

Fire and Rescue Service Operational guidance Operational Risk Information

Contents

| | | |
|-----------|---|-----------|
| 1 | Foreword | 2 |
| 2 | Preface | 3 |
| 3 | Introduction | 4 |
| 4 | Legal framework | 9 |
| 5 | Strategic perspective | 17 |
| 6 | Data and information management- continual improvement | 21 |
| 7 | Security of information | 23 |
| 8 | Practical considerations | 26 |
| 9 | Competency and training | 36 |
| 10 | Provision of operational risk information system | 39 |
| 11 | Appendices | 59 |
| | A: PORIS - Risk assessment matrix | 59 |
| | B(1): Likelihood table | 60 |
| | B(2): Firefighter severity life/health table | 61 |
| | B(3): Societal and individual severity table | 62 |
| | B(4): Environmental severity table | 63 |
| | B(5): Community/social severity table | 64 |
| | B(6): Heritage severity table | 65 |
| | B(7): Economic and other severity table | 67 |
| | B(8): Comparison of levels of risk | 68 |
| | C: Data capture fields | 74 |
| | D: Comparison scoring between PORIS score for individual and societal life risk and IRMP Guidance Note No 4 | 94 |
| 12 | Acknowledgements | 95 |
| 13 | References and bibliography | 97 |
| 14 | Sector specific acronyms | 99 |

SECTION 1

Foreword

The availability of relevant and timely information is recognised as critical to the successful management of all operational incidents attended by any Fire and Rescue Service in England.

The Fire and Rescue Service Operational Guidance – Operational Risk Information provides robust yet flexible guidance on developing and maintaining a consistent approach to managing, processing and using strategic and tactical operational risk information that can be adapted to the nature, scale and requirements of the individual Fire and Rescue Service.

It is anticipated that this guidance will promote common principles, practices and procedures that will support national resilience and interoperability and enable the Fire and Rescue Service and other emergency responders to resolve operational incidents safely and efficiently.

The Chief Fire and Rescue Adviser is grateful for the assistance in the development in this guidance from a wide range of sources, including the Fire and Rescue Service and other emergency responders.

SECTION 2

Preface

The objective of the Fire and Rescue Service Operational Guidance – Operational Risk Information is to provide a consistency of approach that forms the basis for common operational practices, supporting interoperability between Fire and Rescue Services and other emergency responders. These common principles, practices and procedures are intended to support the development of safe systems of work on the incident ground and to enhance national resilience.

Operational Guidance issued by the Department for Communities and Local Government promotes and develops good practice within the Fire and Rescue Service and is offered as a current industry standard. It is envisaged that this will help establish high standards of efficiency and safety in the interests of employers, employees and the general public.

The Guidance, which is compiled using the best sources of information known at the date of issue, is intended for use by competent persons. The application of the guidance does not remove the need for appropriate technical and managerial judgement in practical situations with due regard to local circumstances, nor does it confer any immunity or exemption from relevant legal requirements, including by-laws. Those investigating compliance with the law may refer to this guidance as illustrating an industry standard.

It is a matter for each individual Fire and Rescue Service whether to adopt and follow this operational guidance. The onus of responsibility for application of guidance lies with the user. The Department for Communities and Local Government accept no legal liability or responsibility whatsoever, howsoever arising, for the consequences of the use or misuse of the guidance.

SECTION 3

Introduction

- 3.1 Fire and Rescue Authorities have a responsibility for the health, safety and welfare of their employees. This runs parallel to a responsibility to mitigate the risk from fire (and other emergencies) to the community and to the society that it serves, and the environment within which it operates.
- 3.2 As part of these responsibilities, the Fire and Rescue Authority must have in place appropriate policies and procedures to address the issues concerned in achieving these objectives and, through training and development, to provide appropriate knowledge, skills and understanding to enable its employees to operate safely.
- 3.3 The Fire and Rescue Services Act 2004, states that a Fire and Rescue Authority must make provision for the purposes of:
- extinguishing fires in its area
 - protecting life and property in the event of fires in its area
 - rescuing and protecting people in the event of a road traffic accident, and
 - rescuing and protecting people in the event of emergencies.
- 3.4 Section 7(2)d of this Act places a responsibility on the Fire and Rescue Authority to make arrangements for obtaining information needed for that purpose. Sections 8(2)d, and 9(3)d place a similar responsibility on the Fire and Rescue Authority in respect of road accidents and other emergencies.
- 3.5 In support of these legislative responsibilities, The *Fire and Rescue National Framework* places a requirement on all Fire and Rescue Authorities to have in place effective arrangements for gathering risk information and making it readily available to operational crews. These arrangements should include an effective audit and review system to ensure that the information is current.
- 3.6 Identifying and managing risk, whether through the pre-planning and management of emergencies, fire safety, crime and disorder initiatives, training or undertaking other day-to-day activities, is part of the integrated risk management planning process.
- 3.7 Fire and Rescue Services already capture data and information to support the core functions of their organisations, such as: operations, fire safety, emergency planning, fire investigations, health and safety, incident debriefs

and reports, etc. Fire and Rescue Services vary in the extent of the data collected and held and the policies and processes related to the use, storage and dissemination of this data and information. However, data and information may be stored in isolation and the consequent data integration issues may affect efficient operational pre-planning and incident management.

3.8 Most operational risks are foreseeable; however the risks posed by events such as adverse weather conditions or civil contingencies, are not easily quantifiable. A combination of operational risk information with available generic risk assessments, local knowledge, and professional judgement, will help ensure appropriate risk management processes can be put in place.

3.9 An operational risk information management system should:

- bring together the outputs from existing and established systems
- develop and support a common approach to the strategic and dynamic analysis of risk; and
- determine the appropriate application of resources and processes to address those risks which impact on the firefighter, other emergency responders, members of the public, environment, etc.

3.10 The 2003 Chief Fire Officer's Association national study into the provision of mobile data examined the information requirements for the roles that support incident ground operations. This study identified that the provision of accurate, relevant and timely operational information was critical to all personnel, in the operational environment. These three elements are reflected in the data information triangle shown in Figure 1. The study also highlighted that the provision of too much information could put the recipient in 'information overload' and this situation may be equally as serious as an under provision of information.

FIGURE 1: CHIEF FIRE OFFICER'S ASSOCIATION DATA INFORMATION TRIANGLE



3.11 All three elements shown at the apexes of the triangle must be satisfied to ensure effective information is exchanged, if this is not achieved then the following problems may occur:

- Relevant and Timely but NOT Accurate = Misleading or misinformation
- Relevant and Accurate but NOT Timely = Potentially too late to be of any value
- Timely and Accurate but NOT Relevant = Information overload

3.12 To assist the Fire and Rescue Service to meet their statutory duties and responsibilities in relation to operational risk information, this guidance introduces a model approach. The model, entitled *Provision of Operational Risk Information System (PORIS)*, provides a strategic framework that is compatible with other relevant data and information systems such as the Incident Recording System, Fire Service Emergency Cover Toolkit, generic risk assessments, fire safety data, and security guidance. The model provides a common methodology and approach to managing the identification, gathering, analysis, provision, audit and review of operational data, whilst allowing individual Fire and Rescue Services the flexibility to integrate its processes into their own systems.

- 3.13 Individual Fire and Rescue Services are free to develop their own systems for the management of operational risk information. However, it is suggested that departure from the principles contained in this guidance should only be undertaken following a risk based assessment of an alternative, the outcome of which clearly illustrates that the legal responsibilities of the Fire and Rescue Authority have been met.
- 3.14 Identifying and managing risk is at the heart of the role and responsibility of the Fire and Rescue Service, whether this is risk to its employees, the environment in which it operates, or the society that it serves. The gathering, providing, sharing, maintaining and protecting of operational risk information is a significant challenge for Fire and Rescue Authorities.
- 3.15 This responsibility is specifically identified in a number of different elements of legislation, including: *The Fire and Rescue Services Act 2004*, and the *Management of Health and Safety at Work Regulations 1999*. There is also a range of other legislation that places responsibilities on Fire and Rescue Authorities in respect of the collection, use, storage and sharing of data.
- 3.16 This operational guidance summarises the principal areas of legislation that impinge on these responsibilities, including: legislative duties imposed on the Fire and Rescue Service; relevant duties imposed on other persons; the management of data and information; and identifies examples of other relevant guidance that has been issued.
- 3.17 Guidance is provided on: the security of information; the relationship with the UK Government's anti-terrorism strategy (CONTEST); the guidance produced by the Centre for the Protection of the National Infrastructure (CPNI), together with other guidance concerning protective marking of certain risk information.
- 3.18 Generic risk assessments and standard operating procedures will often form the backbone of the information required to address specific risks. While a range of information will be used to support dynamic risk assessment, it is recognised that the information gathered on site specific risks as part of the pre-planning process is critical to assist the Incident Commander in making effective and timely decisions on the incident ground.
- 3.19 This process is clearly identified in the Managing Incidents Decision-making System described within the *Fire Service Manual: Volume 2 - Operations Incident Command*.

www.communities.gov.uk/documents/fire/pdf/incidentcommand.pdf

- 3.20 The importance of using a harmonised approach is highlighted by the need to ensure that operational risk information can be shared and understood across Fire and Rescue Services in England and other parts of the United Kingdom. This is emphasised by the increasing integration of operational response, through the continuing expansion of intraoperability through mutual aid arrangements and national resilience capabilities.
- 3.21 Fire and Rescue Services should ensure that they have at a strategic level, clearly defined responsibility for policies and procedures for the management of operational risk information as part of an integrated approach to managing the risk and ensuring safe systems of work for all employees.
- 3.22 A Fire and Rescue Service's Information Technology strategy for the management of critical risk information should include tools and techniques for security, storage, information sharing, audit and review, and delivery of data to support effective and efficient management of operational incidents. The strategy should also include formalised data sharing protocols with other Category 1 and 2 responders to ensure timely and efficient exchange of accurate data within a secure system and to support interoperability at incidents.

Operational guidance review protocols

- 3.23 This operational guidance will be reviewed for its currency and accuracy three years from date of publication. The Operational Guidance Programme Board will be responsible for commissioning the review and any decision for revision or amendment.
- 3.24 The Operational Guidance Programme Board may decide that a full or partial review is required within this period.

SECTION 4

Legal framework

Introduction

- 4.1 This section does not contain detailed legal advice about the legislation. It is a summary of the relevant legislation, as applied to Fire and Rescue Authorities. It is recognised that the range of legislation and guidance that could impact on the operational responsibilities of the Fire and Rescue Authority is extensive and each Authority should seek guidance from their own legal advisors.
- 4.2 When considering the legal framework it is essential to recognise that any definitive interpretation of the legal roles and responsibilities imposed by legislation can only be given by a court of law.
- 4.3 The adoption of the principles set out in this guidance will assist Authorities in achieving suitable and sufficient risk control measures such as those referred to in this and other similar documents.

Primary fire and rescue service legislation

FIRE AND RESCUE SERVICES ACT 2004

- 4.4 This provides that Fire and Rescue Authorities must make arrangements for obtaining necessary information for the purposes of: extinguishing fire and protecting lives and property from fires in its area (Section 7); rescuing and protecting people from harm from road traffic accidents in its area (Section 8); or for dealing with any other emergency function other than fires and road traffic accidents in its area, conferred upon them under Section 9. It is, therefore, worthy of particular note that this guidance is not solely directed towards information for fire fighting.
- 4.5 Section 45 provides the powers of entry for an Authorised Officer to enter a premises at any reasonable time for the purposes of obtaining information needed to discharge the functions of Sections 7, 8 or 9 or if there has been a fire in the premises. Where an Authorised Officer enters a premises he may: take with him any other persons, and any equipment, that he considers necessary; or require any person present on the premises to provide him with any facilities, information, documents or records, or other assistance, that he may reasonably request.

The Fire and Rescue Services (Emergencies) (England) Order 2007

- 4.6 Article 4 (c) of the order requires that arrangements are made for obtaining necessary information for the purposes of the duties imposed by the Order, including: (Article 2) removing chemical, biological, or radio-active contaminants from people and the containment of water used for these purposes and to ensure that reasonable steps are taken to prevent or limit serious harm to the environment: (Article 3), rescuing people who may be trapped in the event of such incidents as collapsed buildings or structures or emergencies involving a train, tram or aircraft and protecting them from serious harm. The Order also obliges Authorities to use their specialist CBRNE (Chemical, Biological, Radiological, Nuclear and high- yield Explosives) or USAR (Urban Search And Rescue) resources outside their own areas to an extent reasonable for dealing with a CBRNE (chemical, biological, radiological, nuclear and high- yield explosives) or USAR (urban search and rescue) emergency (Article 5).

Civil Contingencies Act 2004

- 4.7 Under the provisions of the Act, Fire and Rescue Authorities are designated as Category 1 responders and have the duty to: assess the risk of an emergency (as defined by the Act) occurring; and assessing the risk and considering whether plans should be modified in light of the risk assessment as often as necessary.
- 4.8 Section 2(1) states, among other things, that Fire and Rescue Authorities shall maintain plans for the purpose of ensuring that if an emergency occurs or is likely to occur the Authority is able to perform its functions so far as necessary or desirable for the purpose of preventing the emergency, reducing, controlling, mitigating its effects or taking other action in connection with it.
- 4.9 The Act should be read together with *The Civil Contingencies Act 2004* (Contingency Planning) Regulations 2005 (no. 2042), which provide guidelines to local responders as to the content of their duties and how those duties can be carried out

The Civil Contingencies Act 2004 (Contingency Planning) Regulations 2005

- 4.10 The Regulations state that Fire and Rescue Authorities may facilitate cooperation by entering into protocols with each other (Regulation 7), that Authorities may perform duties under Section 2(1) jointly with one another and make arrangements with one another for the performance of that duty (Regulation 8).

- 4.11 These Regulations also set out clear responsibilities for Category 1 and Category 2 responders to participate in local resilience forums, to co-operate and share relevant information with Fire and Rescue Authorities.

Primary health and safety at work legislation

Corporate Manslaughter and Corporate Homicide Act 2007

- 4.12 Fire and Rescue Authorities will be criminally liable for the death of an employee if the way in which they manage or organise themselves.

- amounts to a gross breach of the duty of care owed to employees, and
- the gross breach causes an employees death.

Health and Safety at Work etc Act 1974

- 4.13 This Act applies to all employers in relation to health and safety. It is a wide ranging piece of legislation but in very general terms, imposes the general duty on Fire and Rescue Authorities to ensure, so far as is reasonably practical, the health, safety and welfare at work of all of their employees.

Management of Health and Safety at Work Regulations 1999

- 4.14 These Regulations require employers to: make a suitable and sufficient assessment of the risks to their employees and others (Regulation 3); provide appropriate procedures (Regulation 8); and provide employees with information on the assessment of the risks, the preventative and protective measures and the procedures provided (Regulation 10).

- 4.15 Regulation 9 requires the employer to ensure that any necessary contacts with external services are arranged, particularly as regards first-aid, emergency medical care and rescue work. In practice, few employers or responsible persons fully understand these duties and discharge them adequately, so as to enable Fire and Rescue Authorities to satisfy their duty under the 2004 Act to make suitable arrangements to obtain the necessary information.

- 4.16 Regulation 10, require an employer is required to provide his employees with, among other things, comprehensible and relevant information on: the risks to their health and safety identified by the assessment; the preventative and protective measures; the procedures for serious and imminent danger and for danger areas; the identity of those persons nominated to implement the above mentioned procedures and evacuations etc; and any risks drawn to the attention of the employer by virtue of co-operation with other employers under Regulation 11.

- 4.17 Assessments of risk must involve an assessment of the hazards that may be encountered. In many cases commonly occurring or easily identifiable hazards can be dealt with using generic or standard operating procedures without recourse to "site specific" information. Where this is not the case, site specific information must form part of the risk assessment, and the risks, procedures and protective and preventative measures must be provided to employees.

Other health and safety legislation

Provision and Use of Work Equipment Regulations 1999

- 4.18 Fire and Rescue Authorities are required to ensure that work equipment is constructed or adapted as to be suitable for the purpose for which it is used or provided. Fire and Rescue Authorities have to have regard to the working conditions and to the risks to the health and safety of employees which exist in the premises in which the equipment is to be used and any additional risk posed by the use of that equipment. The Regulations also contain provisions about maintenance, inspection, specific risks, information and instructions and training regarding work equipment.

Control of Asbestos Regulations 2006 and Control of Asbestos Regulations 2012

- 4.19 Fire and Rescue Authorities must ensure that adequate information, instruction and training is given to those of employees who are or who are liable to be exposed to asbestos, or who supervise such employees

- 4.20 Regulation 4 of the regulations places a number of requirements on the person who has the duty (i.e. the "dutyholder") these includes:

(9) The measures to be specified in the plan for managing the risk shall include adequate measures for –
(c) ensuring that information about the location and condition of any asbestos or any such substance is –
(ii) made available to the emergency services.

- 4.21 **The Health and Safety Executive Approved Code of Practice relating to Regulation 4 provides guidance to the duty person**

106. Information on the location and condition of any known, or presumed, asbestos-containing materials must be made available to the emergency services. The fire services in particular need to be made aware that asbestos-containing materials are in the premises so that they can take the appropriate precautions in an emergency.

107. The fire services are the most likely of the emergency services to disturb asbestos-containing materials or come into contact with disturbed asbestos, so they should be contacted to see what information they want, in what form they would like it, and if they would like the information to be sent to them.

