

# **Specification**

## **BTEC Specialist qualifications**

Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF)

First teaching March 2011

Issue 2



Edexcel, a Pearson company, is the UK's largest awarding body, offering academic and vocational qualifications and testing to more than 25,000 schools, colleges, employers and other places of learning in the UK and in over 100 countries worldwide. Qualifications include GCSE, AS and A Level, NVQ and our BTEC suite of vocational qualifications from entry level to BTEC Higher National Diplomas, recognised by employers and higher education institutions worldwide.

We deliver 9.4 million exam scripts each year, with more than 90% of exam papers marked onscreen annually. As part of Pearson, Edexcel continues to invest in cutting-edge technology that has revolutionised the examinations and assessment system. This includes the ability to provide detailed performance data to teachers and students which helps to raise attainment.

This specification is Issue 2. Key changes are sidelined. We will inform centres of any changesto this issue. The latest issue can be found on the Edexcel website: www.edexcel.com

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# BTEC Specialist qualification titles covered by this specification

Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF)

This qualification has been accredited to the Qualifications and Credit Framework (QCF) and is eligible for public funding as determined by the Department for Education (DfE) under Section 96 of the Learning and Skills Act 2000.

The qualification title listed above features in the funding lists published annually by the DfE and the regularly updated website www.education.gov.uk/. The QCF Qualification Number (QN) should be used by centres when they wish to seek public funding for their learners. Each unit within a qualification will also have a QCF unit code.

The QCF qualification and unit codes will appear on learners' final certification documentation.

The Qualification Number for the qualification in this publication is:

Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF)

600/0698/5

This qualification title will appear on learners' certificates. Learners need to be made aware of this when they are recruited by the centre and registered with Edexcel.

This qualification is accredited by Ofqual as being Stand Alone and as part of a Apprenticeship.

### Welcome to the Edexcel BTEC Level 3 Diploma in Emergency and Fire Rescue Services Operations in the Community (QCF)

We are delighted to introduce our new qualification, which will be available for teaching from March 2011. This qualification has been revised and conforms to the requirements of the new QCF (Qualifications and Credit Framework).

## Focusing on the Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF)

This qualification is intended to provide new recruit fire fighters with the knowledge they need to work in the fire and rescue services.

This qualification is also the technical certificate for the Level 3 Apprenticeship in Emergency Fire Services Operations in the Community (QCF).

#### Straightforward to implement, teach and assess

Implementing BTECs could not be easier. They are designed to fit easily into your curriculum and can be studied independently or alongside existing qualifications, to suit the interests and aspirations of learners. The clarity of assessment makes grading learner attainment simpler.

#### Engaging for everyone

Learners of all abilities flourish when they can apply their own knowledge, skills and enthusiasm to a subject. BTEC qualifications make explicit the link between theoretical learning and the world of work by giving learners the opportunity to apply their research, skills and knowledge to work-related contexts and case studies. These applied and practical BTEC approaches give all learners the impetus they need to achieve and the skills they require for workplace or education progression.

#### Recognition

BTECs are understood and recognised by a large number of organisations in a wide range of sectors. BTEC qualifications are developed with key industry representatives and Sector Skills Councils (SSC) to ensure that they meet employer and learner needs — **in this case the Skills for Justice SSC**. Many industry and professional bodies offer successful BTEC learners exemptions for their own accredited qualifications.

#### All you need to get started

To help you off to a flying start, we've developed an enhanced specification that gives you all the information you need to start teaching BTEC. This includes:

- a framework of equivalencies, so you can see how this qualification compares with other Edexcel vocational qualifications
- information on rules of combination, structure and quality assurance, so you can deliver the qualification with confidence
- explanations of the content's relationship with the learning outcomes
- guidance on assessment, and what the learner must produce to achieve the unit.

Don't forget that we're always here to offer curriculum and qualification updates, local training and network opportunities, advice, guidance and support.

## **Contents**

What are BTEC Level 3 Specialist qualifications?	1
Key features of the Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF)	2
National Occupational Standards	2
Rules of combination	3
Rules of combination for Edexcel BTEC Level 3 qualifications	3
Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF)	4
Assessment	5
Quality assurance of centres	6
Approval	6
Quality Assurance Guidance	7
Programme design and delivery	7
Mode of delivery	7
Resources	7
Delivery approach	8
Functional skills	8
Access and recruitment	8
Restrictions on learner entry	8
Access arrangements and special considerations	9
Recognition of Prior Learning	9
Unit format	10
Unit title	10
Unit code	10
QCF level	10
Credit value	10
Guided learning hours	10
Unit aim and purpose	10

Unit int	roduction	11
Learnin	g outcomes	11
Assessm	nent criteria	11
Unit co	ntent	11
Essentia	al guidance for tutors	12
Units		13
Unit 1:	Personal Responsibilities for Performance in the Fire and Rescue Service	e 15
Unit 2:	Practices for Resolving Fire and Special Service Incidents	25
Unit 3:	Fire Fighter Role at Operational Incidents for Search, Rescue and Casualty Care	37
Unit 4:	Fire Fighter Responsibilities at Hazardous Material Incidents	47
Unit 5:	Resources to Support Fire Fighters for Operational Response at Incidents	59
Further	information	69
Useful p	oublications	69
How to	obtain National Occupational Standards	69
Professi	onal development and training	70
Annexe	A	71
The Ede	excel/BTEC qualification framework for the fire and rescue	71
Annexe	В	<b>75</b>
Wider c	curriculum mapping	75
Annexe	C	77
Nationa	l Occupational Standards mapping	77
Annexe	D	79
Mapping	g to Level 2 Functional Skills	79
Annexe	E	81
Unit ma	apping overview	81
Annexe	F	83
Glossar	y of accreditation terminology	83
Annexe	G	85
RTFC Sr	pecialist and Professional qualifications	85

### What are BTEC Level 3 Specialist qualifications?

BTEC Specialist qualifications are qualifications at Entry Level to Level 3 in the Qualifications and Credit Framework (QCF) and are designed to provide specialist work-related qualifications in a range of sectors. They give learners the knowledge, understanding and skills that they need to prepare for employment. The qualifications also provide career development opportunities for those already in work. Consequently, they provide a course of study for full-time or part-time learners in schools, colleges and training centres.

BTEC Specialist qualifications provide much of the underpinning knowledge and understanding for the National Occupational Standards for the sector, where appropriate. They are supported by the relevant Standards Setting Body (SSB) or Sector Skills Council (SSC). A number of BTEC Specialist qualifications are recognised as the knowledge components of Apprenticeships Frameworks. They attract achievement and attainment table points that equate to similar-sized general qualifications.

On successful completion of a BTEC Specialist qualification, learners can progress to or within employment and/or continue their study in the same or related vocational area.

The QCF is a framework which awards credit for qualifications and units and aims to present qualifications in a way that is easy to understand and measure. It enables learners to gain qualifications at their own pace along flexible routes.

There are three sizes of qualification in the QCF:

- Award (1 to 12 credits)
- Certificate (13 to 36 credits)
- Diploma (37 credits and above).

Every unit and qualification in the framework will have a credit value.

The credit value of a unit specifies the number of credits that will be awarded to a learner who has achieved the learning outcomes of the unit.

The credit value of a unit is based on:

- one credit for those learning outcomes achievable in 10 hours of learning
- learning time defined as the time taken by learners at the level of the unit, on average, to complete the learning outcomes of the unit to the standard determined by the assessment criteria.

The credit value of the unit will remain constant in all contexts, regardless of the assessment method used for the qualification(s) to which it contributes.

Learning time should address all learning (including assessment) relevant to the learning outcomes, regardless of where, when and how the learning has taken place.

## Key features of the Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF)

The Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF) has been developed to give learners the opportunity to:

- engage in learning that is relevant to them and which will provide opportunities to develop a range of skills and techniques, personal skills and attributes essential for successful performance in working life
- achieve a nationally recognised, Level 3 vocationally-related qualification
- progress to employment in a particular vocational sector
- progress to related general and/or vocational qualifications.

#### **National Occupational Standards**

Where relevant, Edexcel BTEC Level 3 specialist qualifications are designed to provide some of the underpinning knowledge and understanding for the National Occupational Standards (NOS), as well as developing practical skills in preparation for work and possible achievement of NVQs in due course. NOS form the basis of National Vocational Qualifications (NVQs). Edexcel BTEC Level 3 (QCF) qualifications do not purport to deliver occupational competence in the sector, which should be demonstrated in a work context.

Each unit in the specification identifies links to elements of the NOS in *Annexe C*.

The Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF) relates to the following NOS.

- FF2 Take responsibility for effective performance in fire and rescue
- FF3 Save and preserve endangered life
- FF4 Resolve fire and rescue operational incidents
- FF5 Protect the environment from the effect of hazardous materials
- FF6 Support the effective ness of operational response

### Rules of combination

The rules of combination specify the credits that need to be achieved, through the completion of particular units, for the qualification to be awarded. All accredited qualifications within the QCF have rules of combination.

#### Rules of combination for Edexcel BTEC Level 3 qualifications

When combining units for an Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF), it is the centre's responsibility to ensure that the following rules of combination are adhered to.

- 1 All units are mandatory.
- 2 Qualification credit value: a minimum of 39 credits.
- 3 Minimum credit to be achieved at, or above, the level of the qualification: 39 credits.
- 4 All credits must be achieved from the units listed in this specification.

## Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF)

The Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF) is a 39-credit and 180-guided-learning-hour (GLH) qualification that consists of five mandatory units.

Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF)			
Unit	Mandatory units Credi		
1	Personal Responsibilities for Performance in the Fire and Rescue Service	8	3
2	Practices for Resolving Fire and Special Service Incidents	11	3
3	Fire Fighter Role at Operational Incidents for Search, Rescue and Casualty Care	7	3
4	Fire Fighter Responsibilities at Hazardous Material Incidents	7	3
5	Resources to Support Fire Fighters for Operational Response at Incidents	6	3

#### **Assessment**

All units within this qualification are internally assessed. The qualification is criterion referenced, based on the achievement of all the specified learning outcomes.

To achieve a 'pass' a learner must have successfully passed **all** the assessment criteria.

#### Guidance

The purpose of assessment is to ensure that effective learning has taken place to give learners the opportunity to:

- meet the standard determined by the assessment criteria and
- achieve the learning outcomes.

All the assignments created by centres should be reliable and fit for purpose, and should be built on the unit assessment criteria. Assessment tasks and activities should enable learners to produce valid, sufficient and reliable evidence that relates directly to the specified criteria. Centres should enable learners to produce evidence in a variety of different forms, including performance observation, presentations and posters, along with projects, or time-constrained assessments.

Centres are encouraged to emphasise the practical application of the assessment criteria, providing a realistic scenario for learners to adopt, and making maximum use of practical activities. The creation of assignments that are fit for purpose is vital to achievement and their importance cannot be over-emphasised.

The assessment criteria must be clearly indicated in the assignments briefs. This gives learners focus and helps with internal verification and standardisation processes. It will also help to ensure that learner feedback is specific to the assessment criteria.

When designing assignments briefs, centres are encouraged to identify common topics and themes. A central feature of vocational assessment is that it allows for assessment to be:

- current, ie to reflect the most recent developments and issues
- local, ie to reflect the employment context of the delivering centre
- flexible to reflect learner needs, ie at a time and in a way that matches the learner's requirements so that they can demonstrate achievement.

#### Qualification grade

Learners who achieve the minimum eligible credit value specified by the rule of combination will achieve the qualification at pass grade.

In Edexcel BTEC Level 3 Specialist qualifications each unit has a credit value which specifies the number of credits that will be awarded to a learner who has achieved the learning outcomes of the unit. This has been based on:

- one credit for those learning outcomes achievable in 10 hours of learning time
- learning time being defined as the time taken by learners at the level of the unit, on average, to complete the learning outcomes of the unit to the standard determined by the assessment criteria
- the credit value of the unit remaining constant regardless of the method of assessment used or the qualification to which it contributes.

### Quality assurance of centres

Edexcel BTEC Level 3 specialist qualifications provide a flexible structure for learners enabling programmes of varying credits and combining different levels. For the purposes of quality assurance, all individual qualifications and units are considered as a whole.

Centres delivering Edexcel BTEC Level 3 specialist qualifications must be committed to ensuring the quality of the units and qualifications they deliver, through effective standardisation of assessors and verification of assessor decisions. Centre quality assurance and assessment is monitored and quaranteed by Edexcel.

