

## Amentum – Written evidence (RSK0086)

Question	Amentum Input
<p>1. What are the most significant extreme risks that the UK faces? What do you understand the term 'extreme risk' to mean?</p>	<p>Amentum interprets the term 'extreme risks' in the context of Risk Management. Extreme risks are considered <i>high consequence, low probability</i>.</p> <p>Amentum believes the UK holds extreme risks across a number of the nuclear sites.</p> <p>At Sellafield high hazardous facilities and inventory are subject for decommissioning and clean-up during the coming decades. This includes a variety of assets, including nuclear reprocessing and storage facilities, reactors, ponds and silos. A number of the facilities have the potential for significant 'release', both local to the site and wider.</p> <p>In addition, Sellafield will remain the location for the storage of the UK's Plutonium stockpile, with the need to keep it secure, in safe storage before any re-use or conversion.</p> <p>Further, the Dounreay site, being a former research and test site, also possesses 'extreme risks' cases, related to the decommissioning of the Fuel Cycle Area-North and the unknown nature of the material stored in both the Shaft and Silo.</p> <p>The level of risk, and ability to avoid extreme risk cases, will be directly related to the ability of Nuclear Decommissioning Authority (NDA) and its subsidiaries to appoint, engage and manage the right industry partners / supply chain partners, and setting up contractual models that incentivise safe management and outcome-based delivery. Effective management of the works and risks will be dependent on the engagement of industry partners with the right capabilities and experience. Risks should be managed at programmatic and strategic level rather than at project level.</p> <p>It should be noted that the risk profile will increase by undertaking work at some of these legacy sites but the failure to do anything heightens the extreme risk.</p> <p>Amentum is used to working with programmes and work that hold 'extreme risk' cases. We safely managed the removal of over 10 tonnes of Special Nuclear Material (i.e. Plutonium) from Dounreay, oversaw and managed the "high priority programme" - Pile Fuel Cladding Silo at Sellafield. Amentum is currently managing the special nuclear material programme at the Atomic Weapons Establishment (AWE) as part of the Enriched</p>

	Uranium Programme.
<p>2. Are there types of risks to which the UK is particularly vulnerable or poorly prepared? What are the reasons for this?</p>	<p>Nuclear is a sensitive topic. The general awareness and level of understanding in the public sphere is relatively low, which means that even low impact events can leave significant harm regarding the public's perception and confidence. Such events would also impact our ability to clean up the nuclear legacy effectively and efficiently or indeed to develop Nuclear New Build (be it fission or fusion) despite their good safety records and controls.</p> <p>Both the Sellafield and Dounreay sites are characterised by being designed and operated for the purpose of research, test and nuclear operation rather than having been constructed with a full consideration of the management and clean-up of the nuclear legacy and liabilities of the sites.</p> <p>Nuclear safety and security are at a high level of maturity on the nuclear sites. This is of high priority to the site operator.</p> <p>The current approach to decommissioning applied across the majority of licensees is to utilise arrangements which heavily focus on engineered controls and are based on the premise derived from NIA of effectively managing, or minimising change, with a focus on maintaining 'steady state'. 'Steady state' during decommissioning can actually increase the potential for hazards as storage systems and structures age and deteriorate. International experience is to significantly change the arrangements for managing decommissioning and this can lead to acceleration of hazard reduction programmes.</p>
<p>3 How could the Government's approach to risk assessment be strengthened to ensure that it is rigorous, wide-ranging and consistent?</p>	<p>Risk assessment and management must be considered at a strategic and programmatic level to enable effective and safe management of the clean-up of the nuclear legacy. <b>The government should promote and demand the nuclear sites establish longer-term programmatic contracts and selection of industry partners that bring the right people and corporate capabilities.</b> This also involves encouragement of innovations / new ways of managing the works.</p> <p><b>Further, setting multi-year budgets rather than annual budgets will enable longer term planning, management and efficiency of project delivery of the nuclear legacy clean up.</b></p>
<p>7. How effectively do Departments mitigate risks? Does the Risk Assessment process and</p>	<p>The nuclear industry is characterised by being risk averse. This means that industry is encouraged to look back, and do what has worked before, rather than promoting new and safer ways of progressing work.</p>