Regulatory Reform (Fire Safety) Order 2005

- 4.22 Article 16 of the Order requires that where dangerous substances are in or on premises, in certain circumstances the responsible person must ensure that information on emergency arrangements is available and made available to relevant accident and emergency services to enable those services to prepare their own response procedures and precautionary measures.
- 4.23 Article 37 of the Order requires that where luminous tube sign cut off switches must be placed, coloured or marked so as to satisfy the fire authority. The responsible person must give suitable notice to the fire authority showing the cut-off switch location, colour and marking.
- 4.24 Article 38 of the Order requires that in order to safeguard the safety of firefighters in the event of a fire, the responsible person must ensure facilities, equipment and devices used by or used for the protection of firefighters are maintained and in good repair.

The management of data and information

Data Protection Act 1998

- 4.25 The Act prescribes appropriate arrangements for storing, obtaining, holding, use or disclosure of personal information of individuals. Personal data may be obtained directly for example by: obtaining contact information for individuals in respect of specific sites, or contact details on lists of specialist advisors or indirectly, by listing premises or locations where the circumstances of the individuals may identify personal information, such as persons residing in a vulnerable persons refuge, or for example, where their form of medical treatment results in the Fire and Rescue Authority holding information such as involving medical gases and that information may be regarded as personal information. Fire and Rescue Authorities gathering information that includes personal data appear to be data controllers, as defined by the Act and have duties in relation to that data.

The Freedom of Information Act 2000

- 4.26 This Act is complementary to the *Data Protection Act*. Fire and Rescue Authorities are listed in Schedule II of the *Freedom of Information Act* as a public authority to which the Act applies. Any person making a request for information to a public authority is entitled to be informed in writing by the public authority whether it holds information of the description specified in the request, and if that is the case, to have that information communicated to him/her.
- 4.27 There is significant guidance in relation to the security of information and this matter is covered more comprehensively in Section 4 of this guidance. In the context of the *Freedom of Information Act*, there are clear exceptions to disclosure. Section 30(1) states that information is exempt where it is obtained in relation to a public authority's functions as conferred by an enactment.
- 4.28 Fire and Rescue Authorities should take legal advice as to whether the exemption provisions in the *Data Protection Act* provide gateways for disclosure, and conversely under the *Freedom of Information Act* for non-disclosure in specific circumstances where applications for information are made to such Fire and Rescue Authorities.

Related guidance

- 4.29 The breath of legislation which may impact on the gathering, storing and use of operational risk information is wide ranging. In support of legislation there is in general a range of further guidance and information published by Government or other agencies. Fire and Rescue Authorities should take into account this guidance when planning and undertaking their various legislative responsibilities.
- 4.30 The listing below highlight some of the related guidance, the list is not exhaustive:

National Operational Guidance for the Fire and Rescue Service:

- Fire Service Manual Volume 2 (3rd edition) Incident Command
- Health and Safety Guidance for Managers
- Generic risk assessments
- Fire Service Manual Volume 3 Building Construction

Integrated Risk Management Plan (IRMP) Guidance Notes:

- Integrated Risk Management Planning Steering Group Integrated Risk Management Planning: Policy Guidance – Wildfire
- Integrated Risk Management Planning Steering Group Integrated Risk Management Planning: Policy Guidance - Business Continuity Management
- Integrated Risk Management Planning Steering Group Integrated Risk Management Planning: Policy Guidance - Environmental Protection
- Integrated Risk Management Planning Steering Group Integrated Risk Management Planning: Policy Guidance - Protection of Heritage Buildings and Structures.

Building Regulations 2000

- Regulation 38 requires that where building work is undertaken involving the erection or extension of a relevant building, fire safety information should be given to the responsible person at the completion of the project, or when the building is first occupied.
- Section B5 of Approved Document B to the Building Regulations provides detailed guidance on the passive and active systems that should be provided in new or materially altered buildings to assist firefighters.

Health and Safety

- Health and Safety Guidance note 65 - Successful health and safety management

<http://www.hse.gov.uk/pubns/books/hsg65.htm>

Data and Information Management

- Data Protection & Sharing – Guidance for Emergency Planners & Responders

<http://www.cabinetoffice.gov.uk/sites/default/files/resources/dataprotection.pdf>

4.31 The Fire Service College maintain a bibliography of technical guidance to which Fire and Rescue Services can refer (Fire Service manuals, Fire Service circulars, Dear Chief Officer Letters, technical bulletins, British and European Standards, Approved Codes of Practice, Health and Safety Executive guidance). In addition, technical guidance is available on the Department for Communities and Local Government website.

SECTION 5

Strategic perspective

- 5.1 The commitment and leadership of the strategic management team is essential to the success of any management system. The overarching policy should set a strategic direction demonstrating how the duty for the provision of operational risk information is linked to the duties of the work force and other emergency responders and the communities they serve.
- 5.2 Policies and procedures need to be in place to reflect that all the service activities are part of an integrated approach to managing the risk; thereby ensuring safe systems of work for all employees; that all relevant information is available for those who have a legitimate need for access to the information; and that these policies and procedures are 'owned' at strategic management level.
- 5.3 In developing the policy, the organisation should consider:
- its legislative duties, outlined in Section 4 of this guidance
 - the co-ordination with other 'core' function policies, notably health and safety, integrated risk management, fire safety enforcement and civil resilience
 - the needs of those working in the organisation and the hazards they face
 - the historical and current performance of the organisation in respect of the provision of operational risk information and the impact on health and safety and community safety
 - the opportunities and needs for continual improvement
 - the views of interested parties including other emergency responders; and
 - confirmation / establishment of realistic and achievable objectives.
- 5.4 The policy aims and objectives should include:
- the prevention of injury and ill health of firefighters and other emergency responders
 - management and mitigation of risks in the community
 - continual improvement in the provision of, accurate, relevant and timely operational information

- compliance with the legal duties on Fire and Rescue Authorities in relation to operational risk information
- compliance with formal guidance and “best practice” models; and
- audit and review mechanisms.

5.5 The policy should take into account the legal responsibilities placed on the Fire and Rescue Authorities in particular the requirement that all relevant data held by the Fire and Rescue Service should be available and used to reduce and manage the risk – whether this be to firefighters, other service staff, or to others for which the Fire and Rescue Authority have responsibility.

5.6 The Fire and Rescue Service should ensure that it has, at a strategic level, clearly defined responsibility for policies and procedures for the management of operational risk information as part of an integrated approach to managing the risk and ensuring safe systems of work for all employees including a responsibility to:

- determine specific responsibility for operational risk information and with a defined role in terms of establishing, implementing and maintaining processes, including audit and review in line with the approach advocated by HSG 65
- determine and make available those resources required to implement, maintain and develop these processes
- ensure there is clarity of responsibility between partner organisations, different functions in the Fire and Rescue Service and that the roles and responsibilities of managers are clearly defined
- ensure that there are clear documentation, document control and security procedures in place
- ensure that the allocation of the roles and responsibilities takes account of the competency, level of authority and capacity of individual employees
- ensure a systematic review of all aspects of data and information management (in relation to the provision of information for operational pre-planning, incident management and post-incident analysis) is undertaken

- ensure the continuing monitoring of the performance of relevant personnel, including assessments of their competency and use of the system; and that any gaps in the effective management of the system are identified; and
- ensure that there are effective communication and data sharing protocols within the organisation, and between the partner organisations involved in supplying and receiving operational risk information and intelligence.

5.7

Organisational planning should establish, implement and maintain procedures for ongoing hazard identification, risk assessment and determination of the necessary risk reduction controls. In the context of operational risk information the hazard identification and risk assessment processes should take into account the:

- range of possible activities related to fire fighting, attending road traffic collisions and other emergencies and the exposure to hazards that this may involve
- range of employees who may be involved in the use of the operational risk information at incidents, including those who may be working under the control of the Fire and Rescue Service
- capabilities, and likely behavioural responses, of those employees and other persons who are likely to be involved
- incident command system and management procedures that are used; and
- protective equipment, vehicles, rescue and fire fighting equipment and any limitations of employees and their equipment.

5.8

As part of the integrated risk management plan and Firelink requirements, the policy should include provision of an effective Information technology strategy; including an integrated data / information management strategy, for:

- obtaining
- analysing
- storing

- security, and
- distributing (including to neighbouring Fire and Rescue Services and partner organisations),

the information and data that is likely to be required within an operational environment for pre-planning, incident management and post-incident analysis purposes.

- 5.9 In order to judge the implementation and effectiveness of the arrangements for the provision and management of operational risk information, procedures should be in place to monitor and measure performance on a regular basis. The procedures should:
- provide qualitative and quantitative measures of performance for each stage of the procedures, including post incident reviews or “debriefs”
 - regularly monitor and report on the measures provided relating to the performance of the plan; and
 - record and communicate the results of the monitoring; to provide information on how the system operates in practice, to identify areas where corrective action is required, to provide a basis for continual improvement and provide feedback and motivation.
- 5.10 Strategic managers must ensure that policies and procedures developed for managing all aspects of operational risk information are consistent and supportive of data protection and information system security (See Section 7 Security of Information).
- 5.11 The management of operational risk information must also take into account the existing and future needs for interoperability and mutual aid between neighbouring Fire and Rescue Services and other Category 1 responders, together with an assessment of the financial, human and other resources specific to operations, including a plan for appropriate technology that takes into account the future functionality requirements and the appropriate expertise and training of staff.
- 5.12 To be effective, new management systems should be capable of integrating with existing management systems or disciplines within the organisation, in particular, the management of health and safety. Fire and Rescue Services should consider the integration of fire safety and operational data capture forms and ensure that the organisational skills are appropriately applied at this critical stage in the risk management process.

SECTION 6

Data and information management – continual improvement

- 6.1 The guidance given in this section focuses on the provision of a structured management system for the effective management of operational risk information and may be used to support a review of existing systems and / or to implement revised arrangements.
- 6.2 This operational guidance has been designed is to assist Fire and Rescue Authorities to develop a framework of continual improvement in respect of risk information management - this could be achieved by utilising the approach promoted by ISO 9001 and the British Standard *Occupational health and safety management systems – requirements*. The provision of operational risk information is an essential component of employee health and safety; therefore, there would be considerable benefit in following these Standards.
- 6.3 The development and implementation of an operational risk information management system must be recognised as a 'shared' process, involving a wide range of staff in the various stages of information gathering, assessment and risk mitigation. Particularly important are 'end users', the firefighters, first responders and those other personnel who may subsequently command and support operations. It is therefore important that the implementation of an operational risk information management system is both owned and led by a member of the senior management team of the Fire and Rescue Service.
- 6.4 An initial status review should be conducted to provide information on the scope, adequacy and potential gaps within the Fire and Rescue Service's current systems. The review should include identification of existing management arrangements in place in respect of the policy, planning, implementation, operation and audit and review processes that support continual improvement.
- 6.5 Arrangements should also be made to review the circumstances where non-conformity is identified, either as a result of training, at incidents or through regular supervision of the arrangements. The reasons for non-conformity should be communicated so that lessons learned by one part of the organisation can benefit the entire organisation and feed the process of continual improvement. It is recommended that these findings are shared with other Fire and Rescue Services and other emergency responders.

6.6

Fire and Rescue Services should ensure that those involved in undertaking the operational risk information processes are competent to:

- accurately identify hazards to firefighters, society, environment, community, heritage or other risk groups
- are capable of making professional judgements taking account of the availability of information, the severity and likelihood of risk being assessed and the critical nature of the risk management options
- understand the range of risk management options available to mitigate the risk
- understand their responsibility for the safety of others and the effect of their actions on the effectiveness of the safety system
- understand the legislative framework within which the Fire and Rescue Service operates
- are appropriately motivated and encouraged to work in a safe manner; and
- are supported in addressing any competency gaps that are identified.

SECTION 7

Security of information

- 7.1 Security of information is a much wider subject than the provision and use of operational risk information. There is a range of legislation this is relevant to the gathering, dissemination, storage and protection of information. Fire and Rescue Authorities and their Fire and Rescue Services will need to ensure that security policies, protocols, procedures and systems are in place in relation to operational and other information and compliance with the appropriate legislation.
- 7.2 The UK Government's anti-terrorism strategy (CONTEST) is built upon four key elements: pursue, prevent, protect and prepare. Fire and Rescue Service activity is a part of the "protect" and "prepare" elements.
- 7.3 The Centre for the Protection of National Infrastructure (CPNI) is the Government authority which provides protective security advice to businesses and organisations across the national infrastructure.
- 7.4 The Centre for the Protection of the National Infrastructure has produced guidance that provides a single source of policy and guidance on the Information Assurance (IA) risk management and accreditation of Information Systems (IS). The Centre for the Protection of the National Infrastructure guidance draws the different strands together and places Information Assurance in core business; providing advice and guidance on the process of risk management; targeting a wide audience (not just security specialists and central government).
- 7.5 Of particular relevance is the strand of work under the "Protect" element which relates to the protection of high profile targets for terrorism. These include Critical National Infrastructure (CNI) (those infrastructure assets (physical or electronic) that are vital to the continued delivery and integrity of the essential services upon which the UK relies) and crowded places, for which there are separate procedures for the assessment of risk and sharing and protecting information with partner agencies. "Site specific" information on these items will require particular care in dealing with security of the information that will be required for dealing with an emergency.

7.6 An integrated protective security strategy for the UK has been jointly developed by the Office of the Chief Fire and Rescue Adviser and the Chief Fire Officer's Association and covers three key elements:

- Personnel security
- Physical security
- Information security.

7.7 Assistance with information security will be provided in the form of advice, guidance, policies and procedures to reduce the vulnerability of the Fire and Rescue service to unauthorised access to hard copy and electronic data, as well as assistance concerning the protective marking of materials.

7.8 Arrangements made for the security of operational risk information must be consistent with the Protective Marking Framework. Any site specific risk information imported into a command and control system will need to be assessed in order to identify its security (protective) marking. The information usually falls into groups or levels of importance depending upon the level of risk identified. National guidance is currently in development with the office of the Chief Fire and Rescue Advisor. The following levels are identified in HMG's Security Policy Framework:

www.cabinetoffice.gov.uk/national-security V4.0 December 2010:

- TOP SECRET
- SECRET
- CONFIDENTIAL
- RESTRICTED
- PROTECT
- Unmarked material is considered 'unclassified'. The term 'UNCLASSIFIED' or 'NON' or 'NOT PROTECTIVELY MARKED' may be used to indicate positively that a protective marking is not needed. These markings can be applied to any government assets, although they are most commonly applied to information held electronically or on paper documents. The method used to assess these principles within information systems is expressed in business impact levels.

- 7.9 Site specific risk information may need to be security assessed to ensure it is suitable for use via mobile data terminals.
- 7.10 There may be sites that will not allow Fire and Rescue Services to have copies of floor plans or other information due to their security requirements. In this instance an agreement may be made where the information required will be provided upon arrival of the Fire and Rescue Service in the event of an incident. Operational crews responding to these sites should be made aware of these arrangements
- 7.11 Further guidance regarding the protective marking of specific risk information is contained in the Cabinet Office publication *Security Vetting and Protective Markings Guide*, March 2008

SECTION 8

Practical considerations

Terminology

- 8.1 A common standard for terminology and symbology is critical to effective interoperability between emergency responders and other supporting organisations. Without a common standard of approach and dialogue it would prove extremely difficult to maintain any real level of interoperability between the Fire and Rescue Services and other emergency responders and supporting organisations. This includes the technical aspects of communications across the emergency services.
- 8.2 Without agreed standard terminology and symbology there is a risk of misunderstanding between emergency responders and supporting organisations. At best this can lead to delays in obtaining support services and at worst people could be put at serious risk.
- 8.3 Terminology and symbology issues include:
- words, phrases, symbols or graphics with different meanings or context
 - words, phrases, symbols or graphics with no meaning within other organisations.
- 8.4 The guidance issued in relation to the *Civil Contingencies Act* on common terminology has sort to provide some standardisation for interoperability. See : www.cabinetoffice.gov.uk/cplexicon

Address and location identifiers

- 8.5 A key factor with regard to the identification and cross-mapping of premises / site risk information between systems, organisations, etc is the provision of a unique identifier in relation to its location / address.
- 8.6 The Local Land and Property Gazetteer has been designed to help in the identification of address intelligence and provides a reference on how data should be captured in a consistent manner across England and Wales and also in the context of the DNA-Scotland initiative.

- 8.7 The Local Land and Property Gazetteer forms a central or corporate address list providing a unique and unambiguous identifier for each entry. This central address list is made up from key creating authority service areas responsible for the official street naming, numbering and revenue collection processes. Additional Address Change Intelligence is also introduced from other local authority statutory functions such as building and development control, planning and land charges which affect the real world objects included in the gazetteer.
- 8.8 The locality and town data contained in the Local Land and Property Gazetteer is not based on postal localities and post towns as defined by Royal Mail, but reflects geographic identifiers which assist in the identification through a series of geographic instructions or real world locations in common use.
- 8.9 The Local Land and Property Gazetteer custodian provides continual updates through the National Land and Property Gazetteer which provides a definitive unique national address list of land and property that conforms to BS 7666.
- 8.10 A National Address Gazetteer is being developed that aims to combine all local authority Local Land and Property Gazetteer data, and central government data that is linked to Ordnance Survey address products. This will provide a single definitive database and reduce missed or mismatched addresses. Further information may be found on the Geoplace website: www.geoplace.co.uk.
- 8.11 Therefore, as premises based information is held within numerous systems within each Fire and Rescue Service and in order to ensure that both accurate and relevant information is used in an operational environment, consideration should be given to the production of unique premises identification and that data is synchronised where necessary.