The Edexcel quality assurance processes will involve:

- centre approval for those centres not already recognised as a centre for BTEC qualifications
- approval for Edexcel BTEC Level 3 qualifications and units
- compulsory Edexcel-provided training and standardisation for internal verifiers and assessors leading to the accreditation of lead internal verifiers via the OSCA system
- quality review of the centre verification practice
- centre risk assessment by Edexcel of overarching processes and quality standards
- remedial training and/or assessment sampling for centres identified through standardisation or risk assessment activities as having inadequate quality, assessment or internal verification processes.

#### **Approval**

Centres are required to declare their commitment to ensuring the quality of the programme of learning and providing appropriate assessment opportunities for learners that lead to valid and accurate assessment outcomes. In addition, centres will commit to undertaking defined training and online standardisation activities.

Centres already holding BTEC approval are able to gain qualification approval online. New centres must complete a centre approval application.

#### **Quality Assurance Guidance**

Details of quality assurance for Edexcel BTEC Level 3 qualifications are set out in centre guidance which is published on our website (www.edexcel.com).

### Programme design and delivery

#### Mode of delivery

Edexcel does not normally define the mode of delivery for Edexcel BTEC Entry to Level 3 qualifications. Centres are free to offer the qualifications using any mode of delivery (such as fulltime, parttime, evening only, distance learning) that meets their learners' needs. Whichever mode of delivery is used, centres must ensure that learners have appropriate access to the resources identified in the specification and to the subject specialists delivering the units. This is particularly important for learners studying for the qualification through open or distance learning.

Learners studying for the qualification on a part-time basis bring with them a wealth of experience that should be utilised to maximum effect by tutors and assessors. The use of assessment evidence drawn from learners' work environments should be encouraged. Those planning the programme should aim to enhance the vocational nature of the qualification by:

- liaising with employers to ensure a course relevant to learners' specific needs
- accessing and using non-confidential data and documents from learners' workplaces
- including sponsoring employers in the delivery of the programme and, where appropriate, in the assessment
- linking with company-based/workplace training programmes
- making full use of the variety of experience of work and life that learners bring to the programme.

#### Resources

Edexcel BTEC Level 3 qualifications are designed to give learners an understanding of the skills needed for specific vocational sectors. Physical resources need to support the delivery of the programme and the assessment of the learning outcomes, and should therefore normally be of industry standard. Staff delivering programmes and conducting the assessments should be familiar with current practice and standards in the sector concerned. Centres will need to meet any specific resource requirements to gain approval from Edexcel.

Where specific resources are required these have been indicated in individual units in the *Essential resources* sections.

#### Delivery approach

It is important that centres develop an approach to teaching and learning that supports the vocational nature of Edexcel BTEC Level 3 qualifications and the mode of delivery. Specifications give a balance of practical skill development and knowledge requirements, some of which can be theoretical in nature. Tutors and assessors need to ensure that appropriate links are made between theory and practical application and that the knowledge base is applied to the sector. This requires the development of relevant and up-to-date teaching materials that allow learners to apply their learning to actual events and activity within the sector. Maximum use should be made of learners' experience.

#### Functional skills

Edexcel Level 3 BTEC Specialist qualifications give learners opportunities to develop and apply functional skills. Functional skills are, however, not required to be achieved as part of the BTEC Specialist qualification(s) rules of combination. Functional Skills are offered as stand-alone qualifications.

### Access and recruitment

Edexcel's policy regarding access to its qualifications is that:

- they should be available to everyone who is capable of reaching the required standards
- they should be free from any barriers that restrict access and progression
- there should be equal opportunities for all wishing to access the qualifications.

Centres are required to recruit learners to BTEC qualifications with integrity. This will include ensuring that applicants have appropriate information and advice about the qualifications and that the qualification will meet their needs. Centres should take appropriate steps to assess each applicant's potential and make a professional judgement about their ability to successfully complete the programme of study and achieve the qualification. This assessment will need to take account of the support available to the learner within the centre during their programme of study and any specific support that might be necessary to allow the learner to access the assessment for the qualification. Centres should consult Edexcel's policy on learners with particular requirements.

Centres will need to review the entry profile of qualifications and/or experience held by applicants, considering whether this profile shows an ability to progress to a higher level qualification.

#### Restrictions on learner entry

The Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF) is accredited on the QCF for learners aged 16 and above.

#### Access arrangements and special considerations

Edexcel's policy on access arrangements and special considerations for BTEC and Edexcel NVQ qualifications aims to enhance access to the qualifications for learners with disabilities and other difficulties (as defined by the 1995 Disability Discrimination Act and the amendments to the Act) without compromising the assessment of skills, knowledge, understanding or competence.

Further details are given in the policy document *Access Arrangements and Special Considerations for BTEC and Edexcel NVQ Qualifications*, which can be found on the Edexcel website (www.edexcel.com). This policy replaces the previous Edexcel policy (Assessment of Vocationally Related Qualifications: Regulations and Guidance Relating to Learners with Special Requirements, 2002) concerning learners with particular requirements.

#### Recognition of Prior Learning

Recognition of Prior Learning (RPL) is a method of assessment (leading to the award of credit) that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and so do not need to develop through a course of learning.

Edexcel encourages centres to recognise learners' previous achievements and experiences whether at work, home and at leisure, as well as in the classroom. RPL provides a route for the recognition of the achievements resulting from continuous learning.

RPL enables recognition of achievement from a range of activities using any valid assessment methodology. Provided that the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable for accrediting a unit, units or a whole qualification. Evidence of learning must be sufficient, reliable and valid.

#### Unit format

All units in Edexcel BTEC Level 3 Specialist qualifications have a standard format. The unit format is designed to give guidance on the requirements of the qualification for learners, tutors, assessors and those responsible for monitoring national standards.

Each unit has the following sections.

#### Unit title

The unit title is accredited on the QCF and this form of words will appear on the learner's Notification of Performance (NOP).

#### Unit code

Each unit is assigned a QCF unit code that appears with the unit title on the National Database of Accredited Qualifications.

#### QCF level

All units and qualifications within the QCF will have a level assigned to them, which represents the level of achievement. There are nine levels of achievement, from Entry Level to Level 8. The level of the unit has been informed by the QCF level descriptors and, where appropriate, the NOS and/or other sector/professional benchmarks.

#### Credit value

All units have a credit value. The minimum credit value that may be determined for a unit is one, and credits can only be awarded in whole numbers. Learners will be awarded credits for the successful completion of whole units.

#### Guided learning hours

Guided learning hours are defined as all the times when a tutor, trainer or facilitator is present to give specific guidance towards the learning aim being studied on a programme. This definition includes lectures, tutorials and supervised study in, for example, open learning centres and learning workshops. It also includes time spent by staff assessing learners' achievements. It does not include time spent by staff in day-to-day marking of assignments or homework where the learner is not present.

#### Unit aim and purpose

The aim provides a clear summary of the purpose of the unit and is a succinct statement that summarises the learning outcomes of the unit.

#### Unit introduction

The unit introduction gives the reader an appreciation of the unit in the vocational setting of the qualification, as well as highlighting the focus of the unit. It gives the reader a snapshot of the unit and the key knowledge, skills and understanding gained while studying the unit. The unit introduction also highlights any links to the appropriate vocational sector by describing how the unit relates to that sector.

#### Learning outcomes

The learning outcomes of a unit set out what a learner is expected to know, understand or be able to do as the result of a process of learning.

#### Assessment criteria

The assessment criteria of a unit specify the standard a learner is expected to meet to demonstrate that a learning outcome, or set of learning outcomes, has been achieved. The learning outcomes and assessment criteria clearly articulate the learning achievement for which the credit will be awarded at the level assigned to the unit.

#### Unit content

The unit content identifies the breadth of knowledge, skills and understanding needed to design and deliver a programme of learning to achieve each of the learning outcomes. This is informed by the underpinning knowledge and understanding requirements of the related National Occupational Standards (NOS), where relevant. The content provides the range of subject material for the programme of learning and specifies the skills, knowledge and understanding required for achievement of the unit.

Each learning outcome is stated in full and then the key phrases or concepts related to that learning outcome are listed in italics followed by the subsequent range of related topics.

#### Relationship between content and assessment criteria

The learner should have the opportunity to cover all the unit content.

It is not a requirement of the unit specification that all the content is assessed. However, the indicative content will need to be covered in a programme of learning in order for learners to be able to meet the standard determined in the assessment criteria.

#### Content structure and terminology

The information below shows how the unit content is structured and gives the terminology used to explain the different components within the content.

- Learning outcome: this is shown in bold at the beginning of each section of content.
- Italicised sub-heading: it contains a key phrase or concept. This is content which must be covered in the delivery of the unit. Colons mark the end of an italicised sub-heading.

- Elements of content: the elements are in plain text and amplify the subheading. The elements must be covered in the delivery of the unit. Semi-colons mark the end of an element.
- Brackets contain amplification of content which must be covered in the delivery of the unit.
- 'eg' is a list of examples, used for indicative amplification of an element (that is, the content specified in this amplification could be covered or could be replaced by other, similar material).

#### Essential guidance for tutors

This section gives tutors additional guidance and amplification to aid understanding and a consistent level of delivery and assessment. It is divided into the following sections.

- Delivery explains the content's relationship to the learning outcomes and
  offers guidance about possible approaches to delivery. This section is based
  on the more usual delivery modes but is not intended to rule out alternative
  approaches.
- Assessment gives amplification about the nature and type of evidence that learners need to produce in order to achieve the unit. This section should be read in conjunction with the assessment criteria.
- Essential resources identifies any specialist resources needed to allow learners to generate the evidence required for each unit. The centre will be asked to ensure that any requirements are in place when it seeks approval from Edexcel to offer the qualification.
- *Indicative resource materials* gives a list of learner resource material that benchmarks the level of study.

### **Units**

Unit 1:	Personal Responsibilities for Performance in the Fire and Rescue Service	15
Unit 2:	Practices for Resolving Fire and Special Service Incidents	25
Unit 3:	Fire Fighter Role at Operational Incidents for Search, Rescue and Casualty Care	37
Unit 4:	Fire Fighter Responsibilities at Hazardous Material Incidents	47
Unit 5:	Resources to Support Fire Fighters for Operational Response at Incidents	59

Unit 1: Personal Responsibilities for

Performance in the Fire and

**Rescue Service** 

Unit code: F/502/9520

QCF Level 3: BTEC Specialist

Credit value: 8

Guided learning hours: 30

#### Unit aim

The aim of this unit is to provide learners with the understanding of the responsibilities of fire and rescue personnel, how they use communication skills and apply health and safety at incidents. Learners will also learn how to manage their own personal development within the fire and rescue service.

#### Unit introduction

In this unit learners will explore the responsibilities of fire fighters, including using communication skills appropriately and applying health and safety controls at incidents.

Learners will also explore how fire fighters take responsibility for their own performance including personal health and fitness, working well with other people and developing their own skills in the job role. This unit will give learners knowledge and understanding of personal development and the associated skills to support them to meet agreed changes in practice. This includes identifying and planning how to address their own development needs to maintain their required level of competence.

