidates have demonstrated that they have the potential to progress to job roles where incident management skills are key requirements.

Target Audience

The qualification will meet the needs of those who wish to demonstrate that they are ready to progress to operational supervisory management level roles such as Watch Manager or Crew Manager in fire and rescue services.

Qualification Structure

In order to achieve the **IFE Level 3 Certificate for Operational Supervisory Managers in Fire and Rescue Services**, candidates must achieve two mandatory units:

Unit 1: Fire Service Operations and Incident Command - UK

Unit 2: Initial Incident Command

Form of Assessment

Each unit is assessed separately.

Unit 1 - Fire Service Operations and Incident Command - UK

Unit 1 is assessed by examination. The examination is set and marked externally. The duration of the examination is three hours and takes place under supervised examination conditions. There is no additional stimulus material for the examination.

This unit covers the critical underpinning theory that candidates need in order to address incidents effectively. The IFE recommends that candidates complete this unit before progressing to the practical assessments in Unit 2 as the theoretical knowledge and understanding developed via this unit will contribute to the candidate's ability to make sound judgements in the practical unit.

This examination is available in March each year.

Unit 2 - Initial Incident Command

This unit assesses practical skills. The assessment comprises centre-set assessments designed to assess candidates' performance against all of the assessment objectives specified in the unit. Assessments may be taken at any time, dependent upon centre arrangements.

This unit is graded Pass/Fail only. In order to achieve a pass in this unit, candidates must achieve at least 60% of the marks available. The marking grid will be provided by the IFE and is designed to reflect the assessment objectives set out in the unit.

All assessments should be recorded. Assessments are marked internally using the assessment grids provided by the IFE. Assessments are externally moderated. Centres will be required to forward the

recordings and marking grids to the IFE for sample re-marking and moderation by an external panel. The IFE will convene external panels at regular intervals.

Certification

Candidates who achieve both units will be awarded the **IFE Level 3 Certificate for Operational Supervisory Managers in Fire and Rescue Services (VRQ)**. The qualification is not graded.

Candidates do not need to achieve both units at the same examination session, but are strongly advised to obtain the theoretical element before progressing to the practical assessment. Candidates will receive a Unit Certificate for the first unit achieved. Candidates have two years in which to achieve both units and to claim certification for the full qualification.

The IFE will automatically issue an **IFE Level 3 Certificate for Operational Supervisory Managers in Fire and Rescue Services** certificate at the point where candidates have achieved both of the units required.

Unit Certification and Grading

Unit 1

Candidates, who achieve a Pass, will be awarded one of the following grades: A, B, C or D. Candidates who are unsuccessful in the examination will receive Grade E.

In order to achieve a Pass, candidates must demonstrate a thorough understanding of a range of subject areas and must demonstrate that they fully appreciate the critical safety issues. They must achieve at least 40% of the marks available.

The notional grade boundaries for the pass grades are as follows:

Grade D	40-49%
Grade C	50- 59%
Grade B	60-69%
Grade A	70% and above

Candidates who achieve below 40% of the marks will receive Grade E.

Note: Grade boundaries are reviewed and confirmed by an expert awarding review panel following each examination session in line with standard examination and awarding procedures.

Unit 2

Candidates undertaking this unit will be assessed against each of the assessment objectives in the unit. Candidates who meet the required standard (ie at least 60% of the marks available for the assessment) will be awarded a Pass.

Entry Requirements

The Institution has set no formal entry requirements. However, individual Fire and Rescue Services may set criteria related to personal development, such as requiring candidates to be competent firefighters, before they enter candidates for this qualification.

Candidates are advised that this examination requires a high level of personal commitment in that it is the candidate's responsibility to prepare fully for both units and also in that it requires extensive knowledge of fire service operations, incident command and the built environment.

Candidates should be aware that the examination questions set for Unit 1 will take the form of essay questions. Candidates will therefore need to be able to communicate effectively in writing.

Progression

Candidates who are successful in achieving the **IFE Level 3 Certificate for Operational Supervisory Managers in Fire and Rescue Services** will be able to build on their learning and progress to qualifications at Level 4.