Data / information capture and use

- 8.12 Information may be sought and gathered or reviewed directly through inspection or site visits, or indirectly by collecting information from responsible persons, competent persons, occupiers, owners or other agencies. Information may be supplied from external sources without the Fire and Rescue Service proactively seeking information. Appropriate procedures should be in place for gathering and reviewing such information, and ensuring that relevant information, irrespective of its source and the reason why it was collected.

- 8.13 In particular, Fire and Rescue Services should ensure the integration of fire safety and operational data capture is incorporated into the process and ensure that the organisational skills are appropriately applied at this critical stage. An example 'data capture fields' template is included as Appendix C.
- 8.14 Analysis of the information will inform decisions made about how and when the information should be used, and how it should be supplemented with other information, such as generic risk assessments, standard operating procedures etc. In addition, following the analysis, the information may be used for training or planning, and may be shared with other emergency services or local authorities.
- 8.15 Operational risk information can be used at many levels of planning such as local premises site specific pre-planning, generic risk and tactical plans, major incident plans, multi-agency plans, integrated risk management plans. In addition, operational risk information should take into account the plans and resources of other Category 1 & 2 responders and other agencies.
- 8.16 It is considered that where operational risk information is captured, stored and displayed by use of electronic systems the management of large quantities of data is possible and can be structured to give immediate access to key information and prevent information overload for the users. However for those Fire and Rescue Services using paper based systems to manage and deliver their operational information the quantity of data that will be available will be limited and therefore careful consideration must be given to the prioritisation and presentation of relevant information to support operational crews on the incident ground.

Data and information sources

- 8.17 One of the many challenges facing the Fire and Rescue Services in collecting operational risk information is how to process a potentially very large number of sites, (buildings, and other places where they may attend incidents) in order to identify those where the availability of accurate, relevant and timely information may be of value for any reasonably foreseeable incident. Many buildings, or other risks, may not require detailed site specific information to be held by the Fire and Rescue Service in order to expect a safe and successful outcome to operational interventions.

- 8.18 However, where the availability of such information is critical, the challenge for each Fire and Rescue Service is how to identify and prioritise for operational risk information purposes the large quantity of information that they, or their partners, hold and manage, without excluding any sites that may pose a risk.
- 8.19 Internal sources of information include the Fire Service Emergency Cover toolkit, fire safety management systems, incident data, local operational intelligence and community safety data.
- 8.20 External sources of information may include the Health and Safety Executive, planning and building control authorities, health authorities, Environment Agency, local strategic partnerships, and through local area agreements other organisations such as English Heritage, transport and utility companies.
- 8.21 Examples of data sources are listed in Table 1 below.

| Table 1 : Data sources | | |
|-------------------------------|---|--|
| Influencing factors | Potential internal source | Potential partner source |
| | <i>Usually a prime source of building and process risk information, and where Fire and Rescue surveys have been conducted and the results recorded.</i> | <i>Information owned by the partner organisation where the control of updates to the information to ensure accuracy will be outside the control of Fire and Rescue Services.</i> |
| Complex buildings | Fire Safety System Local operational intelligence | Planning and building control authorities Responsible persons ¹ |
| Large buildings | Fire Service Emergency Cover (Large footprint) Fire Safety System | Planning and building control authorities Responsible persons |

¹ Using the term in relation to Regulation 16 (2) of the Fire Safety Order 2005

| Table 1 : Data sources | | |
|---|--|--|
| Influencing factors | Potential internal source | Potential partner source |
| Buildings where fire fighting facilities are provided | Fire Safety System Local operational intelligence | Building control authorities Responsible persons |
| Buildings or sites containing special hazards, such as chemical, radiological, biological, flammable or explosive materials or processes | Local operational intelligence | Health and Safety Executive process and special premises risks Emergency Planning COMAH Trading Standards Authority Responsible persons |
| Sites with a high life risk to life, including crowded places ² and transport infrastructure | Fire Service Emergency Cover Societal Fire Safety System Local operational intelligence | Local resilience fora/ Interagency Liaison Officers Transport authorities and companies Ministry of Defence |
| Sites with a high risk to fire fighters | Local operational intelligence Fire Service Emergency Cover toolkit Fire Safety System | Police Crime and Disorder Reduction Partnerships Ministry of Defence |
| Sites with a high risk to heritage, the environment, the community, critical national infrastructure, or buildings of exceptional value or sole supplier/employer | Fire Service Emergency Cover toolkit Local operational intelligence Fire Safety System | English Heritage Environment Agency Local resilience fora Health authorities Responsible persons Transport and utility companies |

² As defined in the Government consultation

Table 1 : Data sources

| Influencing factors | Potential internal source | Potential partner source |
|--|---|--|
| Buildings where the fire safety management is poor and the built in fire safety facilities may not be effective | Fire Safety System Fire Service Emergency Cover toolkit Local operational intelligence | Health and Safety Executive Local health and safety enforcement authority |
| Buildings that include a form or element of construction known to perform poorly in fires | Fire Safety System Local operational intelligence | Building control authorities |
| Buildings or site in a location with a high incidence of arson and deliberate fire setting | Incident data Fire Service Emergency Cover toolkit | Crime and Disorder Reduction Partnerships |
| Large structures such as ships, gas/oil rigs, bridges etc | Local operational intelligence | Harbour Master Transport and utility companies Interagency liaison officers Maritime and Coastguard Agency Ministry of Defence |
| Natural Environment: Sites of Special Interest or Scientific Interest, Forests, Beaches (areas of shifting sinking sand), flood plains, cliffs, caves, etc | Local operational intelligence | Maritime and Coastguard Agency Environment Agency Local authorities Natural England |
| Road and motorway interchanges, tunnels, bridges, other structures, etc | Local operational intelligence | Fire Service Emergency Cover Police Local authorities Planning / Building Control Highways Agency |

Table 1 : Data sources

| Influencing factors | Potential internal source | Potential partner source |
|---|----------------------------------|--|
| Transportation – Aircraft, Railways, Shipping, Vehicle Data, etc. | Local operational intelligence | Commercial vehicle Data sets – vehicle construction, etc Aviation authorities Airport Fire Services Ministry of Defence Car manufacturers Railway operating companies Network Rail |
| Temporary structures – pallets, fridge mountains, etc | Local operational intelligence | Local authorities Planning / Building Control Environment Agency |
| Temporary and Mobile structures and/ or events | Local operational intelligence | Local authorities Planning / Building Control Police |
| Areas where potential civil disturbances may occur | Local operational intelligence | Police Local Resilience Forums Crime and Disorder Reduction Partnerships |

Fire Service Emergency Cover Model

- 8.22 Some idea of the scale of the issue can be obtained from looking at the number of “Other Buildings³” contained in the Fire Service Emergency Cover toolkit. A trial search in a small sample of medium to large sized Fire and Rescue Services indicated that there are 35,000 to 45,000 Other Buildings in the database.
- 8.23 The “Other Buildings” module in the Fire Service Emergency Cover toolkit holds information that can identify buildings with a high societal risk and those presenting a high potential property loss. The Fire Service Emergency Cover Toolkit also contains information on road interchanges, tunnels, bridges, rail infrastructure, river sites, flood plains, cliffs and areas of shifting sinking sand where it is reasonably foreseeable that rescues or other emergency activities may take place. In addition where surveys have been conducted and the results recorded, Fire Service Emergency Cover toolkit records may contain “flags” that identify that the building or site is:
- a risk to firefighters
 - a risk to or from the environment
 - a heritage risk
 - a critical national sole supplier
 - of exceptional value (higher than expected for the type of building)
 - where hazardous materials are stored or used.
- 8.24 The Fire Service Emergency Cover Toolkit www.fsec.org has been modified to enable it to undertake the risk analysis elements in Stages I, II and III of the Provision of Operational Risk Information System.

Fire safety data bases

- 8.25 Fire and Rescue Services also hold databases of fire safety records relating to premises, where some fire safety regulatory or advisory activity may have been undertaken. There may be an overlap between the Fire Service Emergency Cover toolkit database and local fire safety databases.

³ Other Buildings are defined in the Fire Service Emergency Cover planning process as those buildings where there is the potential for significant loss of life (societal risk) or significant financial loss (Property, Heritage or Environmental risk.)

8.26 Structured queries of fire safety databases may be able to provide lists of premises such as:

- complex buildings
- large buildings
- buildings where fire fighting facilities are provided
- buildings or sites containing special hazards, such as chemical, radiological, biological, flammable or explosive materials or processes
- sites with a high life risk to occupiers
- sites where a specific risk to firefighters has been identified
- sites with a high risk to heritage, the environment, the community, or buildings of exceptional value or sole supplier / employer
- buildings where the fire safety management is poor and / or the built-in fire safety facilities may not be effective
- buildings that use or include a form or element of construction known to perform poorly in fires.

8.27 Appendix D outlines the Risk Scores and Qualitative Risk Bands given in Integrated Risk Management Planning Guidance Note No. 4, for comparison with the scoring of the Individual and Societal Life Risk Groups, to assist in the subsequent management of visits for combined technical fire safety and operational risk information audit purposes.

Performance management

8.28 Periodic audit is a useful means to enable a deeper and more critical appraisal of the elements of the operational risk information system. The audits should be planned to determine whether the system has been properly implemented and maintained and is effective in meeting the organisation's policy and objectives. The results of the audit should be reviewed to support continual improvement and to address weaknesses in the policy or organisation. Independent third party audit and validation should also be considered to ensure a robust review programme.

8.29 Performance indicators for qualitative and quantitative monitoring of organisational performance may be used as part of an on-going review process of the operational risk management system.

General

- 8.30 Each Fire and Rescue Service should ensure that there is a clearly defined protocol for the management of all risk data, and that those who are tasked with developing and implementing operational risk systems and databases have easy and immediate access to all of their 'Internal' data sources; and that they have established systems for readily obtaining and sharing data from, and with, 'External' organisations.
- 8.31 Fire and Rescue Services must decide what information should be given to operational crews when attending an incident.
- 8.32 The 2003 Chief Fire Officer's Association (CFOA) national study into the provision of mobile data examined the information requirements for the roles that support incident ground operations. This identified the need to give operational crews accurate, timely and relevant information that related directly to the specific stages of the incident. The research indicated that full consideration of the requirement to meet the demands of the various operational phases must be given in order to prevent information overload for all those personnel involved in command and incident management, notably Incident Commanders.
- 8.33 Fire and Rescue Services that use electronic methods of capturing and storing operational site specific information should also give careful consideration to electronic file sizes. This is crucial as it is technically extremely difficult and sometimes impractical to send very large data files to appliances on the incident ground within acceptable time limits.

SECTION 9

Competency and training

Introduction

- 9.1 The guidance in this section is intended to assist in achieving a consistent approach within individual Fire and Rescue Services and between Fire and Rescue Services. This will enable the provision of operational risk information with a continuing emphasis on quality, founded upon common understanding and underpinning knowledge and improved intraoperability with other Fire and Rescue Services. Emphasising a consistent quality approach in turn introduces the underlying requirement that those involved at the various judgemental stages in the operational evaluation of risk information must have operational competency.
- 9.2 The guidance in this section is not intended to set out specific individual competencies or training methodologies. Rather it provides some principles which may be used to support the development of skill and knowledge acquisition.
- 9.3 Irrespective of whatever operational risk information management system is used, the provision of timely, accurate and relevant information is highly dependent on the competency of all those who have accountability and responsibility for operational risk reduction and safety.
- 9.4 The assessment of operational risk requires careful integration with other Fire and Rescue Service risk recording and assessment activities. It is therefore important that the assessment of operational risk is recognised as an essential element of the Integrated Personal Development System and the associated National Occupational Standards.
- 9.5 All of the personnel involved should be competent and have the appropriate skills to undertake risk assessment and utilise the outputs provided by the operational risk information management system. Individuals should be able to interpret and translate, information provided prior and during any incident into decisions and action. For some of those decisions, the outcome will have life safety implications and for many other decisions, these will be made in the pressured environment that results from time restrictions and scarcity or complexity of information.

- 9.6 This will ensure that those personnel involved have the necessary competencies to undertake their responsibilities, and will help create within the organisation a culture of awareness of the importance of the provision of risk information. This awareness should aim to encourage all staff to note deficiencies or changes that may affect operational effectiveness and safety and to ultimately raise these matters within to enable appropriate action to be taken.
- 9.7 There are many tasks in an operational risk information management system where it may not be a relevant for all staff involved to have operational competence – for instance information communication technologists and non-operational community safety or technical fire safety staff. When utilising individuals, who are not required to have an operational competence as part of their role, it is important to recognise the limitations of their knowledge, skills or understanding of operational issues. The credibility and justification of the process will only be achieved if those who will use the operational risk information management system outputs have confidence in the process’s integrity and robustness.
- 9.8 Similar quality controls will need to be applied when utilising the information to gain familiarisation and execute planning assumptions. This activity, which also provides essential feedback, again requires supervision and oversight by individuals having competency in operational tasks and incident command.
- 9.9 The overriding value of having accurate, timely and relevant information is to support Incident Command, decision making including selection and implementation of safe systems of work. It is therefore essential that staff at all levels become central participants in obtaining and selecting the information that they judge will ultimately be useful to them at incidents.
- 9.10 In addition to the skills and competencies related to operational decision-making, there are numerous other processes and activities where the assessment of the risk and likely outcomes in the event of a fire, or other emergencies, will benefit from the experience and knowledge of non-operational professionals. Building construction, building systems, fire protection arrangements, occupancy, use, manufacturing processes, etc, are common examples of areas of expertise that are not exclusively within the operational Fire and Rescue Service domain. It may be determined that a service’s own fire safety staff have sufficient capability, capacity and competency to meet local circumstances, whilst in other cases it may be decided that the services of other specialists or partner organisations should be utilised.

9.11 Competency standards chosen should be supported by reference to evidence or justification statements together with any other material used in choosing the standard. This material should be retained to demonstrate the rigor of the consideration and task matching undertaken.

9.12 Operational risk information should be used during all training and exercises to ensure that operational personnel are able to develop their skills in using the information in the operational environment. Further reading regarding incident command may be found in *Fire and Rescue Manual: Volume 2 - Fire Service Operations Incident Command*.

<http://www.communities.gov.uk/documents/fire/pdf/incidentcommand.pdf>

SECTION 10

Provision of operational risk information system

Introduction

- 10.1 This section introduces a model approach, entitled Provision of Operational Risk Information System (PORIS). This model provides a strategic framework that is compatible with other relevant data and information systems such as the Incident Recording System, Fire Service Emergency Cover toolkit, generic risk assessments, fire safety data, and security guidance. The model provides a common methodology and approach to managing the identification, gathering, analysis, provision, audit and review of operational data, whilst allowing individual Fire and Rescue Services the flexibility to integrate its processes into their own systems.
- 10.2 Individual Fire and Rescue Services are free to develop their own systems for the management of operational risk information. However, it is suggested that departure from the principles contained in this model should only be undertaken following a risk based assessment of an alternative, the outcome of which clearly illustrates that the legal responsibilities of the Fire and Rescue Authority have been met.
- 10.3 The Provision of Operational Risk Information System seeks to provide a common approach to operational planning and management of risk and has been developed to assist Fire and Rescue Services to:
- meet their legislative responsibilities
 - maintain and where necessary improve their effectiveness and efficiency
 - manage the risk to their personnel
 - maintain interoperability with neighbouring Fire and Rescue Services and other Category 1 & Category 2 responders
 - manage and mitigate other risks in the communities that they serve.

- 10.4 The Provision of Operational Risk Information System has been specifically designed to utilise existing data sets and supporting information and constructed to enable a flexible working framework where principles, rather than hard and fast rules, are used to underpin the methodology.
- 10.5 The Provision of Operational Risk Information System takes account of the need to identify and assess information, and its relevance to the operational pre-planning and management of risk to six risk groups.

These groups are summarised in Table 2.

Table 2 : The Provision of Operational Risk Information System - RISK GROUPS

Firefighter safety

The direct impact on the safety of firefighters (or other emergency responders working under the direction of the Fire and Rescue Services) who may be affected. Encompassing fatalities, injuries, illness or injury or damage to health.

Individual and societal

The personal safety of persons other than firefighters, or other emergency responders working under the direction of the Fire and Rescue Services, who may be directly affected (fatalities, injuries, illness, or injury or damage to health) or indirectly affected because of the strain on the health service.

Environment

The consequences from an onsite event which would result in contamination or pollution of land, water or air with harmful biological / chemical / radioactive matter or oil, flooding, disruption or destruction of plant or animal life.

Community

Encompassing the social consequences of an event, including availability of social welfare provision; disruption of facilities for transport; damage to property; disruption of the supply of money, food, water, energy, or fuel; disruption of an electronic or other system of communication; homelessness, evacuation, avoidance of behaviour; and public disorder due to anger, fear, and / or lack of trust in the authorities.

Table 2 : The Provision of Operational Risk Information System - RISK GROUPS

Heritage

Recognition of the value placed by society on the site's cultural and historic presence as part of the fabric of the national and local community. Encompassing where possible the net economic cost, including both direct (e.g. loss of artefacts, goods, buildings, structures, etc) and indirect (loss of business, tourism, etc) costs.

Economic and other

Encompassing the net economic cost, including both direct (e.g. loss of goods, buildings, infrastructure) and indirect (loss of business, increased demand for public services) costs. Also, risks, other than those identified in the remaining risk groups (see above), listed that are judged of importance to the national or local economy.