### Learning outcomes and assessment criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

#### On completion of this unit a learner should:

Learning outcomes		Assessment criteria		
1	Understand responsibilities of fire and rescue service personnel	1.1	Explain how legislation impacts on organisational policies of the fire and rescue service	
		1.2	Explain how organisational responsibilities are devolved through role responsibilities of fire and rescue personnel	
2	Understand the application of communication skills in fire and rescue service operations	2.1	Explain appropriate communication methods when working with diverse audiences	
		2.2	Explain the importance of positive communication as a way of reducing the likelihood of conflict	
		2.3	Explain how managing public expectations can reduce the likelihood of conflict	
		2.4	Explain the importance of viewing a situation from the public's perspective	
		2.5	Identify communication strategies that can be used to solve problems	
3	Understand the application of health and safety in the fire and rescue service	3.1	Explain how to identify practices that minimise hazards in the workplace	
		3.2	Explain how to identify risks arising from hazards in the workplace	
		3.3	Explain how to apply control measures for hazards and risks in the workplace	
4	Understand how to manage personal development in the fire and rescue service	4.1	Summarise personal requirements and skills required by fire and rescue service personnel	
		4.2	Evaluate areas of personal strengths and weaknesses in personal work	
		4.3	Develop strategies to develop self	

#### Unit content

#### 1 Understand responsibilities of fire and rescue service personnel

Organisational practice and policies: legislation applicable to the fire service; policies including occupational health, systems of work and working practices, procedures for performance, review and development; data protection, equality and diversity, organisational objectives, goals, values

Role responsibilities: contract requirements, authority levels of self and others eg community groups, other emergency services, external agencies, employee and employer representative bodies; mitigating potential conflict and resistance, identification of the wider implications of change within the community; challenging unacceptable behaviour; conflict management eg avoidance of threat, harm or damage to people, property, the environment, the organisation

## 2 Understand the application of communication skills in fire and rescue service operations

Communication: ability to communicate with diverse groups of customers; methods of communication including active listening, body language, receiving and responding to feedback; different groups of customers (different ages, different cultures, individuals, families); customers with particular needs (English not first language, visual or hearing difficulties); techniques to ascertain customer needs (questioning, listening, clarifying); the need to provide clear and accurate information; expected and accepted lines of communication; relevant legislation and regulations relating to communication; audience diversity including age, gender, ethnicity, religious belief, sexuality, political beliefs; personal behaviour including calm, polite manner, tone of voice, pitch, active listening, body language, appropriateness to situation; dealing with differing customer behaviour, personalities; how personal behaviour can affect the customer service experience

Conflict management: importance of positive communication in avoiding conflict including the importance of constructive communication, the need to communicate in a way that is clear, professional, polite and fair; managing customer expectations to reduce the risk of conflict including how difficulties can arise if customers have unrealistic expectations, how providing information can help manage customer expectations; importance of viewing the situation from the customer's perspective including the importance of empathy (preventing conflict, helping to defuse conflict, understanding a conflict situation better); ways of showing empathy; strategies for solving problems (building rapport, finding common ground, agreeing a way forward), negotiation strategies that can be used to help solve problems (stating expectations, giving reasons, offering alternatives, applying pressure, offering incentives, compromising), concept and benefit of win-win approach

## 3 Understand the application of health and safety in the fire and rescue service

Health and safety: how to recognise hazards and risk eg risk assessment; how to apply control measures; external legislation and regulations; how legislation and regulations are applied through internal policies and practices; types of hazards and risk eg stress and fatigue, the environment, factors affecting the community, equipment and other resources

## 4 Understand how to manage personal development in the fire and rescue service

Personal skills requirements for fire and rescue service personnel: manage and carry out personal work duties; personal administration, working as an effective team member, acting assertively, behaving ethically, focusing on results, striving for excellence, taking decisions, standards of behaviour eg relating to others, planning and problem solving; job description requirements

Personal development: identification of role requirements; self-assessment against role requirements; managing personal and professional learning and development eg managing health and physical fitness, agreeing and setting personal objectives continuous, improvement of performance, personal development plans

#### Essential guidance for tutors

#### Delivery

It would be beneficial for learners to have input from the FRS, especially in instances where the unit is not delivered as part of a fire fighter development programme. Evidence could be generated from visits to FRS establishments. Appropriate work placements could also be used to generate evidence.

Learners should have the opportunity to view footage from documentaries and FRS-accredited online broadcasts showing the day-to-day life of fire fighters. This material will provide a focus for group discussion.

It is recommended that delivery of this unit is as practical as possible to engage and motivate learners. It is suggested that a theoretical input is followed by examples of the theory in practice. This could be achieved through observation and review of realistic scenarios such as dealing with distressed people and addressing workplace hazards and risks. Learners should be guided as to what to look for when observing and reviewing the scenario so they understand the processes involved.

Visits to, and speakers from, a range of people/groups involved in supporting fire fighter responsibilities and performance are recommended, for example:

Visits to

FRS Training

FRS stations

Speakers from

FRS Organisational Policy Group

FRS Fire Fighter Development

FRS Human Resources/People Management

FRS Health and Safety

**FRS Operations** 

Contact information for these organisations can be found on The Chief Fire Officers Association website (www.cfoa.org.uk/frs).

#### Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

#### Topic and suggested assignments/activities and/assessment

Introduction to unit and programme of assignments

Teaching activity - legislation and policy development

Visiting speakers from a FRS Organisational Policy Group

Case study analysis on the impact of policy on the fire fighter's role

#### **Assignment 1: Responsibilities of FRS Personnel**

Review of Assignment 1 including tutor feedback and re-working

Teaching activity - communicating with your community

Visits from FRS operations personnel

Teaching activity - managing conflict through communication

Case study analysis of the challenges to communication when dealing with diverse distressed people

#### **Assignment 2: Communication Skills in FRS Operations**

Review of Assignment 2 including tutor feedback and re-working

Teaching activity - health and safety at work and the FRS

Visits speaker from FRS health and safety personnel

Learner research identifying the different workplace environments the FRS encounter and their associated responsibilities

#### Assignment 3: Health and Safety and the FRS

Review of Assignment 3 including tutor feedback and re-working

Teaching activity - FRS personal requirements and skills

Visits from FRS human resources/people management personnel

Teaching activity – evaluating personal strengths and weaknesses

Learner research to identify self-development strategies

#### **Assignment 4: Manage Personal Development in the FRS**

Review of Assignment 4 including tutor feedback and re-working

Review of unit and programme of assignments

#### Assessment

It is recommended that assessment criteria are integrated to create holistic assignments. Observation and identification of information against specified objectives in assignments would provide evidence of learner understanding and of them meeting the assessment criteria.

A number of activities can be used to meet the assessment criteria of this unit. The FRS may be able to provide practical information and possible case studies for learners to analyse.

It would be useful for learners to observe the FRS carrying out activities. Evidence could be in the form of written reports or presentations with effective evaluations and summaries. Evidence could also be gained from witness testimony.

Learners could devise a questionnaire and feedback forms, which could be used as part of investigatory interviews, presentations and discussions with members of the FRS and other organisations.

#### Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
1.1 - 1.2	Responsibilities of FRS Personnel	On behalf of the FRS, you have been asked to deliver a presentation at a careers exhibition on the general responsibilities of FRS personnel at all core levels.	Presentation
2.1 - 2.5	Communication Skills in FRS Operations	As part of a multi- emergency service seminar, you have been asked to give an overview of how the FRS has improved communications with the diverse range of people and organisations involved at incidents	Presentation
3.1 - 3.3	Health and Safety and the FRS	To assist employees within the FRS you have been asked to develop two 'high impact' posters highlighting (1) how to deal with hazards and risks and (2) the benefits of good practice and control measures	Posters
4.1 - 4.3	Manage Personal Development in the FRS	You have been asked to produce an article for the in-house FRS magazine on 'How to manage your own personal development'	Written report with diagrams

#### **Essential resources**

Learners should have access to library facilities for research purposes and to the internet to access governmental and inter-governmental websites. Learners must be made aware that fire and rescue services and other authorities have individual websites for each locality/region.

Access to footage from documentaries and accredited online broadcasts showing FRS people in their daily working lives can provide good examples for learners.

Access to the different types of FRS resources referred to within this unit is essential to support learner understanding.

#### Indicative resource materials

#### Manuals and guides

The following manuals and guides have been issued to support the FRS. A local adaptation of what is described within them is sometimes covered by service-specific documentation, which is a source of information that should be utilised to support learner development. This type of documentation is in place to meet local needs and resources.

Department for Communities and Local Government – *Generic Risk Assessments* 1.1 - *Emergency Response and Arrival at the Scene* (The Stationery Office, 2009) ISBN 9780117540163

HM Fire Service Inspectorate – *Dynamic Management of Risk – Fire Service Guides* (The Stationery Office, 1998) ISBN 9780113412211

HM Fire Service Inspectorate – *Dynamic Risk Assessment Flowchart – Fire Service Guides* (The Stationery Office, 2000) ISBN 9780113412518

HM Fire Service Inspectorate – *Volume 1: A Guide for Senior Officers: Fire Service Guides – Generic Risk Assessment Series* (The Stationery Office, 1998) ISBN 9780113412181

HM Fire Service Inspectorate – *Volume 2: A Guide for Managers: Fire Service Guides – Generic Risk Assessment Series* (The Stationery Office, 1998) ISBN 9780113412198

HM Fire Service Inspectorate – *Volume 2: A Guide for Managers: Module 18:*Health and Safety Audit – Fire Service Guides – Generic Risk Assessment Series
(The Stationery Office, 1998) ISBN 9780113412488

HM Fire Service Inspectorate – Volume 3: A Guide to Operational Risk Assessment: Fire Service Guides – Generic Risk Assessment Series (The Stationery Office, 1998) ISBN 9780113412204

In relation to personal development, each FRS will have documentation that explains their practice. Further information can be found on the websites that follow, where workplace learning interventions, including HRD practitioners' strategies, training and development activities, and e-learning programs etc are explained.

#### Journals and magazines

Fire Magazine

Fire Times

Industrial Fire Journal

International Firefighter Magazine

Local FRS 'in-house' magazines

#### Websites

Each FRS has its own website.

The Chartered Institute of Personnel and

Development

www.cipd.co.uk/default.cipd

Chief Fire Officers' Association www.cfoa.org.uk

Communities and Local Government www.communities.gov.uk/fire/

Fire & Rescue Services Act 2004 www.legislation.gov.uk

Fire Service College www.fireservicecollege.ac.uk

Health & Safety at Work Act 1974 www.hse.gov.uk/legislation/hswa.htm

Institute of Fire Engineers www.ife.org.uk/edutrain/

Skills for Justice - Sector Skills Council www.skillsforjustice.com/strand.asp?

PageID=649

The Regulatory Reform (Fire Safety)

Order 2005

www.legislation.gov.uk

UK Fire Service Resources www.fireservice.co.uk

Welsh Assembly Government wales.gov.uk/topics/housingand community/safety/fire/?lang=en

# Unit 2: Practices for Resolving Fire and Special Service Incidents

Unit code: L/502/9522

QCF Level 3: BTEC Specialist

Credit value: 11

Guided learning hours: 60

#### Unit aim

This unit examines the underpinning understanding required to resolve fire and special service incidents including operational systems of work, working practices, use of risk assessment, how to respond to fire and special service incidents, use of appropriate operational equipment and working with others at incidents.

#### Unit introduction

The principles of resolving fire incidents and of resolving special service incidents are considered to be similar and this unit addresses them as one.

This unit covers the underpinning knowledge required to resolve a range of operational incidents in a fire and rescue context. It examines operational systems of work and working practices that fire fighters follow when attending incidents.

Learners will examine the use of risk assessment and control measures, as well as how fire fighters respond directly to fire and special service incidents. Learners will explore the range of personal protective equipment available to fire fighters and how to operate appropriate equipment safely to access, control and/or extinguish fires and to minimise damage to property and the environment from the effects of fire and its extinguishment.

The unit explores how to work with others to respond to emergencies involving all types of fire, resolved by single and multiple crews. Learners will also explore how communication skills are used at fire and special service incidents.

Resolving fire and special service incidents is covered in general terms in this unit and within the context specific detail of *Unit 3: Fire Fighter Role at Operational Incidents for Search, Rescue and Casualty Care* and *Unit 4: Fire Fighter Responsibilities at Hazardous Material Incidents*. It is also given attention in other units within this qualification.

Generic and specific risk assessment is covered within this unit and their application is reinforced and developed in Units 3 and 4.

