

Myles Lind - *Web form submission*

Critical Infrastructure Resilience

What is your name?

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Are you responding as an individual or on behalf of an organisation?

Individual

Do you consent for your submission (including identifying information) to be published and shared in lines with terms for this public consultation?

Yes.

Do you consent for your submission (including identifying information) to be published and shared in lines with terms for this public consultation? - Please note what should be withheld and for what reasons.

[Nil]

Does more need to be done to improve the resilience of New Zealand's critical infrastructure system?

Yes - In recent years, climate change has amplified extreme weather events leading to an increasing number of weather-related disasters globally. A reality reflected in the numbers: Over the last twenty years, the overwhelming majority (90%) of disaster events have been caused by floods, storms, heatwaves and other weather-related events, while more than 50% of mortality by natural hazards are caused by geological hazards such as earthquakes and tsunamis. Biological hazards also disrupt communities, as COVID-19 has shown. The Government has a clear role in leading and helping to build resilient technical, economic and social systems, which demonstrates that our leaders have an enormous role in infrastructure, data management and land use, capacity building, and policies. And let's not forget institutionalisation and other forms of resilience building.

Have you had direct experience of critical infrastructure failures, and if so, how has this affected you?

Yes - I've lived in rural and urban New Zealand. Infrastructure outages can happen to one or multiple infrastructure outages at the same time, which impacts home and work wellbeing essentials - social connection, cooking, schooling, heating, lighting etc.

How would you expect a resilient critical infrastructure system to perform during adverse events?

Its a balance - essential elements should be N-1 or possibly N-2 or more, other pieces "fast repair", the social fabric of the community (capability and capacity) also has a role in response. Government oversight of pre-event investment is essential to ensure that any minimum resilience standards are delivered by central / regional partners. Its too easy to get distracted and not invest, hoping the events don't occur on "my" watch and then look for handouts after the event.

Would you be willing to pay higher prices for a more resilient and reliable critical infrastructure system?

Absolutely - funding of national minimum standards, regulation of the delivery of the standards, and centralized coordination / pipeline to deliver investment outcomes more efficiently.

The work programme's objective is to enhance the resilience of New Zealand's critical infrastructure system to all hazards and threats, with the intent of protecting New Zealand's wellbeing, and supporting sustainable and inclusive growth. Do you agree with these objectives? If not, what changes would you propose?

Yes.

Do you agree with the proposed criteria for assessing reform options? If not, what changes you would propose?

Yes.

Do you think the megatrends outlined pose significant threats to infrastructure resilience?

Yes.

Are there additional megatrends that are also important that we haven't mentioned? If so, please provide details.

Yes - changing demographics and skills shortages.

Do you think we have described the financial implications of enhancing resilience accurately? If not, what have we missed?

Increasing resilience of infrastructure will also increase the attractiveness of NZ for businesses and people to be based.

How important do you think it is for the resilience of New Zealand's infrastructure system to have a greater shared understanding of hazards and threats?

Essential - will ensure consistent and transparent responses to be developed and implemented of risks ensuring no community gets left behind - equity.

If you are a critical infrastructure owner or operator, what additional information do you think would best support you to improve your resilience?

Access to the best hazard risk data, imagery, national tools, national reporting systems, ability to seek, secure and utilize best international experts in hazard assessment and response development.

What do you think the government should do to enable greater information sharing with, and between, critical infrastructure owners and operators?

Provide the national hazard register. imagery etc and then oversee (regulate) the infrastructure owners response. Question - who's tracking the implementation of the governments seismic policy regionally? Are all infrastructure (building) owners going to meet the deadline for upgrades?

Would you support the government having the ability to set, and enforce, minimum resilience standards across the entire infrastructure system?

Absolutely - this is an essential component for NZ Inc resilience. Possibly have a couple of options on implementation - "acceptable solutions", and " specific operator risk based" based on operator maturity / government / public confidence levels in the operator.

Would you support the government investing in a model to assess the significance of a critical infrastructure asset, and using that as the basis for imposing more stringent resilience requirements?

Yes - a helping hand regulator model. Its about ensuring no community gets left behind, not simply enforcing minimum resilience standards. A funding function for support of planning and delivery, with the appropriate oversight, could also be advantageous.

What criteria would you use to determine a critical infrastructure asset's importance? Investing in a model to assess a critical infrastructure asset's criticality, and using that as the basis for imposing resilience requirements that are more stringent on particularly sensitive assets?

Number of homes, businesses impacted, overall importance to community wellbeing outcomes - safety, heating, access to food, education, health. The interrelatedness of infrastructure as a system in terms of supporting community outcomes.

Off the top of my head: energy/fuel, communications and clean drinking water have to be top of list as network utilities. Food and health as top point services. Point services being massively reliant on transport (roads).

Expect not everyone to agree with your model - have plans in place to grow and evolve the model to meet the changing needs of NZ and the available resources.

Do you think there is a need for the government to have greater powers to provide direction or intervene in the management of significant national security threats against a critical infrastructure? - Is there a need for greater powers? If so, what type of powers should the government consider? What protections would you like to see around the use of such powers to ensure that they were only used as a last resort, where necessary?

Yes. The government should consider all powers and have a range of tools in the drawer for its use - at the end of the day - we want a best for NZ Inc outcome. That will require a continual (re)balancing of regional self-determination, national collaboration and strict national directive.

Do you think there is a need for a government agency or agencies to have clear responsibility for the resilience of New Zealand's critical infrastructure system

Essential because resilience management as a social process, operates through a system formed by interlinked components: a hardware (infrastructure), a software (policy documents, norms), financial support and human capital (planners, decision-makers). This system becomes complex since similar structures are embedded in every infrastructure organization composing the national infrastructure system (government and private). The general objective of increasing resilience can be achieved only with a fully functional and resilient system, with the inter-institutional links functioning correctly. The benefit to a country in institutionalising ultimately rests in the community, over the generations of people, being more readily able and consistently practiced at reducing infrastructure risks and preparing for, responding to and recovering more quickly from hazard events - independent of country or community leadership. As such, we need a single, central, government spanning agency, with independence, funding and authority.

Do you think there is a need for compliance and enforcement mechanisms (eg. mandatory reporting, penalties, offences) to ensure that critical infrastructure operators are meeting potential minimum standards?

Possibly for the infrastructure entities that should know and be behaving better - refer previous statement. Should have a range of tools from industry guidelines to acceptable solutions, to funding to measured national resilience outcomes.

What additional comments do you have?

Great initiative. Really pleased to hear you are looking at this seriously. You may want to reference the Sustainability Development Goals, the Sendai Framework for Disaster Risk Reduction, or any other international work that supports this initiative. Let the people know you aren't just making work for yourselves but are in fact partnering and leading with other countries that want their people and communities to thrive in an ever-changing world.