

RE: DPMC public consultation on critical infrastructure resilience

richard@mowll.nz

Peter,

Good afternoon.

Thank you for the opportunity to provide feedback on the discussion document titled 'Strengthening the resilience of Aotearoa New Zealand's critical infrastructure system', as detailed in your e-mail below. The document brings forward a wide range of issues that we can agree with but has some factors and details that we think require consideration.

Please accept this submission as coming from the Wellington Lifelines Group and from the Wairarapa Engineering Lifelines Association. These bodies include the critical infrastructure providers of the Wellington region. Our feedback is ordered, below, into 'key issues' and 'details':

Key issues:

1. This document seems to ignore (or not be aware of, particularly on the box on page 17) Clause 57 of the Emergency Management Bill (EM Bill) <https://legislation.govt.nz/bill/government/2023/0225/latest/whole.html> . The proposal in Clause 57 of that Bill for 'Planning Emergency Levels of Service' (PELOS) overlaps with this discussion document. Comments on Paragraphs 80.b and 85, below, are particularly relevant to this overlap, as those clauses propose a very similar process to that proposed for PELOS.
2. The document (example Paragraph 75.d) rather seems to 'jump to the solution' of setting minimum standards (although we understand that you are taking experiences from similar legislation in Australia as an example). We very much support the concept of levels of service, as these drive performance rather than proscribe specific solutions (i.e. hardening the network vs having a good emergency response plan.) We think, however, that the PELOS option has the potential to provide the desired outputs without imposing standards on critical infrastructure entities.
3. The setting of minimum levels may be relatively easy/straightforward for the water sector (using either the World Health Organisation's 'basic access to water standard' or the Sphere Handbooks water standard (highly researched and understood measures), but will be difficult for other sectors. One example is in the electricity sector – how long is it acceptable for a power outage to last? There is little evidence, internationally, from the energy, telecommunications and transport sectors of minimum standards for an emergency event. The recent Wellington Lifelines Group/Wellington Region Emergency Management Office project on PELOS provides some examples (we can provide references to this work, if required.)
4. Box on page 36: the box titled 'how can a critical infrastructure asset's importance be determined?' places the onus for determining service levels on the model (and therefore the modeller) to provide a standard. Such a standard may be complicated to create and will, ultimately in most cases, be almost arbitrary (as such levels are unlikely to suit 'all' end users, meaning that a choice would need to be taken by someone as to what standard is acceptable). The PELOS system (noted above) allows for more organic discussions between critical infrastructure entity, their regulator and the end-users. Such discussions would allow for agreement on the service levels/standards required of the infrastructure. Also, noting the box on page 33, above Paragraph 79, specifically the third bullet point refers to the '... resilience that New Zealanders expect...', it is not currently clear what level of resilience is

expected. Knowledge of what level of resilience that is currently planned (i.e. through PELOS) would inform the end-users on what they are currently likely to receive.

5. Paragraphs 32 and 115 note the lack of a co-ordinated approach from Central Government on resilient infrastructure issues. Our experiences of producing, and following up on, the Wellington Lifelines Group Programme Business Case <https://www.wremo.nz/assets/Library/Reports/Wellington-Lifelines-PBC-MAIN-Combined-20191009.pdf> bear out this statement. At times during that project, we found it hard to engage with Central Government in a coherent way.
6. The megatrends outlined appear to be relevant. We do note that in New Zealand there appears to be a lack of awareness in the public as to the level of resilience that is currently available. This is not a trend, but is a factor in understanding how discussions on resilience may be discussed.