Candidates who wish to broaden their knowledge and understanding at level 3 could consider working towards additional units at level 3 with a view to achieving the IFE Level 3 Diploma in Fire Science and Fire Safety. Unit 1 of this qualification is available as an optional unit within the Level 3 Diploma structure and may be used as one of two optional units required to achieve the Diploma. However, candidates should note that candidates seeking to achieve the Diploma are required to achieve four units (two mandatory and two optional) and all four units must be achieved within a five year time period.

Candidates may also consider progression to other qualifications at Level 3 and 4 such as relevant NVQ Diplomas.

Relationship to National Occupational Standards (NOS) and the Skills for Justice QCF Unit in Initial Incident Command

Unit 1

Unit 1 of this qualification has been designed to cover the wide range of knowledge and understanding required by candidates undertaking operational management roles. It covers the technical knowledge and understanding that incident commanders will need to draw on when assessing risk, making decisions and managing incidents in diverse contexts.

Candidates who are undertaking study in preparation for assessment for Unit 1 of this qualification will have the opportunity to develop knowledge and understanding which contributes to the underpinning knowledge and understanding in the following National Occupational Standards:

NOS	NOS Suite
SFJWM7: Lead and support people to resolve operational incidents*	Emergency Operations in the Community
SFJFF3 - Save and preserve endangered life	
SFJFF4 - Resolve fire and rescue operational incidents	
SfJFF5 - Protect the environment from the effects of hazardous materials	
SfJFF6 - Support the effectiveness of operational response	

*This unit also appears in the Incident Management and Command suite.

Unit 2

This unit is focussed on the management of incidents. The content has been developed to reflect the requirements set out in:

- National Occupational Standard SFJWM7: Lead and support people to resolve operational incidents
- Skills for Justice QCF unit: Initial Incident Command in Fire and rescue Services.

National Occupational Standards

Achievement of the qualification does not provide confirmation that candidates have met the standards identified above. However, it provides candidates with a basis to progress to further learning and assessment.

Language of Assessment

All assessment will be in English.

Reasonable Adjustments

The IFE permits reasonable adjustments to be made where candidates have disabilities (including medical conditions and learning disabilities such as Dyslexia). The IFE's policy on reasonable adjustment aims to enable candidates with disabilities and other difficulties to access the IFE examinations without comprising the assessment process or the validity of the certificate.

The policy, which includes the arrangements for applying for reasonable adjustments, is published on the IFE's website. The IFE will consider all requests for reasonable adjustments. All requests for reasonable adjustments must be submitted to the IFE.

Centres and candidates should note that unit 2 of this qualification requires candidates to take on a safety critical role in managing a fire and/or rescue situation. Whilst all requests for reasonable adjustments will be considered, it should be noted that the assessment will take place in a "live" fire and rescue situation; as a result, a risk assessment that takes into account any potential risks to the candidate and also to other participants involved in the exercise, will be carried out prior to confirming whether or not adjustments can be made.

Information for Centres

All potential centres will be required to seek approval to offer the qualification. Following approval, centres offering this qualification will be required to comply with the standards set by the IFE for centres.

Further information for centres is available in the Centre Handbook and in the supplementary Guidance for Unit 2: *Implementation Arrangements for Unit 2 of the IFE Level 3 Certificate for Operational Supervisory Managers in Fire and Rescue Services (VRQ)*

Unit 1: Fire Service Operations and Incident Command – UK

Unit Reference Number: L/505/6008

Note: This unit is available as an optional unit within the Level 3 Diploma in Fire Science and Fire Safety where it appears as Unit 6.

Introduction

This unit focuses on the activities required to resolve fire and rescue incidents. The content has been designed to reflect the UK context and to include relevant UK legislation. It covers incident command as well as fire and rescue operations and techniques.

Candidates managing fire and rescue operations will need to have a wide range of technical knowledge and understanding to enable them to evaluate risks and manage incidents of different types in different contexts and environments. They will need to be able to apply their technical understanding to evaluate situations, identify an appropriate course of action, prioritise actions and manage risks.