#### Learning outcomes and assessment criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

#### On completion of this unit a learner should:

Learning outcomes		Assessment criteria		
1	Understand operational systems of work and working practices	1.1	Describe the purpose of operational systems of work	
		1.2	Explain how working practices function within systems of work	
		1.3	Explain the systems of work and working practices at operational incidents	
2	Understand risk assessment and control measures for fire and special	2.1	Explain the use of generic risk assessment and control measures	
	service incidents	2.2	Explain the use of specific risk assessment and control measures	
		2.3	Explain how to apply individual risk assessment and control measures	
		2.4	Explain the relationship between generic, specific and individual risk assessment	
3	Understand how to respond to fire	3.1	Describe the classification of fire	
	and special service incidents	3.2	Explain methods of extinction and applicable media used for classes of fire	
		3.3	Explain the behaviour of fire	
		3.4	Explain causes of special service incidents	
4	Understand how to use operational and personal protective equipment for fire and special service incidents	4.1	Describe the capability and limitations of operational and personal protective equipment	
		4.2	Explain how to use operational and personal protective equipment to meet fire and special service objectives	

Learning outcomes		Assessment criteria	
5	Understand how to work with others in fire and special service incidents	5.1	Explain the importance of the roles within incident command system, single service and multi agency responses
		5.2	Explain limits of authority of self and others to meet fire and special service objectives
		5.3	Describe incident ground communications to meet fire and special service objectives

#### Unit content

#### 1 Understand operational systems of work and working practices

Operational systems of work: for risk assessment; incident command; breathing apparatus (BA) control; safe systems of work eg working at height, working on or near water, working on permanent way, working on motorways

Working practices: Standard Operating Procedures (SOPs); statutory requirements; memorandums of understanding; fire and rescue service technical guidance; site-specific information

## 2 Understand risk assessment and control measures for fire and special service incidents

Generic risk assessment: incident types including transport, (modes of transport, centres such as stations, ports and harbours) fire, premises (industrial, commercial, residential, entertainment), machinery, water, (inland and/or off shore); control measures

Specific risk assessment: against local risk; sources of risk assessment eg from other public services, from agencies, from private sector; control measures

*Individual risk assessment*: eg dynamic, analytical, decision-making model; control measures

#### 3 Understand how to respond to fire and special service incidents

Fire incidents: classification of fire, fire behaviour including causes of fire, the fire triangle, methods of spread, fire development, fire phenomena eg flashover, backdraught; methods employed to gain access, effect entry and maintain egress; safe systems of work eg SOPs

Methods and media for controlling and extinguishing fires: importance of limiting damage from operational incidents, importance of reducing harm to the environment, importance of preserving evidence including to establish the cause, fire behaviour and origin

Special service incidents: eg lock outs, transport incidents, dangerous structures, salvage; methods employed to gain access, effect entry and maintain egress; safe systems of work eg SOPs

# 4 Understand how to use operational and personal protective equipment for fire and special service incidents

Types of equipment: including hose and hose fitting, hydrants and water supplies, pumps and primers, knots and lines, extinguishers, ladders, foam and foam making equipment, hydraulic and pneumatic equipment, lighting equipment

Personal protective equipments: including fire fighting kit, breathing apparatus, specialist equipment eg water rescue kit, working at heights, high volume pump kit, wild fire

Use of personal protective and operational equipment: how to select the appropriate personal protective and operational equipment; capabilities and limitations

# 5 Understand how to work with others in fire and special service incidents

Roles: responsibility within incident command system eg communication with and identification of relevant people; on and off site planning, limits of authority of self and others; importance of accurate record keeping and use of records eg recorded incident ground messages, control messages, risk assessment

Communication: lines of communication: who you talk to, incident ground communication system; methods of communication including radio, line signals, hand signals, words of command, safety signals, phonetic alphabet; confidentiality; briefs and debriefs; communicating with others eg police, ambulance, local authority, local authority fire service, emergency planning department, NHS, private sector, media, the public

# Essential guidance for tutors

# Delivery

Learners will require input from the FRS, especially in instances where the unit is not delivered as part of a fire fighter development programme. Evidence could be generated from visits to FRS establishments. Appropriate work placements could also be used to generate evidence.

Learners should have opportunities to review high profile fire and special service incidents involving media coverage, in particular incidents where the FRS has received praise and/or identified lessons to be learned from their actions. Footage from documentaries and FRS-accredited online broadcasts showing FRS people in their daily working lives will provide good material for group discussion.

It is recommended that delivery of this unit is as practical as possible to engage and motivate learners. It is suggested that a theoretical input is followed by examples of the theory in practice. This could be achieved through observing and reviewing an actual incident or a realistic scenario. For example, a useful approach could be to set up a scenario of a fire that needs to be extinguished and/or a minor collapsed structure that needs to be made safe. Learners should be guided as to what to look for when observing and reviewing the scenario so they are able to identify effective and not so effective performance. Learners may have had personal experiences of these incidents that could be distressing, and therefore sensitivity should be applied.

Learners who are engaged in a FRS fire fighter development programme operated by a local authority in England, Wales, Scotland, Northern Ireland, or the Defence Fire Risk Management Organisation, or private and specialist fire and rescue services may find that this can be integrated into Units 2, 3 and 4 in this qualification.

It is recommended that visits to, and from, a range of people/groups involved in fire and special service incidents are arranged, for example:

Visits to

FRS Training establishment

FRS station

Speakers from

FRS Operational Performance/Assurance Teams

FRS Training/Operations

Officers from relevant local and non-local authority organisations involved in supporting fire and special service responses eg airports, rail, ports, armed services, Ministry of Defence, county councils.

Contact information for these organisations can be found on The Chief Fire Officers Association website (www.cfoa.org.uk/frs).

# Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

# Topic and suggested assignments/activities and/assessment

Introduction to unit and programme of assignments

Teaching activity – how non-life-threatening fire and special service incidents are defined

Case study analysis - reviewing actual incidents and identifying their type

Teaching activity – relationship between systems of work and working practices

Visiting speakers from operational performance/assurance teams

Teaching activity – application of systems of work and working practices at fire and special service incidents

Case study analysis of a fire and a special service incident

# **Assignment 1: Systems of Work and Working Practices**

Review of Assignment 1, including tutor feedback and re-working

Teaching activity – relationship between the different types of risk assessment and control measures

Visiting speakers from operational performance/assurance teams

Teaching activity – application of the different types of risk assessment and control measures

Visiting speakers from operational performance/assurance teams

Case study analysis of an incident scenario identifying the relevant risk assessment

#### **Assignment 2: Risk Assessment and Control Measures**

Review of Assignment 2, including tutor feedback and re-working

Teaching activity – fire and extinction

Learner research into the types of fire, their development, behaviour and extinction

Teaching activity – special service incidents and their causes

Learner research into the types of special service incidents, their causes and responses

## **Assignment 3: Responses to Fire and Special Service Incidents**

Review of Assignment 3, including tutor feedback and re-working

Teaching activity – types of operational equipment and PPE, their limitations and capabilities

FRS trainer-led seminar on the location of operational equipment and PPE

Teaching activity – use of operational equipment and PPE

Learner research on the use of operational equipment and PPE

# **Assignment 4: Operational and Personal Protective Equipment (PPE)**

Review of Assignment 4, including tutor feedback and re-working

Teaching activity – the public and other organisations

Visits from FRS operations personnel

Learner-led presentation identifying the importance, ways and means of working with others

# **Assignment 5: Working with Others**

Review of Assignment 5, including tutor feedback and re-working

Review of unit and programme of assignments

#### **Assessment**

It is recommended that assessment criteria are integrated to create holistic assignments. Observation and identification of information against specified objectives in assignments would provide evidence of learner understanding and of them meeting the assessment criteria.

A number of activities can be used to meet the assessment criteria of this unit. The FRS and other authorities involved in fire and special service incidents may be able to provide practical information and possible case studies for learners to analyse.

It would be useful for learners to observe the FRS and other authorities involved in fire and special service incidents in real or simulated incidents. Evidence could be in the form of written reports or presentations with effective evaluations and summaries. Evidence could also be gained from witness testimony.

Learners could devise a questionnaire and feedback forms, which could be used as part of investigatory interviews, presentations and discussions with members of the FRS and other authorities.

# Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
1.1 - 1.3	Systems of Work and Working Practices	On behalf of the FRS, you have been asked to support learners who need to know how the FRS apply systems of work and working practices at fires and special service incidents	Presentation
2.1 - 2.4 3.4	Risk Assessment and Control Measures	As part of an internal review team you have been asked to review and make recommendations following an analysis of 'near miss' and accident investigation information against a range of risk assessments and control measures	Written report
3.1 - 3.3	Responses to Fire and Special Service Incidents	As part of a community safety initiative you have been asked to explain how incidents develop and the how to resolve them	Presentation
4.1, 4.2	Operational and Personal Protective Equipment (PPE)	As a trainee you have been asked to explain the general use, capabilities and limitations of operational equipment and PPE	Presentation
5.1 - 5.3	Working with Others	You have been asked to write an article about how the FRS works with the public and other responding organisations	Written report with diagrams

#### **Essential resources**

Learners should have access to library facilities for research purposes and to the internet to access governmental and inter-governmental websites. Fire and rescue services and other authorities have individual websites for their locality/region.

Footage from documentaries and accredited online broadcasts showing FRS personnel in their daily working lives can provide good examples of fire and special service incidents for learners.

Access to FRS operational equipment and personal protective equipment is essential to supporting learner understanding.

#### Indicative resource materials

#### Manuals and guides

The following manuals and guides have been issued to support the FRS. A local adaptation of what is described within them is sometimes covered by service-specific documentation, which is a source of information that should be utilised to support learner development. This type of documentation is in place to meet local risk, needs and resources.

Chief Fire and Rescue Advisers Unit/Communities and Local Government Environmental Protection – Fire and Rescue Manual – Volume 2: Fire Service Operations (The Stationery Office, 2008) ISBN 9780113413164

Chief Fire and Rescue Advisers Unit/Communities and Local Government – *Generic Risk Assessment 3.2 – High Rise Firefighting – Version 2 – September 2008* (The Stationery Office, 2008) ISBN 9780113413256

Chief Fire and Rescue Advisers Unit/Communities and Local Government – *Generic Risk Assessment 5.7 – Explosives – Version 2 – Part 1* (The Stationery Office, 2008) ISBN 9780113413225

Chief Fire and Rescue Advisers Unit/Communities and Local Government – *Incident Command – 3rd Edition (2008) – Fire and Rescue Manual – Volume 2: Fire Service Operations* (The Stationery Office, 2008) ISBN 9780113413218

Department for Communities and Local Government – *Generic Risk Assessments* 1.1 – *Emergency Response and Arrival at the Scene* (The Stationery Office, 2009) ISBN 9780117540163

HM Fire Service Inspectorate – *Acetylene Cylinder Incidents and Natural Gas Incidents – Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 2003) ISBN 9780113412266

HM Fire Service Inspectorate – Aircraft Incidents – Fire and Rescue Service Manual Volume 2: Fire Service Operations (The Stationery Office, 1999) ISBN 9780113411924

HM Fire Service Inspectorate – Communications and Mobilising Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media (The Stationery Office, 1998) ISBN 9780113411856

HM Fire Service Inspectorate – *Dynamic Management of Risk – Fire Service Guides* (The Stationery Office, 1998) ISBN 9780113412211

HM Fire Service Inspectorate – *Dynamic Risk Assessment Flowchart – Fire Service Guides* (The Stationery Office, 2000) ISBN 9780113412518

HM Fire Service Inspectorate – *Electricity – Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 1998) ISBN 9780113411122

HM Fire Service Inspectorate – Firefighting Foam (Operational) – Fire and Rescue Service Manual – Volume 2: Fire Service Operations (The Stationery Office, 1998) ISBN 9780113411863

HM Fire Service Inspectorate – *Firefighting Foam – Technical Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media* (The Stationery Office, 2000) ISBN 9780113411887

HM Fire Service Inspectorate – Hydraulics, Pumps and Water Supplies – Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media (The Stationery Office, 2001) ISBN 9780113412167

HM Fire Service Inspectorate – *Inspection and Testing of Equipment – Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media* (The Stationery Office, 2003) ISBN 9780113412747

HM Fire Service Inspectorate – *Marine Incidents – Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 1999) ISBN 9780113412310

HM Fire Service Inspectorate – *Physics and Chemistry for Firefighters – Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media* (The Stationery Office, 1998) ISBN 9780113411825

HM Fire Service Inspectorate – *Safe Work at Height – Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 2006) ISBN 9780113413126

HM Fire Service Inspectorate – *Safe Working Near, On or In Water – Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 2002) ISBN 9780113412686

HM Fire Service Inspectorate – *Tactical Ventilation and Compartment Fires Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 1997) ISBN 9780113411757

HM Fire Service Inspectorate – *Volume 1: A Guide for Senior Officers Fire Service Guides – Generic Risk Assessment Series* (The Stationery Office, 1998) ISBN 9780113412181

HM Fire Service Inspectorate – *Volume 2: A Guide for Managers Fire Service Guides* – *Generic Risk Assessment Series* (The Stationery Office, 1998) ISBN 9780113412198

HM Fire Service Inspectorate – *Volume 2: A Guide for Managers – Module 18: Health and Safety Audit – Fire Service Guides – Generic Risk Assessment Series* (The Stationery Office, 2001) ISBN 9780113412488

HM Fire Service Inspectorate – *Volume 3: A Guide to Operational Risk Assessment* – *Fire Service Guides – Generic Risk Assessment Series* (The Stationery Office, 1998) ISBN 9780113412204

## Journals and magazines

Fire Magazine

Fire Times

Industrial Fire Journal

International Firefighter Magazine

Local FRS 'in-house' magazines

#### Websites

Each FRS has its own website.

Aviation Fire Journal www.aviationfirejournal.com/

Chief Fire Officers' Association www.cfoa.org.uk

Communities and Local Government www.communities.gov.uk/fire/

Fire Magazine www.fire-magazine.com

The Organisation for Emergency Services www.joiff.com/

Management

The Fire Service College, Moreton-in-

Marsh

UK Fire Service Resources www.fireservice.co.uk

Welsh Assembly Government wales.gov.uk/topics/housingand

community/safety/fire/?lang=en

www.fireservicecollege.ac.uk

Unit 3: Fire Fighter Role at Operational

Incidents for Search, Rescue and

Casualty Care

Unit code: R/502/9523

QCF Level 3: BTEC Specialist

Credit value: 7

Guided learning hours: 30

## Unit aim

This unit focuses on the responsibilities fire fighters have when participating in search, rescue and casualty care at all types of operational incidents.

