



Thoughts on the Future Direction of Lifelines Engineering:

Making it Relevant

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Key Themes

- **Engineering Lifelines Groups – ‘similar but different’**
 - with the increasing maturity of ELGs, it is time to achieve greater alignment of activities
- **More effective involvement of national utilities is crucial**
 - In both regional ELG activity and at national level
- **Matching the information supply from ELGs (the ‘push’) with the need by Lifeline Utilities (the ‘pull’)**

Some Bigger Picture Developments Over the Past Two Years

- **National exercises ‘Capital Quake’ and ‘Ruaumoko’**
 - The dependence of end users on infrastructure is beginning to sink in!



Some Bigger Picture Developments Over the Past Two Years

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 - The dependence of end users on infrastructure is beginning to sink in!
- **Infrastructure Resilience programme**
 - General view is that government should step up its leadership to move the resilience agenda forward

Engineering Lifelines Groups: Recap on Purpose

- Providing an overarching layer to the risk management by individual organisations
- Focuses on identifying the interdependencies and weak links at a regional level

Engineering Lifelines Groups: Recap on Context

- **Regional scale emergencies involving more than one utility**
- **ELGs are voluntary, collaborative entities – not structured institutions with a mandate and accountabilities**
 - 'by utilities for utilities'
 - 'Educate, Facilitate, Motivate and Advocate'

Engineering Lifelines Groups: Reframe the Objectives

- i.** Engagement amongst Lifeline Utilities, and between Lifeline Utilities and CDEM agencies
- ii.** Sharing of information on hazards, vulnerabilities, risk reduction and response arrangements
- iii.** Helping individual Lifeline Utilities improve their risk management (ability to continue to function)
- iv.** Helping the region reduce its infrastructure vulnerability and improve resilience

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Questions Abound ...

From Engineering Lifelines Groups:

- **Given all that we could do, what should we be focusing on?**
- **Should we have a structured 3 to 5 year work plan?**
- **If so, what would it look like?**
- **What is a good meeting format that we should be following?**

Questions Abound ...

From National Lifeline Utilities:

- **How can we have greater interaction with other utilities in the various regions as part of our operational readiness?**
- **How can the key outcomes of ELG workshops and activities be exchanged more effectively?**

Questions Abound ...

From both Engineering Lifelines Groups
and National Lifeline Utilities:

- Can ELGs work together more effectively on some projects?

Some Tips for ELGs for Making it Relevant

- 1. At meetings/ workshops, maintain a balance of presentations/ information out with general engagement opportunities (cross-talk)**
- 2. Have a 'show and tell' update at least annually on resilience achievements (both mitigation and preparedness) – each utility to give a 3 min verbal summary**

Some Tips for ELGs for Making it Relevant (continued)

- 3. Maintain a balance of activities between risk reduction (mitigation) and readiness for response and recovery (preparedness)**
- 4. Take into account the regular flow of newcomers – revisit presentations by key utilities on their networks and the vulnerabilities**

Some Tips for ELGs for Making it Relevant (continued)

- 5. Involve the Group Controller more!**
- 6. Have meetings in EOCs**
- 7. Involve critical facility end-users more (esp. hospitals)**
 - Part of giving more consideration to the whole 'through chain'

Some Tips for ELGs for Making it Relevant (continued)

- 8. Draw upon projects undertaken by other Groups**
eg. Fuel inventory (West Coast); Generator review (Auckland); Inventory levels (Canterbury)

- 9. Make sure Lifeline Utilities are involved in the forthcoming CDEM Group plan reviews and updates**

