Preparing Scotland

Are we ready?

Guidance for Scotland's Regional Resilience Partnerships on Risk and Preparedness Assessments

December 2017

Contents

Introduction

___

Purpose of Guidance

Preparing Scotland is a suite of guidance to assist responders plan, respond and recover from disruptive challenges. It consists of a 'Hub' which sets out Scotland's resilience philosophy, structures and regulatory duties, and 'Spokes' that provide detailed guidance on specific matters. The "Are we ready?" Guidance is one of those spokes.

The purpose of "Are we ready?" is to provide a comprehensive overview of the Risk Preparedness Assessment (RPA) process for Regional Resilience Partnerships (RRPs). This document provides the background to the RPA process including legislation, national documents and the purpose of each stage of the process. This document assumes no knowledge and can be read in isolation as a background document for anyone new to the RPA process. Therefore, the guidance includes general background information which is available elsewhere and may be familiar to most readers.

Accompanying the "Are we ready?" Guidance will be a Practitioners Toolkit which provides an in-depth understanding of how to complete each stage of the RPA process including examples of completed templates. The Practitioners Toolkit is currently being developed with key partners and this guidance will be updated when the Toolkit is available in 2018. A risk learning package is also being developed with key resilience partners.

Going forward the risk assessment process is still evolving and the process will continue to be developed as lessons are identified and acted upon. Therefore, "Are we ready?" will be periodically revised. It is recommended that you ensure you are using the current version available at Ready Scotland.

Links to useful websites containing guidance and information issued by Government, other responders and relevant groups is detailed in Annex A.

The Civil Contingencies Act 2004

The Civil Contingencies Act 2004 and the Civil Contingencies Act 2004 (Contingency Planning) (Scotland) Regulations 2005 (as amended) is the legislation which outlines the key organisations and their duty to prepare for civil emergencies within Scotland.

In Scotland under the terms of the principle legislation, the structure which supports multiagency co-operation is the Regional Resilience Partnerships (RRPs). The three RRPs were established in November 2013, these were the North of Scotland, East of Scotland and West of Scotland. The RRPs comprise the representatives from the key organisation responsible for ensuring the effective management of emergencies

from all Category 1 responders and some Category 2 responders as outlined in the Act and Regulations. These are referred to in the legislation as follows:

Category 1 responders:
- Local Authorities
- Police
- Fire
- Ambulance
- Health Boards
- Scottish Environment Protection Agency
- Maritime and Coastguard Agency

Category 2 responders:
- Electricity Operators
- Gas Suppliers
- Scottish Water
- Communication Providers
- Railway Operators
- Airport Operators
- Harbour Authorities
- NHS National Service Scotland
- Health and Safety Executive

In addition to the above, other agencies that can have an important role in the resilience community. These include but are not confined to:
- The military
- The Crown Office and Procurator Fiscal Service
- Transport Scotland
- Commercial Organisations
- The Scottish Government
- The Voluntary Sector

Statutory Duties

There are seven main duties placed on Category 1 responders, aimed at ensuring effective arrangements are in place for planning for emergencies, responding to emergencies and the continued delivery of services. These are:

1. Duty to assess risk
2. Duty to maintain emergency plans
3. Duty to maintain business continuity plans
4. Duty to promote business resilience[1]
5. Duty to communicate with the public
6. Duty to share information
7. Duty to co-operate

---

[1] This duty is only placed on Local Authorities

For Category 2 responders the basic legislative principle is that they must co-operate with Category 1 responders in connection with the performance of their duties, including sharing of information.

The RRPs bring together partners from within the region with the expertise to complete the RPA. The RPA is a self-assessment which provides a shared position on the risk affecting a region and resourcing priorities required for those risks. To comply with the duties outlined in the legislation the purpose of the RPA process is to:

- Provide an accurate and shared understanding of the risks based on available evidence so that planning has a sound foundation.
- Provide a rational basis for the prioritisation of effort and allocation of resources.
- Assessment of plans and capabilities to identify gaps.
- Facilitate multi-agency planning based on planning assumptions.
- Provide an overview of emergency planning and business continuity for the stakeholders within their area.
- Provide a basis for risk communication to the general public through Community Risk Registers (CRR).