# Unit introduction

This unit covers the knowledge, understanding and skills learners will need to work as team members searching for life and rescuing people during operational incidents relating to search, rescue and casualty care.

Learners will learn how to search for life safely using the range of personal protective and rescue equipment available to fire fighters. Example situations could include those within structures such as compartments, transport vehicles, open spaces, and rescuing life involved in incidents including when persons are trapped in wreckage, collapsed or dangerous structures and as a result of adverse weather conditions. Learners will also learn how to provide appropriate treatment to casualties and about casualty handling including their own responsibilities. Casualty handling situations include those within an incident environment, removed from an incident, when a casualty approaches fire fighters at an incident. Lines of communication and support for people at incidents as well as liaising with other agencies are also covered in this unit.

It is recommended that learners complete *Unit 1: Personal Responsibilities for Performance in the Fire and Rescue Service* and *Unit 2: Practices for Resolving Fire and Special Service Incidents* before completing this unit.

# Learning outcomes and assessment criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

# On completion of this unit a learner should:

Learning outcomes		Assessment criteria		
1	Understand hazards and risks in search, rescue and casualty care operations faced by fire fighters	1.1	Explain the types of hazards and risks that may occur at search incidents	
		1.2	Explain the types of hazards and risks that may occur at rescue incidents	
		1.3	Explain the types of hazards and risks that may occur caring for casualties	
		1.4	Explain how to apply decisions based on the assessment of risk in search, rescue and casualty care operations	
2	Understand how fire fighters work with others in search, rescue and casualty operations	2.1	Describe roles and responsibilities of personnel at search, rescue and casualty care operations	
		2.2	Explain the importance of effective communication with search, rescue and casualty care operations	
		2.3	Explain the importance of gathering and sharing information in search, rescue and casualty care operations	
		2.4	Explain how evidence from an incident is identified, preserved and recorded	
3	Know procedures used by fire fighters for search and rescue and	3.1	Describe search procedures and techniques	
	casualty care	3.2	Describe rescue procedures and techniques	
		3.3	Explain the procedures for using equipment at operational incidents involving search, rescue and casualty care	

# Unit content

# 1 Understand hazards and risks in search, rescue and casualty care operations faced by fire fighters

Hazards and risks: nature of hazards and risks at operational incidents involving search, rescue and casualty care; dynamic risk assessment eg incident environment for search and rescue, access and egress with casualties, saveable life, risk to self and others, position of casualty, assessment of actions in relation to casualty care eg treatment (ABC); triage

How to apply decisions based on the assessment of risk: search including search methodology; rescue eg use of specialist teams and equipment; casualty care eg dignity of casualty; prioritisation of casualty care including triage, how and when to provide immediate casualty care; appropriate casualty handling techniques

# 2 Understand how fire fighters work with others in search, rescue and casualty operations

Roles and responsibilities: limits of authority of self and others; behaviour towards colleagues, other services and the public in search, rescue and casualty care operations eg supporting distressed individuals, consideration of diversity, respect, dignity; how to identify evidence, how to preserve evidence and incident scenes

Communication: liaising with other agencies eg police, ambulance, local authority, local authority fire service, emergency planning department, NHS, intercompany departments; clear and effective lines of communication; incident command system; importance of communication eg to avoid problems (compromise health and safety, delay to reaction times, further injury)

Gathering and sharing of information: availability and sharing of information eg access to operational intelligence, collecting information, making decisions, factors that can influence end results; use of record systems in search, rescue and casualty care operations including identification and preservation of evidence/scene, dealing with fatalities, lessons learned, using information gathered and shared to improve practice for future incidents

# 3 Know procedures used by fire fighters for search and rescue and casualty care

Search, rescue and casualty care: procedures for fire and other incidents not involving fire eg transport incidents, risk area; skills and techniques eg releasing trapped people (cutting, lifting, spreading), for search and rescue; procedures for use of equipment

Capabilities and limitations: importance of using personnel with appropriate skills and authority for search, rescue and casualty care; of rescue and casualty care equipment including how to select and use appropriate equipment

# Essential guidance for tutors

# Delivery

Learners will require input from the FRS, especially in instances where the unit is not delivered as part of a fire fighter development programme. Evidence could be generated from visits to FRS establishments. Appropriate work placements could also be used to generate evidence.

Learners should have the opportunity to review high profile search, rescue and casualty care incidents involving media coverage, particularly incidents where the FRS has received praise and/or identified lessons to be learned from their actions. Footage from documentaries and FRS-accredited online broadcasts showing FRS personnel in their daily working lives will provide good material for group discussion. Learners should review incidents involving people and incidents involving animals.

It is recommended that delivery of this unit is as practical as possible to engage and motivate learners. It is suggested that a theoretical input is followed by examples of the theory in practice. This could be achieved through learners observing and reviewing a realistic scenario. A useful approach could be to set up scenarios of search and rescue by ladders at different levels of a building and/or breathing apparatus wearers searching a room(s) for casualties. Learners should be guided as to what to look for when observing and reviewing the scenario so they are able to identify effective and not so effective performance. Learners may have had personal experiences of such incidents which may be distressing, and therefore sensitivity should be applied.

Learners who are engaged in a FRS fire fighter development programme operated by a local authority in England, Wales, Scotland, Northern Ireland, or the Defence Fire Risk Management Organisation, or private and specialist fire and rescue services may find that this can be integrated into Units 2, 3 and 4 in this qualification.

It is recommended that visits to, and from, a variety of people/groups involved in fire and special service incidents are arranged, for example:

Visits to

FRS training establishment

**FRS Station** 

Speakers from

FRS Operational Performance/Assurance Teams

FRS Training/Operations teams

FRS Fire Investigation Teams

Police Scenes of Crime Officers

Officers from relevant local and non-local authority organisations involved in supporting search and rescue responses eg ambulance service, armed services, Ministry of Defence, Coast Guard, RSPCA

Contact information for these organisations can be found on The Chief Fire Officers Association website (www.cfoa.org.uk/frs).

# Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

# Topic and suggested assignments/activities and/assessment

Introduction to unit and programme of assignments

Teaching activity – how responses to search, rescue and casualty care incidents are carried out

Case study analysis – reviewing actual incidents and identifying the role of the FRS within each

Teaching activity – hazards and risks associated with locating, removing and caring for casualties

Teaching activity – application of decision making

Case study analysis – incidents involving search, rescue and casualty care using the decision-making model

# **Assignment 1: Hazards, Risks and Decision Making**

Review of Assignment 1 including tutor feedback and re-working

Teaching activity – roles, responsibilities, communication and information needs in relation to search, rescue and casualty care

Visiting speakers from operational performance/assurance teams, police, ambulance service

Teaching activity – evidence and security needs at operational incidents

Visiting speakers from FRS Fire Investigation Team, coroner's office, scene of crime officers

# **Assignment 2: Working with Others**

Review of Assignment 2 including tutor feedback and re-working

Teaching activity – search and rescue techniques

Visits from FRS operations personnel

Teaching activity – use of equipment

Learner-led presentation on the limitations and capabilities of search, rescue and casualty care equipment

## **Assignment 3: Procedures and Equipment**

Review of Assignment 3 including tutor feedback and re-working

Review of unit and programme of assignments

#### Assessment

It is recommended that assessment criteria are integrated to create holistic assignments. Observation and identification of information against specified objectives in assignments would provide evidence of learner understanding and of them meeting the assessment criteria.

A number of activities can be used to meet the assessment criteria of this unit. The FRS and other authorities involved in search, rescue and casualty care incidents may be able to provide practical information and possible case studies for learners to analyse.

It would be useful for learners to observe the FRS and other authorities involved in search, rescue and casualty care incidents in real or simulated incidents. Evidence could be in the form of written reports or presentations with effective evaluations and summaries. Evidence could also be gained from witness testimony.

Learners could devise a questionnaire and feedback forms, which could be used as part of investigatory interviews, presentations and discussions with members of the FRS and other authorities.

# Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
1.1 - 1.4	Hazards, Risks and Decision Making	On behalf of the FRS, you have been asked to produce an explanatory document for trainee ambulance personnel 'How FRS personnel manage the safety of casualties and themselves at incidents'	Written report with diagrams
2.1 - 2.4	Working with Others	You have been asked to explain the complexity of communication and security needs at the incident ground to newly elected Councillors of the Fire Authority	Presentation
3.1 - 3.3	Procedures and equipment	As part of an EU initiative you have been asked by your FRS to describe the search, rescue and casualty care procedures and equipment in use within the FRS to a group of English speaking delegates from outside the EU	Presentation

#### **Essential resources**

Learners should have access to library facilities for research purposes and to the internet to access governmental and inter-governmental websites. Learners must be made aware that fire and rescue services and other authorities have individual websites for each locality/region.

Footage from documentaries and accredited online broadcasts showing FRS personnel in their daily working lives can provide good examples of incidents involving search, rescue and casualty care for learners.

Access to FRS operational search, rescue and casualty care equipment and Personal protective equipment is essential to supporting learner understanding.

#### Indicative resource materials

#### Manuals and guides

The following manuals and guides have been issued to support the FRS. A local adaptation of what is described within them is sometimes covered by service-specific documentation, which is a source of information that should be utilised to support learner development. This type of documentation is in place to meet local risk, needs and resources.

Chief Fire and Rescue Advisers Unit/Communities and Local Government – *Incident Command – 3rd Edition – Fire and Rescue Manual – Volume 2: Fire Service Operations* (The Stationery Office, 2008) ISBN 9780113413218

Department for Communities and Local Government (DCLG) – *Generic Risk Assessment 2.5 – Large Animal Rescue* (The Stationery Office, 2010) ISBN 9780117540309

HM Fire Service Inspectorate – Aircraft Incidents – Fire and Rescue Service Manual – Volume 2: Fire Service Operations (The Stationery Office, 1999) ISBN 9780113411924

HM Fire Service Inspectorate – *Communications and Mobilising – Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media* (The Stationery Office, 1998) ISBN 9780113411856

HM Fire Service Inspectorate – *Dynamic Management of Risk – Fire Service Guides* (The Stationery Office, 1998) ISBN 9780113412211

HM Fire Service Inspectorate – *Dynamic Risk Assessment Flowchart – Fire Service Guides* (The Stationery Office, 2000) ISBN 9780113412518

HM Fire Service Inspectorate – *Electricity – Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 1998) ISBN 9780113411122

HM Fire Service Inspectorate – *Incidents Involving Rescue from Road Vehicles – Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 2007) ISBN 9780113413058

HM Fire Service Inspectorate – *Inspection and Testing of Equipment Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media* (The Stationery Office, 2003) ISBN 9780113412747

HM Fire Service Inspectorate – *Marine Incidents – Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 1999) ISBN 9780113412310

HM Fire Service Inspectorate – Safe Work at Height – Fire and Rescue Service Manual – Volume 2: Fire Service Operations (The Stationery Office, 2006) ISBN 9780113413126

HM Fire Service Inspectorate – *Safe Working Near, On or In Water – Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 2002) ISBN 9780113412686

HM Fire Service Inspectorate – *Tactical Ventilation and Compartment Fires Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 1997) ISBN 9780113411757

HM Fire Service Inspectorate – Volume 3: A Guide to Operational Risk Assessment – Fire Service Guides – Generic Risk Assessment Series (The Stationery Office, 1998) ISBN 9780113412204

#### Journals and magazines

Fire Magazine

Fire Times

Industrial Fire Journal

International Firefighter Magazine

Local FRS 'in-house' magazines

#### **Websites**

Each FRS has its own website.

Arson Prevention Bureau www.arsonpreventionbureau.org.uk/

Aviation Fire Journal www.aviationfirejournal.com/

Chief Fire Officers' Association www.cfoa.org.uk

Department Communities and

Local Government

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Fire Magazine www.fire-magazine.com

The Organisation for Emergency

Services Management

www.joiff.com/

The Fire Service College, Moreton-

in-Marsh

www.fireservicecollege.ac.uk

www.communities.gov.uk/fire/

UK Fire Service Resources www.fireservice.co.uk

UK Resilience interim.cabinetoffice.gov.uk/ukresilience.aspx

UK Urban Search & Rescue www.ukusar.com/

Welsh Assembly Government wales.gov.uk/topics/housingandcommunity/

safety/fire/?lang=en

# Unit 4: Fire Fighter Responsibilities at Hazardous Material Incidents

Unit code: Y/502/9524

QCF Level 3: BTEC Specialist

Credit value: 7

Guided learning hours: 30

# Unit aim

The aim of this unit is about developing learners' understanding of fire fighter responsibilities at hazardous material incidents.