#### Details:

7. Paragraph 1: objective. This clause is great in its intent but does not cover the issue that there will be infrastructure outages. Clause 2 works this nicely, noting the objective of 'reducing outages' (implying that outages will occur). All end-users should be aware of the possibility of outages and should be prepared (in whatever way) for them. Our suggestion is to amend the statement in Clause 1 to reflect this.
8. Paragraph 11 (third line, fourth word): the discussion document at times, including in this instance, seems to use 'critical infrastructure' and 'entities' interchangeably. We would suggest that the use, at least in this instance, should be changed from 'these entities' to either 'infrastructure facilities' or 'critical infrastructure'.
9. Paragraph 20: we understand that you are referencing another document here, but just noting that the Wellington Lifelines Group Programme Business Case (link in the response to Paragraph 32, above) demonstrates that the investment of \$5.6 billion on purely infrastructure resilience, would negate \$6 billion of lost GDP in the event of a rupture of the Wellington fault. We believe that the \$4.25 billion stated in this example therefore under-represents the need for infrastructure resilience investment.
10. Paragraph 33: while there are some targets (e.g., SAIDI and SAIFI in the electricity transmission and distribution sectors), such targets are often sector-appropriate but not of relevance to the end-users. For example, with SAIDI and SAIFI taking an aggregated approach, some end-users may be impacted heavily and some not at all, leading to a 'good' aggregated SAIDI/SAIFI. The point here is that any targets should be intelligible to the end-users.
11. In addition to Paragraph 36: it may be worth acknowledging the different behaviours of different types of critical infrastructure entities. As a broad generalisation, it is possible that private companies may require regulation to provide resilience. Some sectors, such as local government, have demonstrated success in considering the 'common good' in providing resilient solutions to some infrastructure initiatives.
12. Paragraph 74.a.i: yes, Central Government releases information on hazards, but probably a greater proportion is provided by Local Government. The issue here is that the quality and geographical coverage of such information is patchy. Further, common analysis methods and return periods (for example) between studies and mappings would provide a greater ability to compare between areas.
13. Paragraph 75.a: we are not clear as to what information Central Government would need to be collecting on infrastructure networks, in order to achieve the desired outputs stated in this discussion document.
14. Paragraph 75.c (mirrored in Paragraph 77.b): we are not clear as to why Central Government would require a real-time view of dependencies and interdependencies. This

could be more detail than is required to achieve the objectives stated in this discussion document.

15. Paragraph 81: we agree with the intent of this paragraph but note that the benefit cost ratio system does not cater well for analysing the benefits of investing in resilience to HIRE events. It would be good to acknowledge this issue in this document.
16. Paragraph 88 (as for the comment for Paragraph 33): as above, many existing standards (e.g., SAIDI/SAIFI) do not produce results that are relevant to the end-users. This may also be worth highlighting in this paragraph.
17. The box above paragraph 94 proposes that price-quality settings be considered. Our view would be that the price-quality settings do enable investment in resilience. However, there may be scope to improve clarity on how this is approached across the regulated entities, what outcomes the regulator is looking for, or how it is reported so there is transparency.
18. Paragraph 95: yes, we agree that the requirements given in this paragraph should be followed, whichever resilience policy route is taken.
19. Following paragraph 98: we suggest that, as the discussions between regulator(s) and critical infrastructure entity (entities) already generally include safety, quality, environment etc., that to include resilience as a subject for discussion would be appropriate and proportionate.
20. Paragraph 109: we agree with the proposals of this paragraph, that greater central co-ordination is required at Central Government level on the resilience of infrastructure.

Thank you again for this opportunity to provide feedback. We are available to discuss this issue, if you think that would be of benefit.

Regards,

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**From:** Peter Carter [DPMC] <[Peter.Carter@dpmc.govt.nz](mailto:Peter.Carter@dpmc.govt.nz)>

**Sent:** Tuesday, June 13, 2023 12:34 PM

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**Subject:** DPMC public consultation on critical infrastructure resilience

[UNCLASSIFIED]

Good afternoon Roger,

I'm touching base as part of the project team looking at critical infrastructure in the National Security Group in DPMC. I understand that Ryan Walsh and Emma Bickerstaff have been in contact at various stages on this project, to enhance the resilience of Aotearoa New Zealand's critical infrastructure system.

DPMC has just gone out for public consultation today on the proposed regulatory reforms following Cabinet's confirmation of this work. Consultation will be open from today until 8 August 2023. Town hall sessions will be held in the main centres and online through July with details available at: <https://consultation.dpmc.govt.nz/national-security-group/critical-infrastructure-phase-1-public-consultation>.

There is also a news article on this work at: <https://www.dpmc.govt.nz/news/lifting-resilience-new-zealands-critical-infrastructure>

I am attaching for you the PDF discussion documents, including both full and summary versions. While NEMA will be reaching out on our behalf to Lifeline Groups, we would very much appreciate you forwarding on this information as appropriate to stakeholders who will be interested.

If you do have any websites or newsletters in which it would be useful to publicise this work during the public consultation period then please let me know and I can provide a short summery.

We are encouraging feedback from stakeholders via written submission but are also be happy to talk directly to your stakeholders if this would be useful.

If you require any further details, either directly to project Ryan, Emma or me on the project team or via our team mailbox.

Ngā mihi nui,

Peter Carter

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