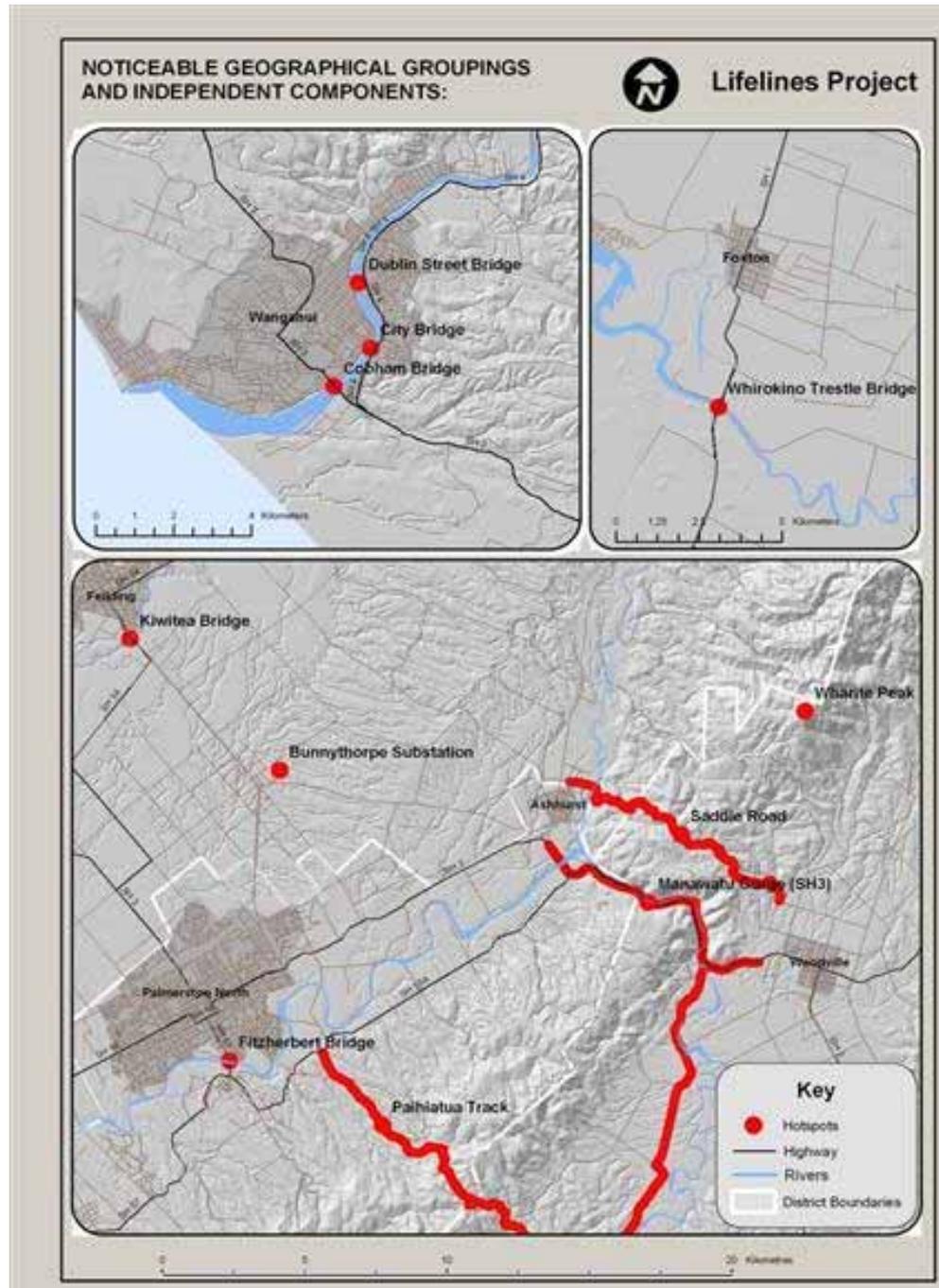
Some Tips for ELGs for Making it Relevant (continued)

- 10. Be realistic in your expectations of input from national utilities**
 - Seek to involve them in key workshops/ development meetings

- 11. Encouragement for newer/ non-metropolitan Lifelines Groups to focus on the networks that link the cities and towns**
 - Establishing the vulnerabilities of the regional linkages provides the platform for subsequent specific work within urban areas

Core Focus: Regional Risk 'Hot-Spots'

Manawatu-Wanganui
Auckland
Wellington
Wairarapa
Marlborough



How the National Engineering Lifelines Co-ordinator Can Help

- **Compile and circulate a quarterly summary of key points from ELG meetings, and relevant national sector meetings**
- **Keep in more active contact with national utilities**
- **Prepare a sample framework of a Workplan (for ELGs that are only nominally funded)**
- **Develop a listing of interdependency examples**

Key Questions for Discussion

- **What information/ inputs/ assistance do Lifeline Utilities need in order to progress their resilience work?**
- **What are some examples of inter-ELG projects with shared objectives and funding?**

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Summary:

Just Keep the Focus on

Making it Relevant!

Relevant to:

- **Providers** – national utilities, local utilities
- **End users** – other infrastructure providers, critical facilities and the community

Key Questions in Identifying Projects

- 1. What do Lifeline Utilities need assistance with in order to progress risk reduction and readiness?**
- 2. What are the region's biggest infrastructure-related risks?**
- 3. Can the ELG collaborative framework make a difference?**
- 4. What are the implementation issues?**

Criteria	Rating		
The <u>number of lifeline utilities (and sectors)</u> that would benefit from the project	Most	Several	1
The number and population of local authorities that would benefit (<u>geographical parameter</u>)	>4	3 to 4	1 to 2
The range of <u>hazard categories</u> that the project would apply to	>3	2 to 3	1
The degree to which the impact of a hazard or risk would be reduced as a result of the application of the project outcomes (<u>level of mitigation</u>)	Significant	?	Slight
The degree to which the <u>time to restore basic and normal levels of service</u> would be reduced as a result of the application of the project outcomes	Significant	?	Slight
The urgency of the issue (and potential for the risk to increase)	High	Med	Low

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