

Challenges for Earthquake Engineering Practice in Aotearoa New Zealand

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1 ABSTRACT

New Zealand has experienced a decade of increased seismic activity, punctuated by the Christchurch earthquake sequence and the Kaikōura earthquake. There have been many lessons but have the learnings been adopted? In particular, it has been observed that while the life safety objectives of the building code were largely met, the levels of damage and economic impact are considered by many to be excessive.

The recent update to the National Seismic Hazard model is in the process being incorporated into the building code. This presents an ideal opportunity to embark a step change in thinking about how seismic risk is managed.

This paper will explore some of the learnings from the earthquakes. It will present and discuss recent initiatives in engineering practice that address some of the learnings and explore some of the potential changes in practice that may be implemented in the decade to come. Consideration will be given both to the design processes that may be employed and the practicalities of implementation in the wider industry.