## Unit introduction

This unit explores how fire fighters work as members of a team in single or multiple crews, to respond to incidents involving hazardous material for example that present a potential hazard to health or the environment. Learners will learn about the different types hazardous materials, including their impact on the human body. They will learn how to use appropriate personal protective equipment and how to operate appropriate equipment to minimise damage to the environment from hazardous materials.

Learners will also explore the importance of limiting damage to the environment from hazardous materials Including the fire fighter's responsibility to work as a member of a team to respond to hazardous material incidents. They will learn about the different ways to decontaminate people and property.

# Learning outcomes and assessment criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

# On completion of this unit a learner should:

Learning outcomes		Assessment criteria	
1	Understand hazards and risks at hazardous material incidents	1.1	Describe hazards and risks when working with hazardous material incidents
		1.2	Explain how to apply decisions based on the assessment of risk in hazardous material incidents
2	Know hazardous materials	2.1	Describe the classes of hazardous materials
		2.2	Interpret hazardous material panels and signs to determine response to hazards
		2.3	Describe the effects of hazardous materials on the body
		2.4	Identify legislation associated with hazardous materials
3	Understand how to respond to hazardous material incidents	3.1	Explain the methods of control and containment of hazardous materials
		3.2	Describe the capability and limitations of operational and personal protective equipment used at hazardous material incidents
		3.3	Explain how to select operational and personal protective equipment to meet hazardous material incident objectives
		3.4	Explain how to use operational and personal protective equipment to meet hazardous material incident objectives

Learning outcomes		Assessment criteria	
4	Understand how to work with others at hazardous material incidents	4.1	Explain the importance of communication with colleagues, other agencies and the public
		4.2	Explain the importance of gathering and sharing information at hazardous material incidents
		4.3	Explain how fire fighters would identify, preserve and record evidence found at hazardous material incidents
		4.4	Describe the roles and responsibilities of personnel at hazardous material incidents

# **Unit content**

#### 1 Understand hazards and risks at hazardous material incidents

Hazards and risks: nature of hazards and risks at hazardous material incidents; dynamic risk assessment eg environment of hazardous material incident hazardous materials, access and egress, risk to self and others, wind direction, slope of ground, water table; how to apply decisions based on the assessment of risks at hazardous material incidents; identification of level of risk, safe systems of work, emergency action code, additional personal protection codes

#### 2 Know hazardous materials

Classes: explosives, compressed gases, flammable liquids, flammable solids, oxidising agents and organic peroxides, toxic substances, poisonous substances, biological hazards, radioactive substances, miscellaneous dangerous substances, dust

Hazard panels and signs: gases, radioactive materials, agro-chemical stores, biohazards, other warning signs; interpretation of information in common labelling; transportation information panels, Hazard Warning Diamonds, United Nations Numbers, the ADR code Substance Identification Number, Kemlar code; use of hazard signs and codes to determine appropriate response to dealing with the hazards

Causes of harm: irritants, corrosives, toxic, carcinogens, mutagens, teratogens, agents of anoxia, narcotics, oxidising agents

Routes of entry into the body: inhalation, ingestion, absorption

Legislation and regulations: including Health and Safety, Control of Substances Hazardous to Health (COSHH Regulations), Control of Major Accident Hazards, transportation of hazardous materials, personal protective equipment requirements, decontamination requirements

# 3 Understand how to respond to hazardous material incidents

Methods of control and containment: pre-planning, training and information, pre-determined attendance, specialist equipment, incident command, inner/outer cordons, topographical features, safety of personnel, health surveillance, electrical apparatus, considerations at incidents, personal protective clothing/equipment, containment procedures, limiting damage to property and the environment; agencies involved eg CHEMMET, CHEMDATA, TOPS, CHEMSAFE, NAIR, RIMNET, RADSAFE, Environment Agency, local authority fire service organisations, the Metrological Office

Equipment: fire fighting equipment, decontamination equipment, personal protective equipment (breathing apparatus, chemical protection suits, PVC gauntlets, rubber boots); limits and capabilities of equipment

Decontamination: purpose of decontamination eg to protect people, environment and property; selection of decontamination equipment, selection and setting up of decontamination zone, designation of decontamination team, methods and procedures of decontamination, initial decontamination zone, full decontamination zone; disposal and decontamination of contaminated items and materials through liaison with other agencies eg Environment Agency/Scottish Environment Protection Agency (SEPA)

#### 4 Understand how to work with others at hazardous material incidents

Communication: liaising with other agencies eg Environment Agency, police, ambulance, local authority, local authority fire service, emergency planning department, NHS, intercompany departments; liaising with others eg manufacturers, scientific advisers, site owners/management, general public; clear and effective lines of communication; incident command system

Information: availability and sharing of information including access to operational intelligence eg HAZMAT CHEMDATA; collecting information, making decisions, factors that can influence end results; use of record systems in hazardous material incidents including identification and preservation of evidence/scene

Roles and responsibilities: limits of authority of self and others; behaviour towards colleagues, other services and the public in hazardous material incidents eg supporting distressed individuals, consideration of diversity, respect, dignity

# Essential guidance for tutors

# Delivery

Learners will require input from the FRS, especially in instances where the unit is not delivered as part of a fire fighter development programme. Evidence could be generated from visits to FRS establishments. Appropriate work placements could also be used to generate evidence.

Learners should have the opportunity to review high profile hazardous material incidents involving media coverage, particularly incidents where the FRS has received praise and/or identified lessons to be learned from their actions. Footage from documentaries and FRS-accredited online broadcasts showing FRS personnel in their daily working lives will provide good material for group discussion.

It is recommended that delivery of this unit is as practical as possible to engage and motivate learners. It is suggested that a theoretical input is followed by examples of the theory in practice. This could be achieved through learners observing and reviewing a realistic scenario. For example, a useful approach could be to set up a scenario of a decontamination zone and/or hazardous material incident. Learners should be guided as to what to look for when observing and reviewing the scenario so they are able to identify effective and not so effective performance. Learners may have had personal experiences of such incidents which may be distressing, and therefore sensitivity should be applied.

Learners who are engaged in a FRS fire fighter development programme operated by a local authority in England, Wales, Scotland, Northern Ireland, or the Defence Fire Risk Management Organisation, or private and specialist fire and rescue services may find that this can be integrated into Units 2, 3 and 4 in this qualification.

It is recommended that visits to, and from, a variety of people/groups involved in fire and special service incidents are arranged, for example:

Visits to

FRS Training establishment

Hazardous materials storage site

Visits from

FRS HAZMAT officer

FRS Scientific Adviser

Environmental Protection officer

Officers from relevant local and non-local authority organisations involved in supporting hazardous material incident responses eg Highways Agency, ambulance service, armed services, Ministry of Defence.

Contact information for these organisations can be found on The Chief Fire Officers Association website (www.cfoa.org.uk/frs).

# Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way of planning the delivery and assessment of this unit.

# Topic and suggested assignments/activities and/assessment

Introduction to unit and programme of assignments

Teaching activity - how responses to hazardous materials incidents are carried out

Case study analysis – reviewing actual incidents and identifying the role of the FRS within each

Teaching activity incorporating a visit to a hazardous materials storage site – hazards and risks associated with stored materials

Teaching activity – application of decision making

Learner research – identifying the impact of a hazardous material incident on the decision-making model

# **Assignment 1: Hazards, Risks and Decision Making**

Review of Assignment 1 – including tutor feedback and re-working

Teaching activity – legislation, classes and signage

Visits from FRS scientific services, environmental protection officer

Teaching activity – effects of hazardous materials

Learner research on the human body's reaction to hazardous materials

# **Assignment 2: Hazardous Materials**

Review of Assignment 2 – including tutor feedback and re-working

Teaching activity - control and containment

Visits from FRS HAZMAT officer

Teaching activity - use of equipment

Learner-led seminar on the use, limitations and capabilities of operational and personal protective equipment

# **Assignment 3: Response to Hazardous Material Incidents**

Review of Assignment 3 – including tutor feedback and re-working

Review of unit and programme of assignments

#### Assessment

It is recommended that assessment criteria are integrated to create holistic assignments. Observation and identification of information against specified objectives in assignments would provide evidence of learner understanding and of them meeting the assessment criteria.

A number of activities can be used to meet the assessment criteria of this unit. The FRS and other authorities involved in search, rescue and casualty care incidents may be able to provide practical information and possible case studies for learners to analyse.

It would be useful for learners to observe the FRS and other authorities involved in hazardous materials incidents in real or simulated incidents. Evidence could be in the form of written reports or presentations with effective evaluations and summaries. Evidence could also be gained from witness testimony.

Learners could devise a questionnaire and feedback forms, which could be used as part of investigatory interviews, presentations and discussions with members of the FRS and other authorities.

# Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
1.1 - 1.2	Hazards, Risks and Decision Making	On behalf of the FRS, you have been asked to explain to new employees of a chemical company how the FRS manage their safety when dealing with incidents involving hazardous materials	Presentation
2.1 - 2.4	Hazardous Materials	You have been asked to produce an explanatory document for local companies that store/manufacture hazardous materials which outlines the legislation, classes, signage and effects in relation to these materials	Written document with diagrams
3.1 - 3.4	Response to Hazardous Material Incidents	As part of an emergency services cooperation initiative you have been asked by your FRS to describe the methods of control/ containment for hazardous materials and the equipment used to deal with hazards material incidents	Presentation

#### **Essential resources**

Learners should have access to library facilities for research purposes and to the internet to access governmental and inter-governmental websites. Learners must be made aware that fire and rescue services and other authorities have individual websites for each locality/region.

Footage from documentaries and accredited online broadcasts showing FRS personnel in their daily working lives can provide good examples of incidents involving hazardous materials for learners.

Access to FRS equipment used to deal with hazardous materials and personal protective equipment is essential to supporting learner understanding.

#### Indicative resource materials

#### Manuals and guides

The following manuals and guides have been issued to support the FRS. A local adaptation of what is described within them is sometimes covered by service-specific documentation, which is a source of information that should be utilised to support learner development. This type of documentation is in place to meet local risk, needs and resources.

Chief Fire and Rescue Advisers Unit/Communities and Local Government – *Generic Risk Assessment 3.2 – High Rise Firefighting – Version 2* (The Stationery Office, 2008) ISBN 9780113413256

Chief Fire and Rescue Advisers Unit/Communities and Local Government – *Incident Command – 3rd Edition – Fire and Rescue Manual – Volume 2: Fire Service Operations* (The Stationery Office, 2008) ISBN 9780113413218

Department for Communities and Local Government – *Generic Risk Assessments* 5.4 – *Incidents Involving Biological Hazards* (The Stationery Office, 2010) ISBN 9780117540767

Department for Communities and Local Government – *Generic Risk Assessment 5.9* – *Incidents Involving Asbestos Containing Materials (ACMs)* (The Stationery Office, 2010) ISBN 9780117540842

Health & Safety Executive (HSE) – Arrangements for dealing with nuclear incidents (HSE Books, 1994) ISBN 9780717608287

HM Fire Service Inspectorate – Communications and Mobilising Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media (The Stationery Office, 1998) ISBN 9780113411856

HM Fire Service Inspectorate – *Dynamic Management of Risk – Fire Service Guides* (The Stationery Office, 1998) ISBN 9780113412211

HM Fire Service Inspectorate – *Dynamic Risk Assessment Flowchart – Fire Service Guides* (The Stationery Office, 2000) ISBN 9780113412518

HM Fire Service Inspectorate – *Inspection and Testing of Equipment Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media* (The Stationery Office, 2003) ISBN 9780113412747

HM Fire Service Inspectorate – *Volume 1: A Guide for Senior Officers Fire Service Guides – Generic Risk Assessment Series* (The Stationery Office, 1998) ISBN 9780113412181

HM Fire Service Inspectorate – *Volume 3: A Guide to Operational Risk Assessment* – *Fire Service Guides – Generic Risk Assessment Series* (The Stationery Office, 1998) ISBN 9780113412204

National Chemical Emergency Centre (NCEC) – *Dangerous Goods Emergency Action Code List 2009* (The Stationery Office, 2009) ISBN 9780113413263 (N.B. Currently updated every other year)

# Journals and magazines

Fire Magazine

Fire Times

Industrial Fire Journal

International Firefighter Magazine

Local FRS 'in-house' magazines

#### Websites

Each FRS has its own website.