10.6 Accurate and relevant information and data is crucial to assess the risk against each of these risk groups. The information and data necessary to assess the risk against each of these risk groups may be:

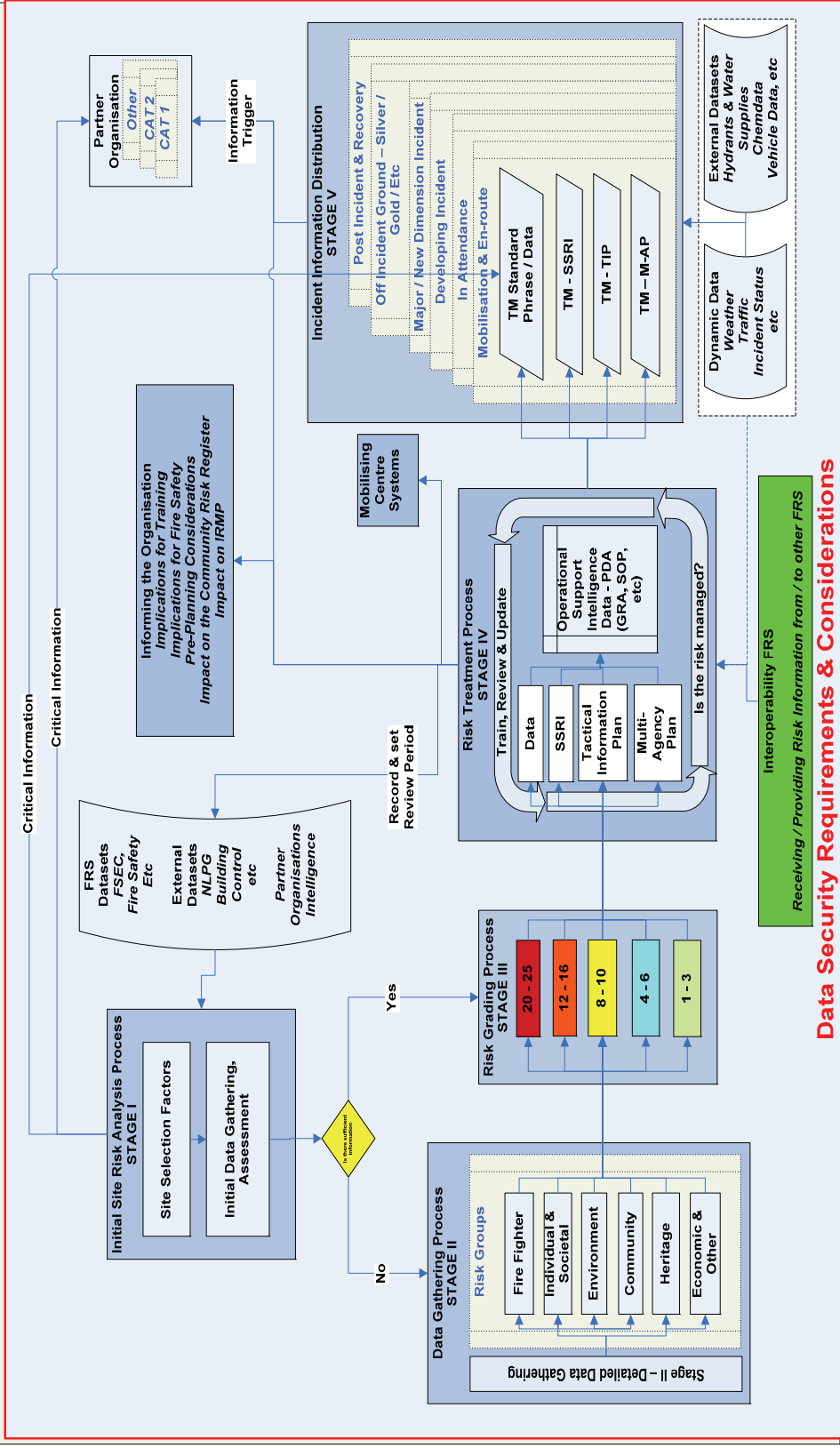
- obtained by the Fire and Rescue Services through their various legal responsibilities
- provided by neighbouring Fire and Rescue Services; *and*
- provided by sites in pursuance of their own legal responsibilities.

10.7 In addition, data and intelligence from other sources may provide information that the Fire and Rescue Service may not otherwise be aware of as part of this process. Establishing and maintaining good links with partner organisations, such as neighbouring Fire and Rescue Services, the Health and Safety Executive, building control bodies, responsible persons, local resilience fora, or Category 1 and 2 responders, is therefore essential.

10.8 The importance of using an integrated approach for risk critical information is highlighted by the need to ensure that operational information can be shared and understood to support national resilience and interoperability between Fire and Rescue Services. This is demonstrated by the increasing frequency in the number, scale and complexity of operational incidents demanding higher levels of multi-agency working.

10.9 The Provision of Operational Risk Information System is based on a five stage process and is illustrated in Figure 2 below, with the objectives for each of the five stages described in Table 3.

PORIS Model - Process Overview



Data Security Requirements & Considerations

FIGURE 2: THE PROVISION OF OPERATIONAL RISK INFORMATION SYSTEM MODEL

10.10 Description and key objectives of the five stages of The Provision of Operational Risk Information System are shown in Table 3 below:

| Table 3 : The Provision of Operational Risk Information System – DESCRIPTION AND KEY OBJECTIVES | |
|--|--|
| <p>Stage I</p> <p>To review the information held relating to a site or premises on internal or external databases. This review will determine whether sufficient information exists for each of the six risk groups in order to decide whether:</p> <ul style="list-style-type: none"> • a Stage II visit to gather further information is required in order for a more accurate assessment to be made, or • sufficient information exists to proceed directly to a Stage III assessment of the risk. | <p>Stage I Key Objectives</p> <ol style="list-style-type: none"> 1. Assessment of existing data / information. 2. Prioritisation of workload. 3. Critical information made available to operational crews. |
| <p>Stage II</p> <p>Where appropriate gathering additional data by visiting the site, and by other means, to provide sufficient information to assess the risk to one or more of the six risk groups (Stage III), and to provide the necessary information for use in the management of the risk (Stage IV).</p> | <p>Stage II - Key Objectives</p> <ol style="list-style-type: none"> 1. Capture relevant accurate information on sites. 2. Review of data from Stage I & IV process. |

Table 3 : The Provision of Operational Risk Information System – DESCRIPTION AND KEY OBJECTIVES

| | |
|--|--|
| <p>Stage III</p> <p>Information from Stage I, and/ or obtained in Stage II, is assessed in order to determine the level of risk presented by the site, premises or activity, for each of the six risk groups; and to determine appropriate timescales and frequencies of visits by operational crews (and other relevant personnel) and subsequent review periods.</p> | <p>Stage III - Key Objectives</p> <ol style="list-style-type: none"> 1. Assessment of the risk using the data / information from Stages I & II. 2. Prioritisation of workload. 3. Critical information made available to operational crews. |
| <p>Stage IV</p> <p>To determine the appropriate risk management processes that should be applied to reduce or manage the risk in one or more of the six risk groups. Information from this Stage should be produced as necessary and communicated across the Fire and Rescue Service and to partner organisations, including , where appropriate, neighbouring Fire and Rescue Services. Decisions will also be made about the provision of appropriate levels of knowledge and training for relevant Fire and Rescue Service personnel, in order to ensure they understand the nature of the risk and the risk management processes that are being put in place.</p> | <p>Stage IV - Key Objectives</p> <ol style="list-style-type: none"> 1. Assessment of the data / information captured using the risk assessment methodology for Stage III. 2. Consider prioritisation of workload and frequency of review. 3. Develop appropriate risk management controls in conjunction with other emergency responders and partner agencies where appropriate. 4. Critical information made available to operational crews. |

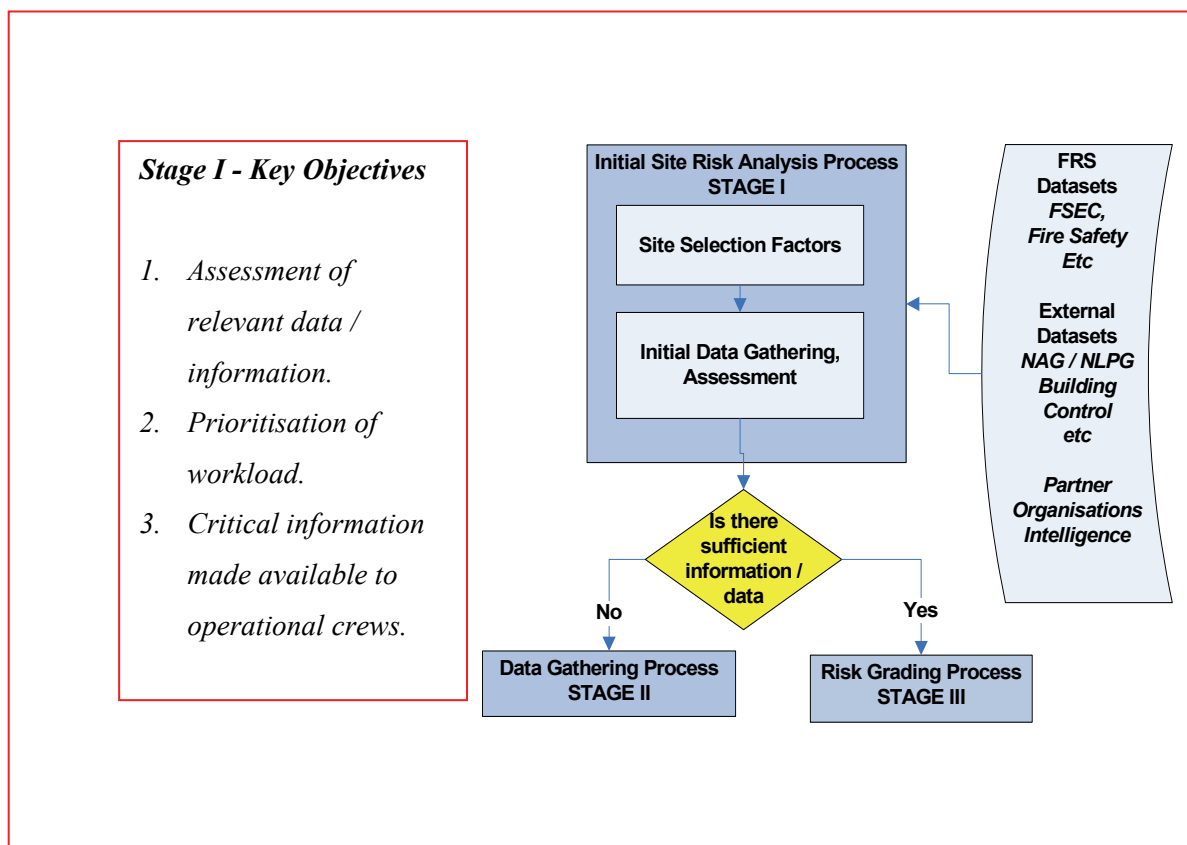
Table 3 : The Provision of Operational Risk Information System – DESCRIPTION AND KEY OBJECTIVES

| Stage V | Stage V - Key Objectives |
|--|---|
| <p>Providing the operational information produced in Stage IV for use by Incident Commanders and other functional roles, in a timely and relevant manner. This should also include information for use at incidents by Bronze and Silver Command and other functional roles, (and off the incident ground in Gold Command). In addition sharing information between other emergency responders and agencies.</p> <p>Stage V should (if appropriate) also include dynamic data, such as weather or local road closures, being made available throughout the stages of an incident, from mobilisation and en-route, in attendance, during a development phase of an incident, to major or protracted incident, post incident investigation and recovery.</p> | <ol style="list-style-type: none"> 1. Delivery of accurate, relevant & timely information to operational personnel. 2. Sharing Information with other Emergency Responders. |

10.11 Each stage of the Provision of Operational Risk Information System model is described in more detail below and the objectives, inputs, processes, and outcomes for each stage are summarised.

Stage I – Initial site risk analysis process

FIGURE 3: PORIS STAGE I – INITIAL SITE RISK ANALYSIS PROCESS

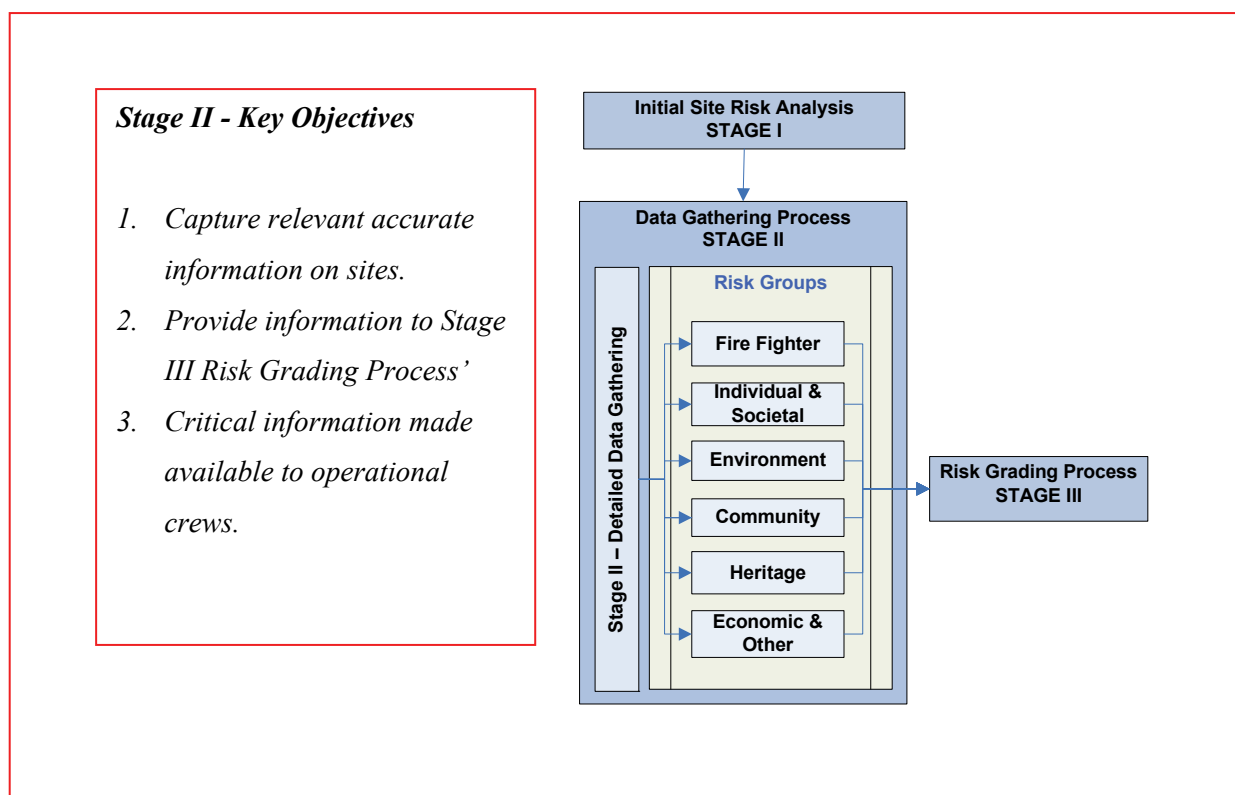


- 10.12 **Objective:** To review the information that is held relating to a site or premises on internal or external databases, such as Fire Service Emergency Cover, operational information, fire safety databases or the service's own Integrated Risk Management Plan, or any information supplied by partner agencies. This review will determine whether sufficient information exists for each of the six risk groups to decide whether (a) sufficient information exists to proceed directly to a Stage III assessment of the risk – or (b) whether a Stage II visit to gather further information is required for a more accurate assessment to be made.

- 10.13 **Inputs:** Data and information from within the Fire and Rescue Services, such as existing operational information, Fire Service Emergency Cover, integrated risk management planning datasets, fire safety databases, incident reporting, health and safety, fire investigation and local knowledge. In addition, data and intelligence from partner organisations, such as neighbouring Fire and Rescue Services, the Health and Safety Executive, building control bodies, responsible persons, local strategic partnerships, or Category 1 and 2 responders.
- 10.14 **Process:** An assessment conducted by competent persons with the relevant levels of appropriate knowledge, experience and capability for: identifying hazards; assessing risks; and using the available data, standard descriptors and professional judgement to determine whether with the information available a meaningful risk assessment of the building or site is possible, or whether a site visit to gather more information is required.
- 10.15 **Outcomes:** A preliminary assessment of the available information and a determination as to whether a Stage II site / premises visit to gather additional information is required, or there is sufficient data to proceed directly to Stage III.
- 10.16 Fire and Rescue Services may wish to consider how, in the short term, they can initiate immediate measures to address any high level risks identified during this stage of the assessment. This may be achieved by providing a short (date / time stamped) warning or recommended action on the mobilising instructions for attending crews; however, it will be important that the responding crews understand that the warning or recommended action details they have been given is based on limited information.

