

The NSRA is designed to be a strategic risk assessment tool and is therefore pragmatically selective. It is not designed to capture every risk that the UK could face, but instead focuses on scenarios that are representative of the wider risk landscape and which inform our understanding of the common consequences that the UK could face as a result of civil emergencies. Figure 1 outlines the thresholds that are broadly used to filter the comprehensive departmental risk registers down to those significant enough for inclusion within the NSRA.

Type of risk	Risk scenarios must EITHER meet the pre-defined criteria of a civil emergency under the Civil Contingencies Act 2004, OR otherwise pose a serious threat to our national security . The NSRA does not consider the potential opportunities presented by national security risks.
Likelihood/Plausibility	There must be a credible possibility of the risk occurring in the next two years in order to be included in the risk assessment. In general, this means there must be evidence to suggest that there is at least a 1 in 100,000 probability of that event occurring in the next year OR credible evidence that potential perpetrators have both the intent and capability to carry out that type of attack and that we are vulnerable to the attack scenario described.
Impact	Risks in the NSRA represent the most significant risks to national security that have the potential to cause considerable harm and would pose a major response challenge. Risks that score 0 in multiple impact categories (see impact scores and scales) are therefore unlikely to meet the minimum impact threshold.
Representative of other risk scenarios	As a strategic planning and prioritisation tool, the NSRA tries to avoid including multiple scenarios with very similar consequences. Risk assessment owners should therefore provide generic scenarios that are representative of a particular type of risk where possible that can inform general planning and prioritisation.

Figure 1: Broad criteria used to determine which risks should be included in the NSRA.

Owing to the rapidly evolving nature of the UK’s risk landscape, new risks or significant additions to existing risks, may have arisen since the last iteration. Evidence suggesting of such inclusions could include:

- Lessons learned from UK or international emergencies/exercises;
- New research, analysis and/or data;
- A change in circumstance which potentially affects the UK’s vulnerability to a risk, (e.g. a change in an attacker’s capability or intent).

Departments or agencies wishing to propose new risks (or change existing risks) do so by setting out a rationale for the amendment, including references to original sources supporting the change. Newly proposed or significantly changed risks are discussed by the cross-government Risk Assessment Steering Group (RASG), chaired by CCS, which considers:

- Whether the scenario has unique consequences not captured by other NSRA risks;
- Whether the scenario is significantly more likely to occur than other NSRA risks with similar consequences;
- Where the scenario is likely to be positioned on the NSRA matrix and consequently the implications adding it will have for contingency planning.

Risks that fall short of the thresholds outlined in Figure 1 are placed under review and are earmarked for future review and consideration. These ‘risks under review’ may have been excluded for the following reasons:

- It is judged that the impact of the risk would not be sufficient to challenge central Government.
- It has been assessed that there is less than a 1 in 100,000 chance (0.00001%) of the RWCS occurring over the next one to two years.
- Its impact is considered to be similar to that of another more likely risk.

- The risk description is so specific that it is not possible to undertake aspects of the assessment.
- There is not enough evidence to be able to assess it.

Once the NSRA risks have been identified and collectively agreed with relevant stakeholders and CCS, risk owners are then asked to begin the process of quantitative risk assessment.

Risk Assessment

Reasonable Worst Case Scenarios

For the purposes of informing contingency planning and the assessment of wider consequences, it is essential that risks are clearly defined and that sufficient detail is provided for the risk outcomes. To ensure that all risks can be consistently assessed and compared, CCS requests risk owners to specify a reasonable worst case scenario (RWCS) for each risk. The RWCS must be a challenging yet plausible manifestation of the risk and must be based upon appropriate background information (e.g. intelligence reports, accurate datasets, historical precedent etc.). The use of a RWCS for each risk ensures that the NSRA is not comparing the best case scenario for some risks and the worst case scenario for others. Whilst the specified location of a RWCS may be geographically located (e.g. in London or England), this does not preclude some form of the risk occurring elsewhere (e.g. another city, town or Devolved Administration), though the likelihood/impact may be different.

Some risks within the NSRA are discrete in nature and have clearly defined impacts (e.g. an explosion at a high pressure gas pipeline or a spell of low temperatures and heavy snow). Other risks are 'chronic' in nature, meaning that the impacts of such risks are cumulative rather than occurring in discrete events. Chronic risk examples could include modern slavery and human trafficking or child sexual abuse and exploitation. To ensure consistency in risk assessment and owing to the importance of recognising the impact of these risks on UK national security, the RWCS scenario for chronic risks should be written as an increase (or decrease) in the risk over a specified time period. Where required, CCS will provide challenge and guidance on the scenario being defined.

