

**UK NATIONAL RESILIENCE STRATEGY:  
A RESPONSE TO THE UK GOVERNMENT**

The RSE supports the development of the strategy to strengthen the UK's resilience. We have been giving extensive consideration to resilience as part of our Post-Covid-19 Futures Commission. Our Building National Resilience work stream has been considering: what a resilient nation looks like; the features that underpin resilience; and how resilience can be built up and developed. We would welcome the opportunity to explore with the Cabinet Office how the RSE can contribute further to the engagement process on the strategy.

A national risk register and a national risk assessment, under continuous review, with long-term foresighting is required. These need to cover the aggregate and interdependent risk to the UK. Only by understanding the totality of the collective risk can we gauge the national risk.

Everybody and every organisation has a role to play in supporting resilience in order to build systemic resilience. A significant step forward is needed to help all parts of society to understand risks and to enable them to support national resilience. The strategy needs to support a culture of preparedness where resilience is proactively considered at all scales in the face of both known and unknown risks.

Government needs to communicate and discuss national risks openly and honestly with the public. Too often, national risk registers and assessments are restricted to specialists and are not the subject of national debate. This calls for transparency and widespread public debate about risk identification and risk management so that the public is well informed and can play its part in supporting resilience.

The impacts of Covid-19 have been felt disproportionately by certain parts of society, and the pandemic has highlighted existing structural inequalities. Policies that support resilience need to be proactively weighted towards marginalised individuals and communities. Preventative approaches and early intervention should be adopted wherever possible to support individuals, particularly the most vulnerable.

While it is impossible to predict and mitigate all causes of potential failure, it is important for decision-makers to consciously decide on the desirable level of resilience. Public input and buy-in is crucial to decision making processes aimed at determining desired levels of resilience and in balancing potential trade-offs between different options. A key question which needs to be addressed is whether there is an unavoidable trade-off between economic efficiency and resilience. If this is true, which seems likely in many sectors of the economy, then building a resilient nation will need different economic objectives from those currently being pursued across the developed world.

Summary

Significantly, it is not clear how the Cabinet Office plans to evaluate the effectiveness or assess the success of the strategy. Without embedding within the strategy an approach for measuring resilience, government and others will be unable to assess the effectiveness of the strategy nor be able to modify approaches based on evaluative evidence. The Cabinet Office should consider the creation of a set of key performance measures for assessing progress towards greater resilience.

The call for evidence recognises the importance of partnership working between the UK Government and the Devolved Administrations on resilience. However, the plans are silent on how this is to be operationalised. It is crucial that the Devolved Administrations are involved in the development and implementation of the National Resilience Strategy given the interplay of reserved and devolved responsibilities.

## Introduction

- 1 The Royal Society of Edinburgh (RSE), Scotland's National Academy, has been giving extensive consideration to resilience as part of our *Post-Covid-19 Futures Commission*.<sup>1</sup> Our Commission was established last year to support Scotland's recovery from the pandemic. It has stimulated wide-ranging discussion and activity aimed at building a fairer and more resilient society by addressing both immediate challenges and longer-term policy and practice questions. The key learnings from the RSE Commission are due to be launched in October 2021 and we would be pleased to share our findings with the Cabinet Office. We are also planning post-launch activity and we would be pleased to discuss how this could contribute to UK Government developments related to the UK's ongoing recovery from the pandemic.
- 2 This response has been prepared by the RSE's Building National Resilience working group which forms part of Post-Covid-19 Futures Commission.<sup>2</sup> The working group is chaired by Professor Sir Ian Boyd, former Chief Scientific Adviser at the UK Government Department of Environment, Food and Rural Affairs. Our Building National Resilience working group has been considering: what a resilient nation looks like; the features that underpin resilience; and how resilience can be built up and developed.
- 3 We are pleased to note that in addition to the written call for evidence, the UK Government is conducting wide-ranging engagement with a diverse range of partners and the public. Our Commission has engaged extensively with government and civil society in Scotland, including a diverse range of businesses, public and third sector organisations, community representatives, international partners and individuals. We would welcome the opportunity to explore with the Cabinet Office how the RSE can contribute to the engagement process. As part of this, we would be pleased to discuss the role that RSE can play, drawing upon our multidisciplinary Fellowship and our convening power. This could include, for example, the RSE facilitating discussions on resilience which bring together a range of perspectives.
- 4 We have focused our responses on those questions that relate most closely to the key learnings from our Building National Resilience workstream.

