INSIGHT

Overcoming challenges to managing risks in government

National Audit Office

Good practice guide

December 2023

This guide outlines the challenges to managing risks in government and ways senior leaders and risk practitioners can overcome these challenges.

We are the UK's independent public spending watchdog

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About our guide

Who is the guide for?

The guide is designed to equip senior leaders ('leaders') and risk practitioners ('practitioners') across government with ways to help overcome the challenges to managing risks in government.

What does the guide cover?

The guide sets out some of the key risk management challenges facing the public sector. It then outlines 10 approaches leaders and practitioners can take to help overcome these challenges. Each approach is supported by:

- an explanation of why this should be a priority for government;
- illustrative case studies and quotes; and
- practical tips for leaders and practitioners to take.

This guide complements existing government guidance on risk management, including the *Orange Book: management of risk – Principles and Concepts*, and published guidance notes, the requirements set out in *Managing Public Money* and the *Government Financial Reporting Manual* (FReM).[1,2,3]

Where have we drawn our insights from?

We have drawn our insights and good practice primarily from:

- the National Audit Office's (NAO's) back catalogue of value-for-money work, lessons learned reports and good practice guides, as well as government guidance relating to risk management;
- the experience and expertise from our own specialist insight teams; and
- interviews with a wide range of leaders and practitioners from our audited bodies and external organisations across industry and academia.

A full methodology is included in the Appendix. Examples drawn from past NAO reports in this guide reflect the situation when these reports were published. We have not included follow-up action that departments may have taken post-publication.

1 Government Finance Function and HM Treasury, *Orange Book: Management of risk – Principles and Concepts*, May 2013.
2 HM Treasury, *Managing Public Money*, May 2012, Annex 4.3.
3 HM Treasury, *Government Financial Reporting Manual: 2023-24*, December 2022.

Overview

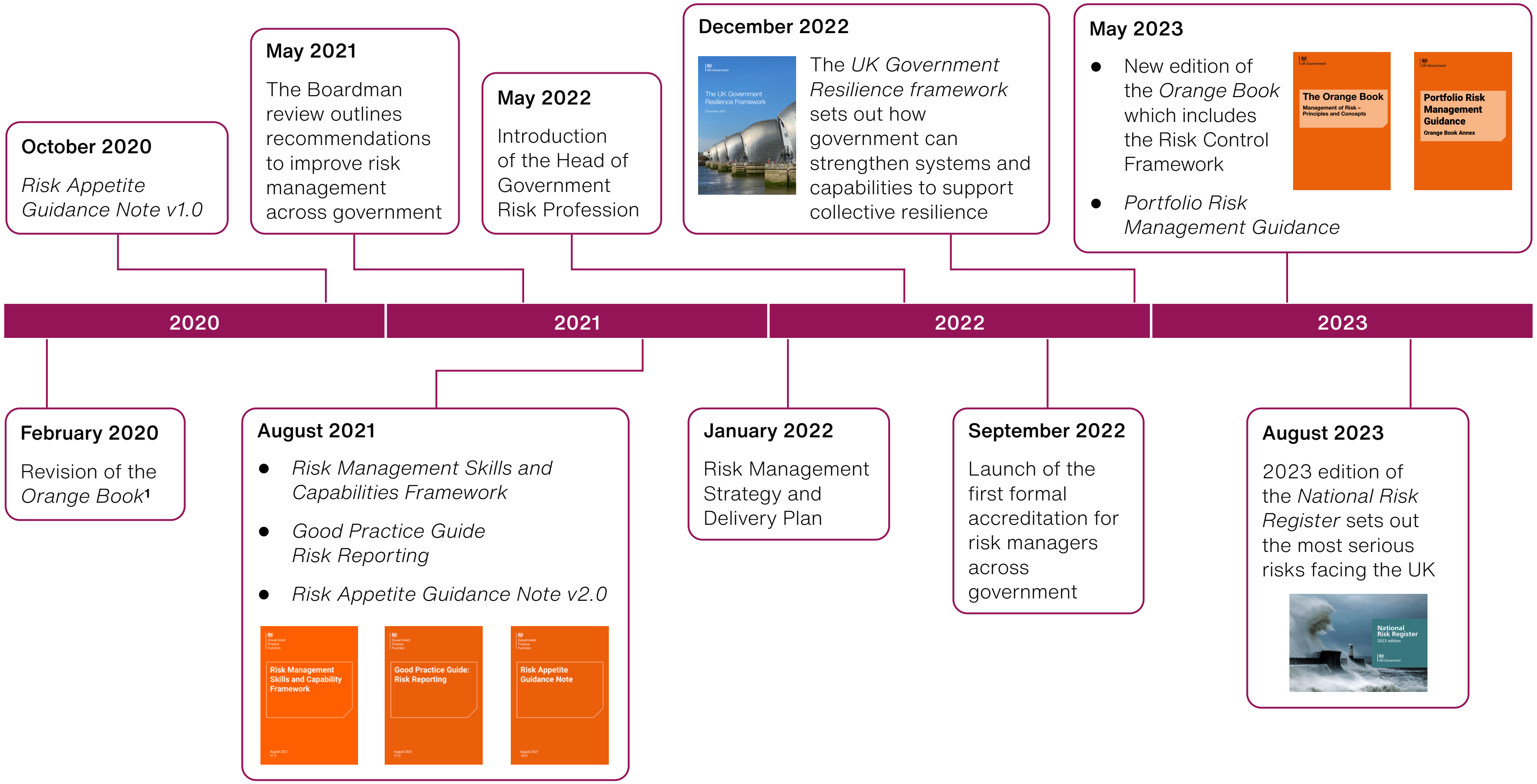
Risk management in government landscape

The Orange Book sets out the key principles and concepts for how risk should be managed by central government organisations.[4] It outlines that "risk management shall be an essential part of governance and leadership, and fundamental to how the organisation is directed, managed and controlled at all levels."

The Risk Centre of Excellence is part of the Government Finance Function (within HM Treasury) and works to improve risk management across government. It developed a Risk Management Strategy and Delivery Plan in 2022, in which it set out an ambition to improve risk management across government to strengthen leadership and enhance credibility, collaborate across boundaries, enhance capabilities and drive professionalism.[5]

Figure 1

Timeline showing recent developments (2020–2023) for risk management in government



Notes

1 *The Orange Book* was first published in 2004 setting out government's approach to risk management.

Source: National Audit Office analysis of government announcements

4 See footnote 1.

5 HM Treasury, Risk Management Centre of Excellence (requires login), accessed 24 November 2023.

Risk management challenges for the public sector

The scale and variety of the risks which government have to deal with makes risk management in the public sector challenging. Recent global events have only added to volatility and complexity. Significant risk events over the last few years have included a pandemic, cost-of-living crisis, rise in inflation and interest rates, and geopolitical conflicts. Government must carefully balance short-term demands with long-term preparedness, making tough choices and trade-offs with finite resources and capacity.

Our value-for-money and lessons-learned reports routinely highlight challenges for government in managing risks. Robust and effective risk management is essential to achieving government's ambitions and objectives and securing long-term value for money. It can lead to better public service delivery and decision making, more efficient use of resources, and help to minimise waste and fraud, promote innovation and opportunity taking.

Our work has identified numerous challenges impacting the way that risks are managed across government:

- Government needs to understand the relationship between short-term efficiencies and long-term resilience so that attempted efficiencies in one area do not inadvertently increase costs or risks in another.
- Government needs to be clear on accountability for risks that are shared across organisations. Effective risk management relies on identifying and managing risks that impact across departments and sectors – and doing this well requires quality data to be shared effectively. Experts in resilience have noted there is no cross-government accountability mechanism to ensure action is taken to check the quality and viability of risk planning and mitigation strategies.[6]
- Building capability and expertise is vital for government organisations to manage their risks effectively.
- It can be difficult for government to demonstrate the value of risk management to the public: often this does not become apparent until something has gone wrong. Sound risk management prepares government to respond more effectively to events as they occur – so organisations are less reactive and respond with their appetite and tolerance for risk front of mind.
- There are complex long-term challenges facing the public sector and risk assessments do not always feed into funding decisions. Risk management helps organisations to make informed decisions leading to better value-for-money for the taxpayer – not just in avoiding threats, but by being innovative in taking opportunities by making good spending decisions.
- Government has responsibility for delivering major programmes over long periods of time. Risk management has a key role to play in critically examining and being realistic about delivery schedules to help identify when programmes are becoming increasingly challenging.

From page 7, our guide sets out clearly how leaders and practitioners can begin to overcome these challenges.

6 The Centre for Long-Term Resilience, *Future Proof: a roadmap to boost the UK's resilience to extreme risks*, June 2021.

Summary of approaches

This summarises the 10 approaches to overcoming the challenges to managing risks in government. It outlines why each one is important to government organisations, and the actions organisations can take. Each of the 10 approaches is considered in detail from page 7.

