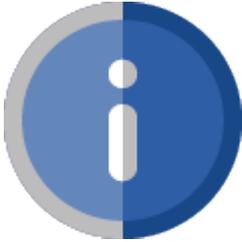




Introduction	2
<i>Relevant knowledge</i>	2
<i>Legislation</i>	4
<i>Risk management plan</i>	5
<i>Responsibility of fire and rescue services</i>	6



Introduction

National Operational Guidance is divided into three main activity categories: fires and firefighting, performing rescues and hazardous materials. All these activities take place in certain contexts. Some hazards apply to all activities but how they are controlled depends on the context of the incident.

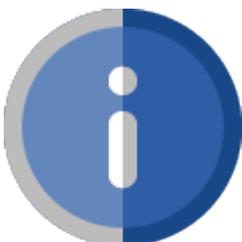
This National Operational Guidance sets out the high-level knowledge, hazards and actions that should be considered in operations occurring subsurface, at height, in confined spaces and within/around collapsed or unstable structures. These are some of the most complex areas that fire and rescue services work in and include both geological and manmade structures.

Fire and rescue services frequently attend incidents that involve a combination of these contexts, where danger to operational crews and the public is significant. This guidance aims to promote and develop good practice and to support the development of safe systems of work to minimise the dangers faced by fire and rescue services in these environments. It also supports the development of intervention strategies and operational procedures.

This guidance specifically deals with potential hazards occurring subsurface, at height and in structural and confined space environments. It also suggests a number of potential control measures and links to other National Operational Guidance. Fire and rescue services can build on this guidance in line with their local risk assessment. This guidance may suggest further information to be considered when reviewing the hazard and control statement and the resulting guidance.

The guidance should be read in conjunction with other pieces of National Operational Guidance.

When reference is made to working with other agencies, please refer to the [Joint Emergency Services Interoperability Principles \(JESIP\) Joint Doctrine](#) for further information.



Relevant knowledge

To make an effective response, each fire and rescue service needs a consistent approach that forms the basis for common operational practices and supports interoperability between fire and rescue services, other emergency responders, infrastructure managers and users.

Fire and rescue service boundaries mean that different services may attend an incident. A joint approach is therefore essential. Understanding the typical hazards faced by incident commanders in these environments and adhering to the relevant control measures will ultimately lead to improved public and firefighter safety.

At an incident, the highest priority for fire and rescue services will always be the safety of the public and responders. Effective and informed action by responders can reduce hazards and help ensure the safety of the public and responders.

Large-scale incidents involving any structure during construction or in use are unusual, which makes it difficult for fire and rescue services to gain experience and test procedures, but the fundamental principles of operational response remain the same. All fire and rescue service personnel liaising with contractors or infrastructure managers should receive appropriate training in the skills and techniques required. It is also crucial that the statutory duties and limitations placed on the fire and rescue service, and those of the relevant duty holder, are examined and that those managing such projects understand this underpinning knowledge.

Although certain hazards will be common to all incidents, the environment in which they occur will vary. This is particularly the case during construction, where access and intervention will require specific strategies and procedures.

During an incident at a fully functioning structure, such as a road or rail tunnel, fire and rescue services may have the additional pressure of maintaining business continuity, especially where the incident has a significant impact and wide disruption is likely. From a fire and rescue service perspective, business continuity should be considered relative to the impact the incident has on the local community and economy. The most important consideration will always be the safety of emergency service personnel and the public.

At all incidents, it will be necessary to preserve the scene for investigation purposes. Other organisations may have to carry out their own investigations. The police, British Transport Police, Office of Road and Rail, Rail Accident Investigation Branch, as well as local agencies, will all need to be considered when dealing with certain subsurface-related incidents.

Fire and rescue services will regularly work at height at incidents, along with general day-to-day activities that require personnel to take measures to protect themselves and others from the risk of falls. Working at height may be achieved safely using a variety of equipment and techniques.

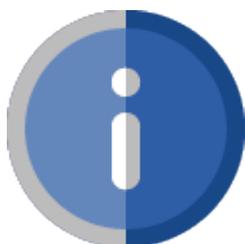
Environments that require personnel to work at height can be found above and below ground, in urban and rural areas, in natural and manmade structures, and in both operational and non-operational scenarios.

For the purpose of this guidance, above ground structures do not generally include buildings, unless the condition of the building requires the use of work at height equipment, such as when stairways and lifts have been compromised and aerial appliances, rope rescue or similar might be used to resolve the incident. Structures such as wind turbines and scaffolding will nearly always require specific work at height equipment.

Legislation clearly defines a confined space, and operating in these environments requires core and specialist skills, including techniques for working at height. Other areas that do not satisfy the specified risks for a confined space may be as challenging owing to varying degrees of difficulty in access and egress. Dealing with these environments will require similar skill sets and equipment as those for confined spaces.

