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National Security Group  
Critical Infrastructure Resilience Team  
Department of the Prime Minister and Cabinet

Email: [InfrastructureResilience@dpmc.govt.nz](mailto:InfrastructureResilience@dpmc.govt.nz)

Tēnā koutou

## **RE STRENGTHENING THE RESILIENCE OF AOTEAROA NEW ZEALAND'S CRITICAL INFRASTRUCTURE SYSTEM**

Thank you for the opportunity to provide comment on the Department of the Prime Minister and Cabinet's (DPMC) discussion document on strengthening the resilience of Aotearoa New Zealand's critical infrastructure system.

Engineering New Zealand (formerly IPENZ) is New Zealand's professional home for engineers. We are New Zealand's strongest and most influential voice on engineering issues, with more than 24,000 members who want to help shape the public policy agenda and engineer better lives for New Zealanders.

### **OUR POSITION**

Overall, we support the intent and objectives set out in this report. We see this consultation as the first step to addressing the needs of Aotearoa New Zealand's critical infrastructure system.

Attached to this letter is our feedback to the questions sought by DPMC. Our position is:

1. We support the transition from lifeline utilities to critical infrastructure
2. While we agree with the megatrends identified, it is our view that many of these will remain unaddressed without the inclusion of the critical workforce shortage and lack of political will as barriers.
3. We support having clear accountabilities and accountability systems regarding critical infrastructure.

### **We support the transition from lifeline utilities to critical infrastructure**

We welcome the introduction of a principle-based definition of critical infrastructure to replace lifeline utilities. This change effectively addresses a significant gap in Aotearoa New Zealand's critical infrastructure framework. The previous definition of lifeline utilities failed to capture the full extent and complexity of Aotearoa New Zealand's critical infrastructure, as it focused solely on essential utilities and overlooked other critical sectors and the interdependencies within. We support the report's notion that this updated definition will ensure a more comprehensive and adaptable approach, fostering national consistency. Aligning the emergency management

regulatory regime with this principle-based definition will future-proof Aotearoa New Zealand and enhance our resilience.

### **Critical workforce shortage must be identified as a barrier**

Engineers are at the forefront of the 4Rs of emergency management in Aotearoa New Zealand, actively working to reduce disaster risk, enhance readiness, and facilitate effective response and recovery. The aftermath of Cyclone Gabrielle highlighted the impact of engineering talent shortage on post-disaster recovery. Addressing the megatrends identified (climate change, a deteriorating national security environment, economic fragmentation, and rapid technological change) requires the expertise and innovations of engineers. To ensure the resilience of our critical infrastructure, Aotearoa New Zealand must have a skilled workforce capable of carrying out necessary work. Addressing the critical workforce shortage must be a priority for Government, as it serves as a barrier not only to addressing the megatrends but also to ensuring our overall resilience.

We urge the Government to continue this important work at pace, given the sector's significant skill and capacity losses. Retaining our engineering professionals is paramount, considering the global scarcity of engineers, to effectively address the challenges posed by these megatrends.

### **Addressing climate change requires consistent political will and commitment**

While we are in strong agreement with recognising climate change as a global megatrend that presents challenges for our critical infrastructure system, it is our view that it is essential to also acknowledge the role of conflicting political priorities and lack of political will as significant barriers to effectively address this megatrend. It is vital to understand that without addressing these political challenges, our efforts to tackle climate change and its impact on critical infrastructure may face substantial hurdles and impede progress. Disagreements and competing interests can hinder the development and building of resilient infrastructures. We are currently witnessing this dynamic with the Water Services Reform, where strongly held views and politicisation has delayed the delivery of a solution to the water infrastructure deficit. Recognising these political challenges is important to ensure effective and timely actions in response to climate change and safeguarding our critical infrastructure.

### **We support creating clear accountabilities and accountability mechanisms for critical infrastructure resilience**

The government's consideration of establishing a central coordinating point to enhance the resilience of Aotearoa New Zealand's infrastructure system is a positive step towards ensuring clear accountability and accountability mechanisms. We support this development as it will streamline efforts, enhance communication, and facilitate decision-making during times of crisis. Further, it is our view that the implementation of a dedicated central unit will bolster the resilience of Aotearoa New Zealand's critical infrastructure system, ultimately safeguarding essential services and the wellbeing of New Zealanders. We urge Government to proceed with this recommendation and prioritise its implementation.

## CONCLUSION

We appreciate the opportunity to provide comment on DPMC's discussion document on strengthening the resilience of Aotearoa New Zealand's critical infrastructure system. Our critical infrastructure is struggling and we're hopeful that this inquiry will change that.

Engineers remain at the forefront of the work needed to drive change and innovation in Aotearoa New Zealand's critical infrastructure. As such, Engineering New Zealand would value the opportunity to be involved in ongoing conversations regarding critical infrastructure. If we can be of additional support, please do not hesitate to contact me by emailing [richard.templer@engineeringnz.org](mailto:richard.templer@engineeringnz.org) or 021 22 000 50.

Ngā mihi

A handwritten signature in blue ink that reads "R. Templer". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

**Dr Richard Templer, FEngNZ**  
Chief Executive

## **APPENDIX A: COMPILATION OF QUESTIONS FOR FEEDBACK**

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

Yes. There is a pressing need for further improvements to enhance the resilience of New Zealand's critical infrastructure system. Recent events have highlighted vulnerabilities and shortcomings within the infrastructure network. Proactive steps must be taken to address these gaps to ensure the safety and well-being of New Zealanders.

**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?**

We support the objectives and intent of the report and work programme. We see this as a positive step towards addressing the gaps within emergency management and critical infrastructure system.

**The paper discussed four megatrends: i) climate change, ii) a more complex geopolitical and national security environment, iii) economic fragmentation, and iv) the advent and rapid uptake of new technologies. Do you think these pose significant threats to infrastructure resilience?**

We agree that these megatrends pose a significant threat to our infrastructure resilience. However, these megatrends will remain unaddressed unless barriers such as the lack of political will and the critical workforce shortage in New Zealand are effectively addressed.

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

More information on financial projections is needed. However, we assume that this detail may be provided as the work programme progresses.

**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 critical infrastructure? If so:**

We agree that government should consider introducing powers similar to Australia's to address national security threats against critical infrastructure.

**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? If so:**

Yes. It is our view that there is a need for a government agency to take responsibility for Aotearoa New Zealand's critical infrastructure system.

**Do you consider that new regulatory functions should be the responsibility of separate agencies or a single agency?**

Sector regulators should be responsible/accountable to the critical infrastructure regulator.

**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?**

Yes. Compliance and enforcement are necessary.