This guidance details the background to the RPA process so focuses on the duty to assess risk and the duty to communicate with the public. If required, a more detailed description of the statutory requirement can be found in [Section 2](#) of Preparing Scotland.

Integrated Emergency Management

This guidance is written in line with the principles of Integrated Emergency Management (IEM). This aims to develop flexible and adaptable arrangements for dealing with emergencies, whether foreseen or unforeseen.

IEM is underpinned by five key activities:

1. Assessment
2. Prevention
3. Preparation
4. Response
5. Recovery

Assessment is a fundamental component of risk management as it is important that responders have a realistic and common understanding of the risks that they should prepare for. In adopting an all risk approach to planning our response to emergencies, matters of prevention are not addressed. Preparation, by planning, training and exercising is a duty under the terms of the Act and a key aspect of responders' efforts to protect the public. A robust risk assessment process ensures that planning is based on a sound foundation.

The RPA process has been developed based on assessment and preparation activities of IEM to comply with the legal requirement of Category 1 responders as defined by the Act.

Risk and Preparedness Partner Structure

The RPA process is not set out in legislation. It is a process which the Scottish Government has development to support Category 1 responders to discharge their duties as defined in the Act. In Scotland resilience partners with the relevant expertise to complete the RPA are brought together under each of the three RRPs (North, East, and West). The RRPs do not have the power to direct individual members in the undertaking of their duties. Each of the three RRPs has a Risk Lead who is supported by the Scottish Government Regional Resilience Partnership Teams and Scottish Fire Rescue Service (SFRS) Coordinators. Together they coordinate the multi-agency collaboration required to complete the RPA.

Once complete, the risk assessment element can be used to prioritise the disruptive events that may happen within a region. Following this the preparedness assessment can be developed, resulting in a work plan that prepares the region to deal with the consequences.

The work plan is a tool that can support resource allocation when used alongside the analysis of a range of options to prevent and protect against risks and their consequences. It is therefore, the responsibility of the RRPs to treat or tolerate risks and close the capacity and capability gaps identified through the RPA. While it is not directly a mechanism for reporting to Scottish Ministers, RRPs may seek to transfer or highlight risks which are beyond regional capability and capacity. A further outcome of the RPA process is that Scottish Ministers can be reassured that Scotland is prepared for a civil emergency or issues for higher intervention are identified.

The Local Resilience Partnership (LRPs) have a key role in supporting RRPs to prepare by ensuring local arrangements are in place and promoting wider awareness of the roles and responsibilities to their members. Clear direction during preparation should ensure that emergency management structure and procedures are agreed in advance and supported by training and exercise.

Risk Preparedness Assessment

The RPA process allows RRPs to assess risks within their region and their level of preparedness to deal with the consequences of the identified risks. The RPA process focuses on developing resilience and dealing with consequences rather than causes of emergencies.

There are four stages to the RPA process, illustrated in the diagram in Annex B:

1. Understanding the context in the region and identifying the relevant risks based on knowledge and historical or empirical data.
2. Assessing these risks using the best available evidence based on the reasonable worst case scenario.
3. Assessing level of preparedness to deal with the consequences of these risks.
4. Communicating with the public.

Stage 1: Context

Context is based around the concept of anticipation. Responders are required to systematically identify new or changing risks within their region. This process is also known as horizon scanning and should consider:

- **Environment** – What is the region's geography? What are the vulnerabilities? Are there any protected sites (e.g. sites of special scientific interest)?
- **Hazardous sites** – What potentially hazardous sites are there in your region? Where are they in relation to communities or sensitive environmental sites?
- **Social** – What is the demographic, ethnic and socio-economic makeup? Are there any particularly vulnerable groups? Where are the communities situated? How prepared are different communities?
- **Infrastructure** – Where is key infrastructure in your region (e.g. transport, utilities, business etc)? What are the critical supply networks? Are there sites that are critical for local, regional and national essential services?
- **Regional economy** – What are the most significant economies in the region? How prepared are these businesses to deal with emergencies?