<sup>1</sup> RSE Post-Covid-19 Futures Commission <https://www.rsecovidcommission.org.uk/>

<sup>2</sup> Information about the RSE Building National Resilience working group is available at: <https://www.rsecovidcommission.org.uk/themes/#building-national-resilience>

## Vision and Principles

*Do you agree with the proposed vision of the Resilience Strategy? Is there anything you would add, amend, or remove?*

- 5 It is proposed that the National Resilience Strategy will make the UK the most resilient nation. We very much support the development of the strategy to strengthen the UK's resilience, including embedding a more proactive approach to long-term resilience. The consultation acknowledges the interconnected world of which the UK is part. It is therefore crucially important that the UK Government takes into account international developments on resilience, including seeking out opportunities to share learnings and to work in partnership with other nations in building global resilience. This should be a collaborative rather than competitive process. We also need to learn to live with the idea that we can never make ourselves completely safe from disasters. Aiming for complete safety is protectionism and is distinct from resilience which focuses on adaptive change.
- 6 The definition of resilience in the consultation refers to the idea of 'bouncing back', of returning to 'normal', and of picking up where we left off before whatever difficulty or challenge we experienced. However, adaptive management, where we are able to learn from the experience of a system(s) under stress, adapting quickly to reduce adverse impacts, is the key component of resilience. It is therefore not a case of seeking a return to some previous state.
- 7 We welcome the breadth of coverage of the proposed strategy. While it is proposed that the strategy will include all types of risk, it will be crucial that it covers the aggregate and interdependent risk to the UK. It is not enough to consider only risks individually. Only by understanding the totality of the collective risk can we gauge the national risk. In the future we are likely to see increasing interconnectivity in our national and international networks, creating new possibilities for risks that are difficult to predict and challenging to communicate. This demonstrates the importance of resilience planning providing for adaptable and flexible responses to take account of the potential for rapidly escalating circumstances.

- 8 The consultation refers to the complementary relationship between the National Resilience Strategy and existing strategies that focus on specific and/or sectoral risks. With a view to mainstreaming planning for resilience across all parts of government, these existing risk strategies will need to undergo periodic review and update so that they align with the UK's overarching resilience strategy which itself will need to be continually reviewed. This is likely to be a significant undertaking for civil servants within the UK Government as well as those within the Devolved Administrations and in local government given the importance of ensuring strategic coordination at all levels of government. It will be important to ensure that resource is made available to support the level of strategic review and coordination required. It will also be critical that strategic developments are communicated to stakeholders outwith government.

*Do you agree with the principles laid out for the strategy? Is there anything you would add, amend, or remove?*

- 9 The comments we make in response to the previous question are also relevant here. The principles set out align with our own key learnings on resilience which will be published shortly. There is a need to increase understanding of resilience at all scales and across all sectors of society, including government, business, institutions, communities and individuals. This links to the need to develop a culture of preparedness where resilience is proactively considered at all scales in the face of both known and unknown risks. Scenario planning exercises need to be as robust as possible, including testing under conditions where access to major infrastructure (such as telecommunications, energy, road network) is compromised. The strategy should aim to support this culture of robust and proactive preparedness.