Stage II – Data gathering process

FIGURE 4: PORIS STAGE II – DATA GATHERING PROCESS

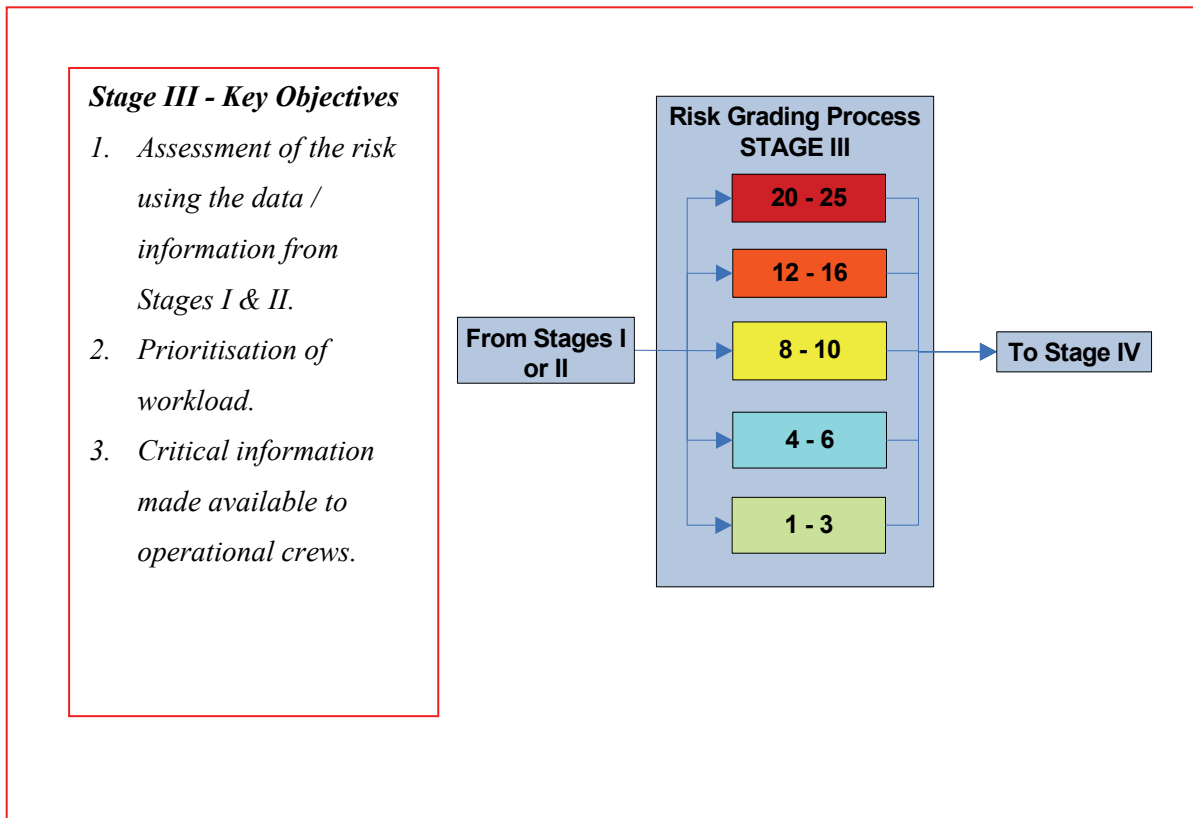


- 10.17 **Objective:** To gather detailed information from and about the site that will assist in an accurate assessment of the risk being made at Stage III of the process, for each of the six risk groups.
- 10.18 **Inputs:** Information from Stage I, and where appropriate, information obtained from operational crew or fire safety personnel's site visits. Information collected from specific operational data collection forms and Fire Safety Audit Forms and obtained from partner agency data should be used. The information collected will be considered for relevance across the six risk groups.
- 10.19 **Process:** A site visit conducted by competent persons with the relevant levels of appropriate knowledge and experience and capability for: identifying hazards; assessing risks; and capturing accurate information relevant to the risk assessment process for each category of the six risk groups. It is essential to ensure that owners and / or occupiers of premises receiving a visit from the Fire and Rescue Service to capture operational information are made aware of the extent and purpose of the visit.

10.20 **Outcomes:** Suitably detailed information on which to form a sufficient assessment of the risks according to each of the six risk groups (Stage III).

Stage III – Detailed site risk analysis process

FIGURE 5: PORIS STAGE III – DETAILED SITE RISK ANALYSIS PROCESS



10.21 **Objective:** Stage III is designed to guide the assessment of the information obtained under Stage I, and/ or obtained under Stage II, to determine the level of risk, presented by any particular site, premises or activity, for each of the six risk groups; and to determine if further visits by Fire and Rescue Service personnel are necessary, and the initial timescales for these visits and any subsequent review periods.

10.22 **Inputs:** Data and information from within the Fire and Rescue Service, such as: existing operational, technical and community fire safety information; data and outputs from the Fire Service Emergency Cover toolkit; integrated risk management planning datasets; incident reporting; fire investigation; and local knowledge. In addition data and intelligence

from partner organisations, such as neighbouring Fire and Rescue Services; the Health and Safety Executive; building control bodies; responsible persons from the premises concerned; local strategic partnership; or Category 1 and 2 responders may provide risk critical information.

10.23 Policy guidance notes published to support the Integrated risk management plan, provide guidance covering such areas as wildfires, business continuity, environmental protection and heritage. These are a useful source of information when planning operational response to premises or sites that contain these specific risks.

10.24 **Process:** An assessment conducted by competent persons with the relevant levels of appropriate knowledge, experience and capability for identifying hazards, assessing risks and using the available data, to assess the risk for potential likelihood and the possible consequences of an incident occurring for each of the six risk categories.

- Appendix A (The Provision of Operational Risk Information System Risk Assessment Matrix) provides for five categories of 'Likelihood' (the potential for an incident to occur) and five categories of severity should an incident occur. This matrix allows the outcome of the 'Likelihood' analysis to be cross referenced with the outcome of the 'Severity' analysis, to produce an overall risk 'score' of between 1 & 25, for each of the risk groups.
- Appendix B(1) provides guidance on the range of Likelihood categories. These are given as Negligible, Very Unlikely, Unlikely, Possible, and Probable, and are scored in ascending values from 1 to 5, with 1 being Negligible.
- Appendices B(2) to B(7) provide guidance on the range of severity impact for each of the six risk group categories. These are given as Insignificant, Minor, Moderate, Significant, and Catastrophic, and are scored in ascending values from 1 to 5, with 1 being Insignificant.
- Appendix B(8) gives an illustration of how the resulting risk scores may be recorded. The resulting overall risk scores can then be used for comparison purposes to help local determination of where the premises or site will feature in any subsequent part of the Provision of Operational Risk Information System.

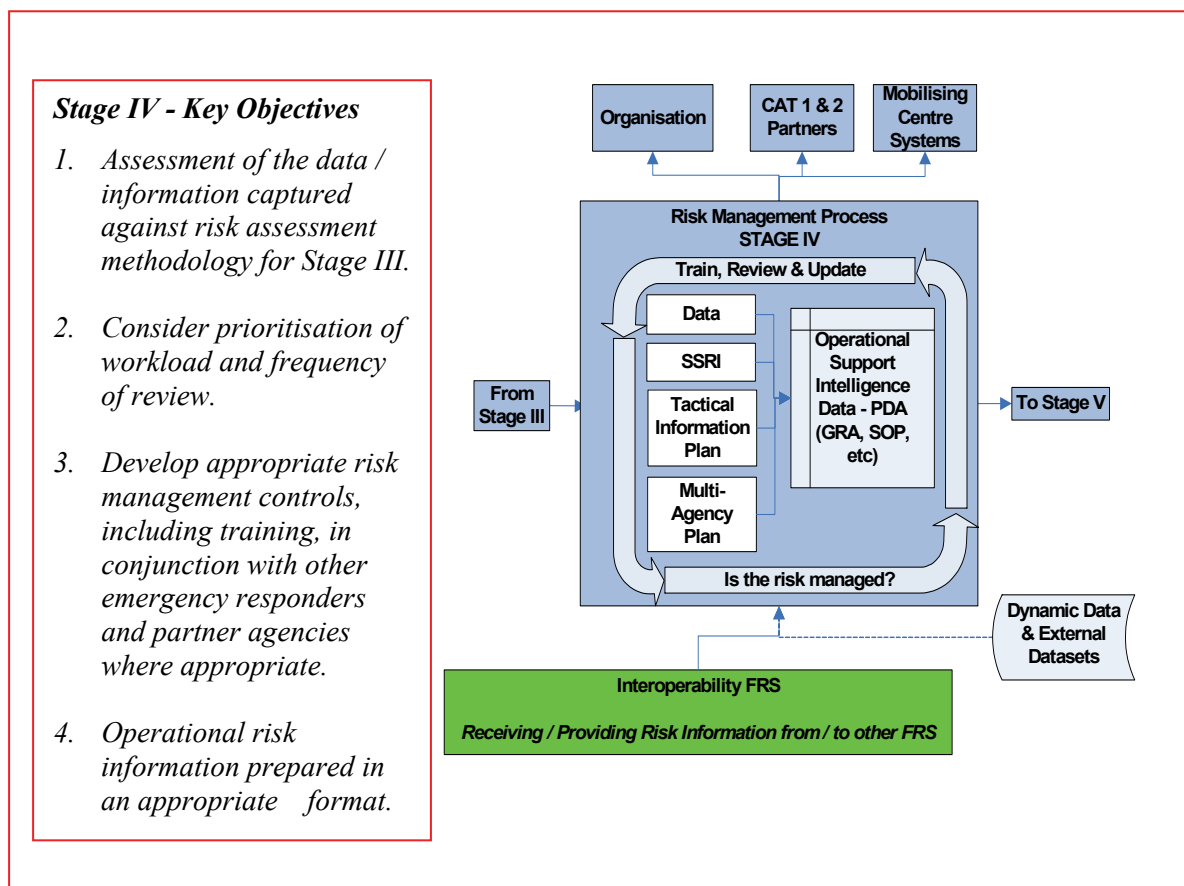
- 10.25 The Stage III steps are:
- Step 1** Determine the likelihood of a particular incident type occurring based on the available information (Appendix B(1)).
 - Step 2** Determine the potential severity for each of the risk groups (Appendices B(2) to B(7)).
 - Step 3** Use the information obtained from Steps 1 & 2, together with the matrix in Appendix A to determine the level of risk presented to each of the six risk groups. Appendix B(8) provides a matrix to enable the individual risk group scores to be compared. Appendix G provides a matrix to enable the levels of risk to be compared with Integrated Risk Management Planning Guidance Note 4.
 - Step 4** Comparing the levels of risk for several sites or premises obtained through following the Provision of Operational Risk Information System, will enable subsequent risk management procedures (Stage IV) to be prioritised by Fire and Rescue Service staff.
- 10.26 Where the assessment process identifies sites as presenting a sufficiently low level of risk that specific risk management interventions are not necessary, other than those provided by appropriate generic risk assessments or standard operating procedures, the date of the assessment should be recorded together with the generic risk assessments and standard operating procedures, and a review date recommended.
- 10.27 Where the assessment process identifies sites that present a low potential for a fire or other incident to occur, but in the event of such an incident the potential severity can reasonably be anticipated to be catastrophic or significant, then these sites should be identified and managed accordingly.
- 10.28 **Outcomes:** An informed assessment of the risk presented to each of the six risk groups for premises or sites within the Fire and Rescue Service's area of operation. This will subsequently enable a comparative analysis of the risks to be undertaken and the appropriate risk management processes to be identified for immediate or further action.

10.29

Fire and Rescue Services should consider how, in the short term, immediate measures to address any high level risks identified during this stage of the assessment may be initiated. This may be achieved through providing a short (date / time stamped) warning or recommended action on the mobilising instructions for attending crews. However, it will be important that the responding crews understand that the warning or recommended action details they have been given is based on limited information.

Stage IV – Risk management process

FIGURE 6: PORIS STAGE IV – RISK MANAGEMENT PROCESS



10.30 **Objectives:** To determine the appropriate risk management processes that should be applied to mitigate or manage the risk presented to one or more of the six risk groups. To identify and produce operational risk information in an appropriate format according to the level of risk and the information requirements of Incident Commanders; other functional roles; other emergency responders and agencies. To identify appropriate levels of training in those risk management processes to ensure the risk is effectively mitigated or managed.

10.31 **Inputs:** Existing information from Stage I and / or Stage II in conjunction with the risk assessment outcomes from Stage III.

10.32 **Process:** Assessing the specific and comparative risk information obtained in Stages I to III, and determining the appropriate risk management processes, training and data sharing necessary to manage or mitigate the risk. This stage should be undertaken by a competent person, using the available information to determine any subsequent risk management planning or mitigating actions deemed necessary. In addition it is recognised that other emergency responders and agencies such as the Environment Agency, may have a significant contribution to the Stage IV development of appropriate risk management controls to reduce and mitigate the risk.

10.33 **Outcomes:** The preparation of sufficient information in an appropriate format for use in a training and operational environment. The following provides examples of risk management processes that may be considered appropriate according to the overall level of risk identified.

- **Level 1** - Site or premises offers very low or no risk. Allocate a unique premises identification number only.
- **Level 2** - Site or premises offers low to medium levels of risk. This may be mitigated by attaching specific standard phrases and /or generic risk assessment and / or standard operating procedures to the mobilisation message to support the dynamic risk management process.
- **Level 3** - Site or premises offers medium to high levels of risk. This may be mitigated by attaching detailed site specific risk information records, together with appropriate generic risk assessments and / or standard operating procedures, to the mobilisation message. This information may be in the form of data (occupancy details, type, numbers, hazardous substances, type, quantities, etc), Geographical Information System (GIS), Computer Aided Design (CAD) Plans, and associated symbols, photographs, etc.

- **Level 4** – Site or premises presents high levels of risk. In this case tactical information plans, in addition to appropriate site specific risk information, generic risk assessments and standard operating procedures used by the first responders should be prepared to allow specific information for additional roles that may be required on the incident ground to support incident ground operations and / or at Silver Command when working with other responders or agencies.
- **Level 5** – Site or premises, together with the likely scale of the incident may, in addition to the information provision indicated at Level 4 above, require the provision of comprehensive multi-agency plans as part of the overall information necessary to support the attendance of the Fire and Rescue Service personnel and other emergency responders (Category 1 or 2). This may include information requirements for Gold Command levels that may be established as appropriate.

10.34 Consideration should be given to the information requirements of Incident Commanders; other functional roles; other emergency responders and agencies. It is essential not to place the Incident Commander of the initial response in a situation of information overload and to ensure that the information available would support the initial decision making processes and is accurate, timely and relevant.

10.35 In addition, consideration should be given to the provision of dynamic information such as road closures, weather conditions, etc which may have an impact on any pre-planning processes.

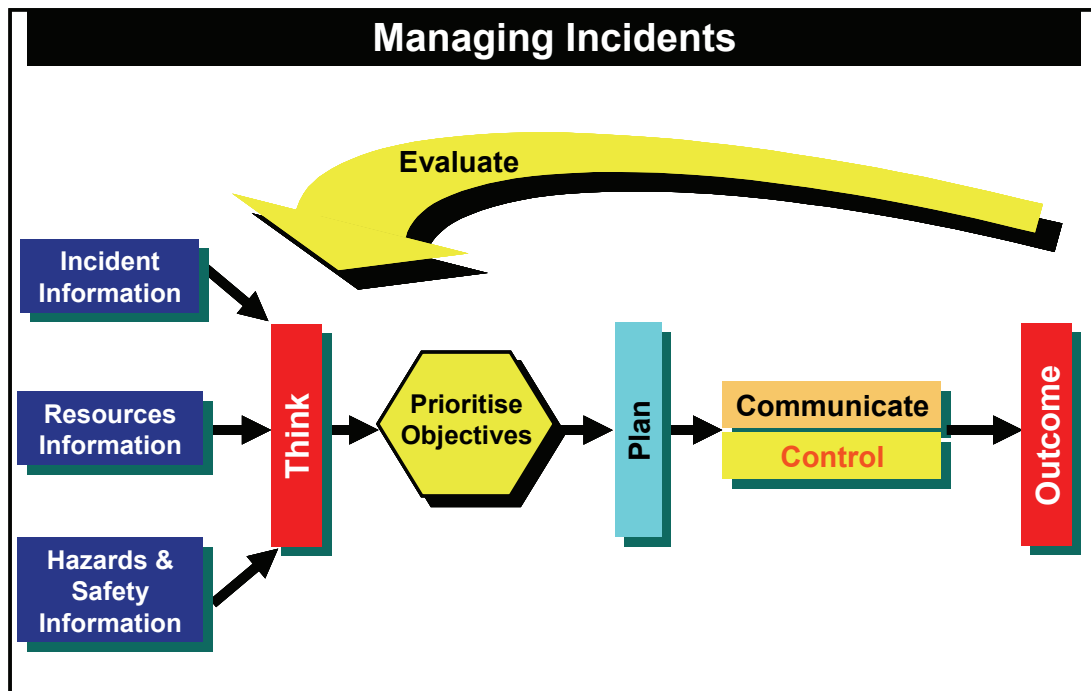
10.36 Consideration should also be given to the appropriate format for operational risk information taking into account the mechanisms for its' distribution and availability, for example:

- Vehicle-mounted data systems, such as mobile data terminals and printers offer advantages for the storage and availability of site specific risk information on fire appliances
- Some premises will be provided with emergency boxes either inside or adjacent to perimeter access points. These boxes are designed to contain emergency response information.

10.37 Where operational risk information is shared with other Fire and Rescue Services, agreement should be sought on the terminology, symbology, format and review processes for the information. Consideration should be given to the relevant dynamic information that will need to be shared with other emergency responders or partner organisations throughout the course of an incident.

10.38 Professional decision-making and incident management is supported by the provision of timely, relevant and accurate information. This can be clearly identified from the 'Managing incidents decision making model' diagram below.