Stage 2: Risk Assessment

Risk assessment is a process of understanding the significance of potential events on the basis of plausibility and likelihood of impact. The outcome description of each risk is based on the reasonable worst case scenario. It describes a plausible manifestation of the risk and the likely immediate consequences of the event.

Risk assessment is a key part of the emergency planning process and is a statutory responsibility for Category 1 responders. Category 2 responders bring a wealth of expertise and knowledge which can enhance the evidence base of the regional risk assessment.

It is important to assess risk at a regional level as the impact of risk is likely to vary across the three regions. Each region should consider if the risk is relevant to the area or should be excluded. Regions may also want to consider risks out with their area which will have a wider impact. By assessing risk regionally the risk assessments should reflect local circumstances. The overall assessment of the risk and prioritisation on the risk matrix will allow regions to consider if current planning and capabilities are sufficient and if further work is required to respond to the consequence.

The risk assessment stage is split into assessing hazards (naturally occurring events or accidents) and assessing threats (malicious attacks). These are separated because different techniques are used to assess the probability of these different types of emergencies occurring (likelihood is used for hazards and plausibility for threats) – see Annex C for definitions.

Hazards

Hazards are divided into categories indicating their type i.e. industrial, hazmat disease as well as subdivided into "H" and "HL" risks. "H" risks are hazards which will require a national response as well as a local response and are identical to those in the National Risk Assessment (NRA). "HL" risks give a local picture of "H" risk and are risks that would provide a significant challenge to the region but are unlikely to prompt a national response. The 2016 NRA no longer includes "HL" risks. It is therefore at the discretion of each RRP if they would like to include "HL" risks in future cycles of the RPA process, as consequences will have already been planned for in the "H" risk.

Threats

The terrorist threat to Scotland is no different to the rest of the UK. Work to mitigate and prevent these threats continues to be taken forward separately from the RPA a significant part of that relies upon the core consequence work that is undertaken to mitigate hazards. It is therefore essential that this core consequence work continues to improve and be as effective as possible. While threats are not part of the Scottish Risk Assessment (SRA), limited threat information has been included as part of the "OFFICIAL – SENSITIVE" version of the NRA available on ResilienceDirect.

Likelihood

Likelihood assessment for hazards are presented on a scale of 1-5 with 1 being the lowest. The likelihood scale is influenced by two main factors:

- Many events covered in the risk assessments will tend to be unlikely to occur over the next 5 years, and;
- The degree of precision which the likelihood assessment can be made. In some cases the statistical data is available that provides a high degree of

confidence to the analysis. However, in many other cases it is only possible to differentiate likelihood by order of magnitude.

The likelihood of an event occurring differs from region to region, therefore each RRP should consider its own likelihood assessment as part of the RRP process, using local expertise and empirical evidence. If the reasonable worst case scenario does not apply to the region this can be reflected in a lower likelihood score, though the rationale should be fully audited. However, the likelihood score should never be higher than the NRA.

In estimating the likelihood of an event by considering historical events care needs to be taken depending on how far back the event occurred. The more historical the incident the less relevant the evidence may become. A sliding scale of 3 to 5 years is suggested. However, this is only a recommendation and is at the discretion of the RRP to include events further in the past to ensure that all relevant evidence is considered.

Likelihood scoring scale

Level	Descriptor	Percentage chance over 5 years	Chance over 5 years
1	Low	Between a 0.005% and 0.05% chance	Between a 1 in 20,000 and 1 in 2,000 chance
2	Medium-low	Between a 0.05% and 0.5% chance	Between a 1 in 2,000 and 1 in 200 chance
3	Medium	Between a 0.5% and 5% chance	Between a 1 in 200 and 1 in 20 chance
4	Medium-high	Between a 5% and 50% chance	Between a 1 in 20 and a 1 in 2 chance
5	High	More than a 50% chance	More than a 1 in 2 chance

Table 1: Likelihood scale

The design of the likelihood scale is influenced by two factors. Firstly, the events covered by the risk assessment and NRA will tend to be very unlikely. Experience has shown that a typical likelihood scale that ranges linearly from 'highly likely' to 'highly unlikely' would cause the great majority of risks to cluster at the lower end of the scale. Since the primary purpose of the likelihood assessment (and the risk assessments as a whole) is to differentiate the seriousness of possible events, this would be unhelpful. Consequently, the likelihood scale increases exponentially by an order of magnitude per step on the scale (i.e. it is logarithmic). The result is a better spread of likelihoods for the events being assessed.