Incidents involving underground structures may also require varied techniques and specialised equipment, including those needed for work at height and in confined spaces. In this guidance, underground structures may be referred to as subsurface or below ground structures, depending on the context.

All or any of the above may involve a collapsed or unstable structure, and as such could include a combination of hazards.



Legislation

[Civil Contingencies Act 2004](#)

[The Civil Contingencies Act 2004 \(Contingency Planning\) \(Scotland\) Regulations 2005](#)

[The Civil Contingencies Act 2004 \(Contingency Planning\) \(Amendment\) Regulations 2012 \(The 2012 regulations\)](#)

[Confined Spaces Regulations 1997](#)

[Confined Spaces Regulations \(Northern Ireland\) 1999 \(The Regulations\)](#)

[Control of Substances Hazardous to Health Regulations 2002](#)

[Corporate Manslaughter and Corporate Homicide Act 2007](#)

[Dangerous Substances and Explosive Atmospheres Regulations 2002](#)

[Dangerous Substances and Explosive Atmospheres Regulations 2002](#)

[The Environmental Damage \(Prevention and Remediation\) \(England\) Regulations 2015](#)

[The Environmental Damage \(Prevention and Remediation\) \(England\) \(Amendment\) Regulations 2015](#)

[The Environmental Damage \(Prevention and Remediation\) \(Amendment\) \(Wales\) Regulations 2015](#)

[Environmental Permitting \(England and Wales\) Regulations 2010](#)

[Fire \(Scotland\) Act 2005](#)

[Fire and Rescue Services \(Emergencies\) \(England\) Order 2007](#)

[Fire \(Additional Function\) Scotland Order 2005 \[Scotland\]](#)

[Fire and Rescue Services \(Emergencies\) \(Wales\) Order 2007](#)

[Fire and Rescue Services \(Emergencies\) \(Northern Ireland\) Order 2011](#)

[Fire and Rescue Services \(Northern Ireland\) Order 2006](#)

[Fire and Rescue Services Act 2004](#)

[Health and Safety \(Consultation with Employees\) Regulations 1996](#)

[Health and Safety at Work etc. Act 1974](#)

[Health and Safety at Work \(Northern Ireland\) Order 1978](#)

[Lifting Operations and Lifting Equipment Regulations \(Northern Ireland\) 1999](#)

[Lifting Operations and Lifting Equipment Regulations 1998](#)

[Management of Health and Safety at Work Regulations 1999](#)

[Management of Health and Safety at Work Regulations \(Northern Ireland\) 2000](#)

[Personal Protective Equipment at Work Regulations 1992](#)

[Personal Protective Equipment at Work Regulations \(Northern Ireland\) 1993](#)

[Police and Criminal Evidence Act 1984](#)

[Provision and Use of Work Equipment Regulations 1998](#)

[Safety Representatives and Safety Committees Regulations 1977](#)

[Work in Compressed Air Regulations 1996](#)

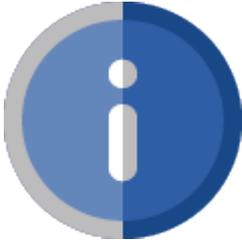
[Work in Compressed Air Regulations \(Northern Ireland\) 2004](#)

[Work at Height \(Amendment\) Regulations \(Northern Ireland\) 2007](#)

[Work at Height \(Amendment\) Regulations 2007](#)

[Work at Height Regulations \(Northern Ireland\) 2005](#)

[Work at Height Regulations 2005](#)



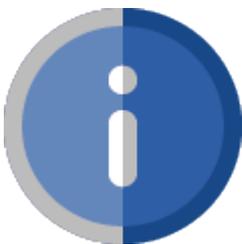
Risk management plan

Each fire and rescue authority must develop a strategic direction through a risk management plan. To determine the extent of their firefighting and rescue capability, strategic managers will consider their statutory duties and the reasonably foreseeable risk in their areas.

Work to identify risk and prepare operational plans should consider all stakeholders, including local emergency planning groups, and the fire and rescue service risk management plan.

When developing risk management plans and strategies, fire and rescue services should also take into account any other organisations, either voluntary or for-profit, that provide rescue services in their area. They may include:

- Mountain rescue
- Cave rescue
- Mines Rescue Service
- Industry-related rescue teams



Responsibility of fire and rescue services

Fire and rescue services are responsible, under legislation and regulations, for developing policies and procedures and to provide information, instruction, training and supervision to their personnel about foreseeable hazards and the control measures used to reduce the risks arising from those hazards.

This guidance sets out to provide fire and rescue services with sufficient knowledge about the potential hazards their personnel could encounter when attending incidents. Fire and rescue services should ensure their policies, procedures and training cover all of the hazards and control measures contained within this guidance.