

Workshop 4 Preliminary findings: capturing the value of resilience



Review of a workshop held on 2 July 2015, which examined issues of capturing the value of resilience

The preliminary workshop findings presented here are from an initial fast-track analysis. Workshop outputs are currently being analysed in more depth for future publications.

This workshop was led by the International Centre for Infrastructure Futures (ICIF) and the iBUILD research projects. Both projects share the vision of significantly improving the quality of policy-making and project delivery for infrastructure schemes and bringing together the stakeholders involved in renewing the UK's infrastructure to exploit structured, multidisciplinary, systemic thinking about infrastructure interdependencies and resilience when developing the novel business models (BM) needed to address future challenges.

Through discussion of the interconnected question set (see Figure 1), the workshop explored the meaning of resilience to the organisations' representatives in the room, possible actions to increase resilience, the challenges faced when acting to increase resilience and the value organisations gain by becoming more resilient.

The workshop took the form of eight round table discussions each comprising 8 to 12 participants. The aim of the workshop was to create open cross-sector discussion of issues connected to making a business case for resilience and through these discussions enable participants to gain shared insight into other infrastructure organisations approaches resilience, the common ground shared, challenges faced when taking actions to increase resilience and how different perspectives can influence the framing of the business case.



Figure 1 Workshop discussion questions

Workshop findings

- Before actions for resilience can be taken, or a value can be placed on resilience, the importance of resilience, in particular by illustrating the potential consequences of an absence of resilience, needs to be understood. Case studies of the potential consequences of a lack of resilience are needed to increase public and industry awareness of the importance of resilience thinking.
- Being a resilient organisation can generate both reputational and competitive benefits, so the value of resilience is greater than solely the value of avoiding the financial costs of failure.
- Vulnerabilities are frequently unknown, ignored or undervalued making it very difficult to justify the organisational value of preventative measures (to enhance resilience) until disruption occurs. Even after a

- disruption event, because the impact of infrastructure failure is often experienced indirectly, the true value of preventative action is often not appreciated.
- Resilience is a systems level issue – any infrastructure is only as resilient as the least resilient element of that system.
- Action for resilience cannot stop at organisational boundaries. The potential for the impact of disruption in one infrastructure to spread across multiple networks creates multiple system-level challenges for infrastructure organisations. It follows that resilience requires organisations to collaborate with their networks and supply chains to improve understanding of interdependencies and the type of actions that can increase the resilience of the systems of which they are a part.
- Resilience is frequently viewed as a bolt-on rather than a primary objective. Consequently,

resilience planning often starts too late in a project by which time it is very difficult and costly to introduce resilience measures.

- To address the question 'how much resilience is needed?' requires stakeholder engagement to understand customer willingness to accept (WTA) disruption, decreased quality or alternative provision and customer willingness to pay (WTP) to ensure an absence of disruption. Both WTA and WTP will vary with context and customer.
- Managing client and public expectations for service quality and security of supply and managing the 'customer experience' during times of

disruption in order to minimise the impact on the customer are important to a resilient organisation.

- Continuous learning and adaptation are needed to be resilient in changing contexts.
- Organisational knowledge resides with people and translation of knowledge into established processes (with a defensible rationale) is rare. So, resilience learning from disruption events is rarely systemically embedded into organisations. Organisational knowledge is vulnerable to changes in staff or organisational priorities.

ICIF and iBUILD would like to acknowledge the support of the Engineering and Physical Science Research Council (EPSRC) and Economic and Social Sciences Research Council (ESRC) in funding these programmes, and this workshop.



Note that these briefings are for informational purposes only and any statement, opinion, or view that is not specifically attributed to CIRIA, may not necessarily reflect the views of CIRIA.

For further details about CIRIA's standard terms and conditions, and for other information about CIRIA's work please go to: www.ciria.org