The second factor that influenced the design of the scale is the precision with which the likelihood assessments can be made. In some cases there will be statistical data that lends a high degree of confidence to the assessment (e.g. based on historical assessment, modelling, robust analytics, etc.). In many cases though, it is only possible to differentiate likelihoods by orders of magnitude. The points on the likelihood scale above represent this.

Impact

The regional assessment of impacts for all types of risks can vary from the SRA or NRA to reflect regional circumstances and the degree to which risks would be expected to overwhelm local resources. In some cases the local impact score may therefore be higher than those in the SRA or NRA. However, the expected consequences within the region should be less or equal to the expected consequences at national level.

Risk Evaluation

Once the likelihood and impact scores have been assessed and agreed their position can be plotted on a risk matrix. The risk matrix is asymmetric, allocating a higher priority to the impact of risk than the likelihood. The strategy of prioritising towards impact is because by planning for high impact risks the consequences of lower impact risks are inherently planned for regardless of likelihood.

Monitoring and Reviewing

Risks should be monitored continuously and updated if there is any change in context within the region or if any disruptive events occur.

Stage 3: Preparedness Assessment

Consequence based planning

RRP plans should be focused on the consequences of, and not the causes of emergencies. Emergencies can be caused by a wide range of factors but the effects will often share identical or similar consequences. For instance, care for people issues can arise from a wide range of incidents which share few other characteristics. A flood, a terrorist attack or an industrial incident can all lead to similar requirements for shelter and support to a local community. As a result, many aspects of preparation can be generic in nature, focusing on mitigating the consequences of an emergency whilst, from a planning perspective, paying relatively little attention to the cause of the disruption. This all-risks approach, concentrating on consequences rather than causes, allows a process of generic planning which can be adapted readily to fit to a wide range of issues around response and recovery.

Whilst the all-risks approach is effective, each emergency will have unique aspects, some of which may be unforeseen. Therefore, the ability to be flexible and adaptable is a crucial quality. Emergencies cannot always be accurately predicted and responders must always be ready to adapt plans to suit a situation unfolding in an unforeseen way.

This approach helps avoid duplication and allows resources to be allocated optimally, reserving more resource intensive specific planning for risks which are very high priority risk or have unique consequences which generic planning cannot cover.

The UK National Resilience Planning Assumptions

National Resilience Planning Assumptions define the impact that should be prepared for nationally. This should be scaled down to a regional level (local planning assumptions) and used to drive the development of capabilities. Capability is ordinarily the expertise, ability and experience required to deal with a range of consequences and capacity is the people and assets required.

Capacity is the level of resource available to sustain a determined response. A capacity is not just a resource but the ability to undertake a task and the capacity to do so. A capacity may be defined as a demonstrable ability to respond to and recover from a hazard. It also has to be determined if there is sufficient capacity to deliver the capability requirements.

Firstly, decide which risk should define the planning assumptions based on the risk matrix below which can be grouped into Priority 1 and Priority 2 capability drivers. The risk that has the potential to cause the greatest severity of that particular consequence is then used to define the level of capability required. Building generic capacity set by the higher risks ensures the ability to respond to lower risks that are not specifically driving resilience planning.

Scottish Risk Matrix

Table 2: Scottish Risk Matrix

Preparedness analysis can then be conducted to baseline current capacity and capability against the assessed level of capacity required as defined in the local planning assumptions. The gaps identified can then inform the programme of work to build capacity and reduce the gaps.

