

House of Representatives

Supplementary Order Paper

Tuesday, 8 March 2016

Building (Earthquake-prone Buildings) Amendment Bill

Proposed amendments

David Seymour, in Committee, to move the following amendments:

Clause 6

In *clause 6*, after the *definition of earthquake-prone building* (page 7, after line 10), insert:

earthquake life risk rating has the meaning given in **section 133ABC**

Clause 7

In *clause 7*, after *new section 11(ia)* (page 8, after line 24), insert:

(ib) sets a methodology for determining the earthquake life risk rating of certain earthquake-prone buildings; and

Clause 23

In *clause 23*, after *new section 133ABB* (page 13, after line 35), insert:

133ABC Meaning of earthquake life risk rating

- (1) In this Act, **earthquake life risk rating** in relation to a building or a part of a building means the probability during a 1-year period of a person being killed by the collapse of the building or part of it because of a moderate earthquake as defined for the purposes of **section 133AB**.
- (2) The probability shall be expressed as a fraction in which the numerator is 1 and the denominator is the year divisor.

Example

An earthquake life risk rating of 1/100,000 means that the building has been assessed, taking account of its state, uses, and location, as offer-

ing in any year a 1 in 100,000 chance of causing the death of a person in a moderate earthquake.

- (3) The earthquake life risk rating of a building must be determined when required under **section 133ASA(3)** to the satisfaction of the territorial authority in whose district the building is situated in accordance with the methodology set under **section 133AZAA** and the requirements in **section 133AS**.
- (4) A building or part of a building is deemed to have a low earthquake life risk if that methodology gives a rating less than a level set for this purpose from time to time under **section 132AZAA**.

In *clause 23*, after *new section 133AL(2)(c)* (page 27, after line 32), insert “; and”, and also insert:

- (d) in relation to a building in respect of which an exemption applies under **section 133ASA** (low earthquake life risk rating) that is withdrawn (and not replaced) 5 years from the date of that withdrawal.

In *clause 23*, after *new section 133AS* (page 29, after line 13), insert:

133ASA Owner may apply for exemption if building has low earthquake life risk rating

- (1) The owner of a building or a part of a building that is subject to an EPB notice that the owner believes qualifies for a low earthquake life risk rating may apply to a territorial authority for an exemption from the requirement to carry out seismic work on the building or part of the building.
- (2) An application must be in writing and must be accompanied by any fee imposed by the territorial authority under section 219.
- (3) The territorial authority must deal with the application promptly, by doing one of the following:
 - (a) if the territorial authority is satisfied that the building or the part of the building does qualify for a low earthquake life risk rating,—
 - (i) granting the exemption and issuing an EPB exemption notice; and
 - (ii) recording the details of the exemption in the EPB register and updating other information in the EPB register as necessary; or
 - (b) notifying the owner in writing that the authority is not satisfied that the building qualifies, and that the exemption has not been granted.

- (4) An EPB exemption notice under this section must indicate that it may cease to apply if there is a material change in circumstances that would be likely to result in the building ceasing to qualify for a low earthquake life risk rating.
- (5) An owner of a building that is exempt under this section must inform the territorial authority promptly upon becoming aware of circumstances likely to mean that the building is likely to cease to qualify for a low earthquake risk rating.
- (6) In all other respects an EPB notice of exemption under this section has the effects and is subject to the conditions and consequences of an EPB notice of exemption issued under **section 133AS**, and that section and others that refer to it shall apply accordingly.

In clause 23, after new section 133AZ (page 38, after line 4), insert:

133AZAA Chief executive must set methodology for rating buildings for earthquake life safety risk

- (1) The chief executive must set a methodology for calculating the earthquake life risk rating of an EPB building.
- (2) The methodology must estimate the probability of injury or death referred to in **section 133AB** from building damage because of a moderate earthquake, taking into account:
 - (a) the seismic capacity of the building; and
 - (b) construction characteristics that increase and decrease the safety risk in the event of earthquake damage; and
 - (c) the current and expected occupancy of the building including numbers and the frequency and duration of occupancy); and
 - (d) arrangements likely in practice to limit the risk that the foregoing conditions might change to affect adversely the earthquake life risk; and
 - (e) the seismic risk characteristics of the area in which the building is located; and
 - (f) its location in relation to other buildings or building types; and
 - (g) any other characteristics of the building or part of the building that may be relevant.
- (3) The probability shall be expressed as a fraction in which the numerator is 1 and the denominator is the appropriate divisor.

Example

An earthquake life risk rating of 1/100,000 means that the building has been estimated to offer in any year period, taking account of its state,

likely uses, and location, a 1 in 100,000 chance of causing the death of a person in a moderate earthquake.

- (4) The chief executive must also prescribe a threshold point below which the building is deemed to present a low earthquake life risk, and the fixing of that point in the rating range should be directed to—
- (a) minimise the risks that **this subpart** causes irrational expenditure and a focus of regulatory, social, and private investment on earthquake strengthening, disproportionate to other health and safety activities with greater health and safety benefits; and
 - (b) ensuring that work on buildings to reduce earthquake life safety risks is prioritised to maximise safety improvements without wasted cost; and
 - (c) avoiding the costs to communities of unnecessary abandonment or loss of heritage and other community and commercial buildings for which strengthening or replacement work is uneconomic and unlikely, if they have low earthquake life risk ratings; and
 - (d) ensuring that a cost benefit analysis of the proposed methodology is carried out.
- (5) The chief executive must ensure that descriptions and explanations of the prescribed threshold point for low earthquake life risk (including in any exemption notice) assist building owners and users—
- (a) to compare the risks of using buildings with low earthquake life risk ratings with the life safety risks of other activities commonly faced and accepted in ordinary life such as and including using New Zealand roads; and
 - (b) to understand that it does not affirm the safety of the building if an earthquake occurs, but instead reflects matters such as the relative likelihood of a damaging earthquake, numbers of occupants, and how much time they spend in the building.
- (6) Before the methodology and the proposed low risk threshold point are released for consultation the chief executive must ensure that—
- (a) they are assessed by a recognised expert in the field of seismic engineering risk with international recognition; and
 - (b) international benchmarks for this type of risk metric are considered, including, but not limited to, the Annual Individual Fatality Risk; and
 - (c) cost benefit analysis is carried out and the results are reflected in the methodology.