- 10** As an interconnected society, everybody and every organisation, has a role to play in supporting resilience in order to build systemic resilience. Government needs to set the overarching framework and conditions to support resilience. This includes putting in place strategies, policies, infrastructure, incentives, regulation and finance so that people and organisations are able to cope with adversity and find solutions to problems. The strategy can play an important role in supporting this approach.
- 11** The consultation document rightly emphasises the need for engagement on risk and resilience with marginalised and vulnerable individuals and communities. The impacts of Covid-19 have been felt disproportionately by certain parts of society, including among different ethnic minority groups and women, and it has highlighted existing structural inequalities. Policies that support resilience need to be proactively weighted towards marginalised sections of the community. Preventative approaches and early intervention should be adopted wherever possible to support individuals, particularly the most vulnerable in our communities.
- 12** A core principle of the proposed strategy is investment to better prevent, mitigate and recover from failure. While it is impossible to predict and mitigate all causes of potential failure, it is important for decision-makers to consciously decide on the desirable level of resilience. The right levels of resilience will vary among different systems and between different system components.
- 13** Related to this, is the need to consider trade-offs between system efficiency and resilience. Efficiency can be defined in many different ways and would cover the rate of flow of goods (e.g. money, food, energy, social agency) through the system relative to the total of those goods stored as capital reserves within the system. Low efficiency systems have low rates of flow relative to the stored capital within the system. “Just-in-time” supply chains are high efficiency systems because they maximise flows over capital reserves. In many of these systems, the market is designed specifically to drive up efficiency through competition and this is apparent within many critical markets, such as energy. These kinds of markets are driven to minimise the price paid by consumers, but they have not necessarily been designed with a policy of resilience in mind, as demonstrated by the current global gas price crisis. If we want resilient systems, we will need to start to measure and trade-off between these different drivers. A key question which needs to be addressed is whether there is an unavoidable trade-off between economic efficiency and resilience. If this is true, which seems likely in many sectors of the economy, then building a resilient nation will need different economic objectives from those currently being pursued across the developed world.
- 14** The preceding comments underscore the importance of the Cabinet Office engaging with diverse perspectives, including businesses, in the development of the strategy. The RSE Building National Resilience working group has met with a wide variety of businesses. We heard from many business leaders that while they were not prepared for the pandemic, they used the experience to adapt quickly and embrace the opportunity for change, including establishing new business models and product lines. However, this was not without its challenges and businesses highlighted to us the conditions needed to support business resilience, including: access to infrastructure and digital connectivity; access to skilled labour; improved mutual understanding between business and local and regional communities; developing diverse supply and distribution lines; access to government and financial support; the need for enhanced communication and collaboration between business and government; and distributed leadership which increases diversity, inclusivity and creativity in decision making.
- 15** Significantly, it is not clear how the Cabinet Office plans to evaluate the effectiveness or assess the success of the strategy. The Cabinet Office should consider the creation of a set of key performance measures for assessing progress towards greater resilience. While we recognise that measuring resilience is difficult, some specific measures including the status of strategic reserves of critical response equipment or supplies and the awareness of people of the need to plan for resilience, are examples which could be used. Without embedding within the strategy an approach for measuring resilience, government and others will be unable to assess the effectiveness of the strategy nor be able to modify approaches based on evaluative evidence. Efforts need to be made to ensure that key performance measures are robustly and routinely applied in policy, procurement, corporate governance and regulation, and are transparently traded against other potentially in-tension KPIs, such as short-term profit. Moreover, it is important to measure, monitor and respond to “near-misses” because these inform about where systems might be vulnerable.

## Risk and Resilience

*Is there more that the Government can do to assess risk at the national and local levels? If so, what?*

- 16** The UK's National Risk Register (NRR) indicates that there is a high probability of an influenza pandemic occurring. While the World Health Organisation (WHO) had identified novel coronaviruses as a threat, it is notable that the NRR did not explicitly identify the potential threat of coronaviruses. This points to the UK not being well-prepared for a novel coronavirus. As a result, it seems likely that in the early stages of the pandemic, the modelling and preparedness were based on a legacy of influenza experience. This raises serious questions about the UK's approach to risk assessment and preparedness, including whether the NRR should categorise more specifically the range of potential risks. A national risk register and a national risk assessment, under continuous review, with long-term foresighting (that extends beyond the 5-year time horizon of the NRR) is required.
- 17** As we have commented previously, these need to look beyond individual risks and form a view of the aggregate and interdependent risk to the UK. This requires assessments and registers, and system capability, that is able to make connections between risks. National risk registers and assessments also need to inform and be informed by local risk registers and assessments. In this way the strategy can therefore support a more coordinated and systemic approach to assessing risk.
- 18** A key issue will be ensuring that government and others have access to the capacity (infrastructure, facilities and skilled personnel) required to assess, prepare for and mitigate current and future risks. Capacity which is not formally retained in key technical and specialist areas cannot always be scaled-up during emergencies. The Cabinet Office will need to consider the long-term investment and maintenance of appropriate skills capacity and infrastructure to support the strategic vision and principles.