Approach	Why is this a priority?	What actions can organisations take?
1 Establish strong leadership and risk culture	A tone from the top that establishes the importance of risk management and promotes a positive risk culture will have greater success in driving the right behaviours and actions throughout the organisation.	• Set the right tone at and from the top of the organisation • Strengthen leadership, accountability and assurance arrangements for risk management • Reduce the risk of optimism bias through independent challenge • Promote a culture of psychological safety to have open dialogues around risk
2 Build capability and expertise	Developing risk management expertise and credibility will strengthen the organisation's ability to make risk-informed decisions that achieve strategic objectives and deliver value-for-money outcomes.	• Assess the skills and capabilities needed and address gaps • Deliver interventions to raise risk awareness and capability across the organisation • Upskill and develop risk practitioners to strengthen risk management credibility • Engage risk experts and specialists where appropriate
3 Define and embed risk appetite and tolerance	Expressions of risk appetite and risk tolerance that are understood across the entire organisation will set parameters for individuals to operate and enable risk-taking that supports the achievement of strategic objectives.	• Clearly articulate the levels of risk the organisation is willing to accept and tolerate • Base risk appetite and tolerance on good information • Communicate risk appetite across the organisation so it can be understood and put into action • Flex risk appetite to reflect changing dynamics in the environment and management's preferences
4 Take a forward-looking view	Anticipating future risks will enable organisations to be better prepared and more responsive to changes and shocks.	• Continually scan the horizon for emerging and future risks and opportunities • Build in diversity to risk identification by including expert viewpoints • Use foresight tools and futures thinking to understand uncertainty and inform risk identification • Be imaginative in planning for severe but plausible scenarios
5 Make risk-informed decisions	Decisions that are informed by robust risk management will take threats and opportunities into account so the organisation can better achieve its objectives.	• Align risks with the organisation's strategy, goals and objectives • Design risk management into the governance architecture • Be deliberate about risks and opportunities in decision making • Engage risk expertise early in the decision-making process

Summary of approaches *continued*

Approach	Why is this a priority?	What actions can organisations take?
6 Adopt a whole-system approach	A holistic approach to risk management enables interdependent and interconnected risks to be identified and managed in a robust and integrated manner.	• Identify risks in the organisation and third-party ecosystem • Map interdependencies and connections for cross-cutting risks • Assess the range of impacts and consequences of risks • Take a joined-up approach to managing risks and break down silos
7 Assess risk impact	Thorough assessment and evaluation will enable the impact of risks to be consistently understood and help prioritise the different risks the organisation is managing.	• Use the right tools and expertise to assess and evaluate risks • Leverage good quality data to support the risk assessment effort • Deploy qualitative and quantitative methods to assess impact • Identify and assess the aggregate impact of risks across the organisation
8 Take action to address risks	An organisation where individuals understand their responsibilities for managing risks – and how risk appetite and tolerance can be applied in practice – will be better equipped to take effective action as risks develop.	• Have clear ownership and accountability for risks • Develop appropriate responses in line with the organisation's risk appetite and tolerance • Have clear criteria for escalating risks that fall outside of appetite or tolerance • Gain assurance over the effectiveness of risk management processes
9 Monitor and report on the risks that matter	Continuous risk monitoring and effective risk reporting will help focus attention on the risks that should matter most to the organisation.	• Set meaningful performance metrics and indicators to monitor risks • Apply tools which enable real-time and dynamic monitoring of risks • Promote timely and accurate reporting of significant risks to key decision-makers • Ensure risk registers are robust and 'living documents' that reflect significant risks
10 Drive continuous improvement	Learning lessons from others and assessing risk maturity will enable the organisation to continually develop and improve its approach to risk management.	• Assess the current level of maturity to identify gaps and areas for development • Identify and share good practice across the organisation • Learn and share lessons from beyond the organisation • Validate, benchmark and seek assurance over risk management arrangements

Establish strong leadership and risk culture

A tone from the top that establishes the importance of risk management and promotes a positive risk culture will have greater success in driving the right behaviours and actions throughout the organisation.

Quote

"Risk culture is driven from all parts of an organisation; however, setting the right tone from the top along with open leadership is critical. Without that it can be challenging to get people to be open and transparent about the risks an organisation might be facing. If focus is placed on the potential negative outcome of the risk, rather than the positive of being open and transparent, there could be a reluctance to call attention to risks in future."

Elizabeth Lupton, Head of Enterprise Risk, Money and Pensions Service

Why is this important?

The tone and behaviours at the top of the organisation play a significant role in both demonstrating and reinforcing the importance of risk management. A strong risk culture enables and rewards individuals and groups for taking the right risks in an informed manner.[7] For government organisations to respond quickly and responsibly to risks they need up-to-date risk information – an organisational culture which actively encourages individuals to report risks without fear helps enable this.

Our work has shown that organisations must have effective leadership if they are to deliver their objectives: leaders must set a clear direction and harness the talents of employees and delivery partners towards achieving that vision.[8] Organisations should aspire to have risk leaders with the seniority, skill and experience to influence decision making.

What did leaders and practitioners say?

Strong leadership and a positive risk culture were recognised as being critical to good risk management. Having senior leaders who encourage conversations around risk and incentivise the right behaviours can overcome a blame culture in which individuals are overly cautious or unresponsive to risks. Senior leaders should emphasise the value of risk management to the organisation and support this with learning and development opportunities. This can address issues individuals have in misunderstanding the purpose or importance of risk management, or a wider lack of workforce engagement in conversations around risk management.

Case study

Promoting a positive risk culture

Background: The Risk Centre of Excellence (CoE) is working to improve risk management across government. A key aspect of this is strengthening leadership and enhancing credibility.

Approach: The CoE produces guidance and toolkits in 'short sprints' with departments and makes them available to others in the public sector. The CoE collaborated with a main ministerial department to develop a toolkit for addressing risk culture. The exercise brought together relevant internal and external approaches to design an enhanced approach that worked within the department. The toolkit is available for other departments to adopt and adapt in line with *Orange Book* principles.

Benefit: The CoE was able to support a department in taking its approach to addressing risk culture to a new level of maturity – and develop a toolkit that allows other departments to start to address this issue.

Source: Discussion with Risk Centre of Excellence

7 The Institute of Risk Management, *Risk culture Under the Microscope Guidance for Boards*, October 2012.

8 Comptroller and Auditor General, *Leadership development in the civil service*, Session 2022-23, HC 798, National Audit Office, October 2022.

Establish strong leadership and risk culture *continued*

	Set the right tone at and from the top of the organisation	Strengthen leadership, accountability and assurance arrangements for risk management	Reduce the risk of optimism bias through independent challenge	Promote a culture of psychological safety to have open dialogues around risk
What actions can organisations take?	The Accounting Officer, supported by the Board, will determine how to integrate risk into the normal management systems of the organisation. Consistent and strong promotion of risk management from the very top of the organisation can incentivise the best risk management behaviours.	When there is clear and transparent accountability for risk management, individuals have a sense of personal responsibility for their actions. This influences behaviours across the organisation and can help to build a strong risk management culture.	Independent and objective analysis of risk processes can challenge whether risk management considerations are grounded in realism and reflect a true assessment of the threats being faced.	An open and positive culture where risk can be discussed freely enables individuals to constructively challenge existing risk management practices and use their expertise and knowledge in order to drive improvement.
Where have we seen this issue in our work?	In *Managing risks in government* (2011) we set out the role of the Board in setting the tone at the top of the organisation.[9] The behaviour and actions of the Board and the senior management team, particularly how they communicate with and challenge the business, reinforces the importance of risk management, and drives and encourages a consistent approach to safeguarding the business.	In *The challenges in implementing digital change* (2021) we recommended that the Central Digital and Data Office, along with the Government Digital Service and the Cabinet Office, should work to provide clear leadership.[10] In particular, they need to revise existing training programmes to better equip and train all decision makers with responsibility for digital transformation programmes. This should include education on legacy systems, the importance of data and the risks of 'build before buy' and of opting for unproven technology.	In *Over-optimism in government projects* (2013) we looked at the difficulties caused by unrealistic expectations and over-optimism, recognising them as a "particularly persistent risk management problem".[11] Issues caused by over-optimism, such as cost overruns, delays in completion and failure to deliver the benefits of a project, can undermine the likely success of the project.	In *Improving the UK's science capability for managing animal diseases* (2022) we noted that The Department for Environment, Food and Rural Affairs established a risk board to provide additional challenge and scrutiny through a detailed review of the Science Capability in Animal Health programme's risks.[12] At the time the report was published, there were indications that Defra was developing a strong risk management culture across the programme, with evidence of recognition that a diversity of perspective is important to ensure the 'status quo' and 'group thinking' are consistently challenged.

9 National Audit Office, Good practice guide, *Managing risks in government*, June 2011, paragraph 1.1.

10 Comptroller and Auditor General, *The challenges in implementing digital change*, Session 2021-22, HC 575, National Audit Office, July 2021, paragraph 8.