Learning Outcomes

Candidates who achieve this unit should be able to:

- Evaluate fire and rescue incidents and identify appropriate action to resolve the incident safely and with regard to environmental issues
- Understand how to supervise activities at incidents including the management of sectors
- Assess the scale of an evolving incident and know when and how to escalate/handover to appropriate colleagues
- Explain the operation of firefighting equipment, knowing when to use equipment and how to manage risks associated with the use of different equipment
- Evaluate risk and identify appropriate action in order to preserve the safety of firefighters and members of the public

Unit Status

This unit is Mandatory unit in the IFE Level 3 Certificate for Operational Supervisory Managers in Fire and rescue Services (VRQ). It is an Optional Unit for candidates undertaking the Level 3 Diploma in Fire Science and Fire Safety.

Content

1. Incident Command and Management

Assessment Objective	Knowledge, Understanding and Skills
1.1 Understand the key principles of the Incident Command System	<ul style="list-style-type: none"> • Describe the three functional areas of the Incident Command System (ICS) • Describe the three levels of management applied at operational incidents • Identify the role of other agencies within the ICS • Describe the common framework under which Category 1 & 2 responders integrate at multi-agency incidents
1.2 Understand the roles and responsibilities of personnel within the incident command structure	<ul style="list-style-type: none"> • Explain the role and responsibilities of the Incident Commander at Operational level • Explain the role and responsibilities of the Sector Commander at incidents • Describe the relationship between the incident commander, the sector commander and the incident command system • Identify the role and responsibilities of Command Support • Outline the progression at an incident from first pump attending to the arrival of a dedicated vehicle • Explain the responsibility for determining the cause of an incident • Define the range and the types of evidence available at an operational incident
1.3 Understand the requirements for the successful management of risk at operational incidents	<ul style="list-style-type: none"> • Define a hazard, risk and control measure • Define the categories of risk assessment utilised within the United Kingdom Fire and Rescue Service (UKFRS) • State the UKFRS risk philosophy applied to the management of risk at operational incidents • Detail the Dynamic Risk Assessment flowchart employed at operational incidents • Explain the tactical mode options available at incidents • Identify the hierarchy of control measures in relation to managing risks • Explain the importance of evidence preservation
1.4 Understand the need for effective lines and methods of communication at incidents	<ul style="list-style-type: none"> • Identify the lines of communication available at incidents in relation to an Incident Commander's span of control • Describe the impact of poor or inappropriate communication • Describe the methods of briefing of crews at operational incidents • Describe the standard model for sectorisation utilised

	by the UKFRS at operational incidents
1.5 Describe in detail principles for general control, tactics and strategy in resolving emergency incidents and explain when and how these principles should be applied to different contexts	<ul style="list-style-type: none"> • Need for evacuation at fires • Strategy and tactics involved in rescue work • Objectives of ventilation at fires • Aims and principles of salvage/damage control • Procedures for ensuring the safety of both personnel and public • How to identify signs and symptoms of stress in relation to trauma and/or work based activity • Actions to reduce the exposure to and impact on operational personnel and casualties
1.6 Explain the purpose of pre-planning for any specified emergency and assess the issues for inclusion in different contexts	<p>Incidents to include:</p> <ul style="list-style-type: none"> • Fires • Rescues involving trapped or stranded large animals • Incidents involving civil disturbances and acts of terrorism • Incidents involving hazardous materials e.g. at refineries or chemical plants

2. Firefighting Techniques

Assessment Objective	Knowledge, Understanding and Skills
2.1 Understand the process and principles of fire development and extinguishment and assess how these principles in apply in different contexts	<ul style="list-style-type: none"> • Methods of identifying different types of burning materials • Ways in which fire can spread within buildings and between buildings • Principles, application and benefits of ventilation, including Positive Pressure Ventilation
2.2 Evaluate situations and determine the appropriate methods of attack and appropriate practical procedures for the circumstances taking into account hazards to the environment and persons present	<ul style="list-style-type: none"> • Responding to emergency including: <ul style="list-style-type: none"> ○ Turning out ○ Proceeding to incident ○ Arriving/getting to work • Rescue contexts including: <ul style="list-style-type: none"> ○ Ice/unstable ground ○ Lifts/escalators ○ Sewers ○ Silos ○ Trench/pits ○ Collapsed structures ○ Height ○ Water, including flooding ○ Large animal rescue ○ Machinery (trapped persons) ○ Tunnels ○ Ships • Fighting fires in contexts including: <ul style="list-style-type: none"> ○ Buildings ○ High rise

