



Internet resilience for community resilience: shared purpose, collaborative action

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13 May 2026

**Internet infrastructure
climate resilience:
action research in Aotearoa**



Why: Community resilience matters

- Values-based and also a needed response to escalating risks
 - Climate-driven severe weather events are already causing "long-lasting hurt, grief and fear", with many more people will likely be exposed to hazards by 2050
- Direct experiences of communications as key to community well-being and ability to respond and recover
- Communities and people experiencing digital exclusion, including rural and remote communities, people with disabilities, are often most at risk from and impacted by Internet disruption
- Copper withdrawal makes Internet even more important in emergency comms



Why: Resilience is a good investment

Climate Change Commission Climate Risks Assessment 2026

- Acting early and in a coordinated way reduces long-term costs and disruption, with evidence that proactive investment can deliver returns of around ten-to-one
- Currently around 97% of public spending on climate hazards goes into recovery, and only 3% into building resilience.

Shared purpose as a foundation

A shared vision and framework around Internet resilience as a foundation for collaborative action

Vision: Internet resilience in Aotearoa

Our vision of communications and Internet resilience to support communities in Aotearoa New Zealand is:



Communities and organisations have the relationships, resources and plans that allow them to function through, and bounce back after, Internet disruptions.



Internet and electricity infrastructure is robust and supported by redundancies, so disruptions are limited and restoration is rapid.

This vision was developed in the context of climate change and extreme weather events and is also relevant to other Internet infrastructure risks, like earthquakes or cyber attacks.

The 5Rs of Internet infrastructure resilience

A framework for collaborative action

ROBUSTNESS



RAPIDITY



RELATIONSHIPS

REDUNDANCY



RESOURCEFULNESS



The 5Rs of Internet infrastructure resilience



Robustness

Infrastructure systems are designed, built, and maintained to avoid, withstand and recover from disruptive events to support communications and Internet continuity.

The 5Rs of Internet infrastructure resilience



Redundancy

Infrastructure backup capacity and alternative systems support people to deliver and receive vital communications and services during Internet disruptions.

The 5Rs of Internet infrastructure resilience



Resourcefulness

When disruptions occur, responders and affected people can effectively and creatively identify and solve problems as they arise, supported by the plans and resources they need to do so.

The 5Rs of Internet infrastructure resilience



Rapidity

Infrastructure repairs, replacements and redundancies can be delivered in a timely and prioritised manner so Internet disruption is minimised and emergency needs can be met.

The 5Rs of Internet infrastructure resilience



Relationships

People and organisations with responsibility for aspects of Internet and community resilience build and maintain relationships that support prevention of, and quick response to, Internet disruptions.

Actions to support Internet infrastructure climate resilience

Building on the vision and framework

Actions to support Internet infrastructure climate resilience: five other themes

1

System-wide plans

A holistic approach to resilience planning which maintains a 2050 and beyond horizon

2

Community-centred resilience

Well-resourced community-led resilience approach that meets local needs

3

Data-informed decisions

Comprehensive, joined-up hazard and infrastructure data informs processes and actions

4

Clear expectations

Regulations, standards and guidance which support and enable appropriate action

5

Collaborative approach

Relationships, collaboration and a breadth of capability as a strong foundation



Next steps: Internet Resilience in Aotearoa

- Work will continue into 2027 on Internet resilience, using the vision and 5Rs framework as a tool to explore risks and support collaborative action
- Meet with me ellen@brainbox.institute and the research team at Brainbox Institute! Lots of ideas and insights not in the reports (and that you might have) that we'd love to bring into discussions and support with collaborative ongoing work
- Read about the IICR research, download the reports and get in touch at Internetresilience.nz or join the LinkedIn group: [Internet Resilience NZ](#)