Minister Salesa Speaking Notes at the launch of publication 'Engineering a Better New Zealand' 16 August 2018

Introductory remarks

- Welcome. Mālō e lelei. I'd like to acknowledge the staff and guests of Engineering New Zealand (ENZ). It is a privilege to host like-minded groups at Parliament.
- Thanks in particular to Susan Freeman Greene for the opportunity to speak at the launch of the publication 'Engineering a Better New Zealand'.

About Engineering New Zealand

- I'd also like to acknowledge the thought leadership that we see from ENZ, a professional body which is an essential contributor to my portfolio. ENZ is looking to the future – the engineering related challenges facing New Zealand – and I note that resilience is at the core of every page of this document.
- ENZ is posing the questions that we need to address now to secure a better future a better New Zealand.
- ENZ is not just considering what others should be doing, but looking at what they, as Engineers, can do to make New Zealand better.
- I share ENZ's vision and will work with ENZ toward achieving better outcomes across the Building and Construction industry for the benefit of society.

The document

- The document 'Engineering a Better New Zealand' outlines the engineering vision for a resilient New Zealand and provides seven recommendations on how to get there.
- ENZ have acknowledged that Engineers have a responsibility for driving and delivering much of the change that is needed. The Government also acknowledges our role in driving this change.
- The document takes a detailed look at two critical engineering-related issues facing NZ; seismic resilience and water quality.
- Parts of the document resonated with me personally and I'd like to highlight three key points for you today.
- Firstly, ENZ have highlighted that "Community is at the heart of New Zealand's resilience". It is essential that we understand the social and life safety risks posed by natural hazards so that we can manage these risks and protect the wellbeing of New Zealanders. And that we prepare communities to cope with, and recover from, disasters. Recent events in the Pacific region including here in New Zealand have highlighted the importance of preparedness and how hard it is to recover from a disaster. Disasters often disproportionately affect the most vulnerable in our society. Therefore as we work to enhance community resilience, we must be cognisant of the varied needs of different community groups if we are to meet whole-of-society objectives.

- Secondly, the document highlights that resilience is a "Collective responsibility". Resilience
 can't be achieved when we all act in silos and it won't happen through Government action
 alone.
- Finally, ENZ shares their views of what hinders resilience. When looking to achieve a goal, it's important to understand some of the barriers to achieving this goal. Resilience is hindered when:
 - We don't value resilience
 - o There are perverse incentives for resilience
 - We apply short-term thinking
 - We don't recognise the complexity and the widespread impacts of disasters.

Working together

- Seismic resilience was one of the key issues highlighted by ENZ and it is vitally important in the building and construction sector. The Government and ENZ need to work together to achieve better seismic resilience in the Building and construction sector.
- The Building Code plays a key role in protecting the public by setting minimum acceptable
 risk settings for building work. It is crucial that the infrastructure we create is built
 appropriately for the environment it is in, respecting any natural hazards present and taking
 a long-term view of ensuring community well-being.
- To do this we need to set risk settings that are evidence-based and founded on current engineering knowledge and practice. The settings of the building code are constantly being monitored and refreshed to reflect advances in research and technology.
- In an earthquake-prone country like New Zealand, Engineers have a very important role to play in communicating risk so that it can be appropriately treated by building owners and developers and through regulation.
- An ambitious programme has been established to strengthen existing earthquake-prone buildings under the 2017 legislation, but powerful earthquakes could feasibly strike at any time.
- The national system ensures the way buildings are managed for future earthquakes is consistent and strikes a balance between the following:
 - Protecting people from harm in an earthquake
 - o The costs of strengthening or removing buildings
 - o The impact on New Zealand's built heritage.

New era of risk awareness and resilience

• Following the recent earthquakes in New Zealand in Canterbury and Kaikōura, we are, as a society, entering a new era of enhanced awareness of resilience and risk.

- Our understanding of risk has evolved and we are now thinking more about how we can protect buildings and infrastructure in the long-term, as well as minimising life-safety risks.
- I commend ENZ for encouraging Engineers to develop different approaches to design that focus on enhanced resilience; and for working with MBIE to develop design guidance for low-damage structures.
- I am excited by our progress as a society the city of Wellington is part of the worldwide 100 Resilient Cities network, which acknowledges this wider consideration of resilience and how these 100 global cities are focusing on resilience to the physical, social, and engineering challenges that are a growing part of the 21st century.
- I do not underestimate the difficulty of achieving enhanced resilience. It's a problem that this Government wants to address. And like other big problems, it comes with numerous challenges.
- We acknowledge that the technical competency and professionalism of the engineering community provides a valued contribution to addressing the resilience challenge.

The people involved are vital

- Engineers have an important role in New Zealand and we rely on technical communities to provide sound and sensible advice to the government and the wider public.
- Engineers are vital to achieving the vision ENZ has articulated. The Government will work with ENZ to encourage more young people into engineering careers and to lift the game for professional engineering in New Zealand. The Government and ENZ are looking at Occupational Regulation for Engineers in the Building and construction sector. The long term sustained activity in construction sector and the projections we have that indicate this will continue, has us in a better position to lift skills and professions in the building and construction sector.

Conclusion

 Thank you again to all of you for being here today, and to Engineering New Zealand for inviting me to speak to you.