	<ul style="list-style-type: none"> ○ Chimneys ○ Rural areas ○ Farms ○ Using PPV ○ In refuse ○ Public entertainment venues ○ Places of lawful detention ○ Petrochemical and pipelines ○ Forests, heaths, bush and crops (wildland fires) ○ Historic buildings and premises ● Fires in transport contexts: <ul style="list-style-type: none"> ○ Road ○ Rail ○ Air ○ Marine ○ Helicopters ● Generic hazards including: <ul style="list-style-type: none"> ○ Electricity ○ Common industrial gases, including acetylene ○ Chemical ○ Biological ○ Confined spaces ○ Civil or local disturbances ○ Explosives ○ Flashover/backdraught ○ Asbestos ○ Industrial processes ○ Radiological hazards
2.3 Evaluate the hazards and implications for firefighting in a built environment and identify appropriate strategies in different situations	<ul style="list-style-type: none"> ● Hazards presented by different building materials ● Hazards presented by elements of building structure ● Hazards presented by building facilities including heating, ventilation, air conditioning systems, stairwell pressurisations systems, electricity, gas, water, lifts, escalators

3. National Resilience

Assessment Objective	Knowledge, Understanding and Skills
3.1 Understand and apply incident command strategies to Terrorist Incidents	<ul style="list-style-type: none"> ● Incidents resulting from high level terrorist acts of national significance, (including chemical, biological, radiological and nuclear hazards - CBRN) ● Incidents arising from low level threats posed by groups such as animal rights organisations
3.2 Understand and apply relevant legislation	<ul style="list-style-type: none"> ● Powers of entry and responsibilities under the relevant legislation ● Operational responsibilities for fire services under the relevant legislation

4. Equipment and its Operational Use

Assessment Objective	Knowledge, Understanding and Skills
4.1 Understand and explain how to deploy appropriate firefighting equipment and other resources	<ul style="list-style-type: none"> Select and use appropriate equipment and resources to meet the needs of the incident
4.2 Understand the procedures and considerations when working at height and how these apply in different situations	<ul style="list-style-type: none"> Line rescue capability including operational procedures Safe systems of work
4.3 Understand the performance requirements and the construction of the various types of foam and foam making equipment and how these apply in different situations	<ul style="list-style-type: none"> Properties of the various foams and foam concentrates Classify problems by expansion and by constituents (low, medium, high) Conditions under which foam concentrates should be stored Types of equipment required to produce foam Care and maintenance of foam making equipment Application rates of foam and factors to be taken into account when using foam to extinguish a fire 'Pressurised foam supply'
4.4 Describe in detail the performance requirements and the construction of the various types of Breathing Apparatus (BA) and associated equipment	<ul style="list-style-type: none"> Principal component parts and the passage of air from the cylinder at high pressure to the wearer in a specific type of compressed air apparatus Breathing Apparatus communications equipment Safety procedure used to control the use of BA by up to 12 wearers Methods of testing a specific type of apparatus Hand operated resuscitation apparatus and typical automatic resuscitator
4.5 Describe in detail the performance requirements and the construction of the various types of chemical protective clothing and how these apply in different situations	<ul style="list-style-type: none"> Principles of clothing design to give total environmental protection by being 'gas tight', or limited protection against splashing by harmful chemicals Testing and maintenance procedures to be adopted for such items
4.6 Describe in detail the type of equipment used in relation to radiation incidents	<p>Types of equipment to include:</p> <ul style="list-style-type: none"> Radiation measuring equipment Personal protective equipment Decontamination equipment
4.7 Evaluate the provision and operational use of water supplies for firefighting purposes and determine strategies to resolve issues	<ul style="list-style-type: none"> Provision of supplies of water for firefighting purposes Operational use of water from its supply for firefighting purposes
4.8 Understand and apply strategies for the use of Heavy Rescue Equipment including search and rescue in built up areas	<ul style="list-style-type: none"> Construction and operating principles of compressed air power tools, electric power tools and flame cutting equipment Items in a typical hydraulic rescue kit, operating