11 National Audit Office, Insight – Lessons learned, *Over-optimism in government projects*, December 2013, page 3.

12 Comptroller and Auditor General, *Improving the UK's science capability for managing animal diseases*, Session 2022-23. HC 64, National Audit Office, June 2022, paragraph 3.4.

Build capability and expertise

Developing risk management expertise and credibility will strengthen the organisation's ability to make risk-informed decisions that achieve strategic objectives and deliver value-for-money outcomes.

Quote

"A central profession has been a positive move for the risk community across government. Driving cohesion in how we do things and building the professionalism in people and upskilling. Having this network helps to identify common problems, share best practice, and gives us the ability to address risks across the system not just departmental level."

Upasna Sagar, Chief Risk Officer, Ministry of Defence

Why is this important?

Building capability and expertise for specialist functions within government organisations is a big challenge. Our own work has reported that the government faces substantial challenges to attract and retain civil service staff.[13] Developing risk management expertise in the organisation helps achieve strategic objectives and deliver outcomes effectively and efficiently. Leading government risk management functions will have a balance of technical expertise and a deep knowledge of risk management in practice in central government. Building strong capability within the risk management function establishes credibility and makes a compelling case for decision makers to maintain a strong risk culture within the organisation.

What did leaders and practitioners say?

Leaders we talked to said risk management may not always be seen as a priority. Organisational leaders must be convinced of its importance and value to the organisation so that the challenge of building capability and expertise can be properly addressed. Some also mentioned the difficulty of competing with the private sector to attract and retain accredited or qualified risk practitioners and the need for developing risk management training.

Case study

Raising risk capability across government

Background: In response to recommendations made by the Boardman review, the Risk Centre of Excellence (CoE) is working to enhance capabilities and drive professionalism in risk management across government.

Approach: The CoE is a single point of access to guidance and publications, networks, and learning and development across government. It has taken a proactive approach to making information widely available and sharing examples of good practice in risk management. In addition to developing and launching a professional accreditation, the CoE is organising webinars bringing together cross-departmental risk management leads to discuss a range of topics, recordings of which are available online.[14] Some of the topics covered in the seminars include portfolio risk thinking, risk management improvement planning, risk appetite, risk implications in decision making and risk assurance mapping.

Benefit: By bringing together risk management leads the CoE is building communities and networks across government, and by sharing guidance, publications and examples of good practice it can help to create a common language, drive consistency in approaches and enable developments in the profession to be applied.[15]

Source: Discussion with Risk Centre of Excellence

13 Comptroller and Auditor General, Civil service workforce: Recruitment, pay and performance management, Session 2023-24, National Audit Office, November 2023.

14 Government Finance Function, *Risk Management Skills and Capability Framework*, August 2021.

15 Infrastructure and Projects Authority and Cabinet Office, *Project Delivery Capability Framework: Infrastructure and Projects Authority*, December 2021.

Build capability and expertise *continued*

	Assess the skills and capabilities needed and address gaps	Deliver interventions to raise risk awareness and capability across the organisation	Upskill and develop risk practitioners to strengthen risk management credibility	Engage risk experts and specialists where appropriate
What actions can organisations take?	Risk leaders should use a skills matrix to assess the function's existing capability and then identify gaps. This will enable the organisation to target efforts on building resilience by equipping the organisation with the right risk management skills and capabilities for the future.	Raising risk awareness increases the likelihood of people across the organisation understanding the importance of risk management. Risk leaders can develop training to increase risk management capability across the organisation. More routinely, they can share knowledge, insights and outcomes to promote the ongoing importance of risk activities.	Creating opportunities to professionalise the risk function will help to promote risk management, drive value and build credibility across the organisation. Professional development should be tailored to the current and future needs of the organisation so it can respond to existing and emerging risks.	The organisation should know where in-house capability is insufficient so that external expertise can be targeted in the right areas. Knowing when to bring in expertise enables organisations to make well-informed risk-based decisions.
Where have we seen this issue in our work?	In *Improving services – understanding and managing demand* (2022) we recognised that people providing the service must have the skills and tools they need to do their jobs.[16] A skills matrix can help you to see the capabilities needed to undertake the work and identify any training gaps and needs.	In *Government resilience: extreme weather* (2023) we noted that the Cabinet Office now produces a regular UK Resilience Lessons Digest, which summarises lessons from a range of sources to share insights across government and wider partners.[17] For example, the first issue in October 2022 shared lessons from Storm Arwen in 2021.	In *Financial management in government: enablers of success* (2023) we noted that technical and professional skills are essential.[18] Professional skills enhance confidence and help to establish credibility with stakeholders, such as individual budget-holders, and provide a level of assurance to the Accounting Officer on the quality of financial management information produced. This principle also applies in risk management.	In *Tackling fraud and corruption against government* (2023) we noted that the Public Sector Fraud Authority (PSFA) brought together counter-fraud experts to reduce the impact of fraud in departments and public bodies.[19] To assist HM Treasury (HMT) in embedding counter-fraud measures into its policy making, the PSFA developed and implemented a process to apply counter-fraud expertise to the development of new spending initiatives through the use of Initial Fraud Impact Assessments.

16 National Audit Office, Good practice guide, *Improving services – understanding and managing demand*, February 2023, page 7.

17 Comptroller and Auditor General, *Government resilience: extreme weather*, Session 2023-24, HC 314, National Audit Office, December 2023, paragraph 16.

18 National Audit Office, Good practice guide, *Financial management in government: enablers of success*, July 2023, page 16.

19 Comptroller and Auditor General, *Tackling fraud and corruption against government*, Session 2022-23, HC 1199, National Audit Office, March 2023, paragraph 2.5.

Define and embed risk appetite and tolerance

Expressions of risk appetite and risk tolerance that are understood across the entire organisation will set parameters for individuals to operate and enable risk taking that supports the achievement of strategic objectives.

Quote

"It is important to be clear on the parameters for risk appetite: where are we now, where do we ideally want to be, and what is the position we are having to tolerate? The tolerable risk position is a band that moves: it can expand or shrink to take account of available funding, facilitate delivery of outcomes and reflect the appetite of ministers and the government of the day."

Jo Collins, Chief Risk Officer, Ministry of Justice

Why is this important?

Risk appetite sets the guardrails for the level of risk an organisation is willing to take and those that can be absorbed in pursuit of the organisation's strategic plan and objectives; it provides a framework that enables an organisation to make informed management decisions and trade-offs. Government organisations need to decide the level of risk they are willing to tolerate or accept – ideally for each significant risk. Risk appetite can apply to whole organisations or be specific to different business or policy areas – the key thing for government organisations is that it is well understood and can be applied in practice by decision makers.

In our own work we have reported that government needs to define its risk appetite to make informed decisions and prepare appropriately so that value for money can be protected.[20] Organisations sometimes fail to clearly articulate desired end states and what needs to be done to get there in terms of investment and resources. Overcoming this challenge requires a clear understanding of the gap between current performance and position and the desired end state – only with this foundation will organisations then be able to monitor and track progress in driving risk down to an acceptable level.

What did leaders and practitioners say?

A particular challenge our interviewees raised was that many risks are unavoidable or cannot be mitigated – government organisations cannot simply 'opt out' of some significant risks that they are legislatively required to undertake. Some of our interviewees cited transparency in decision making as an additional challenge, particularly when operating outside of appetite.

Case study

Using risk appetite to inform trade-offs

Background: In designing employment support schemes during the COVID-19 pandemic, HM Revenue & Customs (HMRC) acknowledged that it would need to make certain trade-offs between preventing as much fraud and error as possible and ensuring grants reached claimants quickly.

Approach: HMRC drew up longlists of potential controls for both its employment schemes. In total it identified 42 potential controls for the Coronavirus Job Retention Scheme (CJRS), of which 24 were implemented by the go-live date and 57 for the Self-Employment Income Support Scheme (SEISS), of which 38 were delivered by the end of April 2020. HMRC's planning assumptions were that between 5% and 10% of payments from the CJRS and between 1% and 2% of payments from the SEISS were due to fraud and error. In September 2020, this amounted to between £2 billion and £3.9 billion for the CJRS and between £130 million and £270 million for the SEISS.

Benefit: HMRC was able to act quickly by making decisions that were informed by its understanding of its risk appetite and risk tolerance levels.

Source: National Audit Office, *Initial learning from the government's response to the COVID-19 pandemic*

20 Comptroller and Auditor General, *The government's preparedness for the COVID-19 pandemic: lessons for government on risk management*, Session 2021-22, HC 735, National Audit Office, November 2021.