*Is there more that the Government can do to communicate about risk and risk appetite with organisations and individuals? If so, what?*

- 19** The moral hazard with the theme of resilience is that it is always somebody else's problem. There is a tendency towards "optimism bias" where events which are far off in the future, which is often the case for low-frequency events even if they are likely to have high impact, are discounted both socially and financially, meaning they attract little investment. The result is low resilience. A significant step forward is needed to help all sectors of society to understand risks and to enable them to support national resilience. The proposed national strategy can play an important role in shaping and supporting a system of awareness, governance, guidance and regulation which effectively shares risk across broad sections of society. This would help to mainstream resilience in a systemic way. Individuals, households, communities, businesses, local government, corporate structures, institutions and government at all levels need to know and understand their responsibilities.
- 20** As part of this leadership and communication role, government needs to communicate and discuss national risks openly and honestly with the public. Too often, national risk registers and assessments are restricted to specialists and are not the subject of national debate. This calls for transparency and widespread public debate about risk identification and risk management so that the public is well informed and can play its part in supporting resilience.
- 21** There is a need to develop an inclusive, collaborative and trusting approach to decision making on resilience. Public input and buy-in is crucial to decision making processes aimed at determining desired levels of resilience and in balancing potential trade-offs between different options. While existing models, including Citizen Assemblies, can be adopted and sustained to help secure input from diverse voices on risk and resilience, this should not detract from the need for government to engage with the public at large on matters of national importance. Careful consideration will need to be given to processes of public engagement, including approaches that will need to be tailored to reach different audiences. Through the RSE's Post-Covid-19 Futures Commission we have sought to engage a wide range of perspectives on Scotland's long-term recovery from the pandemic and we would be pleased to discuss further with the Cabinet Office our experiences and key learnings.

## Responsibilities and Accountability

*Do you think that the current division of resilience responsibilities between Central Government, the Devolved Administrations, local government and local responders is correct? If not, why?*

- 22** While everyone and everybody has a role to play in building national resilience, the roles of UK and Devolved Governments are key in setting the strategic direction and using the range of policy levers at their disposal, including fiscal, subsidy and regulation to support the objective of resilience.
- 23** The call for evidence recognises the importance of partnership working between the UK Government and the Devolved Administrations on resilience. However, the plans are silent on how this is to be operationalised. For example, will inter-government engagement on resilience be undertaken through existing intergovernmental channels? Experience shows that these have not worked as well as they might, suggesting that other ways of facilitating constructive and productive relationships on resilience will need to be found.<sup>3</sup>
- 24** It is crucial that the Devolved Administrations are involved in the development and implementation of the National Resilience Strategy given the interplay of reserved and devolved responsibilities. We are aware from our discussions with Scottish Government that they have been carefully considering risk and resilience with work ongoing. There are therefore opportunities to share learnings across the different levels of government with a view to informing the National Resilience Strategy, ensuring that it takes account of the priorities and needs of the different nations and regions of the UK, and to ensure strategic alignment.
- 25** Both the UK and Scottish Governments have committed to conduct independent inquiries into, respectively, the UK and Scotland's handling of the Covid-19 pandemic. It will be important that there be a level of connection between these two inquiries given the intergovernmental relations involved in guiding the UK and Scotland's

responses to the pandemic. Ensuring connections between the two inquiries and the lessons learned will also be important to strengthening resilience at both the Scottish and UK levels.