Stage 4: Communication

One of the seven main duties placed on Category 1 responders is the duty to communicate with the public. The mandatory requirements under the Act and Regulations are to arrange for the publication of risk assessments where publication is necessary or desirable to:

- Prevent an emergency
- Reduce, control or mitigate the effects of an emergency
- Enable action to be taken in connection with an emergency.

In publishing information, responders should ensure that they do not cause unnecessary alarm. Due regard should be given to the warning and informing arrangements maintained by other responders and agencies.

Sensitive information should not prevent publication, however consideration should be given to the implications of publishing and any necessary permissions required. Some aspects of the risk process may be sensitive and care should always be taken prior to any public release, ensuring always that proper assessment is undertaken and appropriate permissions are sought.

Community Risk Register

The CRR is the document that the three RRPs use to communicate with the general public about risks identified in the RPA process that have the highest likelihood and potential to have significant impact and cause disruption to communities.

The purpose of a CRR is to:

- Inform the public about the highest risks and their consequences
- Educate them on what the Resilience Partnership is doing.
- Provide them with links to organisations and websites to find out more and,
- Encourage steps to be taken for them to become better prepared and more resilient in their homes, businesses and community.
- Act as the Resilience Partnership's core public warning and informing document.

A CRR should be reviewed and updated regularly as the final stage of the RPA process. The CRRs for Resilient Partnerships across Scotland can be found on the SFRS website at: www.firescotland.gov.uk/your-safety/community-risk-register.aspx

CRRs are the statutory requirement of RRPs but there are other communication outputs from the RPA process for example a gap analysis report or reports to the RRP Chair or Scottish Ministers.

Community Resilience

Community resilience is based on a culture of preparedness, in which individuals, communities and organisations take responsibility to prepare for, respond to and recover from emergencies. The CRR provides a summary of the key risks specific to the three RRPs which provides a shared understanding of the risks that communities may face. By communicating clearly with the public about the risks they might face, they will be empowered to take more responsibility in preparing for, responding to and recovering from the impacts of those risks.

Communities may also have knowledge of the local impacts of risks, which can complement responders' understanding. In some circumstances communities might be better placed or quicker to address particular needs than Category 1 and other responders. By communicating with communities in advance they can be more aware, and more prepared, to help themselves and each other.

For further information on community resilience and business resilience, please see the relevant spokes on Ready Scotland.

Scottish Risk Assessment

The Scottish Risk Assessment (SRA) is being produced to provide a better understanding of the key risks to Scotland and the impact they would have. This should allow the resilience community in Scotland to better understand the disruptive challenges that Scotland may face, and to use this to anticipate, assess, protect, prevent, prepare, respond and recover.

The SRA is developed using information from the UK NRA, together with Scottish-specific information. It uses an adaptation of the same methodology as the NRA, with impact scales adjusted down appropriately for Scotland. It is focussed on natural hazards and accidents.

The SRA provides a Scottish context to resilience partners on the types of emergencies Scotland may face and makes the most relevant information available to them when completing their RPAs.

As a strategic tool, the SRA does not replace or replicate more detailed risk assessment products and evidence, whether that be dynamic intelligence threat assessments or short term hazards forecasts.

The Future

The SRA will continue to be developed on a two year cycle. The next iteration of the SRA will be published in 2019. Those risks that need to be scaled for Scotland will be assessed with Scottish responders, scientific experts and policy leads. These risks will be identified by subject matter experts and validation groups. Those risks that do not need to be scaled i.e. the scenario described in the NRA is accurate for Scotland and the science is the same, would not be assessed separately for Scotland. For these risks a lead Scottish Government department or agency will still be identified but resilience practitioners will be directed to the appropriate risk within the UK NRA.

Other Legislation and National Guidance

Other Legislation

Other legislation exists which shares the characteristics and practices of civil contingencies legislation, notably:

- Control of Major Accident Hazards Regulations 2015 (COMAH)
- Pipelines Safety Regulations 1996 (PSR)
- Radiation (Emergency Preparedness and Public Information) Regulations 2001 (REPPIR).

Duties imposed by the Act or the Regulations need not be performed in relation to an emergency within the meaning of the above legislation (Regulation 9). However, whilst there are specific legislative demands posed by COMAH, PSR and REPPIR, there is much within civil contingencies activity which will be relevant to this other legislation.