FIGURE 7: MANAGING INCIDENTS DECISION MAKING MODEL



10.39 The three key aspects that will influence the decision making process undertaken by the Incident Commander are identified as:

- **Incident Information** – Involves the use of dynamic information as regards what is happening; the environment; the status of the incident – static or developing; who is involved in the incident, etc.
- **Resource Information** – Personnel, appliances and equipment, standard operating procedures, other agencies information, etc.
- **Hazards and Safety Information** – Who, what and where are the risks – risk management processes – generic risk assessments, site specific risk information, turnout messages, tactical information plans, etc

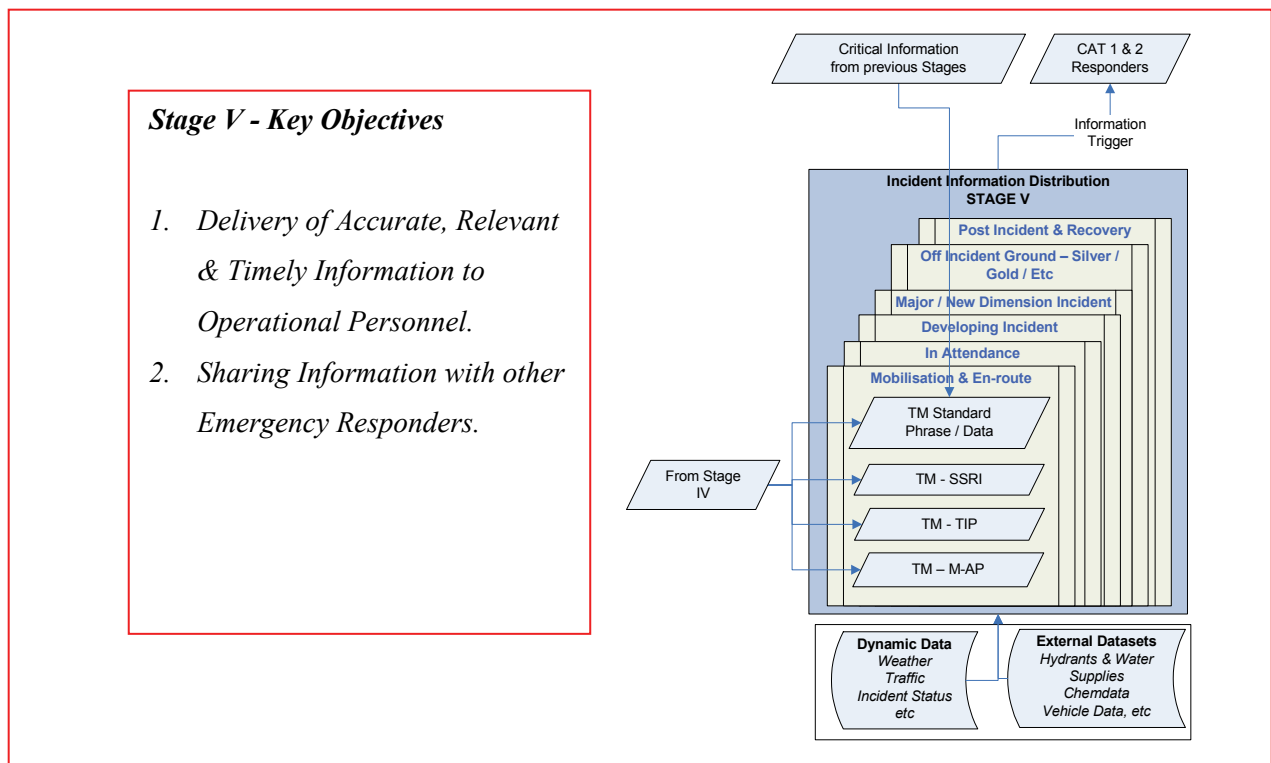
10.40

Review of data and operational risk information:

- Appropriate review periods should be established to allow risk management plans to be re-examined to ensure that the optimum prevention and intervention strategies are in place
- The review periods will normally be based on the level of risk identified, although they may also be triggered by: incidents at similar premises elsewhere in the country; changes in use of the site or building alterations, or changes by the Fire and Rescue Service to methods of working or equipment used.
- The review should be carried out on time and by appropriately qualified personnel.

Stage V – Incident information distribution process

FIGURE 8: PORIS STAGE V – INCIDENT INFORMATION DISTRIBUTION



- 10.41 **Objective:** Distribution of operational risk information produced in Stage IV for use by Incident Commanders; and other functional roles; other emergency responders and agencies; in a timely and relevant manner. Stage V should (where appropriate) also include dynamic data, e.g. weather conditions or local road closures, being made available throughout all stages of an incident, and during post incident investigation and recovery.
- 10.42 **Inputs:** Various levels of information will be available depending on the nature of the risk and any management or mitigation approaches applied.
- 10.43 **Process:** A process of ensuring that appropriate information is provided for operational personnel to assist in the dynamic risk assessment process in an operational environment.
- 10.44 **Outcomes:** Sufficiently detailed information is provided in a timely manner to support decision making during all phases of an operational event, for example:
- **MOBILISATION** – Turnout message should not delay response, but still provide basic risk-critical information
 - **EN-ROUTE** – Presentation and delivery method is crucial as data must be understood within a very short and busy time. Key information needs to be provided to the crews so they are aware of hazards, risks and risk management plans, and crews should be able to obtain more information if they have the time.
 - **ARRIVAL** – After initial dynamic assessment, crews must have quick access to information that helps with vital, early decisions.
 - **DEVELOPING PHASES** - Additional data may need to be provided to support Incident Command and other roles in the command structure.
 - **POST INCIDENT** – Information for other roles may also be required during and in the aftermath of the incident.

Appendix A : PORIS – Risk Assessment Matrix

Risk Assessment Matrix

| | | | | | | | |
|------------|---------------|---|---------------|-------|----------|-------------|--------------|
| Likelihood | Probable | 5 | 5 | 10 | 15 | 20 | 25 |
| | Possible | 4 | 4 | 8 | 12 | 16 | 20 |
| | Unlikely | 3 | 3 | 6 | 9 | 12 | 15 |
| | Very Unlikely | 2 | 2 | 4 | 6 | 8 | 10 |
| | Negligible | 1 | 1 | 2 | 3 | 4 | 5 |
| | | | 1 | 2 | 3 | 4 | 5 |
| | | | Insignificant | Minor | Moderate | Significant | Catastrophic |
| Severity | | | | | | | |

Appendix B(1): Likelihood table

| Level | Descriptor |
|----------------------|---|
| Probable | Intelligence from national or local fire statistics, or partner organisations, indicate that a significant number of fires or other emergencies / problems have occurred in these types of premises, in the previous five years that have required Fire and Rescue Service attendance. Local statistics or knowledge indicates that malicious fire setting is a problem in this area. Levels of fire safety management, maintenance or security of the premises/site are very poor. Specific aspects of construction, occupancy, use or contents give rise for serious concern. |
| Possible | Intelligence from national or local fire statistics, or partner organisations, indicate that a significant number of fires or other emergencies / problems have occurred in these types of premises that have required Fire and Rescue Service attendance. Levels of fire safety management, maintenance or security of the premises/site are poor. Specific aspects of construction, occupancy, use or contents give rise for concern. |
| Unlikely | Intelligence from fire statistics or partner organisations indicate that there is little evidence of fires or other emergencies / problems within similar sites or occupancies elsewhere within the area, or nationally/internationally, during the last ten years. There is some evidence / indication of appropriate levels of fire safety management, maintenance and security of the premises/site. |
| Very Unlikely | Intelligence from fire statistics or partner organisations would indicate that there is little evidence of fires or other emergencies / problems within similar sites or occupancies elsewhere within the area or nationally/internationally during the last ten years. There is good evidence of appropriate levels of fire safety management, maintenance and security of the premises/site. There are no aspects of construction, occupancy, use or contents that give rise for concern. |
| Negligible | Intelligence from fire statistics or partner organisations would indicate that there is little evidence of fires or other emergencies / problems within similar sites or occupancies elsewhere within the area or nationally/internationally during the last ten years. There are excellent levels of fire safety management, maintenance and security of the premises/site. There are no aspects of construction, occupancy, use or contents that give rise for concern. |

Appendix B(2): Firefighter severity life / health

| Level | Severity | Considerations and risk controls |
|----------------------|--|---|
| Catastrophic | Exposure to hazards could result in very large numbers of emergency responders being impacted with significant number of fatalities, large number of personnel requiring hospitalisation with serious injuries with long term effects. | Most responders will be unfamiliar with the site and / or the complex and / or unique risk controls in addition to the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Significant | Exposure to hazards could result in a significant number of emergency responders being impacted with one or more fatalities, multiple serious or extensive injuries and significant numbers requiring hospitalisation. | Most responders will be familiar with the site and / or the complex and / or unique risk controls required in addition to the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Moderate | Exposure to hazard resulting in death or serious injury is unlikely but could result in emergency responder's impacted requiring medical treatment and hospitalisation. | Mainly standard operating procedures and / or generic risk assessments with the possibility of some additional risk controls with which most responders will be familiar to prevent exposure. |
| Minor | Exposure to hazards resulting in death or serious injury is unlikely but could result in less serious minor injuries requiring first aid treatment. | Most responders will be familiar with the Standard Operating Procedures and / or Generic Risk Assessments required to prevent exposure. |
| Insignificant | Exposure to hazard resulting in injury is unlikely. | Most responders will be familiar with the standard operating procedures and / or generic risk assessments required to prevent exposure. |

Appendix B(3): Individual and societal severity life / health risk

| Level | Severity | Considerations and risk controls |
|----------------------|---|---|
| Catastrophic | Very large numbers of people in affected areas (s) impacted with significant number of fatalities, large number of people requiring hospitalisation with serious injuries with long term effects. | Most responders will be unfamiliar with the site and / or the complex and / or unique risk controls in addition to the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Significant | Significant number of people in affected area impacted with multiple fatalities, multiple serious or extensive injuries, significant hospitalisation and activation of MAJAX procedures across a number of hospitals. | Most responders will be familiar with the site and / or the complex and / or unique risk controls required in addition to the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Moderate | One or two fatalities or a single family group number of fatalities with some casualties requiring hospitalisation and medical treatment and activation of MAJAX alert notification system procedures in one or more hospitals. | Mainly standard operating procedures and / or generic risk assessments with the possibility of some additional risk controls with which most responders will be familiar to prevent exposure. |
| Minor | Small number of people affected, no fatalities and a small number of minor injuries with first aid treatment. | Most responders will be familiar with the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Insignificant | Insignificant number of injuries or impact on health. | Most responders will be familiar with the standard operating procedures and / or generic risk assessments required to prevent exposure. |

Appendix B(4): Environment severity

| Level | Severity | Considerations and risk controls |
|----------------------|--|---|
| Catastrophic | Serious long term impact (Environmental Agency Category 1) on environment and / or permanent damage. | Most responders will be unfamiliar with the site and / or the complex and / or unique risk controls in addition to the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Significant | Significant impact (Environmental Agency Category 2) on environment with medium to long term effects | Most responders will be familiar with the site and / or the complex and / or unique risk controls required in addition to the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Moderate | Limited impact (Environmental Agency Category 3) on environment with short term or long term effects | Mainly standard operating procedures and / or generic risk assessments with the possibility of some additional risk controls with which most responders will be familiar to prevent exposure. |
| Minor | Minor impact (Environmental Agency Category 4) on environment with no lasting effects | Most responders will be familiar with the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Insignificant | Insignificant effect on environment with short term or long term effects | Most responders will be familiar with the standard operating procedures and / or generic risk assessments required to prevent exposure. |

Appendix B(5): Community / Social Severity

| Level | Severity | Considerations and risk controls |
|----------------------|--|---|
| Catastrophic | Extensive damage to properties and built environment in affected area requiring major demolition. General and widespread displacement of more than 500 people for prolonged duration and extensive personal support required. Serious damage to infrastructure causing significant disruption to or loss of key services for prolonged period. Community unable to function without significant support. | Most responders will be unfamiliar with the site and / or the complex and / or unique risk controls in addition to the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Significant | Significant damage that requires support for local responders with external resources. 100 – 500 people in danger and displaced for longer than one week. Local responders require external resources to deliver personal support. Significant impact on and possible breakdown of delivery of some local community services. | Most responders will be familiar with the site and / or the complex and / or unique risk controls required in addition to the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Moderate | Damage that is confined to a specific location, or a number of locations but requires additional resources, localised disruption of <100 people for 1 – 3 days. Localised disruption to infrastructure and community services. | Mainly standard operating procedures and / or generic risk assessments with the possibility of some additional risk controls with which most responders will be familiar to prevent exposure. |
| Minor | Minor damage to properties, minor displacement of a small number of people for < 24hours and minor personal support required. Minor localised disruption to community services or infrastructure for <24hours. | Most responders will be familiar with the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Insignificant | Insignificant number of persons displaced and insignificant personal support required, insignificant disruption to community services including transport services and infrastructure. | Most responders will be familiar with the standard operating procedures and / or generic risk assessments required to prevent exposure. |

Appendix B(6): Heritage severity

| Level | Severity | Considerations and risk controls |
|---------------------|---|--|
| Catastrophic | Where there is a potential total loss / damage of a historical structure and / or content(s) or site of special scientific interest with national significance that can have a serious economic and/or social impact on the community either locally, regionally, nationally or in some cases internationally. With some long term potential permanent impact and loss with extensive clean up and recovery costs. | Most responders will be unfamiliar with the site and / or the complex and / or unique risk controls in addition to the standard operating procedures and / or generic risk assessments and salvage arrangements required to prevent exposure. |
| Significant | Where there is a potential of a significant loss / damage of an historical structure and/or content(s) or site of special scientific interest with national significance that can have a significant economic and/or social impact on the community either locally, regionally, nationally or in some cases internationally. With significant potential long term impact and loss with extensive clean up and recovery costs. | Most responders will be familiar with the site and / or the complex and / or unique risk controls required in addition to the standard operating procedures and / or generic risk assessments and salvage arrangements required to prevent exposure. |
| Moderate | Where there is a potential of limited loss of a historical structure and / or content(s) or site of special scientific interest with national significance that can have an economic and/or social impact on the community either locally, regionally, or in some cases nationally. With a potential long term impact and loss with limited clean up and recovery costs. | Mainly standard operating procedures and / or generic risk assessments and salvage arrangements with the possibility of some additional risk controls with which most responders will be familiar to prevent exposure. |
| Minor | Where there is a potential of loss to part of a historical structure and/or content(s) or site of special scientific interest with national significance that can have an economic and/or social impact on the community either locally, regionally, or in some cases nationally. With a potential short term impact and loss with small clean up and recovery costs. | Most responders will be familiar with the standard operating procedures and / or generic risk assessments and salvage arrangements required to prevent exposure. |

| Level | Severity | Considerations and risk controls |
|----------------------|--|--|
| Insignificant | Insignificant potential impact on structure and content(s) or site of special scientific interest with national significance and therefore no impact on the community. | Most responders will be familiar with the standard operating procedures and / or generic risk assessments and salvage arrangements required to prevent exposure. |

Appendix B(7): Economic and other severity

| Level | Severity | Considerations and risk controls |
|----------------------|--|---|
| Catastrophic | Serious impact on the local and regional economy, business environment and infrastructure with some serious long term potentially permanent loss of production with some structural change. Extensive clean up and recovery costs. | Most responders will be unfamiliar with the site and / or the complex and / or unique risk controls in addition to the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Significant | Significant impact on local economy, business environment and infrastructure with medium term loss of production. Significant extra clean up and recovery costs. | Most responders will be familiar with the site and / or the complex and / or unique risk controls required in addition to the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Moderate | Limited impact on local economy, business environment and infrastructure with some short term loss of production with possible additional clean up costs. | Mainly standard operating procedures and / or generic risk assessments with the possibility of some additional risk controls with which most responders will be familiar to prevent exposure. |
| Minor | Negligible impact on local economy, business environment and infrastructure and costs easily absorbed. | Most responders will be familiar with the standard operating procedures and / or generic risk assessments required to prevent exposure. |
| Insignificant | Insignificant impact on local economy, business environment and infrastructure. | Most responders will be familiar with the standard operating procedures and / or generic risk assessments required to prevent exposure. |

Appendix B(8) PORIS – Comparison of levels of risk

EXAMPLE

| <u>Site / Property General Details</u> | <u>Sheet 1 of 2</u> |
|---|--------------------------------|
| Site / Property Name or Number | Maxwell Furniture Sales |
| Also known as | N/A |
| Street / Road | Brown Street |
| Town | Westwell |
| County | Westington |
| Post Code | W11 T12 |
| Fire Safety System Number | W123456 |
| UPRN | 101035021678 |
| Station Area | W12 |
| Number of significant Buildings | 1 |
| Incident Type | Fire |
| Inspecting Officers Name | Stn Manager Smith |
| Inspecting Officer ID | 6674 |

| Risk Groups | FF | Ind/Soc | Env | Com | Her | Eco |
|---|-----------|----------------|------------|------------|------------|------------|
| Significant or Catastrophic Impact Identified | ✓ | | | | | ✓ |
| Very High | 25 | 25 | 25 | 25 | 25 | 25 |
| | 20 | 20 | 20 | 20 | 20 | 20 |
| High | 16 | 16 | 16 | 16 | 16 | 16 |
| | 15 | 15 | 15 | 15 | 15 | 15 |
| | 12 | 12 | 12 | 12 | 12 | 12 |
| Medium | 10 | 10 | 10 | 10 | 10 | 10 |
| | 9 | 9 | 9 | 9 | 9 | 9 |
| | 8 | 8 | 8 | 8 | 8 | 8 |
| Low | 6 | 6 | 6 | 6 | 6 | 6 |
| | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 4 | 4 | 4 | 4 | 4 |
| Very Low | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 1 | 1 | 1 | 1 | 1 |

This pro-forma (1 of 2) provides an illustration of how the risk scores may be recorded against each Risk Group where more than one incident type is considered. The resulting risk scores for each of the incident types can then be used for prioritising workload and assessing the risk management process.