Define and embed risk appetite and tolerance *continued*

What actions can organisations take?	**Clearly articulate the levels of risk the organisation is willing to accept and tolerate**	**Base risk appetite and tolerance on good information**	**Communicate risk appetite across the organisation so it can be understood and put into action**	**Flex risk appetite to reflect changing dynamics in the environment and management's preferences**
	Having a consistent and up-to-date understanding of risk appetite and tolerance on an individual risk basis will help to inform decisions around prioritisation and trade-offs and create a more transparent understanding of consequences.	Having good information enables leaders to set risk appetite and put it into action with greater confidence. This will enable management to come to an informed conclusion on what is and is what is not tolerable – so they can make informed choices and trade-offs.	A common understanding of risk appetite can help to tackle confusion and positively influence risk behaviours. Individuals across the organisation benefit from understanding how their day-to-day decisions can and should be informed by risk appetite.	Unexpected systemic risks, such as the pandemic, have shown that risk appetite cannot be static and remain useful. A dynamic approach that reflects changes to the internal and external environment helps to ensure that risk appetite can be applied confidently when it is most needed.
Where have we seen this issue in our work?	In *Government resilience: extreme weather* (2023) we recommended that the Cabinet Office, working with lead government departments, should: • assess the current level of risk and how that risk is changing over time; • decide what is the tolerable and acceptable level for that risk (or sets of similar risks) and set out 'what good looks like' now and in the future; and • identify the gap between this and the current performance and position.[21]	In *COVID-19 business grant schemes* (2023) we reported that in the pandemic ministers made decisions to accept additional risks in the set-up and delivery of grant support for businesses.[22] We recognised in our other work on the COVID-19 response that the government needed to make urgent decisions with limited information to respond to an unprecedented public health emergency. However, even in emergency situations we noted that we would expect officials to: • consider risks at the start and put in place basic controls; and • improve their understanding of risks and the effectiveness of controls over time, refining the programme accordingly.	In *Managing risks in government* (2011) we recommended the question be asked "are we clear about where we are prepared to tolerate differing levels of risk and, in turn, how this influences and drives the actions of management?"[23] By defining and communicating tolerance of risk, staff are empowered to make decisions, identify priority areas for investment and be clear about when issues need to be escalated for their attention.	In *Environmental Sustainability Overview* (2023) the Department for Education (DfE) recognised – in response to risks from climate change – that it was operating outside its risk appetite for the education system, particularly the education estate.[24] Its departmental risk appetite statement set out a need for investment to match DfE's sustainability ambition, a need to limit financial risk by piloting new approaches, and an emerging risk of physical damage or school closure without investment to improve the resilience of the education estate. DfE committed to publish a risk assessment of flood, overheating and water scarcity of the education estate, to be reviewed on an annual basis from 2023. It plans to use the assessment to increase its understanding of climate risk and target its intervention.

21 See footnote 17, paragraph 29c.

22 Comptroller and Auditor General, *COVID-19 business grant schemes*, Session 2022-23, HC 1200, National Audit Office, March 2023, paragraph 5.

23 National Audit Office, Good practice guide, *Managing risks in government*, June 2011, page 5.

24 Comptroller and Auditor General, *Environmental Sustainability Overview*, Session 2022-23, HC 1514, National Audit Office, June 2023, paragraph 3.29.

Take a forward-looking view

Anticipating future risks will enable organisations to be better prepared and more responsive to changes and shocks.

Quote

"We need to pay greater attention to extreme event scenarios, emerging risks and the different futures that might ensue. If we anchor risk thinking to problems that are merely inconvenient and thus manageable, we will likely be blindsided by eventualities due to a failure of imagination. We will have squandered the opportunity for anticipatory adaptation by relying on risk management practices, resilience strategies and levels of investment that are increasingly unfit for purpose."

Richard Smith-Bingham, Executive Director, Marsh McLennan

The challenge for government

Risk management is inherently future focused. It requires foresight to look ahead to future risks and opportunities that extend beyond the long-term. This enables government to anticipate and be better prepared for potential threats and opportunities before they materialise and ensure decisions are made with short and long-term impacts in mind.

Our work has highlighted the need for the government to balance immediate and competing demands with long-term value for money. These near-term demands make it harder to invest time in forward-looking risk management strategies, identification exercises and scenario planning. Where scenarios are considered, they are often limited in range and imagination. Organisations should consider how technology can be used to enhance future planning. Overcoming this challenge ultimately requires time and resources to be dedicated to looking ahead.

What did leaders and practitioners say?

During our interviews, leaders and practitioners told us that they constantly make trade-offs between short-term issues and long-term objectives, and that although they want to encourage more long-term thinking it is difficult to prioritise when there are immediate demands. Often the focus ends up being more towards short-term threats.

Case study

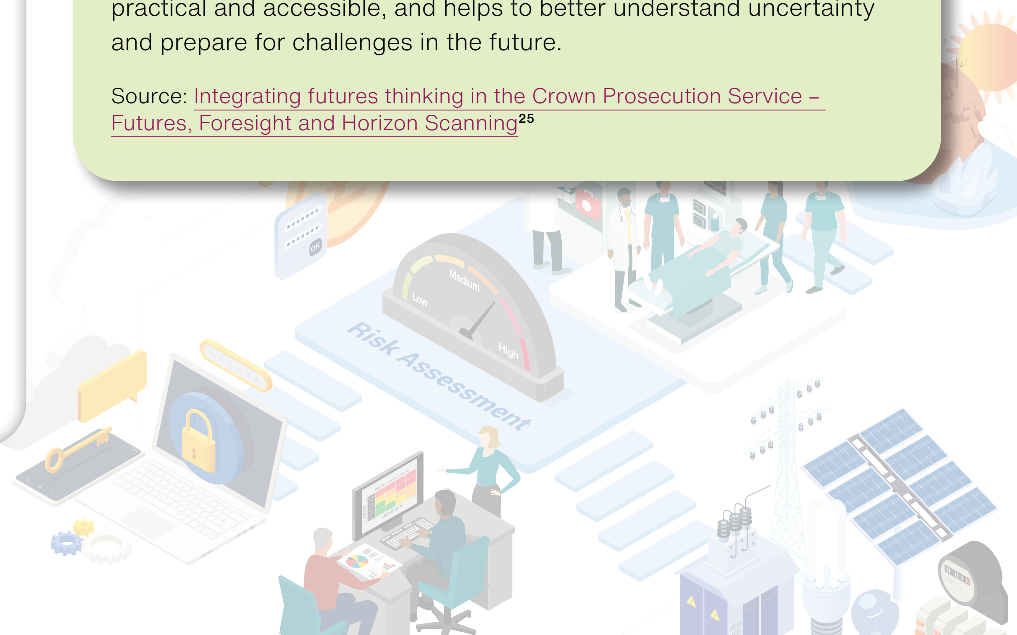
Integrating futures thinking

Background: Futures thinking is an important part of the Crown Prosecution Service's (CPS) organisational strategy. The CPS aims to lead on futures thinking to understand issues across the criminal justice system to prepare today for tomorrow's challenges.

Approach: The CPS Strategy Team has designed a bespoke model to apply futures thinking and drive preparedness. Horizon scanning involves casting a wide net, using desk research and a network of contacts to identify the issues that could affect the CPS in years to come. The team uses a bespoke sifting tool to narrow down the list of potential issues to a longlist, which they analyse in detail. They then engage with internal and external stakeholders to explore insights and test assumptions, agree on a short list and decide on actions.

Benefit: The clear annual process makes futures work focused, practical and accessible, and helps to better understand uncertainty and prepare for challenges in the future.

Source: Integrating futures thinking in the Crown Prosecution Service – Futures, Foresight and Horizon Scanning[25]



25 Government Office for Science, *Integrating futures thinking in the Crown Prosecution Service*, November 2023.

Take a forward-looking view *continued*

	Continually scan the horizon for emerging risks and future threats and opportunities	Build in diversity to risk identification by including expert viewpoints	Use foresight tools and futures thinking to understand uncertainty and inform risk identification	Be imaginative in planning for severe but plausible scenarios
What actions can organisations take?	Continuous and dynamic horizon scanning helps the organisation to consider scenarios which could present emerging risks and opportunities.[26] Using real-time information to identify emerging risks will enable the organisation to be better prepared to respond with greater agility to future threats and exploit opportunities.	A robust risk identification should include different viewpoints, a range of experiences and, where appropriate, the views of subject matter experts. Increasing the diversity of individuals and thought will help tackle bias and groupthink and allow less familiar risks to be identified and monitored.	Organisations should apply a range of methods to assess uncertainty. Foresight methods and futures thinking can help to identify and anticipate long-range threats and opportunities. Balancing this with retaining corporate memory and monitoring trend data will inform long-term outcome delivery.	Considering a range of scenarios, including those that are severe but plausible, can improve the organisation's response to unexpected shocks. Scenarios should consider multiple and parallel interactions and be stress tested.
Where have we seen this issue in our work?	In *The energy supplier market*, (2022) we concluded that by allowing many suppliers to enter the market and operate with weak financial resilience, and by failing to imagine a scenario in which there could be sustained volatility in energy prices, Ofgem allowed a market to develop that was vulnerable to large-scale shocks and where the risk largely rested with consumers, who would pick up the costs in the event of failure.[27]	In *Delivery Environment Complexity Analytic: Understanding challenges in delivering project objectives – Good practice guide* (2022) we recommended that organisations take a range of different actions, including pilots, trials or testing of the complex or new elements of the project, to identify risks, and bring in subject matters experts to advise on potential sources of complexity.[28]	In *Cross-government working – Good practice guide* (2023) we encouraged departments to use data to support regular discussions between partnering departments to review performance, hold each other to account and identify and assess emerging risks.[29]	In *Monitoring and responding to companies in distress – Good practice guide* (2023) we stated that for scenario planning we would expect to see: • clear and consistent assessment of risks through scenario testing, both short and long term; • systematic testing of a range of possible scenarios and the implications for industry, customers and citizens; and • identification and mitigation of any gaps in the government's ability to respond to different possible scenarios.[30]

26 The Institute of Risk Management define an emerging risk as "a risk that is evolving in areas and ways where the body of available knowledge is weak". Institute of Risk Management, *An introduction to emerging risks and how to identify them* (accessed 14 December 2023).