	<p>instructions and general maintenance applicable to the equipment</p> <ul style="list-style-type: none"> • Operation of hauling and lifting equipment, including blocks and tackle, and the associated anchoring methods
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5. Post-Incident Actions

Assessment Objective	Knowledge, Understanding and Skills
5.1 Understand how to close down the operational phase of an incident	<ul style="list-style-type: none"> • Measures to hand over control of an incident to an appropriate person, agency or authority • Actions to identify and minimise any unresolved hazards and associated risks within operational constraints • How to gather and review all relevant information from internal and external sources for debriefing purposes
5.2 Understand the principles of and value of debriefs and apply these principles to different incident contexts	<ul style="list-style-type: none"> • How to contribute to a post-incident debrief appropriate to the type and scale of incident • How to gather and review all relevant information from internal and external sources • How to engage crew in debriefing and to review crew welfare and learning issues • How to implement remedial measures to improve future practice and performance
5.3 Determine the requirements for preservation of evidence at a scene by applying basic fire investigation principles	<ul style="list-style-type: none"> • How to identify and preserve potential evidence identified at the incident

Unit 2: Initial Incident Command

Introduction

This unit focuses on the application of practical skills relevant to incident management. Candidates are required to demonstrate that they can apply their technical understanding and operational management skills in managing an incident in a simulated environment.

The assessment will focus on incidents relevant to those operating at Incident Command level 1. At this level, individuals will respond to emergencies and will manage fire appliances and crews. Incident commanders will be required to manage numerous and diverse risks in situations that are continuously evolving in an unpredictable way. The types of assessment scenario that will be appropriate are fires in houses, commercial locations or road/vehicle contexts.

Learning Outcomes

Candidates who achieve this unit should be able to:

- Assess a situation and formulate an appropriate plan to resolve the incident
- Identify and manage risks
- Implement appropriate actions
- Demonstrate the ability to take command of an incident
- Manage crews and resources

Unit Status

This is a Mandatory Unit.

Content

Assessment Objective	Knowledge, Understanding and Skills
1. Gather and review information and determine incident status	<ul style="list-style-type: none">• Gather information from all available sources on incident progress, risks, deployment, resources available and existing incident management• Confirm previous action is compliant with relevant legislation and protocols• Confirm hazards already identified• Confirm an appropriate risk assessment was carried out at an appropriate time• Confirm the roles assigned• Determine sufficiency and suitability of resources currently present• Determine the requirements for the involvement of other agencies
2. Evaluate the incident and operational implications	<ul style="list-style-type: none">• Evaluate resource requirements, anticipating future resource needs and considering the possibility of an escalation of the incident

	<ul style="list-style-type: none"> • Evaluate risks to health, safety and welfare and ensure adequate and timely control measures are implemented • Obtain technical advice from appropriate sources and use this to support decision making • Monitor and continuously evaluate the impact of the incident on the organisation, the environment, the local community and on the roles and responsibilities of other agencies
3. Formulate and implement a plan to resolve the incident	<ul style="list-style-type: none"> • Confirm priority actions and objectives to resolve the incident • Formulate a plan to deal with all aspects of the incident, deploying appropriate resources • Employ the most appropriate safe system of work, taking account of all identified risks
4. Monitor and review the incident	<ul style="list-style-type: none"> • Update tactical mode • Review and modify risk assessment and respond to changes in the nature and extent of the incident • Monitor the progress of activity against the plan, updating plan as required
5. Maintain ongoing communication with those involved in the incident	<ul style="list-style-type: none"> • Communicate information accurately and in the correct mode • Deliver operational messages without error and in such a way that they convey a clear picture of the incident • Transmit tactical mode of operation regularly and effectively to all personnel • Deliver clear, concise, comprehensive and effective senior officer briefings
6. Assume command and manage an incident	<ul style="list-style-type: none"> • Assume command at the appropriate time having gathered all necessary information • Assert and maintain control throughout the incident • Establish command of all crews and sectors and maintain command throughout the incident • Assess the span of control required and delegate/sectorise as appropriate for the incident • Interact effectively with command support, making full use of appropriate resources • Deal with the crisis in a controlled and considered manner at all times