<p>the Civil Contingencies Secretariat adequately support Government departments to address risks within their remits?</p>	<p>For example, the Low-Level Waste (LLW) Repository could readily be used to accommodate Intermediate-Level Waste (ILW), but the authorities involved are cautious about looking at new ways of doing things, even when this is based on experience in dealing with such issues in other countries. Whilst the opportunity is identified and progressed “process” is king, and a solution for near surface disposal is likely to be delivered ~10 years later than otherwise could be delivered through a more streamlined and pragmatic approach to managing policy, strategic and commercial issues.</p> <p><b>There should be a culture change which also encourages the identification, adoption and delivery of innovative solutions of which the supply chain is best placed to facilitate.</b></p> <p><b>This could pay dividends for the UK - expertise developed in tackling the UK’s nuclear legacy will be in high demand around the world as other countries look at how they tackle their own nuclear challenges. This should be explicitly recognised by the Department of Trade as an opportunity for the UK.</b></p> <p>The NDA must take care to not stray from the Energy Act requirement of using the private sector/supply chain and should not overly centralise and attempt to become an expert itself.</p> <p>In addition, the UK tends to take a short-term approach to long-term projects because of its budgetary approach. Companies will spend hundreds of thousands of pounds bidding for contracts, because of the level of detail required in the bidding process; this can only be justified for larger projects. These commercial processes are onerous and often do not deliver best value.</p> <p><b>The UK’s approach has often been characterised by breaking down projects into smaller elements and changing strategic direction at short notice, which can be a deterrent to industry partners. A longer-term strategic approach would pay dividends.</b></p>
<p>11. What can be learnt from local or corporate risk management processes, or those of other countries? Are there any specific examples of practices processes or considerations which</p>	<p>National Resiliency is built around preparedness, threat identification, mitigation, ensuring continuity and insurance. The goal of a national resiliency programme is to withstand and recover rapidly from deliberate attacks, accidents, natural disasters, unconventional stresses and threats to a nation’s economy and financial institutions, democratic system and processes, key critical infrastructure and national security. A resiliency programme provides:</p>

could improve the UK's national risk resilience? How could businesses and civil society more effectively support national resilience preparations?

- the ability to adapt to changing conditions working through federal, local and private sector capabilities and interests
- the ability to withstand disruptions, typically to key critical infrastructure (in the US, for example, the DOE has the responsibility for the power grid – identified as a key critical infrastructure – rather than a commercial business).
- and ensures rapid recovery, typically through a national disaster framework that uses a whole of government approach – in the U.S. the Federal Emergency Management Agency has developed this framework and orchestrates the response among the 15 Federal organisations providing emergency support functions.

At a corporate level, we have a similar resiliency programme, implemented through continuity of operations procedures, emergency response and risk management processes. Risk management is a process management strategy that identifies, evaluates, prioritises, and prepares for potential risks to protect the company's reputation and operational and financial performance. We implement a tiered risk management approach.

Our projects implement a traditional risk management approach, structured along functional lines of authority, while our corporation implements an enterprise risk approach which integrates across functions and businesses. Managing risks follows a basic process of identification, analysis of severity, frequency and consequence, prioritisation, development of risk management strategies (avoidance, mitigate, accept) and monitoring and reviewing results. It should be noted that the same process is used for opportunity management.

Enterprise risk management integrates across the functional lines and identifies risks that fall between the functions or that impact multiple functions if recognised (examples might include changes in rules, regulations or requirements, new risks (cyber security, COVID-19)). Our projects manage their project specific risk management programme with corporate governance provided through board of managers. Enterprise risks are identified by projects and corporate functions and managed at the corporate level through a number of processes (Gate Reviews for Opportunities, Strategy documents, risk management procedures).

Our internal controls processes ensure that processes

	<p>are being followed and are to improve process efficiency in reporting, conformity and process effectiveness. Internal audits are used to make sure internal controls are working properly and assesses the compliance, cost, efficiency and effectiveness of the risk management process. An effectively managed and implemented risk management programme is an essential component of an organisation's resiliency and resilience preparation in that it identifies weaknesses or potential degradation of resiliency and develops strategies to mitigate or avoid.</p>
--	--

*February 2021*