Preparation, response and recovery processes developed by responders in the context of the Act and the Regulations will, in large part, be applicable to the demands of COMAH, PSR and REPPIR and the potential hazards associated with this legislation. There is no requirement to duplicate planning and preparation required by both sets of legislation.

Key UK Government Guidance

The Scottish Government has kept the RPA process in line with UK Government guidance as much as possible. This is to make use of the considerable information and expertise that goes into developing the UK Government documents and to avoid confusion when speaking to UK counterparts. The key UK documents are:

- **The UK National Risk Assessment (NRA)** – is the UK Government's assessment of the likelihood and potential impact of the most significant civil emergencies that the UK could face over the next 5 years and is published every 2 years. The NRA includes scenarios which experts agree represent the 'reasonable worst case scenario' has been developed for each potential risk. These are events which could result in significant harm to human welfare: casualties, damage to property, essential services, security, environment and disruption to everyday life. The NRA provides a prioritisation of the most significant emergencies that could affect the UK to inform decision making and contingency planning and capability building at a national and local level.

- **The UK National Risk Register of Civil Emergencies (NRR)** – is the public version of the NRA. It is a useful, easily accessible summary of the key risks but does not go into the same level of detail as the NRA which is an official sensitive document.

- **The Local Risk Management Guidance (LRMG)** which includes information about Planning Assumptions.

- **UK National Risk Guidance** is available on ResilienceDirect, where you will find:

  - The National Risk Assessment (NRA) 2016
  - The NRA Detailed Risk Assessment Part 1 (Hazards) 2016
  - The Local Risk Management Guidance (LRMG) 2016
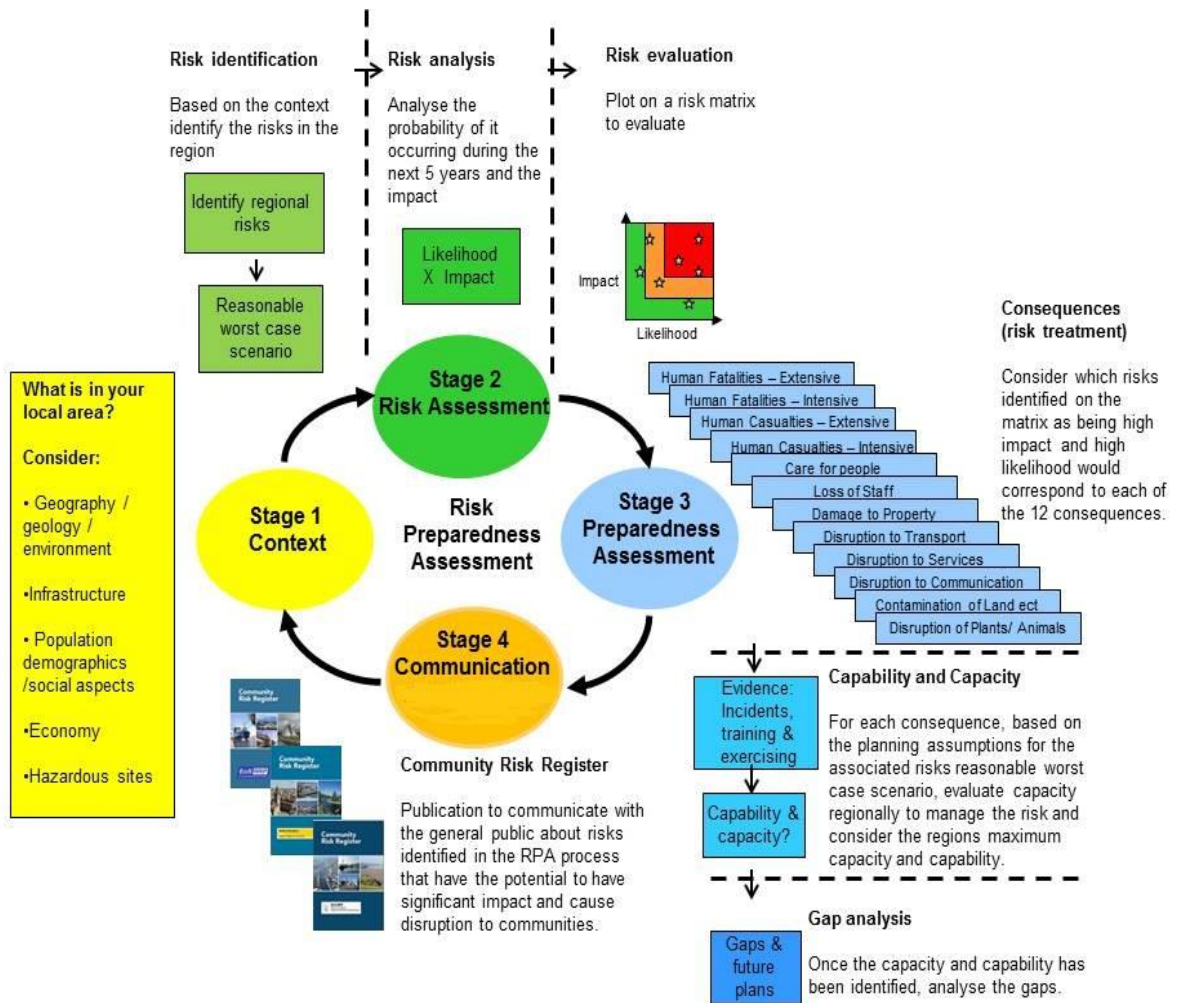 - NRA Methodology and Production 2016