EXAMPLE

EXAMPLE

| <u>Site / Property General Details</u> | <u>Sheet 2 of 2</u> |
|---|--------------------------------|
| Site / Property Name or Number | Maxwell Furniture Sales |
| Also known as | N/A |
| Street / Road | Brown Street |
| Town | Westwell |
| County | Westington |
| Post Code | W11 T12 |
| Fire Safety System Number | W123456 |
| UPRN | 101035021678 |
| Station Area | W12 |
| Number of significant Buildings | 1 |
| Incident Type | Flooding |
| Inspecting Officers Name | Stn Manager Smith |
| Inspecting Officer ID | 6674 |

| Risk Groups | FF | Ind/Soc | Env | Com | Her | Eco |
|---|----|---------|-----|-----|-----|-----|
| Significant or Catastrophic Impact Identified | ✓ | | ✓ | | | |
| Very High | 25 | 25 | 25 | 25 | 25 | 25 |
| | 20 | 20 | 20 | 20 | 20 | 20 |
| High | 16 | 16 | 16 | 16 | 16 | 16 |
| | 15 | 15 | 15 | 15 | 15 | 15 |
| | 12 | 12 | 12 | 12 | 12 | 12 |
| Medium | 10 | 10 | 10 | 10 | 10 | 10 |
| | 9 | 9 | 9 | 9 | 9 | 9 |
| | 8 | 8 | 8 | 8 | 8 | 8 |
| Low | 6 | 6 | 6 | 6 | 6 | 6 |
| | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 4 | 4 | 4 | 4 | 4 |
| Very Low | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 1 | 1 | 1 | 1 | 1 |

This pro-forma (2 of 2) provides an illustration of how the risk scores may be recorded against each Risk Group where more than one incident type is considered. The resulting risk scores for each of the incident types can then be used for prioritising workload and assessing the risk management process.

EXAMPLE

A blank pro-forma is shown below:

| <u>Site / Property General Details</u> | <u>Sheet of</u> |
|---|------------------------|
| Site / Property Name or Number | |
| Also known as | |
| Street / Road | |
| Town | |
| County | |
| Post Code | |
| Fire Safety System Number | |
| UPRN | |
| Station Area | |
| Number of significant Buildings | |
| Incident Type | |
| Inspecting Officers Name | |
| Inspecting Officer ID | |

| Risk Groups | FF | Ind/Soc | Env | Com | Her | Eco |
|---|-----------|----------------|------------|------------|------------|------------|
| Significant or Catastrophic Impact Identified | | | | | | |
| Very High | 25 | 25 | 25 | 25 | 25 | 25 |
| | 20 | 20 | 20 | 20 | 20 | 20 |
| High | 16 | 16 | 16 | 16 | 16 | 16 |
| | 15 | 15 | 15 | 15 | 15 | 15 |
| | 12 | 12 | 12 | 12 | 12 | 12 |
| Medium | 10 | 10 | 10 | 10 | 10 | 10 |
| | 9 | 9 | 9 | 9 | 9 | 9 |
| | 8 | 8 | 8 | 8 | 8 | 8 |
| Low | 6 | 6 | 6 | 6 | 6 | 6 |
| | 5 | 5 | 5 | 5 | 5 | 5 |
| | 4 | 4 | 4 | 4 | 4 | 4 |
| Very Low | 3 | 3 | 3 | 3 | 3 | 3 |
| | 2 | 2 | 2 | 2 | 2 | 2 |
| | 1 | 1 | 1 | 1 | 1 | 1 |

Appendix C: Data capture fields

Data capture pro-forma

| Site / Property general details | |
|---------------------------------|----------------------|
| Site / Property name or number | <input type="text"/> |
| Also known as | <input type="text"/> |
| Street / Road | <input type="text"/> |
| Town | <input type="text"/> |
| County | <input type="text"/> |
| Post code | <input type="text"/> |
| Fire Safety System Number | <input type="text"/> |
| UPRN | <input type="text"/> |
| Fire and Rescue Service | <input type="text"/> |
| Station area | <input type="text"/> |
| Number of significant buildings | <input type="text"/> |
| Registered address of owner | <input type="text"/> |
| Owner post code | <input type="text"/> |
| Owner phone No. | <input type="text"/> |

Responsible Person contact details

| | |
|-----------|----------------------|
| Name | <input type="text"/> |
| Phone No. | <input type="text"/> |
| Email | <input type="text"/> |
| Position | <input type="text"/> |
| Mobile | <input type="text"/> |

Use of the site / Premises (see use codes guide)

| | |
|----------|----------------------|
| Use code | <input type="text"/> |
| Note | <input type="text"/> |

| Site / Building size and status | |
|--|--------------------------|
| Year of construction | <input type="text"/> |
| Building / Site close to others | <input type="text"/> |
| Building / Site in rural location | <input type="text"/> |
| Building size category | |
| | Select (X) |
| Extremely small | <input type="checkbox"/> |
| Very small | <input type="checkbox"/> |
| Small | <input type="checkbox"/> |
| Medium | <input type="checkbox"/> |
| Large | <input type="checkbox"/> |
| Very large | <input type="checkbox"/> |
| Extremely large | <input type="checkbox"/> |
| Number of floors above ground | |
| | Select (X) |
| 0 – 2 | <input type="checkbox"/> |
| 3 – 5 | <input type="checkbox"/> |
| 6 – 8 | <input type="checkbox"/> |
| 9 – 15 | <input type="checkbox"/> |
| >15 | <input type="checkbox"/> |
| Number of floors below ground | |
| Total number of floors | <input type="text"/> |
| Mezzanine Floors (Location) | <input type="text"/> |
| Building Length | <input type="text"/> |
| Building Depth | <input type="text"/> |
| Total building floor area | |
| | Select (X) |
| < 9,000m ² | <input type="checkbox"/> |
| 9,000m ² - 18,000m ² | <input type="checkbox"/> |
| >18,000m ² | <input type="checkbox"/> |

| Building status | Select (X) |
|--------------------|--------------------------|
| Under construction | <input type="checkbox"/> |
| Occupied | <input type="checkbox"/> |
| Empty | <input type="checkbox"/> |
| Derelict | <input type="checkbox"/> |
| Under renovation | <input type="checkbox"/> |
| Being demolished | <input type="checkbox"/> |
| Temporary | <input type="checkbox"/> |

| Site categorisation | |
|----------------------|--|
| | Select (X) |
| COMAH | <input type="checkbox"/> |
| NAMOS | <input type="checkbox"/> |
| DSEAR | <input type="checkbox"/> |
| BASIS | <input type="checkbox"/> |
| DSHAR | <input type="checkbox"/> |
| NIHWS | <input type="checkbox"/> |
| CHIP | <input type="checkbox"/> |
| NIHHS | <input type="checkbox"/> |
| MSER | <input type="checkbox"/> |
| Pipeline regulations | <input type="checkbox"/> |
| Other (Specify) | <input data-bbox="598 1361 691 1402" type="text"/> |

Occupancy

Number of occupants

List names of occupier(s)

Number of occupants week day

00:00 – 04:00

04:00 – 08:00

08:00 – 12:00

12:00 – 16:00

16:00 – 20:00

20:00 – 24:00

Number of occupants weekend

00:00 – 04:00

04:00 – 08:00

08:00 – 12:00

12:00 – 16:00

16:00 – 20:00

20:00 – 24:00

| Occupancy risks | <i>Select (X)</i> | <i>Details</i> |
|---|--------------------------|----------------------|
| Unfamiliar with building and exit routes | <input type="checkbox"/> | <input type="text"/> |
| Restricted mobility | <input type="checkbox"/> | <input type="text"/> |
| Limited comprehension | <input type="checkbox"/> | <input type="text"/> |
| Oxygen therapy in use | <input type="checkbox"/> | <input type="text"/> |
| Sleeping risk | <input type="checkbox"/> | <input type="text"/> |
| Potential for physical violence | <input type="checkbox"/> | <input type="text"/> |
| Potential for verbal abuse | <input type="checkbox"/> | <input type="text"/> |
| Arrangements for assistance in evacuation | <input type="checkbox"/> | <input type="text"/> |
| Occupant's unconscious through drugs | <input type="checkbox"/> | <input type="text"/> |
| May be occasional major life risk | <input type="checkbox"/> | <input type="text"/> |
| Give details of temporary life risk | <input type="checkbox"/> | <input type="text"/> |
| Regular evacuation drills | <input type="checkbox"/> | <input type="text"/> |
| Training records are up to date | <input type="checkbox"/> | <input type="text"/> |
| Children aged 6 and below | <input type="checkbox"/> | <input type="text"/> |

| Location of occupants | <i>Select (X)</i> | <i>Details</i> |
|------------------------------|--------------------------|----------------------|
| Single compartment | <input type="checkbox"/> | <input type="text"/> |
| Multi compartment | <input type="checkbox"/> | <input type="text"/> |

| Building systems | | |
|-------------------------|--------------------------|----------------------|
| | <i>Select (X)</i> | <i>Details</i> |
| Internal communications | <input type="checkbox"/> | <input type="text"/> |
| Interceptor tanks | <input type="checkbox"/> | <input type="text"/> |
| On site treatment plant | <input type="checkbox"/> | <input type="text"/> |
| Control/Command Room | <input type="checkbox"/> | <input type="text"/> |
| Sprinklers | | |
| | <i>Select (X)</i> | <i>Details</i> |
| For life safety | <input type="checkbox"/> | <input type="text"/> |
| For property protection | <input type="checkbox"/> | <input type="text"/> |
| Coverage | <i>Select (X)</i> | |
| 10% | <input type="checkbox"/> | |
| 20% | <input type="checkbox"/> | |
| 30% | <input type="checkbox"/> | |
| 40% | <input type="checkbox"/> | |
| 50% | <input type="checkbox"/> | |
| 60% | <input type="checkbox"/> | |
| 70% | <input type="checkbox"/> | |
| 80% | <input type="checkbox"/> | |
| 90% | <input type="checkbox"/> | |
| 100% | <input type="checkbox"/> | |
| Location of stop valve | | <input type="text"/> |
| Details of water supply | | <input type="text"/> |

Drencher system

| | |
|----------------|----------------------|
| Coverage | <input type="text"/> |
| Location | <input type="text"/> |
| Valve location | <input type="text"/> |
| Water supply | <input type="text"/> |

Inert gas system

| | |
|-------------------|----------------------|
| Type | <input type="text"/> |
| Controls Location | <input type="text"/> |
| Ventilation | <input type="text"/> |
| Alert | <input type="text"/> |

Firefighting facilities *Select (X)*

| | |
|--------------------------------|--------------------------|
| Dry riser | <input type="checkbox"/> |
| Wet riser | <input type="checkbox"/> |
| First aid firefighting details | <input type="checkbox"/> |
| Firefighting lifts | <input type="checkbox"/> |
| Firefighting shafts | <input type="checkbox"/> |

Smoke control *Select (X)*

| | |
|--------------------|--------------------------|
| Natural | <input type="checkbox"/> |
| Mechanical | <input type="checkbox"/> |
| Basement clearance | <input type="checkbox"/> |
| Pressurised | <input type="checkbox"/> |

| | |
|---------------------|----------------------|
| Control(s) location | <input type="text"/> |
|---------------------|----------------------|

Automatic fire detection*Select (X)*

More than adequate

Adequate

Less than adequate

Location of panel

System
maintained?

Yes/No

Is the system
monitored?

Yes/No

Escape routes**Yes/No**

Are all fire escape routes readily available?

Are self closing doors effectively self closing?

Is the fire resistance of the escape routes structurally sound?

Are circulation routes unobstructed and free from combustibles?

Are stair coverings, steps and floors well maintained?

Are the exit routes clearly indicated?

Have any provisions been made to assist in the evacuation
of person with disabilities?

Are there satisfactory means of controlling the occupancy?

Are all furnishings and wall coverings in a good state of repair?

Escape lighting**Yes/No**

Do the lighting provisions appear to be adequate?

Are testing and maintenance records up to date?

| Emergency action and training | | <i>Yes/No</i> |
|---|--------------------------|--------------------------|
| Is there a suitable emergency action plan? | | <input type="checkbox"/> |
| Are staff aware of what action to take in an emergency? | | <input type="checkbox"/> |
| Are Staff aware of all escape routes from the premises? | | <input type="checkbox"/> |
| Has there been an emergency evacuation drill in the last 12 months? | | <input type="checkbox"/> |
| Standard of building maintenance | | <i>Select (X)</i> |
| Well above average | <input type="checkbox"/> | |
| Above average | <input type="checkbox"/> | |
| Average | <input type="checkbox"/> | |
| Below average | <input type="checkbox"/> | |
| Well below average | <input type="checkbox"/> | |
| Building type | | <i>Select (X)</i> |
| Building blocks & slabs | <input type="checkbox"/> | |
| Structural steel frame | <input type="checkbox"/> | |
| Concrete | <input type="checkbox"/> | |
| Timber frame | <input type="checkbox"/> | |
| Pre-fabricated | <input type="checkbox"/> | |
| Building boards | <input type="checkbox"/> | |
| Brick | <input type="checkbox"/> | |
| Air supported structure | <input type="checkbox"/> | |
| Construction type | | <i>Select (X)</i> |
| Modular | <input type="checkbox"/> | |
| Portal frame | <input type="checkbox"/> | |
| CLASP | <input type="checkbox"/> | |
| Temporary | <input type="checkbox"/> | |
| Unfenestrated | <input type="checkbox"/> | |

| Cladding and roof | <i>Select (X)</i> |
|--|--------------------------|
| Sandwich panel | <input type="checkbox"/> |
| Asbestos | <input type="checkbox"/> |
| Metal sheet | <input type="checkbox"/> |
| UPVC | <input type="checkbox"/> |
| Tile/Slate | <input type="checkbox"/> |
| Timber | <input type="checkbox"/> |
| Concrete | <input type="checkbox"/> |
| Glass | <input type="checkbox"/> |
| Plastic panels | <input type="checkbox"/> |
| Thatched | <input type="checkbox"/> |
| Internal linings | <i>Select (X)</i> |
| Combustible (timber or fibreboard) | <input type="checkbox"/> |
| Non-combustible (plaster, plasterboard, mineral board) | <input type="checkbox"/> |
| Composite (any sandwich construction boarding) | <input type="checkbox"/> |
| Suspended ceilings | <input type="checkbox"/> |
| Unprotected voids | <input type="checkbox"/> |
| Ducts | <input type="checkbox"/> |
| Internal sub division | <i>Select (X)</i> |
| Extensive sub division | <input type="checkbox"/> |
| Some sub division | <input type="checkbox"/> |
| Open plan | <input type="checkbox"/> |
| Atrium | <input type="checkbox"/> |

| Storage | <i>Select (X)</i> |
|--|--------------------------|
| High Density , High bay storage with internal mezzanine floors | <input type="checkbox"/> |
| Large capacity storage tanks cylinders or silos (Above 5000L or 5000 Kg) | <input type="checkbox"/> |
| Goods stored in free standing stacks above 3m in height | <input type="checkbox"/> |
| Goods stored in free standing stacks below 3m in height | <input type="checkbox"/> |
| Goods stored in stable purpose built storage systems | <input type="checkbox"/> |
| Combustible storage arrangements | <input type="checkbox"/> |
| >200 L Oil or petrochemicals | <input type="checkbox"/> |

| Water supplies | |
|-----------------------|--------------------------|
| Hydrants | |
| Construction | <input type="checkbox"/> |
| Flow rate | <input type="checkbox"/> |
| Position | <input type="checkbox"/> |
| Size | <input type="checkbox"/> |
| Status | <input type="checkbox"/> |
| Type | <input type="checkbox"/> |
| Pressure | <input type="checkbox"/> |
| Meter bypass | <input type="checkbox"/> |
| Water provider | <input type="checkbox"/> |
| Ring main | <input type="checkbox"/> |

| Open water | |
|------------------------|--|
| Location | <input type="text"/> |
| Seasonal effects | <input type="text"/> |
| Pump type | <p style="text-align: right;"><i>Select (X)</i></p> <p>Light portable pump <input type="checkbox"/></p> <p>Major pump <input type="checkbox"/></p> |
| Water tanker required | <input type="checkbox"/> |
| Hose layer required | <input type="checkbox"/> |
| Number of hose lengths | <input type="text"/> |

| Security | <i>Select (X)</i> |
|---------------------|--------------------------|
| Smoke cloak system | <input type="checkbox"/> |
| Dogs | <input type="checkbox"/> |
| CCTV | <input type="checkbox"/> |
| Electrified fencing | <input type="checkbox"/> |
| Intruder alarm | <input type="checkbox"/> |
| Security operative | <input type="checkbox"/> |
| Secured and left | <input type="checkbox"/> |

| Potential loss / risk | <i>Select (X)</i> | <i>Brief details</i> |
|-----------------------|--------------------------|--|
| Sole supplier | <input type="checkbox"/> | <input type="text"/> |
| Exceptional value | <input type="checkbox"/> | <input type="text"/> |
| Heritage risk | <input type="checkbox"/> | Salvage considerations <input type="text"/> |
| Community loss | <input type="checkbox"/> | <input type="text"/> |

| | | |
|--|--------------------------|----------------------|
| Environmental risk (Further Details Below) | <input type="checkbox"/> | <input type="text"/> |
| Firefighter Risk ⁴ (Further Details Below) | <input type="checkbox"/> | <input type="text"/> |