- (7) The chief executive must set the methodology and prescribed threshold for low earthquake life risk no later than 1 year after the commencement of this section.
- (8) The methodology may incorporate material by reference in accordance with **sections 405** to 413.
- (9) The chief executive may amend or replace the methodology and the prescribed threshold at any time.
- (10) If the chief executive amends or replaces the methodology or the threshold, **sections 133AZA and 133AZB** apply in respect of the amendment or replacement with any necessary modifications.
- (11) **Sections 133AZA to 133AZC** shall apply as the context permits to the methodology and threshold required under this section as if they were included in references to the EPB methodology.

New clauses 36A and 36B

After *clause 36* (page 44, after line 15), insert:

36A Section 388 amended (Strict liability and defences)

After section 388(2), insert:

- (3) In relation to a building with a low earthquake life risk rating the defence in subsection (2)(b) must not be denied because of the foreseeability of damage in an earthquake and the possibility of provision against the consequences by the defendant, and the rating shall be prima facie evidence that relying on an exemption was reasonable in the absence of extraordinary reasons to the contrary.

36B New section 392A inserted (Presumption of reasonableness in relation to buildings with low earthquake life risk rating)

After section 392, insert:

392A Presumption of reasonableness in relation to buildings with low earthquake life risk rating

In any civil proceedings against any person referred to in sections 390 to 392 inclusive, or any building owner or employee or agent of an owner, in respect of any loss or damage arising out of or in connection with injury or loss of life because of earthquake damage to a building that had at the relevant time a low earthquake life risk rating, the factors that qualified the building for that rating shall be prima facie evidence that the defendants acted reasonably in granting any exemption under **section 133ASA** and in relying on it at the relevant time as the case may be.

Explanatory note

This Supplementary Order Paper amends the Building (Earthquake-prone Buildings) Bill provisions to address a serious gap identified by GNS Science and other reputable professional experts in earthquake risk assessment and management. They pointed out that unless territorial authorities could go further than merely assessing the risk of collapse, even after using the new power to distinguish high, low, and medium seismicity areas, the new regime would force councils to order a vast waste of resources. It could force abandonment of much-loved heritage and other buildings that were highly unlikely to injure anyone. It would waste investment that could save far more lives if put into productive capital that would ultimately contribute more to health and safety capacity. They drew the comparison with investment in safer transport and other socially valuable works.

GNS Science urged that council and the Ministry of Business, Innovation and Employment decision making be informed by adding to the criteria a life safety risk assessment. Submitters pointed out that it was not metrics that failed to take into account the numbers of people exposed to a building and the time spent in it. For example an historic church may have fewer than 20 people in it for a couple of times per week, for a couple of hours each time. The life safety risk represented by that church to its community would be a small fraction of the risk if the congregation took up bicycling in the time they would otherwise be in the church. Yet the owners, and the local council, will be liable for very large and continuing fines if they fail to find and spend resources on the building. For many buildings, the outcome will be demolition without replacement.

Accordingly this Supplementary Order Paper enables a territorial authority to rely on a disciplined earthquake life risk rating to exempt low life risk rated buildings and their owners from strengthening obligations. That will protect against an irrational waste of resources in life safety terms, for as long as the intensity of use of the building presents low life safety risks.

The Supplementary Order Paper provisions require the chief executive to promulgate a methodology to rate a building's life safety risk, when needed at the application of an owner, and to prescribe the point at which a rating would classify a building as presenting a low life safety risk.

The additional methodology does not weaken or change the Bill's provisions for identifying earthquake prone buildings, or the seismicity of a locality, and the requirement for expert reports. Nor does it remove the ability for people to know the status of a building in comparison with new building standards, including by having notices posted on the building.

The Supplementary Order Paper provides—

- a new definition for earthquake life risk rating:
- a requirement to promulgate an earthquake life safety risk rating methodology within 1 year of the commencement of *subpart 6A* (the EPB methodologies must be available within 1 month of commencement under the Bill):

- that the new life safety risk methodology be expressed and explained in terms that compare the risks to commonly understood and accepted risks so that ordinary people can assess its significance. For example, an individual's life safety risk in use of New Zealand roads may be around 1 death per 10,000 years of use. To qualify for a low earthquake life risk rating could start at around 1 death per 100,000 years of occupancy:
- for consultation and professional quality vetting and cost benefit analysis in setting the methodology:
- for a territorial authority to exempt a low earthquake life risk building from irrational strengthening work, on application by the owner:
- for keeping details of exemptions on a public register in the same way as the existing exemption provision:
- for notices on the building to explain the reasons for the exemption without implying that the building is stronger than it is:
- for withdrawal of an exemption if changed circumstances necessitate fresh assessment (for example, substantial intensification of use):
- protections from both criminal and civil liability in relation to low earthquake life risk buildings by a prima facie presumption that reasonable care does not oblige officials or owners to require strengthening or other steps that would be irrational, as evidenced by the standard established for qualification as low risk. The chief executive and consultants, employees, councillors, and officers of councils appear to be protected under existing provisions in relation to setting the methodology and exercising the exemption powers (except in cases of bad faith).