27 Comptroller and Auditor General *The energy supplier market*, Session 2022-23, HC 68, National Audit Office, June 2022, paragraph 20.

28 National Audit Office, Good practice guide, *Delivery Environment Complexity Analytic: Understanding challenges in delivering project objectives*, November 2022, page 27.

29 National Audit Office, Good practice guide, *Cross-government working*, July 2023, page 10.

30 National Audit Office, Good practice guide, *Monitoring and responding to companies in distress*, October 2023, page 11.

Make risk-informed decisions

Decisions that are informed by robust risk management will take threats and opportunities into account so the organisation can better achieve its objectives.

Quote

"Risk management needs to be embedded in the fabric of organisational strategy and practice. We need a holistic view of risks linked with strategic objectives. Without sufficient awareness, how can we manage risk effectively?"

Dr Ini Enang, Senior Lecturer/Assistant Professor in Risk Management, Coventry University

Why is this important?

Risk management should be a key driver to better and informed decision making. Departments face challenges in developing an integrated and consistent approach to managing risks in a dynamic environment, and approaches that are tailored to their own circumstances are likely to be the most effective.

Government departments need to aim for high-quality and robust strategic conversations in which relevant factors are being considered when making decisions on planning, long-term investment, prioritisation and trade-offs.

What did leaders and practitioners say?

Although there is now a better understanding of the importance of risk-informed decision making, risk is still not embedded at the core of the processes to drive decisions. There can be a disconnect between different functions – for example policy, operations and risk management – which leads to these functions working in isolation instead of informing each other to strengthen overall decision making.

Case study

Being deliberate about risks and opportunities in decision making

Background: Defra has needed to manage the risks and opportunities associated with EU exit. EU exit created an unprecedented portfolio of work that Defra needed to deliver, which brought a risk that less immediate issues such as metrics would not get sufficient resource and senior management focus. At the same time, we considered that the EU exit could bring opportunities to review wider reporting to assess whether it all added value in relation to UK goals.

Approach: Although there was a risk that some data would no longer be collected if it was not required to be reported to the EU, there may also have been an opportunity to simplify or innovate dataflows that were complex or included perverse incentives. Stakeholders identified waste and recycling reporting as an example: recycling metrics were weight-based, which meant there was an incentive to recycle more dense materials rather than lower-density materials such as plastics.

Benefit: This example shows how considering both risks and opportunities can lead to more-informed decision making.

Source: Environmental metrics: governments approach to monitoring the state of the natural environment[31]

31 Comptroller and Auditor General, *Environmental metrics: government's approach to monitoring the state of the natural environment*, Session 2017-2019, HC 1866, National Audit Office, January 2019.

Make risk-informed decisions *continued*

	Align risks with the organisation's strategy, goals and objectives	Design risk management into the governance architecture	Be deliberate about risks and opportunities in decision making	Engage risk expertise early in the decision-making process
What actions can organisations take?	Risk, by definition, is the impact of uncertainty on objectives. Linking risks to organisational objectives is central to meaningful risk management. Without a clear end goal, the real value of risk management will not be achieved.	Governance and oversight arrangements need to clearly factor in risk management considerations. This will help keep risk management at the centre of decision making.	Well managed risk taking should consider both threats and opportunities. At its best, risk management can support innovation, transformation and change, and help to deliver efficiencies.	Engaging risk experts at the right time during the formation of the decision-making process means threats and opportunities are not only considered but are underpinned by well informed assessments.
Where have we seen this issue in our work?	In *Climate change risk: A good practice guide* (2021) we recognised that climate change risks have a range of impacts across an organisation, and in order to properly manage these risks, they need to be understood and firmly integrated as part of an organisation's strategy.[32] As organisations are making strategic decisions, it is essential that climate change risk is fully understood and continually evaluated alongside all other principal risks.	In *Decarbonising the power sector* (2023) we noted that, in relation to power sector portfolio risk management, we would expect the Department for Energy Security and Net Zero (DESNZ) to use risk information to inform decision making, including through reporting risks to critical stakeholders.[33]	In *Managing Risks to Improve Public Services* (2004) we noted that well managed risk taking presents opportunities to innovate, experiment and develop new ideas, where more traditional ways of working are not able to deliver real change.[34] Indeed, the greatest risk of all may be not taking any risks, where services and the way they are delivered do not anticipate change or evolve to meet new demands from citizens.	In *Energy bills support* (2023) we noted that to introduce the Energy Price Guarantee and the Energy Bill Support Scheme quickly, the then Department for Business Energy and Industrial Strategy (BEIS) told us that it used its experience from implementing projects at speed during the pandemic.[35] This led to collaborating from the outset with the Public Sector Fraud Authority, which supported BEIS to better understand fraud risks across the schemes.

32 National Audit Office, *Climate change risk: A good practice guide for Audit and Risk Assurance Committees*, August 2021, page 17.

33 Comptroller and Auditor General, *Decarbonising the power sector*, Session 2022-23, HC 1131, National Audit Office, March 2023, paragraph 2.26.

34 Comptroller and Auditor General, *Managing Risks to Improve Public Services*, Session 2003-2004, HC 1078-1, National Audit Office, October 2004, paragraph 2.

35 Comptroller and Auditor General, *Energy bills support*, Session 2022-23, HC 1025, National Audit Office, February 2023, paragraph 2.9.

Adopt a whole-system approach

A holistic approach to risk management enables interdependent and interconnected risks to be identified and managed in a robust and integrated manner.

Quote

"Systems are increasingly interdependent and interconnected; when a problem hits the system, it cascades. Yet risks are being managed within silos, vertically not horizontally. We need to see collective actions and coordination across government to understand the risk better, how it translates into preparedness and change the conversations to focus more on the risk consequence."

David Denyer, Professor of Leadership and Organisational Change, Cranfield University

Why is this important?

Delivering public services is often complex, involving different parts of the organisation, others across government, and other sectors and third parties. Risks often have cross-cutting impacts that extend across organisational boundaries. To effectively manage these interdependent and interconnected risks the organisation needs to take a whole-system approach.

Our work has often highlighted the challenges associated with taking a whole-system approach to achieve a consistent view of risk that includes an understanding of how risks interact and impact across organisational and departmental boundaries.[36]

What did leaders and practitioners say?

Our interviewees told us that departments and arm's-length bodies (ALBs) tend to operate in silos, which makes it difficult to manage shared risks. They noted that there is a need for a better understanding of shared risks and their impacts across government, and improved sharing of information and good practice on how these risks can be managed effectively.

Case study

Take a joined-up approach to break down silos

Background: Change delivery is often complex and has risks and dependencies associated with it. HM Land Registry (HMLR) believed their governance was effective when it came to delivery – but sometimes they did not capture everything that was required to fully understand a business problem in a structured way. This impacted their ability to make the most effective risk-based decisions while considering risk interdependencies.

Approach: HMLR use their Enterprise Design Hub to help address this issue. The approach consists of four main stages: Strategic Design, Product/Service Design, Planning & Prioritisation and Delivery. The Hub has been at the heart of shaping HMLR's new ways of working from design through to delivery: working collaboratively with other groups from across the organisation, identifying interdependencies between risks, and giving risks greater visibility across the organisation.

Benefit: These new ways of working are helping HMLR to more effectively plan resources and investments to optimise successful delivery outcomes in order to meet organisational priorities. It has helped connect the strategic intent of HMLR with the changes required to deliver their Business Plan objectives and enabled more effective management of cross-cutting risks. By adopting these new ways of working HMLR has begun to mitigate more effectively the key risks associated with change and to ensure there is greater transparency of key change activities across the organisation.

Source: Interview with HM Land Registry

36 Comptroller and Auditor General, *The government's preparedness for the COVID-19 pandemic: lessons for government on risk management*, Session 2021-22, HC 735, National Audit Office, November 2021.