All risk owners are encouraged by CCS to work collaboratively with experts in order to define the RWCS. The following experts, where appropriate, may be consulted by risk owners:

- their Chief Scientific Adviser;
- other government departments and agencies
- the intelligence community
- industry stakeholders (particularly owners/operators of critical national infrastructure)
- external scientific, academic and policy subject experts

The most cross-cutting risks are independently reviewed by Expert Review Groups, coordinated by CCS, who draw upon expertise from the public, private and academic sectors. These groups ensure that risks are considered objectively, consistently and to a robust standard.

These groups include the:

- International Expert Group (government)
- International Expert Group (academics)
- Security Expert Group
- Cyber Expert Group
- CBRN Group

- Natural Hazards Partnership
- Human Welfare Group
- Essential Services Group
- Economic Expert Group
- Behavioural Sciences Expert Group

In many cases, the evidence from these groups will inform departmental understanding of the risk and the common consequences used to determine the planning assumptions.

Impact Assessment

Once a Reasonable Worst Case Scenario has been agreed, CCS provide a spreadsheet and associated guidance to departments in order for them to fill in the likelihood and impacts of the scenario. To ensure consistent assessment and statistical rigour, all scenarios are assessed against the same set of impact criteria which have been designed to broadly correspond to the planning assumptions included within the NSRA. Risk owners move sequentially through the assessment templates and complete the data fields requesting specific impact information for each of the dimensions and indicators shown in *Figure 2*.

Each indicator is allocated an impact score from zero to five based on the scope, scale and duration of the harm that the RWCS could foreseeably cause. These scores are derived from the impact scales produced by the Cabinet Office in conjunction with key departments and agencies. These have been included in Annex A1.

CCS converts all the information into a score using an impact assessment tool. In the new NSRA methodology there are seven dimensions of 'harm' which contribute to the overall impact score, with most dimensions comprised of multiple measurable indicators of harm.

Owing to the breadth and complexity of impact criteria that must be assessed for an accurate and viable assessment to be completed, risk owners are again asked to consult subject matter experts, the intelligence community and relevant databases. CCS can act as a mediator for these conversations and will challenge impact score allocations where appropriate.

Impact dimension	Indicators	
HUMAN WELFARE	Fatalities in the UK	
	Impact on fatality management	
	Casualties in the UK	
	Fatalities and casualties abroad – British Nationals	
	Crisis hub cases	
	Evacuation in the UK	
	Temporary shelter in the UK	
	Alternative accommodation in the UK	
BEHAVIOURAL	Public perception (UK)	
	Public outrage (UK)	
ECONOMY	Economic cost to the UK	
ESSENTIAL SERVICES	Domestic	Transport (road, rail, air, maritime)
		Energy (fuel, gas, electricity)
		Water
		Food (choice and availability)
		Health (drug supply, availability of 111 service, access to A&E and other health care providers)
		Finance (personal and government)

The matrix itself can then be used to sub-divide risks into red, amber, yellow and green risks in order to assess whether specific planning is likely to be required (red risks) or whether the consequences can be planned for in a more generic way. See *figure 7*

Significant less likely risks: Evidence based judgement on a Generic or Specific approach		High impact risks Specific planning likely to be required to supplement generic planning		
	Limited - Moderate impact risks Generic planning for common consequences			

Figure 7 Using the matrix to drive planning

The risk matrix for each RWCS is included in the risk summary alongside key information also provided by risk owners in their assessment spreadsheets, chiefly the response capability requirements, recovery time and key variations for each risk. Another key section provided for each risk involves the identification of linked and compound risks, included because the NSRA only assesses single events and does not assign scores to scenarios that could involve many different risks occurring simultaneously.

- Linked risks - Linked risks are simultaneous or near simultaneous risks that share a cause or are cause by another. For example, severe storms and gales would increase the chance of fluvial flooding, drought and heatwave can happen together.
- Compound risks - Compound risks are those where the occurrence of one risk makes another significantly more impactful, but they do not share a cause. For example, low temperatures and heavy snow would increase the impact of fuel shortage risks.