Environmental risk details

| | <i>Select (X)</i> | <i>Details</i> |
|----------------------|--------------------------|----------------------|
| Biological | <input type="checkbox"/> | <input type="text"/> |
| Chemical | <input type="checkbox"/> | <input type="text"/> |
| Radiation | <input type="checkbox"/> | <input type="text"/> |
| >37 Giga Becquerel's | <input type="checkbox"/> | <input type="text"/> |
| Type | <input type="checkbox"/> | <input type="text"/> |
| Air borne | <input type="checkbox"/> | <input type="text"/> |
| Explosive | <input type="checkbox"/> | <input type="text"/> |
| Fire water run off | <input type="checkbox"/> | <input type="text"/> |

⁴ Items in the Environmental risk section may also be firefighter risk

Firefighter risk details

| | <i>Select (X)</i> | <i>Details</i> | |
|------------------------------------|--------------------------|---|--|
| Hazardous chemicals | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Known asbestos | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Swimming pool chemicals | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Cryogenic gases | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Teratogens | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Mutagens | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Carcinogens | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Flammable gas | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Toxic gas | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Acetylene cylinders | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Piped gasses or liquids | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Open inspection pits | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Plinths | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Drops | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Confined spaces | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Injury due to sharps | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Working at height | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Working near water | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Railway line adjacent | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Slip trip or fall hazard | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |
| Communication difficulties | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | Leaky feeder required <input style="width: 100%;" type="text"/> |
| Extensive basement or tunnel areas | <input type="checkbox"/> | <input style="width: 100%;" type="text"/> | |

Firefighter risk details

| | Select (X) | Details |
|---------------------------------|--------------------------|----------------------|
| Composite panels | <input type="checkbox"/> | <input type="text"/> |
| Unfenestrated compartments | <input type="checkbox"/> | <input type="text"/> |
| Underground structure | <input type="checkbox"/> | <input type="text"/> |
| Overhead power lines | <input type="checkbox"/> | <input type="text"/> |
| Significant smoke logging | <input type="checkbox"/> | <input type="text"/> |
| History of incidents | <input type="checkbox"/> | <input type="text"/> |
| History of accidents / injuries | <input type="checkbox"/> | <input type="text"/> |
| Crew targeting | <input type="checkbox"/> | <input type="text"/> |
| Potential for rapid fire spread | <input type="checkbox"/> | <input type="text"/> |

Stored energy systems

Select (X)

| | |
|----------------------------|--------------------------|
| Steam | <input type="checkbox"/> |
| Hydraulic | <input type="checkbox"/> |
| Pneumatic | <input type="checkbox"/> |
| Batteries | <input type="checkbox"/> |
| Electro-magnetic radiation | <input type="checkbox"/> |
| Others (give details) | <input type="text"/> |

Hazardous process

| | <i>Select (X)</i> | <i>Details</i> |
|-----------------------------------|--------------------------|----------------------|
| Large cold rooms | <input type="checkbox"/> | <input type="text"/> |
| Machinery hazard | <input type="checkbox"/> | <input type="text"/> |
| Secondary power supply | <input type="checkbox"/> | <input type="text"/> |
| Electricity supply >415V | <input type="checkbox"/> | <input type="text"/> |
| Electromagnetic radiation | <input type="checkbox"/> | <input type="text"/> |
| Category 1 Explosives | <input type="checkbox"/> | <input type="text"/> |
| Lasers | <input type="checkbox"/> | <input type="text"/> |
| Waste disposal site | <input type="checkbox"/> | <input type="text"/> |
| Plant or machinery through floors | <input type="checkbox"/> | <input type="text"/> |
| Internal disposal chute | <input type="checkbox"/> | <input type="text"/> |
| Dust extraction system | <input type="checkbox"/> | <input type="text"/> |
| Finely divided solids | <input type="checkbox"/> | <input type="text"/> |
| High fire loading | <input type="checkbox"/> | <input type="text"/> |
| Work permit systems | <input type="checkbox"/> | <input type="text"/> |

Site access

| | Select (X) | Details |
|---------------------------------|--------------------------|----------------------|
| Ladders be pitched to all sides | <input type="checkbox"/> | <input type="text"/> |
| Access/egress difficulties | <input type="checkbox"/> | <input type="text"/> |
| Command vehicle site identified | <input type="checkbox"/> | <input type="text"/> |
| Aerial access | <input type="checkbox"/> | <input type="text"/> |
| Pumping appliance access | <input type="checkbox"/> | <input type="text"/> |
| Appliance turning provisions | <input type="checkbox"/> | <input type="text"/> |
| RV points identified | <input type="checkbox"/> | <input type="text"/> |

Operational resilience information

| | Select (X) | Details |
|--------------------------|--------------------------|----------------------|
| BA Plan | <input type="checkbox"/> | <input type="text"/> |
| De-contamination Plan | <input type="checkbox"/> | <input type="text"/> |
| Environmental Plan | <input type="checkbox"/> | <input type="text"/> |
| New Dimension Plan | <input type="checkbox"/> | <input type="text"/> |
| Press Strategy | <input type="checkbox"/> | <input type="text"/> |
| Resource Management plan | <input type="checkbox"/> | <input type="text"/> |
| Salvage Plan | <input type="checkbox"/> | <input type="text"/> |
| Sectorisation Plan | <input type="checkbox"/> | <input type="text"/> |
| Initial Attendance | <input type="checkbox"/> | <input type="text"/> |
| Tactical Plan | <input type="checkbox"/> | <input type="text"/> |

Operational resilience information

| | <i>Select (X)</i> | <i>Details</i> |
|------------------------------------|--------------------------|----------------------|
| Ventilation Plan | <input type="checkbox"/> | <input type="text"/> |
| Water Plan | <input type="checkbox"/> | <input type="text"/> |
| Welfare Plan | <input type="checkbox"/> | <input type="text"/> |
| Foam Plan | <input type="checkbox"/> | <input type="text"/> |
| Aerial Plan | <input type="checkbox"/> | <input type="text"/> |
| Hazardous Substance Plan | <input type="checkbox"/> | <input type="text"/> |
| Area Evacuation Plan | <input type="checkbox"/> | <input type="text"/> |
| Major Incident / Multi Agency Plan | <input type="checkbox"/> | <input type="text"/> |
| Business Continuity Plan | <input type="checkbox"/> | <input type="text"/> |
| Site Emergency Plan | <input type="checkbox"/> | <input type="text"/> |

Referrals

| | <i>Select (X)</i> | <i>Details</i> |
|----------------------------------|--------------------------|----------------------|
| Home Fire Safety Check | <input type="checkbox"/> | <input type="text"/> |
| Workplace Fire Safety Inspection | <input type="checkbox"/> | <input type="text"/> |
| Crime Prevention | <input type="checkbox"/> | <input type="text"/> |
| Business Liaison Officer | <input type="checkbox"/> | <input type="text"/> |
| Hazard Materials Officer | <input type="checkbox"/> | <input type="text"/> |
| SRS | <input type="checkbox"/> | <input type="text"/> |

PORIS Details

| | |
|----------------------------|----------------------|
| Date of Stage II Visit | <input type="text"/> |
| Inspecting Officer Name | <input type="text"/> |
| Inspecting Officer ID | <input type="text"/> |
| Date of Stage III Analysis | <input type="text"/> |
| Inspecting Officers Name | <input type="text"/> |
| Inspecting Officer ID | <input type="text"/> |

Appendix D: Comparison Scoring between PORIS Score for Individual & Societal Life Risk, and IRMP Guidance Note No 4

| PORIS Score – Individual & Societal Life Risk Group | 20 - 25 | 12 – 16 | 8 - 10 | 4 - 6 | 1 - 3 |
|--|--|---|---|---|--|
| Occupancy Type | FSEC Relative Risk Band & Score Well Above Average | FSEC Relative Risk Band & Score Above Average | FSEC Relative Risk Band & Score Average | FSEC Relative Risk Band & Score Below Average | FSEC Relative Risk Band & Score Well Below Average |
| Hospital | Greater than 6 | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | DNA | DNA |
| Hostel | Greater than 6 | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | DNA |
| Care Home | Greater than 6 | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | DNA |
| Purpose Built Flats 4 storeys or more | Greater than 6 | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | DNA |
| Houses converted to Flats 3 storeys or more | Greater than 6 | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | DNA |
| HMO 3 storeys or more | Greater than 6 | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | DNA |
| Hotels | DNA | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | DNA |
| Shops | DNA | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | DNA |
| Other Sleeping accommodation | DNA | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | Less than or equal to 3 |
| Schools | DNA | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | Less than or equal to 3 |
| Further Education | DNA | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | Less than or equal to 3 |
| Other premises open to the public | DNA | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | Less than or equal to 3 |
| Public buildings | DNA | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | Less than or equal to 3 |
| Licensed premises | DNA | Greater than 5 or equal to 6 | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | Less than or equal to 3 |
| Factories and Warehouses | DNA | DNA | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | Less than or equal to 3 |
| Other Workplaces | DNA | DNA | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | Less than or equal to 3 |
| Offices | DNA | DNA | Greater than 4 or equal to 5 | Greater than 3 or equal to 4 | Less than or equal to 3 |

SECTION 12

Acknowledgements

The Chief Fire and Rescue Adviser is indebted to all those who have contributed their time and expertise towards the production of this operational guidance manual. There were many consultees and contributors, but the following deserve special mention.

| | |
|--|------|
| Bedfordshire & Luton Fire and Rescue Service | * |
| Buckinghamshire Fire and Rescue Service | * |
| Cambridgeshire Fire & Rescue Service | |
| Cheshire Fire & Rescue Service | |
| Chief Fire Officers' Association | * |
| Cleveland Fire and Rescue Service | * |
| County Durham & Darlington Fire & Rescue Service | ** |
| Cumbria Fire & Rescue Service | |
| Dave Berry Fire and Risk Management Support Services Limited | |
| Damian Smith Fire and Risk Management Support Services Limited | |
| Defence Fire & Rescue Service | |
| Devon & Somerset Fire & Rescue Service | ** |
| East Sussex Fire & Rescue Service | |
| Environment Agency | |
| Fire Protection Association | |
| Firelink | |
| Gary Harney Fire and Risk Management Support Services Limited | |
| Gloucestershire Fire & Rescue Service | ** |
| Greater Manchester Fire and Rescue Service | ** |
| Health and Safety Executive | |
| Health Protection Agency | |
| Hereford and Worcester Fire and Rescue Service | |
| Isle of Wight Fire & Rescue Service | |
| Kent Fire and Rescue Service | * |
| Lancashire Fire and Rescue Service | * ** |
| Leicestershire Fire and Rescue Service | |
| London Fire Brigade | * |
| Merseyside Fire & Rescue Service | |

Mid and West Wales Fire and Rescue Service
 Norfolk Fire & Rescue Service
 North Wales Fire and Rescue Service
 North Yorkshire Fire & Rescue Service
 Northamptonshire Fire and Rescue Service
 Northern Ireland Fire & Rescue Service
 Nottinghamshire Fire and Rescue Service
 South Wales Fire and Rescue Service
 South Yorkshire Fire & Rescue Service **
 Staffordshire Fire and Rescue Service
 Strathclyde Fire and Rescue Service *
 Warwickshire Fire & Rescue Service
 Welsh Assembly *
 West Midlands Fire Service *
 West Yorkshire Fire & Rescue Service *
 Wiltshire Fire and Rescue Service
 Information Communication Technology Managers

** With special thanks to those Fire and Rescue Services who arranged regional briefings and ** those that have participated with the pilot consultation study.*

SECTION 13

References and bibliography

Building Regulations Approved Document B
Civil Contingencies Act 2004
Control of Major Accident Hazards Regulations 1999
Chief Fire Officer's Association Fire Safety Audit Form
Chief Fire Officer's Association National Mobile Data Report
Chief Fire Officer's Association Role Based Operational Information Requirements
Chief Fire Officer's Association Data Dictionary
Environmental Information Regulations 2004
Data Protection Act 1998
Fire & Rescue National Framework 2008 – 11
Fire and Rescue Services Act 2004
Fire and Rescue Services (Emergencies) (England) Order 2007
Fire Service Manual Volume 2 Operations Incident Command
Fire Service Manual Volume 2 Operations Environmental Protection
Freedom of Information Act 2000
Health and Safety at Work etc Act 1974
Health & Safety Guidance Suite of Documents
Health & Safety Guidance 65 Successful Health and Safety Management
Her Majesty's Government Security Policy Framework V 4.0 December 2010
Integrated Risk Management Planning Steering Group Integrated Risk Management Planning: Policy Guidance – Wildfire
Integrated Risk Management Planning Steering Group Integrated Risk Management Planning: Policy Guidance - Business Continuity Management
Integrated Risk Management Planning Steering Group Integrated Risk Management Planning: Policy Guidance - Environmental Protection
Integrated Risk Management Planning Steering Group Integrated Risk Management Planning: Policy Guidance - Protection of Heritage Buildings and Structures
Management of Health and Safety at Work Regulations 1999
Northern Ireland Fire and Rescue Service – Standard Operating Procedure 12 – Site Specific Risk Assessment Form
Operational Firefighter Guide to Building Construction and Fire Safety Features for Site Safety Risk Surveys – West Midlands Fire Service

Security Vetting and Protective Markings Guide March 2008
Regulatory Reform (Fire Safety) Order 2005
South East Fire and Rescue Service Premises-Site Risk Management

SECTION 14

Sector specific acronyms

DCLG style guide dictates that we limit the number of acronyms used in our documents. However, we have included here a list of acronyms in common use in the fire service.

A

ACI Address Change Intelligence

B

BA Breathing Apparatus
BASIS British Agrochemical Standards Inspection Scheme
BDAG Building Disaster Assessment Group
BS British Standard

C

CACFOA Chief and Assistant Chief Fire Officers' Association
CAD Computer Aided Design
CAT 1 & 2 Category 1 & Category 2 Responders (Civil Contingencies Act)
CCTV Closed Circuit Tele-Vision
CDRP Crime and Disorder Reduction Partnerships
CE Conformité Européene
CFOA Chief Fire Officers' Association
CFRA Chief Fire and Rescue Adviser
CFS Community Fire Safety
CHIP Chemicals Hazard Information and Packaging
CLASP Consortium of Local Authorities Special Programme
CNI Critical National Infrastructure
COMAH Control of Major Accident Hazards
CONTEST Counter Terrorism Strategy
CPNI Centre for the Protection of the National Infrastructure

D

DCLG Department for Communities and Local Government
DNA Does Not Apply
DSEAR Dangerous Substances and Explosive Atmosphere Regulations
DSHAR Dangerous Substances in Harbour Regulations 1987

F

| | |
|------|------------------------------|
| FDR1 | Fire Damage Report (form 1) |
| FRA | Fire and Rescue Authority |
| FRS | Fire and Rescue Service |
| FSEC | Fire Service Emergency Cover |

G

| | |
|-----|---------------------------------|
| GIS | Geographical Information System |
| GRA | Generic Risk Assessment |

H

| | |
|--------|--|
| HMG | Her Majesty's Government |
| HPA | Health Protection Agency |
| HSE | Health and Safety Executive |
| HSG 65 | Health and Safety Guidance (number 65) |

I

| | |
|------|--|
| IA | Information Assurance |
| IC | Incident Commander |
| ICT | Information Communication System |
| ICU | Incident Control Unit |
| ID | Identity / Identification / Identifier |
| IPDS | Integrated Personal Development System |
| IRMP | Integrated Risk Management Planning |
| IRS | Incident Recording System |
| IS | Information System |
| ISO | International Standards Organisation |
| IT | Information Technology |

L

| | |
|------|-----------------------------------|
| LLPG | Local Land and Property Gazetteer |
| LPP | Low Pressure Pump |
| LRF | Local Resilience Forum |
| LSP | Local Strategic Partnership |

M

| | |
|-------|---|
| MAJAX | Major Incident Response Procedure |
| MAPs | Multi-Agency Plans |
| MDT | Mobile Data Terminal |
| MSER | Manufacture and Storage of Explosives Regulations |

N

| | |
|-------|---|
| NAG | National Address Gazetteer |
| NAMOS | Notification and Marking of Sites |
| NIHHS | Notification of Installations Handling Hazardous Substances |
| NLPG | National Land and Property Gazetteer |
| NOS | National Occupational Standards |

O

| | |
|----|----------------|
| OB | Other Building |
|----|----------------|

P

| | |
|-------|--|
| PDA | Pre Determined Attendance |
| PORIS | Provision of Operational Risk Information System |
| PPE | Personal Protective Equipment |
| PSA | Public Service Agreement |

R

| | |
|--------|--|
| RIDDOR | Reporting of Injuries Diseases and Dangerous Occurrences |
| RPE | Respiratory Protective Equipment |
| RV | Rendezvous (as in RV point – rendezvous point) |

S

| | |
|------|---------------------------------|
| SN&N | Street Naming and Numbering |
| SOP | Standard Operating Procedure |
| SRS | Safety Responsibility Statement |
| SSRI | Site Specific Risk Information |

T

| | |
|-----|---|
| TIP | Tactical Information Plans |
| TM | Turnout Message (provided by FRS at mobilisation) |

U

| | |
|------|-----------------------------------|
| UK | United Kingdom |
| UPRN | Unique Property Reference Number |
| UPVC | Unplasticised Poly Vinyl Chloride |

V

| | |
|---|------|
| V | Volt |
|---|------|

© Crown copyright, 2012

Copyright in the typographical arrangement rests with the Crown.

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit <http://www.nationalarchives.gov.uk/doc/open-government-licence/> or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: 1Hpsi@nationalarchives.gsi.gov.uk.

This document/publication is also available on our website at www.communities.gov.uk

Any enquiries regarding this document/publication should be sent to us at:

Department for Communities and Local Government
Eland House
Bressenden Place
London
SW1E 5DU
Telephone: 030 3444 0000

March 2012

ISBN: 978-1-4098-978-3374-1