Adopt a whole-system approach *continued*

	Identify risks in the organisation and third-party ecosystem	Map interdependencies and connections for cross-cutting risks	Assess the range of impacts and consequences of risks	Take a joined-up approach to managing risks and break down silos
What actions can organisations take?	Risks can cascade, amplify and compound, resulting in more significant impacts and unintended consequences. Risk teams should identify risk information from not just across the organisation but *beyond* – including delivery partners and the whole supply chain.	To manage cross-cutting risks effectively, risk teams should map connections between risks and understand how they interact. Bringing together the right parties will enable leaders to design actions to manage risks in a holistic and joined-up way.	In addition to identifying risks that cross departmental boundaries, organisations require a strong understanding of the impact and consequences of risks materialising. This requires an appreciation of the impact of risks that exist outside of the organisation's direct control.	Risk management cannot be effective in isolation. Taking a joined-up approach may require collaboration across the departmental group, other government departments and with delivery partners to create a shared understanding of risks.
Where have we seen this issue in our work?	In Central oversight of arm's-length bodies (2021) we recommended that departments and the Cabinet Office should establish standards and good practice for monitoring ALB risks at departmental and cross-government levels.[37] This should include establishing strong links between the Cabinet Office and the Government Finance Function on cross-departmental risks, and between departmental heads of risk on risks across their respective ALBs.	In Achieving government's long-term environmental goals (2020) we recognised that the Implementation Board and Environment Committee brought together relevant parties from different teams in Defra and its ALBs to discuss cross-cutting issues and to consider strategic risks and issues for the delivery of the 25 Year Environment Plan as a whole.[38]	In Decarbonising the power sector (2023) we noted that DESNZ was developing and maturing its end-to-end portfolio risk management framework.[39] Risk management processes existed for each programme within the portfolio, and information on each project's most significant risks (that satisfy certain criteria) was escalated for review by the energy portfolio office. However, not all risks were aggregated across the portfolio and there was no portfolio-wide view of the top risks to decarbonising the power sector.	In Efficiency in government (2021) we outlined practical considerations to identifying efficiency gains in government ahead of the Spending Review.[40] For example, we noted the role of HM Treasury in providing a cross-government perspective to identify potential consequences for citizens that departments may have missed, and to consider wider risk implications such as the cumulative risk to different groups (for example, age, location, ethnicity) and risk exposure from efficiency plans.

37 Comptroller and Auditor General, *Central oversight of arm's-length bodies*, Session 2021-22, HC 297, National Audit Office, June 2021, paragraph 24e.

38 Comptroller and Auditor General, *Achieving government's long-term environmental goals*, Session 2019–21, HC 958, National Audit Office, November 2020, paragraph 14.

39 Comptroller and Auditor General, *Decarbonising the power sector*, Session 2022-23, HC1131, National Audit Office, March 2023, paragraph 2.27.

40 Comptroller and Auditor General, *Efficiency in government*, Session 2021-22, HC 303, National Audit Office, July 2021, paragraph 14.

Assess risk impact

Thorough assessment and evaluation will enable the impact of risks to be consistently understood and help prioritise the different risks the organisation is managing.

Quote

"You need the right tools and access to intelligence to really understand risks. Bringing different perspectives and thinking about other impacts improves risk assessment and reporting. Tools need to enable this to happen."

Richard Ryder, Head of Risk & Control Framework Team, HMRC

Why is this important?

The current risk environment under which the government operates is highly complex and volatile, with many interconnected risks. The government has to robustly evaluate risks, their interdependencies and their end-to-end impact, to inform decision making. Our work has sometimes shown that the government does not always hold detailed information and relevant data to assess the full impact of risk.[41,42]

Government organisations not only need the tools and expertise to assess the impact of *individual* risks crystallising – but they also need to assess the impact of *multiple* risks crystallising. Recent years have shown how events like the COVID-19 pandemic and the energy crisis have disrupted organisations. Risk leaders increasingly need to operate in this landscape of 'polycrisis'.[43]

What did leaders and practitioners say?

Our interviewees mentioned both the lack of good quality data across government and the lack of tools necessary to make assessments. To tackle the challenge, they suggested using both qualitative and quantitative methods to assess impact and bringing in a diversity of perspectives.

Case study

Use qualitative and quantitative methods to assess the impact of risks

Background: In 2020, a new team was established in the Nuclear Decommissioning Authority (NDA) to set standards, provide guidance, and facilitate good practice risk management. It became apparent that, over time, approaches to risk management across the group had diverged. While there were many pockets of good practice, there were also areas requiring attention.

Approach: The NDA group approach to maturing risk management is multifaceted. However, three early interventions targeted consistency of risk information and improvements in risk estimation:

- **a** Qualitative risk assessment and risk aggregation;
- **b** Common principles/approaches to quantitative risk analysis (QRA); and
- **c** Introduction of reference class forecasting (RCF) as a counter to optimism bias.

Each business area used its own variation of a probability-impact diagram (PID) to qualitatively evaluate risks, making consolidated risk reporting – especially given differing risk appetites – difficult. This was addressed by creating and mandating a new corporate PID that each business could use for NDA reporting. Differing approaches and gaps in QRA meant that the basis of risks underpinning business-case values was inconsistent, with nuances not well understood by decision makers. In response, a set of common modelling principles was established while retaining a proportionate approach to the use of complex techniques.

Benefit: Applying RCF, by taking the 'external view', has allowed the NDA group to combat early-stage underestimation that tends to set low and narrow exposure range expectations for risks. The cumulative effect of these interventions has been a more digestible summary of Group Strategic Risks and greater confidence that forecasts are becoming less overly optimistic.

Source: Discussion with Nuclear Decommissioning Authority

41 Comptroller and Auditor General, *Efficiency in government*, Session 2021-22, HC 303, National Audit Office, July 2021.
42 Comptroller and Auditor General, *Electricity networks*, Session 2019-20, HC 42, National Audit Office, January 2020.
43 Polycrisis is "a time of great disagreement, confusion, or suffering that is caused by many different problems happening at the same time so that they together have a very big effect", Cambridge Dictionary (accessed 23 November 2023).

Assess risk impact *continued*

	Use the right tools and expertise to assess and evaluate risks	Leverage good quality data to support the risk assessment effort	Deploy qualitative and quantitative methods to assess impact	Identify and assess the aggregate impact of risk across the organisation
What actions can organisations take?	Organisations should consider how Governance, Risk and Compliance advanced risk analytics, artificial intelligence, risk modelling, scenario and sensitivity analysis, and stress-testing tools can improve risk assessment and evaluation. Accessing the right expertise at the right time can also enhance how well risks are assessed, understood and prioritised.	Data is essential for assessing the scale, likelihood and potential impact of risks. Organisations need to collect and access the right data to improve their understanding of how risks are developing, support their risk assessment and inform their risk treatment plans.	A range of quantitative and qualitative methods should be used to ensure impact assessments are realistic. Quantitative methods are particularly helpful to decision makers in understanding the scale of risk impact.	Properly identifying and assessing the impact of risks gives decision makers a better understanding of threats and opportunities. Leaders and practitioners need to develop a clear understanding of how risks and their consequences interact.
Where have we seen this issue in our work?	In *The rollout of the COVID-19 vaccination programme in England* (2022) we noted that NHS England and NHS Improvement (NHSE&I) were open about uncertainties they faced.[44] They made use of techniques such as scenario planning and sensitivity analysis to explore the impact of certain patterns of vaccine availability, vaccine uptake and rollout speed.	In *Local authority investment in commercial property* (2020) we recommended that the then Ministry of Housing, Communities & Local Government should improve the relevance and quality of data and analysis it has on local authorities' acquisition of commercial property to understand more fully any associated risks and to provide greater assurance on framework compliance.[45]	In *Financial modelling in government* (2022) we recommended that HM Treasury (HMT) should build on its current approach to quantifying uncertainty and risk analysis by requiring departments to present HMT with a range of plausible outcomes from business-critical models as a matter of routine.[46] This range should be driven by key inputs and model parameters to take account of where there might be material uncertainties around best estimates.	In *Progress of the 2016–2021 National Cyber Security Programme* (2019) we recommended that the Cabinet Office should continue to consult with other government departments to understand their cyber security priorities.[47] This would allow them to contribute to any future strategy and programme and enable the Department to aggregate cyber opportunities and risks to better prioritise overall government activity in this area.

44 Comptroller and Auditor General, *The rollout of the COVID-19 vaccination programme in England*, Session 2021-22, HC1106, National Audit Office, February 2022, page 65.

45 Comptroller and Auditor General, *Local authority investment in commercial property*, Session 2019-20, HC 45, National Audit Office, February 2020, paragraph 28a.

46 Comptroller and Auditor General, *Financial modelling in government*, Session 2021-22, HC 1015, National Audit Office, January 2022, paragraph 23d.

47 Comptroller and Auditor General, *Progress of the 2016–2021 National Cyber Security Programme*, Session 2017-2019, HC 1988, National Audit Office, March 2019, paragraph 24b.

Take action to address risks

An organisation where individuals understand their responsibilities for managing risks – and how risk appetite and tolerance can be applied in practice – will be better equipped to take effective action as risks develop.

Quote

"Risk response analytics allow us to identify trends and understand the impact of the controls and responses. They allow the risk team to look at the system objectively and make suggestions – allowing controls to be linked and shared, joining up responses for similar threats."