Useful Websites

Guidance and information issued by Government, other responders and relevant groups.

- Preparing Scotland http://www.readyscotland.org/ready-government/preparing-scotland/

- General preparedness: Ready Scotland http://www.readyscotland.org/

- Community Risk Register http://www.firescotland.gov.uk/your-safety/community-risk-register.aspx

- Business resilience: Ready Scotland Ready Business http://www.readyscotland.org/ready-government/

- Warning and informing guidance http://www.readyscotland.org/ready-government/

- Weather advice: http://www.metoffice.gov.uk/weather/uk/advice/

- Food warnings and flood advice: http://www.sepa.org.uk/flooding.aspx and http://www.scottishfloodforum.org/category/news/

- Public transport advice: http://www.travelinescotland.com

- Roads advice: http://trafficscotland.org/

- Foreign travel advice: http://www.fco.gov.uk/en/

- First aid training and advice: http://www.firstaid.org.uk/ and http://www.redcross.org.uk/What-we-do/First-aid

- Advice to disaster survivors and the bereaved: http://www.disasteraction.org.uk/

- Scottish Resilience Development Service (ScoRDS) http://www.scords.gov.uk/

- A strategic framework for critical national infrastructure in Scotland http://www.gov.scot/Resource/Doc/346469/0115308.pdf

- Control of major accident hazards http://www.hse.gov.uk/comah/index.htm

- UK Guidance on Emergency preparedness https://www.gov.uk/government/publications/emergency-preparedness

- Safe, Secure and Prosperous: A Cyber Resilience Strategy for Scotland http://www.gov.scot/Publications/2015/11/2023

- National Cyber Security Centre**: https://www.ncsc.gov.uk/

- Get Safe on Line: https://getsafeonline.org/business/

- Cyber Essentials: www.cyberaware.gov.uk/cyberessentials

- Cyberstreetwise
  https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/273330/cyber_streetwise_open_for_business.pdf

- Cyberaware - https://www.cyberaware.gov.uk/

Risk Preparedness Assessment Diagram

Risk identification

Based on the context identify the risks in the region

Identify regional risks

↓

Reasonable worst case scenario

Risk analysis

Analyse the probability of it occurring during the next 5 years and the impact

Likelihood X Impact

Risk evaluation

Plot on a risk matrix to evaluate

Impact

Likelihood

What is in your local area?