- 26** A key issue is the need to make connections across all levels of government. The preceding points have focussed on the role of national governments. However, it is crucial that local government has the resource and capability to build resilience, including among those communities and individuals most in need of support. It continues to be the case in Scotland that reductions in local government funding are still larger than in other areas of the Scottish Government budget.<sup>4</sup> This has the potential to constrain the ability of local government to support the resilience of local communities.
- 27** The multidisciplinary national academies in the devolved nations, including the RSE, can help make connections between the UK Government and Devolved Administrations, as well as facilitating the provision of wide-ranging expertise and practitioner experience, including that drawn from communities and grass-roots organisations.

*How can the UK Central Government, DAs, local and regional forms of government and local responders better collaborate on resilience?*

- 28** The consultation refers to the Cabinet Office having committed to consider strengthening the role of Local Resilience Forums (LRFs). However, LRFs operate only in England and Wales. The consultation provides very little detail as to how structures and fora operating in the different nations of the UK, including Scotland's Regional Resilience Partnerships, can be better coordinated to strengthen national resilience. This links to our response to the previous question where we refer to the need for, and importance of, sustained intergovernmental engagement on resilience.

<sup>3</sup> See, for example, the RSE Advice Paper on the Future Governance of the UK (May 2021) <https://www.rse.org.uk/wp-content/uploads/2021/05/Future-Governance-of-UK-AP21-05.pdf>

<sup>4</sup> Local Government in Scotland Financial overview 2019/20; Audit Scotland; January 2021 [https://www.audit-scotland.gov.uk/uploads/docs/report/2021/nr\\_210126\\_local\\_government\\_finance.pdf](https://www.audit-scotland.gov.uk/uploads/docs/report/2021/nr_210126_local_government_finance.pdf)

- 29** There are also questions relating to how governments within the UK, on a sustained basis, tap into the wide body of expertise on risk and resilience that exists both within and outwith government departments and formal structures.
- 30** Given the range of national, regional and local organisations and groupings with resilience-related responsibilities, it is important that there should be a clear framework of roles and responsibilities among the different groupings to ensure effective coordination, communication and action. Otherwise, there is a risk of duplication of effort, inefficient use of resources and of parts of the system not receiving the support they need.
- 31** Audit Scotland has highlighted the way in which many communities and individuals stepped in to provide much needed local services during the pandemic. Through our Post-Covid-19 Futures Commission we have heard first-hand the contribution that community groups and representatives make to supporting resilience in their local communities, including the way in which they can help ensure that more marginalised voices are heard. However, their contribution can often be overlooked and/or taken for granted, and it is important that they are viewed as key partners in strengthening resilience.

## Resilience in an Interconnected World

*Are there any approaches taken by other countries to resilience that you think the UK could learn from?*

- 32** The global Covid-19 pandemic has highlighted low levels of resilience in nations across the world. The Covid-19 pandemic was a predictable event, even if the timing and exact nature of the event could not be foreseen. It would therefore be very beneficial for countries to share their experiences and lessons learned from the pandemic. In an interconnected and interdependent world, partnership working among countries will be key,

particularly as countries will be dealing with issues that will have global impact, including climate change, future pandemics, cyber-attacks and terrorism, among others. It is therefore important that the UK's National Resilience Strategy is nested within an international approach to strengthening resilience. The UK currently collaborates in a wide range of international networks related to resilience. This includes protocols being in place to guide the UK's Civil Contingencies Secretariat in working with international partners in planning and responding to civil emergencies. The development of the strategy therefore presents an opportunity to strengthen UK collaboration with international partners on resilience, including on the sharing of information and experiences between countries, and to support the UK and international response to risk planning and mitigation.

- 33** There is an opportunity to learn from other nations in relation to how they have sought to embed resilience in to the national psyche. In New Zealand, for example, natural disasters, especially those caused by earthquakes, are a way of life. There, the government actively warns people to be aware and be prepared. Much of the success of New Zealand's national response to Covid-19 may be down to its experience of planning for general disasters, its scale, geographical isolation and mainstreaming of the concept of resilience to the extent that it flows through from the level of households to national institutions.
- 34** The UK's National Academies are well-placed to harness international expertise through their relationships with sister academies across the world.

### *Additional Information*

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