Fay Carradine, Risk Capability and Strategy Lead, former Department for BEIS

Why is this important?

Accountability for risks should be clear to everybody in the organisation – from the Board down. Responses to risks – including treatment options to manage risks to an acceptable level – should be clearly articulated and in line with the organisation's risk appetite. Decisions on when and how to address risks involve balancing costs of implementation – for instance putting new controls in place – with the benefits of the overall impact on the risk itself – such as reducing harm or enhancing outcomes. Achieving this balance can be challenging when operating in a dynamic environment.

Many risks cut across organisational boundaries – leaders and practitioners need to coordinate actions with other organisations outside of their direct control. Complex cross-government challenges – for instance achieving net zero – present risks that require leaders to engage with the centre of government and other departments to understand which actions are within their control and which are not.

What did leaders and practitioners say?

It can be difficult to get assurance on whether the right actions are being taken to manage risks and the degree to which actions are effective. Leaders and practitioners suggested that one of the reasons is the lack of accountability for risks, resulting in a lack of ownership to take actions. The challenge intensifies when there are activities that involve multiple departments, or delivery bodies that have different priorities and different appetites for risk, particularly if responsibilities for managing risks are not clearly defined.

Case study

Align actions with risk appetite and tolerance

Background: The number of Universal Credit claimants roughly doubled in 2020 and the Department for Work & Pensions (DWP) suspended some controls such as face-to-face appointments to support vulnerable people during lockdown and manage demand.

Approach: Of Universal Credit payments, £1.7 billion (9.4%) were overpaid in 2019-20 before COVID-19. DWP accepted that the increased caseload and easements made to the process of applying for benefits would lead to a further increase in fraud and error levels.

Benefit: By being clear on risk appetite and tolerance and the impact of relaxing controls, DWP were able to adapt to changing circumstances and take action to issue benefit payments to claimants, in order to avoid hardship.

Source: Initial learning from the government's response to the COVID-19 pandemic[48]

48 Comptroller and Auditor General, *Initial learning from the government's response to the COVID-19 pandemic*, Session 2021-22, HC 66, National Audit Office, May 2021.

Take action to address risks *continued*

	Have clear ownership and accountability for risks	Develop appropriate responses for significant risks in line with the organisation's risk appetite and tolerance	Have clear criteria for escalating risks that fall outside of appetite or tolerance	Gain assurance over effectiveness of risk management processes
What can senior leaders and risk practitioners do?	This will ensure that actions to manage risks are taken and can be independently challenged by others. It is particularly important to have clarity of ownership for complex risks that involve different aspects of the organisation or other delivery partners.	Aligning responses and risk actions to risk appetite will ensure that mitigations are reducing risks to acceptable levels, or that actions are enhancing the benefits of opportunities.	Having clear criteria for escalating risks improves transparency and makes it easier for individuals to know when to escalate risks that are above tolerance and require immediate action.	Risk leaders should embed oversight and assurance into risk management arrangements – particularly those that assess how effective processes are in managing risks.
Where have we seen this issue in our work?	In Financial management in government: enablers of success (2023) we set out that responsibilities should be clear in role descriptions and provide individuals with the time to execute those responsibilities.[49] Applying the three lines of defence model to establish ownership of risk, key roles and responsibilities, and accountabilities can significantly contribute to the organisation's overall approach to managing risks.	In British Business Bank (2020) we noted that the Bank's management recognised that growth had placed pressure on its governance and operations.[50] With the expectation of the Bank growing further, in 2018 the Bank's management chose to temporarily operate outside its operational risk appetite while adopting a number of initiatives to strengthen its processes and controls. By the end of 2018-19 the Bank concluded that it had returned to within its operational risk appetite, as a result of these actions.	In Electronic monitoring: a progress update (2022) we noted that HM Prison & Probation Service's plans for an improved integration assurance function, and its new risk escalation framework, would ensure more timely and appropriate scrutiny.[51]	In Local Authority governance (2019) we recommended that local authorities need to ensure that they have robust risk management arrangements in place when making commercial investments to generate new income, and that oversight and accountability are clear when entering into shared service or outsourced arrangements in order to deliver savings.[52]

49 See footnote 18, page 13.

50 Comptroller and Auditor General, *British Business Bank*, Session 2019-20, HC 21, National Audit Office, February 2020, paragraph 16.

51 Comptroller and Auditor General, *Electronic monitoring: a progress update*, Session 2022-23, HC 62, National Audit Office, June 2022, paragraph 14.

52 Comptroller and Auditor General, *Local authority governance*, Session 2017–2019, HC 1865, National Audit Office, January 2019, paragraph 5.

Monitor and report on the risks that matter

Continuous risk monitoring and effective risk reporting will help focus attention on the risks that should matter most to the organisation.

Quote

"When it comes to risk reporting we need to engage the Board by ensuring information and insights provided meet their needs and enables them to make effective risk-based decisions. Using visuals such as flight paths, heat maps, assurance mapping along with executive summaries can help drive the right conversations. To keep things dynamic, we also need to be discussing new areas of new concern and emerging risks, and asking questions such as: are we taking sufficient mitigating action, do we need to be doing something different or quicker?"

Joanna Horrocks-Potts, Deputy Director, Risk and Assurance, HM Land Registry

Why is this important?

The risk landscape is constantly evolving, with new and emerging risks surfacing and evolving. Effective risk management demands that risks are monitored and reported to ensure risks are being focused on and managed. Risk monitoring also entails assessing vulnerabilities in the organisation's operations or the system. This can include the condition of assets, existing IT or physical infrastructure, processes or business operations, and workforce capacity to support organisational or project objectives.

Given the many competing demands for management's focus and attention, it can be challenging to keep focused on the most important risks at any given time. Cutting through multiple risks to focus on the most significant ones requires a sound understanding of the extended risk environment and how risks interact, cascade, compound and amplify to create knock-on effects and unintended consequences. If risks are not monitored effectively, reporting may be incomplete and inconsistent, and appropriate action may not mitigate or manage the risk. A common failing is risks being reported with little change in performance for long periods of time – with actions only taking place when risks crystallise or become more challenging.

What did leaders and practitioners say?

Leaders and practitioners emphasised the importance of monitoring risks along with the need for timely reporting. Good risk reporting can drive the right conversations, improve engagement with the Board, and reduce surprises. Notifying the Board of new threats and opportunities as they emerge, and informing them of material changes to the impact and likelihood of existing risks – and the associated impact on the organisation's or project's risk profile – are ways risk leaders can enable appropriate action to be taken through effective monitoring.[53]

Case study

Monitoring the risks that matter to the organisation

Background: Alongside its response to the pandemic, HMRC needed to continue monitoring and addressing new and emerging risks. The tax system is a continual target for fraud and criminal attacks.

Approach: HMRC therefore needed to maintain a base level of resource to monitor risks of such attacks to address any criminal activity it identified. For example, shortly after lockdown in March 2020 the income tax self-assessment repayment system was subject to a new type of attack, involving fraudulent claims. The total value of repayment claims rose by around £1.5 billion (19%) in 2020-21 compared with 2019-20.

Benefit: HMRC stopped around £1.1 billion of these payments before they were made, but estimates that between £52 million and £219 million was extracted by fraudsters. HMRC strengthened systems and controls, and claims returned to expected levels by July 2021.

Source: Managing tax compliance following the pandemic[54]

53 Risk profiling involves a systematic and structured approach to risk management which provides an organisation with a detailed picture of all the risk elements of its operations, the effectiveness of risk mitigation measures, and a framework for analysing and monitoring its higher risk priorities. Zurich Municipal, *Understanding your risk profile*, October 2023.

54 Comptroller and Auditor General, *Managing tax compliance following the pandemic*, Session 2022-23, HC 957, National Audit Office, December 2022.

Monitor and report on the risks that matter *continued*

	Set meaningful performance metrics and indicators to monitor and report risks	Apply tools which enable real-time and dynamic monitoring of risks	Promote timely and accurate reporting of significant risks to key decision-makers	Ensure that risk registers are robust and 'living documents' that reflect significant risks
What actions can organisations take?	Leading performance and risk indicators can provide early warning signs of possible risk events or incidents, to trigger a proactive response. Near miss reporting should be encouraged so organisations anticipate future risks more effectively. Indicators help to understand changes in the likelihood or impact of risk and can generate focused deliberations to inform decision making, risk treatment and response.	Risk leaders should design processes that enable increased agility and responsiveness to risks. Organisations should identify cost-effective opportunities to deploy tools and techniques that make monitoring risks more effective and efficient.	Risks can change suddenly and organisations need to consider their implications and act accordingly. Timely and accurate reporting of risks – following appropriate monitoring – increases the chances of being able to plan, treat and promptly respond to risks. Risk registers and wider risk information should be tailored to the needs of different users, like Boards and Audit and Risk Assurance Committees.	Risk registers are central to reporting and communicating risks in government – they need to be up to date and reflect the risks of most importance to the organisation.
Where have we seen this issue in our work?	In *Performance measurement by regulators* (2016) we highlighted that approaches to risks can only be effective if they are underpinned by high-quality data.[55] Lead indicators can be used to provide 'early warning' signs of potential problems.	In *Survival guide to challenging costs in major projects* (2018) we observed that too often the need for transparent reporting, good cost forecasting and continuous monitoring is only really recognised when a department faces a crisis in affordability, or when things have gone wrong.[56] Performance updates should enable up-to-date monitoring of critical risks.	In *Managing cross-border travel during the COVID-19 pandemic* (2022) we noted that individual departments fed risks relating to their border programmes into departmental risk registers and some border-specific risks featured in broader government assessments of the pandemic response.[57] However, for the overall system, we found government had no assessment setting out all the risks related to the management of cross-border travel in one place.	In *Government shared services* (2022) we recognised that the Cabinet Office introduced a central risk register as part of an operational end-to-end risk management framework to allow for effective risk mitigation.[58] The central risk register is updated monthly following risk reviews with each workstream lead where ongoing risks are discussed, and risks which exceed tolerance levels are flagged for escalation with senior leaders.