Chief Fire Officers' Association www.cfoa.org.uk

Defra www.defra.gov.uk/environment/waste/topics/

hazwaste/

Department of Communities and

Local Government

www.communities.gov.uk/fire/

Environment Agency www.environment-

agency.gov.uk/default.aspx

Fire Magazine www.fire-magazine.com

The Fire Service College, Moreton-

in-Marsh

www.fireservice college.ac.uk

Health & Safety Executive www.hse.gov.uk/coshh/index.htm

The Organisation for Emergency

Services Management

www.joiff.com/

UK Fire Service Resources www.fireservice.co.uk

UK Resilience interim.cabinetoffice.gov.uk/ukresilience.aspx

Welsh Assembly Government wales.gov.uk/topics/housingandcommunity/

safety/fire/?lang=en

Unit 5: Resources to Support Fire

Fighters for Operational Response at Incidents

Unit code: D/502/9525

QCF Level 3: BTEC Specialist

Credit value: 6

Guided learning hours: 30

## Unit aim

The aim of this unit is to provide learners with the knowledge and understanding of the different resources that fire fighters use to support effective operational response at incidents.

# Unit introduction

This unit explores the different types of information and resources within the community that fire fighters use for operational responses including information about potential risks. The unit also explores the roles of individuals and teams in collecting new, or updating existing, information on risks in the community. Risks in the community include sites that contain hazards needing special responses such as chemical, biological and radioactive hazards, as well as sites that by their nature need special responses for example hospitals, shipyards, zoos, airports. Other examples include risks that might lead to an incident such as derelict or unoccupied property.

Learners will also explore how information is recorded in relation to the community and how it is used by the fire and rescue services. The aspects of communication covered in *Unit 2: Practices for Resolving Fire and Special Service Incidents* underpin this unit.

# Learning outcomes and assessment criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

# On completion of this unit a learner should:

Learning outcomes		Assessment criteria		
Understand the information fire fighters require on hazards and risks in the community	fighters require on hazards and risks	1.1	Describe the information required for records of risk sites	
	1.2	Identify the legislative requirements and organisational policies for gathering risk site information		
		1.3	Explain the methods of gathering risk site information	
		1.4	Explain the systems available for recording risk site information	
		1.5	Explain the use of recorded information to support the effectiveness of operational response	
2	Know the available resources within the community to support operational response	2.1	Describe physical resources within communities that supports operational response	
		2.2	Describe available information resources within communities that support operational response	
3	Understand requirements for testing and maintaining fire rescue service	3.1	Explain how internal resources are tested and maintained	
	internal resources	3.2	Explain the importance of testing and maintaining resources	

# Unit content

# 1 Understand the information fire fighters require on hazards and risks in the community

Hazards and risks within the community: types eg process, life, property, heritage, environment, hazardous material, high monetary value, risk to commerce, risk to industry

Current legislation and organisational policies: areas of legislation including fire and rescue services, health and safety, environmental, civil contingencies; organisational policies, aims and objectives in relation to risks and resources

Site-specific information: including gathering information on risk sites, from responsible person, records of risks in local area, dissemination and availability of information

Collecting information on risks in the community: types of information collected including sites that contain hazards needing special responses (eg chemical, biological and radioactive), sites that by their nature need special responses eg hospitals, shipyards, zoos, airports), risks that might lead to an incident (eg derelict or unoccupied property), topography

# 2 Know the available resources within the community to support operational response

Physical resources: human resources, other agencies eg police, ambulance service, Environment Agency, Highways Agency; types of fixed installation eg sprinkler systems, other fire suppression systems, ventilation systems; bulk storage of fire-fighting media; bulk storage of decontamination media; storage of fire-fighting equipment; water supplies; fire and rescue service access to water supplies and risk sites; on-site emergency team

*Information resources*: types eg map, local availability of water supplies, foam supplies, alarm systems, ventilation systems, active, passive; construction eg buildings, structure, aircraft, transport; site-specific information

# 3 Understand requirements for testing and maintaining fire and rescue service internal resources

Internal resources: equipment eg ladders, cutting equipment, small gear, personal protective equipment (PPE); personnel, knowledge eg topography

*Instructions for maintenance of internal resources*: brigade/fire service orders, manufacturer's instructions

Importance of maintaining resources: periodic testing and maintaining of all equipment; recording systems; operational readiness; availability of media and equipment eg foam, servicing spares; rectifying deficiencies eg replenishing consumables, repair/replace, defect reporting; responsibility to maintain internal resources within limitations of own role

# Essential guidance for tutors

# Delivery

Learners will require input from the FRS, especially in instances where the unit is not delivered as part of a fire fighter development programme. Evidence could be generated from visits to FRS establishments. Appropriate work placements could also be used to generate evidence.

Learners should have opportunities to view a location(s) and information the FRS has collated to understand FRS information requirements. Footage from documentaries and FRS-accredited online broadcasts showing fixed fire fighting installations and associated visits/inspections will provide good material for group discussion.

It is recommended that delivery of this unit is as practical as possible to engage and motivate learners. It is suggested that a theoretical input is followed by examples of the theory in practice. This could be achieved through learners observing and reviewing actual work or a realistic scenario. For example, a useful approach could be to set up a scenario of gathering risk site information. Learners should be guided as to what to look for when observing and subsequently reviewing the information gathered to understand its use.

It is recommended that visits to, and from, a variety of people/groups involved in organising the resource arrangements that support fire fighters are arranged, for example:

Visits to

FRS Control

**FRS Station** 

Speakers from

FRS Fire Safety teams

FRS Operations teams

Officers from relevant local and non-local authority organisations involved in contributing to resources that support fire fighters eg water companies, airports, rail, ports, county councils.

Contact information for these organisations can be found on The Chief Fire Officers Association website (www.cfoa.org.uk/frs).

# Outline learning plan

The outline learning plan has been included in this unit as guidance and can be used in conjunction with the programme of suggested assignments.

The outline learning plan demonstrates one way in planning the delivery and assessment of this unit.

# Topic and suggested assignments/activities and/assessment

Introduction to unit and programme of assignments

Teaching activity - legislation and organisational policies

Case study analysis - information needs, recording methods and systems

Visits from FRS Control personnel

Teaching activity - information supporting operations

Case study analysis - use of information at an FRS incident

# **Assignment 1: Hazard and Risk Information**

Review of Assignment 1, including tutor feedback and re-working

Teaching activity – physical resources within the community

Visits from FRS operations personnel

Teaching activity – information resources within the community

Learner-led seminar on the resources available to the FRS within a diverse geographical risk area

## **Assignment 2: Resources Within the Community**

Review of Assignment 2, including tutor feedback and re-working

Teaching activity - testing and maintenance

Visits from FRS operations personnel

Learner research identifying the reasons for the different requirements for testing and maintaining internal resources

# **Assignment 3: Testing and Maintaining Internal Resources**

Review of Assignment 3, including tutor feedback and re-working

Review of unit and programme of assignments

#### Assessment

It is recommended that assessment criteria are integrated to create holistic assignments. Observation and identification of information against specified objectives in assignments would provide evidence of learner understanding and of them meeting the assessment criteria.

A number of activities can be used to meet the assessment criteria of this unit. The FRS and other authorities involved in organising resources to support the FRS may be able to provide practical information and possible case studies for learners to analyse.

It would be useful for learners to observe situations where the FRS and other organisations are involved in resource collation and maintenance. Evidence could be in the form of written reports or presentations with effective evaluations and summaries. Evidence could also be gained from witness testimony.

Learners could devise a questionnaire and feedback forms, which could be used as part of investigatory interviews, presentations and discussions with members of the FRS and other organisations.

### Programme of suggested assignments

The table below shows a programme of suggested assignments that cover the criteria in the assessment grid. This is for guidance only and it is recommended that centres either write their own assignments or adapt Edexcel assignments to meet local needs and resources.

Criteria covered	Assignment title	Scenario	Assessment method
1.1 - 1.5	Hazard and Risk Information	You have been asked to draft an article for a local magazine to explain the reasons the FRS collates information on hazards and risks in the community	Written report with diagrams
2.1 - 2.2	Resources Within the Community	As part of a community safety initiative you have been asked to review your local area and identify both the physical and information resources available within the community to support FRS operations	Presentation
3.1 - 3.2	Testing and Maintaining Internal Resources	To assist with FRS Authority understanding, you have been asked to explain the testing and maintenance arrangements for internal resources and their importance in ensuring the effective day-to-day operation of a fire station	Presentation

### **Essential resources**

Learners should have access to library facilities for research purposes and to the internet to access governmental and inter-governmental websites. Learners must be made aware that fire and rescue services and other authorities have individual websites for each locality/region.

Footage from documentaries and accredited online broadcasts showing FRS personnel in their daily working lives can provide good examples for learners.

Access to the different types of FRS resources referred to within the *Unit* conent is essential to support learner understanding.

### Indicative resource materials

### Manuals and guides

The following manuals and guides have been issued to support the FRS. A local adaptation of what is described within them is sometimes covered by service-specific documentation, which is a source of information that should be utilised to support learner development. This type of documentation is in place to meet local risk, needs and resources.

Chief Fire and Rescue Advisers Unit/Communities and Local Government – Environmental Protection – Fire and Rescue Manual – Volume 2: Fire Service Operations (The Stationery Office, 2008) ISBN 9780113413164

Department for Communities and Local Government – *Generic Risk Assessments* 1.1 – *Emergency Response and Arrival at the Scene* (The Stationery Office, 2009) ISBN 9780117540163

HM Fire Service Inspectorate – Aircraft Incidents – Fire and Rescue Service Manual – Volume 2: Fire Service Operations (The Stationery Office, 1999)
ISBN 9780113411924

HM Fire Service Inspectorate – Firefighting Foam – Technical Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media (The Stationery Office, 2000) ISBN 9780113411887

HM Fire Service Inspectorate – *Hydraulics, Pumps and Water Supplies Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media* (The Stationery Office, 2001) ISBN 9780113412167

HM Fire Service Inspectorate – Inspection and Testing of Equipment Fire Service Manual – Volume 1: Fire Service Technology, Equipment and Media (The Stationery Office, 2003) ISBN 9780113412747

HM Fire Service Inspectorate – Marine Incidents – Fire and Rescue Service Manual – Volume 2: Fire Service Operations (The Stationery Office, 1999) ISBN 9780113412310

HM Fire Service Inspectorate – *Safe Working Near, On or In Water – Fire and Rescue Service Manual – Volume 2: Fire Service Operations* (The Stationery Office, 2002) ISBN 9780113412686

HM Fire Service Inspectorate – Volume 3: A Guide to Operational Risk Assessment – Fire Service Guides – Generic Risk Assessment Series (The Stationery Office, 1998) ISBN 9780113412204

### Journals and magazines

Fire Magazine

Fire Times

Industrial Fire Journal

International Firefighter Magazine

Local FRS 'in-house' magazines

Websites

Each FRS has its own website.

Chief Fire Officers' Association www.cfoa.org.uk

Department for Communities and

Local Government

www.communities.gov.uk/fire/

Fire & Rescue Services Act 2004 www.legislation.gov.uk

The Regulatory Reform (Fire Safety)

Order 2005

www.legislation.gov.uk

UK Fire Service Resources www.fireservice.co.uk

Welsh Assembly Government wales.gov.uk/topics/housingandcommunity/

safety/fire/?lang=en

## Further information

For further information please call Customer Services on 0844 576 0026 (calls may be recorded for training purposes) or visit our website (www.edexcel.com).

# Useful publications

Related information and publications include:

- Guidance for Centres Offering Edexcel/BTEC QCF Accredited Programmes (Edexcel, distributed to centres annually)
- Functional Skills publications specifications, tutor support materials and question papers
- Regulatory arrangements for the Qualification and Credit Framework (published by Ofqual) August 2008
- the current Edexcel publications catalogue and update catalogue.

Edexcel publications concerning the Quality Assurance System and the internal and external verification of vocationally-related programmes can be found on the Edexcel website and in the Edexcel publications catalogue.

NB: Some of our publications are priced. There is also a charge for postage and packing. Please check the cost when you order.

### How to obtain National Occupational Standards

Skills for Justice Centre Court Atlas Way Sheffield S4 7QQ

Telephone: 0114 261 1499 Email: info@skillsforjustice.com Website: www.skillsforjustice.com

# Professional development and training

Edexcel supports UK and international customers with training related to BTEC qualifications. This support is available through a choice of training options offered in our published training directory or through customised training at your centre.

The support we offer focuses on a range of issues including:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing student-centred learning and teaching approaches
- building Functional Skills into your programme
- building in effective and efficient quality assurance systems.

The national programme of training we offer can be viewed on our website (www.edexcel.com/training). You can request customised training through the website or by contacting one of our advisers in the Training from Edexcel team via Customer Services to discuss your training needs.

