

A duty to prepare: vital infrastructure must be ready for the future, finds Commission

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The past is not always the best guide to the future and proactive steps are needed to ensure the UK's infrastructure can remain resilient, according to a new report by the National Infrastructure Commission.

The Commission has set out a new framework to help support change across infrastructure sectors and is calling for transparent standards of appropriate service levels, stress testing for major incidents and clearer direction for utilities providers to invest in long term resilience. Together, the report finds, these steps will ensure the country's infrastructure can better resist, absorb and recover from shocks.

The evidence base used in the study was undertaken before the current Covid-19 pandemic, and the report notes that it is too early to fully assess and learn lessons from the ongoing crisis.

Anticipate, React, Recover: Resilient Infrastructure Systems instead focuses on previous disruptions and failures and the response of the UK's energy, water, digital, road and rail infrastructure over a longer timeframe – drawing on examples including the widescale power outage of August 2019 and the various incidents of flooding experienced in the UK over recent years. It also highlights the impact on New Orleans when Hurricane Katrina hit in 2005: a failure to adapt infrastructure to respond to a changing climate and population growth led to a catastrophic impact on the city and its people.

The Commission warns that the UK's generally robust historic resilience may be challenged in future by a

range of factors that will not always be possible to foresee, alongside better understood challenges like climate change.

To prepare better, government should set clear resilience standards for infrastructure operators, and introduce stress tests overseen by regulators similar to those employed in the financial sector. Operators should also be required to develop and maintain long term resilience strategies, and regulators should ensure their determinations support achieving the prescribed resilience standards, according to the Commission.

The report includes a new framework to improve resilience, offering an approach for government, regulators and operators to use collaboratively when developing plans for anticipating and handling short term shocks. The framework sets out six key aspects of resilience: anticipate, resist, absorb, recover, adapt and transform, which the Commission will also use in its own future analysis of resilience strategies.

Acknowledging the recent pressures placed on infrastructure operators, Sir John Armitt, Chair of the Commission, said: “The Commission pays tribute to all those who are helping to minimise the impact to infrastructure during this period, often at significant personal risk.

“While this report draws on evidence collected before the pandemic, this study can inform thinking about the recovery and help ensure that we can be resilient to future challenges.

“To safeguard the systems our communities rely on, everyone involved in running infrastructure needs to anticipate and prepare for potential future challenges. The framework proposed in our report offers the tools to face uncomfortable truths, value resilience properly, test for vulnerabilities and drive adaptation before it is too late.”

Emma Howard Boyd, Chair of the Environment Agency, said: “The climate emergency means shocks to the economy from record weather events are following each other with increasing speed.

“Creating more resilient infrastructure, and building back better after a climate-induced shock, doesn’t just reduce risks, it’s an economic opportunity too. This report will help people better understand that opportunity.”

Simon Collins, Chair of Resilience First, said: “Businesses across the country are showing just how resilient they are able to be under the most trying of circumstances – but we need to be able to rely on infrastructure to support us in facing whatever the future holds.

“The Commission’s framework provides a roadmap for achieving just that and I urge government, regulators and businesses to consider its lessons and get to work on implementing them.”

Photo credit: National Infrastructure Commission