55 National Audit Office, Good practice guide, *Performance measurement by regulators*, November 2016, paragraph 2.24.

56 National Audit Office, *Survival guide to challenging costs in major projects*, June 2018, page 7.

57 Comptroller and Auditor General, *Managing cross-border travel during the COVID-19 pandemic*, Session 2021-22, HC 1148, National Audit Office, April 2022, paragraph 3.7.

58 Comptroller and Auditor General, *Government shared services*, Session 2022-23, HC 921, National Audit Office, November 2022, paragraph 2.13.

Drive continuous improvement

Learning lessons from others and assessing risk maturity will enable the organisation to continually develop and improve its approach to risk management.

Quote

"Leaders need to be able to articulate what they want risk management to achieve. This includes being clear on what good looks like, and setting expectations that their teams will be following good practice. Proper centrally managed validation arrangements, and an assurance system around them, which provide Boards with confidence that risks are genuinely being mitigated to an acceptable level, are important in order to shift the dial on risk management effectiveness."

Bruce Mann, Strategic Advisor on Resilience and Preparedness

Why is this important?

Government organisations – in a time of scarce resources – need to prioritise a culture of continuous learning and improvement so risk management is a primary focus for individuals. Central to this is a no-blame culture that promotes open dialogue and knowledge sharing. This should include learning lessons from the past – including near-misses from within the organisation – and relevant risk examples from other organisations.

Organisational leaders should emphasise the value of feedback loops so learning can be taken from outcomes and applied to make future improvements. Increasingly, risk leaders can identify opportunities to make greater use of data analytics and other advanced technology in risk management – to improve the quality and scope of identification, assessment and monitoring, and make processes more efficient.

What did leaders and practitioners say?

Leaders and practitioners we talked to recognised the challenges in sharing information and good practice across government. Involving risk professionals in the learning process is a good way for learnings to be shared and implemented. The challenge extends beyond sharing of good practice to sharing information on shared risks across government. Challenges to achieving net zero were cited as an example where lots of departments are involved and there are opportunities to share approaches to improve risk action plans and strategies.

Case study

Continuous learning and improvement

Background: HMRC needed to update its risk maturity assessment to describe how well it was delivering each of the *Orange Book* principles. The aim was to undertake a Department-wide risk maturity assessment to highlight and share areas of good practice and identify areas where focus or improvement activity might be required.

Approach: Using a combination of interviews and questionnaires, HMRC asked senior leaders, risk professionals and non-risk professionals a set of questions against each of the *Orange Book* principles. Their responses were collated and self-assessed. The central team then undertook a consistency exercise and produced the overarching maturity assessment for the Department, outlining a set of improvement activities it was proposing to deliver. This was then ratified by the Executive Committee.

The immediate output from the exercise was an agreed improvement plan for risk managers to implement for the next 12–24 months. The improvement activities were incorporated into business plans to support resource allocation and objective setting of the risk function. The team monitored progress against the improvement activities and regularly shared best practice across the Department on these specific issues.

Benefit: While it is important to undertake a consistent assessment, which enables benchmarking to take place, HMRC gained greater insight from having rich discussions with colleagues and in identifying the specific improvement activities themselves. It was also important to recognise that improvement plans had to be proportionate to activities and hence would vary across different business units. Understanding whether they were at maturity level 2 or 3 felt less tangible, as there is always an element of subjectivity associated with the assessment.

Source: Discussion with HMRC

Drive continuous improvement *continued*

	Assess the current level of maturity to identify gaps and areas for development	Identify and share good practice across the organisation	Learn and share lessons from beyond the organisation	Validate, benchmark and seek assurance over risk management arrangements
What actions can organisations take?	Undertaking an honest assessment of the organisation's current level of risk maturity enables risk leaders to assess which areas should be prioritised for future development.	Organisations should invest time in identifying examples of good practice in risk management that can be showcased to the organisation to drive continuous improvement.	Learning lessons from others – like other ALBs within a departmental group or departments across government – helps inform risk-based decision making across the organisation.	As part of a continual improvement mindset, risk leaders should look for opportunities where their processes can be independently assured. Benchmarking progress against other organisations enables leaders to find ways to improve existing processes.
Where have we seen this issue in our work?	In *Climate change risk: A good practice guide* (2021) we recommended that organisations should identify gaps in skills and knowledge, and plan for how these can be addressed.[59] This will increase their ability to respond effectively to climate change risk and make the most of any opportunities. Organisations should decide how regularly to review their climate change risk identification and assessment, to make sure that they are learning any lessons from their experience and ensure that the response to climate change risk remains appropriate considering their strategy to adapt to and mitigate climate change risks.	In *The Transpennine Route Upgrade Programme* (2022) we noted that Network Rail put in place a system to identify and incorporate relevant lessons learned into its management of the Programme.[60] It identified 19 themes, drawing on lessons and good practice and experience on the Programme to date and other major infrastructure projects. These themes included behaviours and culture, risk management and collaborative planning.	In *Managing risks in government* (2011) we recognised the benefit of the Risk Improvement Group, which still operates today.[61] This is a cross-government group coordinated by the Risk CoE in HM Treasury, which is a useful forum for risk and assurance specialists to meet and discuss risk management practices, and provides the opportunity to learn from others and share good practice.	In *Supporting innovation – Managing risk in Government departments* (2000) we recognised that assurance arrangements can help management to gain assurance about the effectiveness or otherwise of the risk management system.[62] Internal Audit has an important role to play in reviewing the operation of departments' risk management systems, and provides assurance to senior management that the department's risk management reflects good practice.

59 See footnote 32, page 36.

60 Comptroller and Auditor General, *The Transpennine Route Upgrade Programme*, Session 2022-23, HC 572, National Audit Office, July 2022, paragraph 21b.

61 See footnote 23, paragraph 6.4.

62 Comptroller and Auditor General, *Supporting innovation: Managing risk in government departments*, Session 1999-2000, HC 864, August 2000, page 85.

Methodology appendix

We have used the following methods to generate our insights:

a We conducted 18 semi-structured interviews and one workshop with senior leaders and risk practitioners from a range of our audited bodies. In some instances more than one interview was undertaken with different individuals from the same organisation. We met with a Deputy Chief Executive, Group and Executive Directors, Chief Risk Officers, Heads of Risk and Department Risk Leads from:

- 9 ministerial departments
- 2 non-ministerial departments
- 2 non-departmental public bodies
- 4 executive agencies

We included organisations of different sizes and complexity to capture a diversity of perspectives. The findings from the interviews were used to inform our themes and identify examples of good practice. Our interviews and the workshop were carried out between July and October 2023.

b We held nine semi-structured interviews and one workshop with experts from the wider risk community to discuss and gain their perspectives on the challenges for government in managing risks and how to tackle these challenges. These included:

- 2 institutions/professional bodies
- 1 regulator
- 3 academics
- 2 private sector companies
- 2 industry experts

The interviews and the workshop were carried out between July and October 2023.

For methods **a** and **b** we organised the notes from the interviews and workshops in an Excel matrix, against the themes identified in our review of past NAO reports. We used this analysis to refine, test and supplement our findings and to identify and examine case study examples to illustrate our findings.

c We held a workshop discussion with officials from the Risk Centre of Excellence to discuss our emerging findings and hear their views on the themes we had identified.

d We interviewed financial audit, value-for-money and insights teams from the National Audit Office. We used this information to gain insights into the variation in risk management across different bodies, identify good-practice examples and further our understanding of what different government bodies require for robust risk management. Our interviews were carried out between June and October 2023.

e We reviewed our back catalogue of value-for-money reports, investigations, and good practice guides. We used this information to identify the main challenges for government in managing risks and approaches to tackle these challenges.

f We conducted external research on risk management. This constituted desktop research of risk management materials and documentation from central government and the private sector, and discussions with organisations from beyond central government to deepen our understanding of the current challenges for effective risk management.