Our customer service numbers are:

BTEC and NVQ	0844 576 0026
GCSE	0844 576 0027
GCE	0844 576 0025
The Diploma	0844 576 0028
DiDA and other qualifications	0844 576 0031

Calls may be recorded for training purposes.

The training we provide:

- is active ideas are developed and applied
- is designed to be supportive and thought provoking
- builds on best practice.

Our training is underpinned by the LLUK standards for those preparing to teach and for those seeking evidence for their continuing professional development.

# Annexe A

# The Edexcel/BTEC qualification framework for the fire and rescue sector

Progression opportunities within the framework.

Level	General qualifications	BTEC full vocationally-related qualifications	BTEC specialist courses	NVQ/occupational
8				
7				
6				
5		Edexcel Level 5 Higher National Diploma in Public Services		
4		Edexcel Level 4 Higher National Certificate in Public Services		Edexcel Level 4 NVQ in Fire Safety

General qualifications	BTEC full vocationally-related qualifications	BTEC specialist courses	NVQ/occupational
	Edexcel BTEC Level 3 Certificate, Subsidiary Diploma, Diploma and Extended Diploma in Public Services	Edexcel BTEC Level 3 Award in Fitness Testing and Training for the Uniformed Public Services (QCF)  Edexcel BTEC Level 3 Award in Understanding Discipline in the Uniformed Public Services (QCF)  Edexcel BTEC Level 3  Certificate in Public Sector Practice (QCF)  Edexcel BTEC Level 3  Certificate in Public Sector Practice (Uniformed) (QCF)  Edexcel BTEC Level 3 Diploma in Public Sector Practice (QCF)  Edexcel BTEC Level 3 Diploma in Public Sector Practice (QCF)  Edexcel BTEC Level 3 Diploma in Public Sector Practice (QCF)  Edexcel Level 3 BTEC  Award/Certificate in Compartment Fire Services  Edexcel Level 3 BTEC  Certificate in Emergency Fire and Rescue Services  Opperations in the Community (QCF)	Edexcel Level 3 NVQ in Fire and Rescue Sector Control Operations Edexcel Level 3 NVQ in Fire Safety Edexcel Level NVQ in Emergency Fire Services – Watch Management
	General qualifications		educations  Edexcel BTEC Level 3 Certificate, Subsidiary Diploma, Diploma and Extended Diploma in Public Services

Level	General qualifications	BTEC full vocationally-related qualifications	BTEC specialist courses	NVQ/occupational
2		Edexcel BTEC Level 2 Certificate, Extended Certificate and Diploma in Public Services Edexcel BTEC Level 2 Award in Improving Health and Fitness for Entry to the Uniformed Public Services (QCF) Edexcel BTEC Level 2 Award in Public Sector Practice (QCF) Edexcel BTEC Level 2 Extended Certificate in Public Sector Practice (QCF) Edexcel Level 2 BTEC Award, Certificate and Diploma in Fire and Rescue Services in the Community	Edexcel Level 2 BTEC Award/Certificate/ Diploma in Fire and Rescue Services in the Community	Edexcel Level 2 NVQ Diploma in Public Services – Operational Delivery (Uniformed) (QCF) Edexcel Level 2 NVQ in Fire Safety
1				
Entry		Entry Level 3 Award in Public Services		

### Annexe B

### Wider curriculum mapping

Edexcel BTEC Level 3 Specialist qualifications give learners opportunities to develop an understanding of spiritual, moral, ethical, social and cultural issues as well as an awareness of citizenship, environmental issues, European developments, health and safety considerations and equal opportunities issues.

### Spiritual, moral, ethical, social and cultural issues

Throughout the delivery of these qualifications learners will have the opportunity to actively participate in different kinds of decision making. They will have to consider fair and unfair situations and explore how to resolve conflict. Working in small groups they will learn how to respect and value others' beliefs, backgrounds and traditions.

### Citizenship

Learners undertaking these qualifications will have the opportunity to develop their understanding of citizenship issues.

### **Environmental issues**

Developing a responsible attitude towards the care of the environment is an integral part of this qualification. Learners are encouraged to minimise waste and discuss controversial issues.

### **European developments**

Much of the content of the qualification applies throughout Europe, even though the delivery is in a UK context.

### Health and safety considerations

Health and safety is embedded within many of the units in this qualification. Learners will consider their own health and safety at work, how to identify risks and hazards and how to minimise those risks.

### Equal opportunities issues

There will be opportunities throughout this qualification to explore different kinds of rights and how they affect both individuals and communities, for example learners will consider their rights at work and the rights of employers and how these rights affect the work community.

# Annexe C

### **National Occupational Standards mapping**

The grid below maps the knowledge covered in the Edexcel BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF) against the underpinning knowledge of the National Occupational Standards in Fire and Rescue Services.

### **KEY**

# indicates partial coverage of the NVQ unita blank space indicates no coverage of the underpinning knowledge

NOS Units	1	2	3	4	5
FF2. Take responsibility for effective performance in fire and rescue	#				
FF3. Save and preserve endangered life		#			
FF4. Resolve fire and rescue operational incidents			#		
FF5. Protect the environment from the effects of hazardous materials				#	
FF6. Support the effectiveness of operational response					#

# Annexe D

# Mapping to Level 2 Functional Skills

Level 2		Uni	t num	ber	
English – Speaking, Listening and Communication	1	2	3	4	5
Make a range of contributions to discussions in a range of contexts, including those that are unfamiliar, and make effective presentations	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>	<b>*</b>
English – Reading					
Select, read, understand and compare texts and use them to gather information, ideas, arguments and opinions	✓	✓	<b>√</b>	<b>√</b>	✓
English - Writing					
Write a range of texts, including extended written documents, communicating information, ideas and opinions, effectively and persuasively	<b>√</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>√</b>

Level 2		Uni	t num	ber	
Mathematics - representing:	1	2	3	4	5
Understand routine and non- routine problems in familiar and unfamiliar contexts and situations		<b>&gt;</b>	<b>*</b>	<b>*</b>	<b>√</b>
Identify the situation or problems and identify the mathematical methods needed to solve them		✓	✓		✓
Choose from a range of mathematics to find solutions		<b>✓</b>	<b>√</b>		✓
Mathematics – analysing					
Apply a range of mathematics to find solutions		<b>√</b>			✓
Use appropriate checking procedures and evaluate their effectiveness at each stage		<b>*</b>			<b>✓</b>
Mathematics - interpreting					
Interpret and communicate solutions to multistage practical problems in familiar and unfamiliar contexts and situations		<b>√</b>	<b>√</b>	<b>√</b>	<b>✓</b>
Draw conclusions and provide mathematical justifications		✓	✓		✓

### Unit mapping overview

The table below maps the BTEC Level 3 Certificate in Emergency Fire Services Operations in the Community (NQF) legacy qualification (specification end date 31/03/2011) with the new QCF version of the BTEC Level 3 Diploma in Emergency Fire and Rescue Services Operations in the Community (QCF) (specification start date 01/03/2011).

Old units New units	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
Unit 1		X				
Unit 2			P	P	P	
Unit 3			P	P	P	
Unit 4			Р	Р	Р	
Unit 5	P					x

### **KEY**

- P Partial mapping (some topics from the old unit appear in the new unit)
- F Full mapping (topics in old unit match new unit exactly or almost exactly)
- X -Full mapping + new (all the topics from the old unit appear in the new unit, but new unit also contains new topic(s))

### **NOTES**

This qualification has been developed in conjunction with FRS representatives. It is likely that people delivering a FRS fire fighter development programme will find that the content matches the range of topic areas included within this qualification.

Due to the restructuring of this qualification, partial mapping of old Units 3, 4 and 5 exists across new Units 2, 3 and 4. However, as the new units have been updated and contain refocused assessment criteria they also contain some new topics.

New Unit 5 covers few topics contained within the old Unit 1. It is focussed more generally around old Unit 6 and contains some new topics beyond the original scope of that unit.

# **Annexe F**

# Glossary of accreditation terminology

The following information about this qualification can also be found on the Edexcel website – see: 'Accreditation Information'.

Accreditation start/end date	The first/last dates that Edexcel can register learners for a qualification.
Certification end date	The last date on which a certificate may be issued by Edexcel.
Credit value	All units have a credit value. The minimum credit value that may be determined for a unit is one, and credits can be only awarded in whole numbers. Learners will be awarded credits for the successful completion of whole units.
Guided Learning Hours (GLH)	Guided learning hours are defined as all the times when a tutor, trainer or facilitator is present to give specific guidance towards the learning aim being studied on a programme. This definition includes lectures, tutorials and supervised study in, for example, open learning centres and learning workshops. It also includes time spent by staff assessing learners' achievements. It does not include time spent by staff in day-to-day marking of assignments or homework where the learner is not present.
Learning Aims Database	Link to the Learning Aims Database, which features detailed funding information by specific learning aim reference.
Learning Aim Reference	Unique reference number given to the qualification by the funding authorities on accreditation.
Level	The level at which the qualification is positioned in the Qualifications and Credit Framework (QCF).
Qualifications Number (QN)	Unique reference number given to the qualification by the regulatory authorities on accreditation.
Register of Regulated Qualifications	Link to the entry on the Register of Regulated Qualifications for a particular qualification. This database features detailed accreditation information for the particular qualification.
Section 96	Section 96 is a section of the Learning and Skills Act 2000. This shows for which age ranges the qualification is publicly funded for under-19 learners.
Title	The accredited title of the qualification.

# **Annexe G**

BTEC Specialist and Professional qualifications

BTEC qualifications on the NQF	Level	BTEC Specialist and Professional qualifications on the QCF	BTEC qualification suites on the QCF
BTEC Level 7 Advanced Professional qualifications	1	BTEC Level 7 Professional qualifications	
BTEC Advanced Professional Award, Certificate and Diploma	_	BTEC Level 7 Award, Certificate, Extended Certificate and Diploma	
BTEC Level 6 Professional qualifications	7	BTEC Level 6 Professional qualifications	
BTEC Professional Award, Certificate and Diploma	0	BTEC Level 6 Award, Certificate, Extended Certificate and Diploma	
BTEC Level 5 Professional qualifications		BTEC Level 5 Professional qualifications	BTEC Level 5 Higher Nationals BTEC Level 5 HND Diploma
BTEC Professional Award, Certificate and Diploma	C	BTEC Level 5 Award, Certificate, Extended Certificate and Diploma	
BTEC Level 4 Professional qualifications	7	BTEC Level 4 Professional qualifications	BTEC Level 4 Higher Nationals BTEC Level 4 HNC Diploma
BTEC Professional Award, Certificate and Diploma	4	BTEC Level 4 Award, Certificate, Extended Certificate and Diploma	
BTEC Level 3 qualifications		BTEC Level 3 Specialist qualifications	BTEC Level 3 Nationals
BTEC Award, Certificate, Extended Certificate and Diploma	m	BTEC Level 3 Award, Certificate, Extended Certificate and Diploma	BTEC Level 3 Certificate, Subsidiary Diploma, Diploma and Extended Diploma

BTEC qualifications on the NQF	Level	BTEC Specialist and Professional qualifications on the QCF	BTEC qualification suites on the QCF
BTEC Level 2 qualifications		BTEC Level 2 Specialist qualifications	BTEC Level 2 Firsts
BTEC Award, Certificate, Extended Certificate and Diploma	7	BTEC Level 2 Award, Certificate, Extended Certificate and Diploma	BTEC Level 2 Certificate, Extended Certificate and Diploma
BTEC Level 1 qualifications		BTEC Level 1 Specialist qualifications	BTEC Level 1 qualifications
BTEC Award, Certificate, Extended Certificate and Diploma	_	BTEC Level 1 Award, Certificate, Extended Certificate and Diploma	BTEC Level 1 Award, Certificate and Diploma
			(vocational component of Foundation Learning)
		BTEC Entry Level Specialist	BTEC Entry Level qualifications (E3)
	Ц	<b>Qualifications</b> BTEC Entry Level Award, Certificate,	BTEC Entry Level 3 Award, Certificate and Diploma
	J	Extended Certificate and Diploma	vocational component of Foundation (Vecarning)

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QCF = Qualifications and Credit Framework

For most qualifications on the NQF, the accreditation end date is normally 31 August 2010 or 31 December 2010.

For qualifications on the QCF, the accreditation start date is usually 1 September 2010 or 1 January 2011.

QCF qualification sizes	on sizes
Award	1-12 credits
Certificate	13-36 credits
Diploma	37+ credits



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For more information on Edexcel and BTEC qualifications please visit our website:  $\ensuremath{\mathsf{www.edexcel.com}}$ 

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