Consider:

• Geography / geology / environment

•Infrastructure

• Population demographics /social aspects

•Economy

•Hazardous sites

Stage 2 Risk Assessment

Stage 1 Context

Risk Preparedness Assessment

Stage 3 Preparedness Assessment

Stage 4 Communication

Community Risk Register

Publication to communicate with the general public about risks identified in the RPA process that have the potential to have significant impact and cause disruption to communities.

Human Fatalities – Extensive
Human Fatalities – Intensive
Human Casualties – Extensive
Human Casualties – Intensive
Care for people
Loss of Staff
Damage to Property
Disruption to Transport
Disruption to Services
Disruption to Communication
Contamination of Land ect
Disruption of Plants/ Animals

Consequences (risk treatment)

Consider which risks identified on the matrix as being high impact and high likelihood would correspond to each of the 12 consequences.

Evidence: Incidents, training & exercising

↓

Capability & capacity?

Capability and Capacity

For each consequence, based on the planning assumptions for the associated risks reasonable worst case scenario, evaluate capacity regionally to manage the risk and consider the regions maximum capacity and capability.

Gaps & future plans

Gap analysis

Once the capacity and capability has been identified, analyse the gaps.

Glossary and Acronyms

- **Hazard** – Accidental or naturally occurring (i.e., non-malicious) event or situation with the potential to cause death or physical or psychological harm, damage or losses to property, and/or disruption to the environment and/or to economic, social and political structures.

- **Threat** – Intent and capacity to cause loss of life or create adverse consequences to human welfare (including property and the supply of essential services and commodities), the environment or security.

- **Risk** – Measure of the significance of a potential emergency in terms of its assessed likelihood and impact.

- **Impact** – The scale of the consequences of a hazard, threat or emergency expressed in terms of a reduction in human welfare, damage to the environment and loss of security.

- **Likelihood** – Chance of something happening, whether defined, measured or estimated objectively or subjectively, or in terms of general descriptors (such as rare, unlikely, almost certain), frequencies or mathematical probabilities.

- **Risk assessment** – A structured and auditable process of identifying potentially significant events, assessing their likelihood and impacts, and then combining these to provide an overall assessment of risk, as a basis for further decisions and action.

- **Risk management** – All activities and structures directed towards the effective assessment and management of risks and their potential adverse impacts.

- **Risk priority** – The relative importance of the treatment(s) required for the management of the risk, based on the risk rating and the additional capabilities required to manage risk.

- **Capacity –** measure of an organisation's ability manage the consequences of an emergency.

- **Capability** – demonstrable ability to respond to and recover from a particular threat or hazard.

- **Capability Gap** – The gap between the current ability to provide a response and the actual response assessed to be required for a given threat or hazard. Plans should be made to reduce or eliminate this gap, if the risk justifies it.

- **Risk Lead** – Coordinate the regions multi-agency response to complete the RPA process. Risk Lead can also be define a representative of an

organisation with the greatest interest, expertise and knowledge of a particular risk and are therefore best place to define and assess it. As well as being involved in the assessment of risks which fall within their area of interest Risk Leads should be encouraged to contribute to the assessment of other risks which may indirectly effect upon their area of knowledge. Risk Leads are experts and not risks owners they have the expertise to provide an evidence based assessment based on analysis of information and are therefore not necessarily responsible for preparing and responding to an event.

- **Reasonable worst case scenario** – is defined as a plausible yet challenging manifestation of the risk it is the worst manifestation of the generic risk it represents from a civil contingencies planning and capability building perspective.

You can find more resilience-related definitions at:
https://www.gov.uk/government/publications/emergency-responder-interoperability-lexicon

Acronyms:
RPA - Risk Preparedness Assessment
RRPs - Regional Resilience Partnerships
CRR - Community Risk Registers
IEM - Integrated Emergency Management
LRP - Local Resilience Partnership
NRA - National Risk Assessment
SRA - Scottish Risk Assessment
SFRS - Scottish Fire and Rescue Service
COMAH - Control of Major Accident Hazards Regulations 2015
PSR - Pipelines Safety Regulations 1996
REPPIR - Radiation (Emergency Preparedness and Public Information) Regulations 2001
NRR - National Risk Register
LRMG - Local Risk Management Guidance