



Submission to the

Canterbury Earthquakes Royal Commission

on

Discussion Paper: Roles and Responsibilities

15 August 2012

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15 August 2012

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Dear Sir / Madam

Discussion Paper: Roles and Responsibilities

BACKGROUND TO CCANZ

The Cement and Concrete Association of New Zealand (CCANZ) represents a membership in excess of 300 corporates and individuals who collectively account for a significant proportion of the building and construction sector in New Zealand.

The cement and concrete industry annually produces and uses about 1.2 million tonnes of cement in New Zealand, which equates to around 3.3 million cubic metres of concrete for new residential, non-residential and commercial construction.

In total, the direct, indirect and induced economic impact of the cement and concrete industry resulted in close to \$7.5 billion of output across the economy in the year to March 2006. This activity supported more than 24,000 jobs and created a value add of about \$2.8 billion – around 2 percent of New Zealand's GDP in 2006.

In line with our mandate as representative of the cement and concrete industry, CCANZ has prepared the following responses to the *Discussion Paper: Roles and Responsibilities*.

COMMENTS

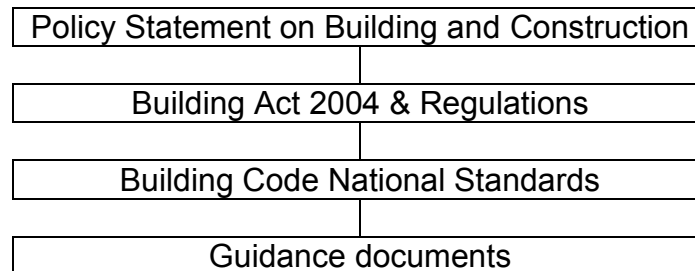
In response to the *Discussion Paper: Roles and Responsibilities* CCANZ has grouped its comments under the following three broad headings:

1. National Policy Statement
2. Standards Development
3. Education and Training

NATIONAL POLICY STATEMENT

CCANZ believes that the building and construction industry would benefit from a national policy statement, as this would provide a clear direction from government on the aims/objectives of the building and construction sector across New Zealand - (section 3.1.3, page 12, questions 1 and 2):

In alignment with the New Zealand Construction Industry Council (NZCIC) CCANZ supports the unambiguous regulatory hierarchy below, which includes what is effectively a national policy statement.



Such a hierarchy would go some way to ensuring clarity around how the Building Act 2004, NZ Standards, Building Code and guidance documents relate to one another. This would facilitate greater regularity, confidence and transparency. In particular, professional bodies could develop relevant education and training resources with more confidence.

STANDARDS DEVELOPMENT

As both a general comment and in relation to the building failures caused by earthquakes focus of the *Roles and Responsibilities* discussion paper, CCANZ believes that the current Standards model has many attributes, but that it is stymied by an incoherent and inequitable funding mechanism - (section 4.2, page 19, questions 1 & 2, and section 4.4, page 22, questions 1, 2, 3, 4 & 5):

How National New Zealand Standards Are Used

National New Zealand Standards are a vital element in the concrete design and construction sector. They guide best practice, define performance parameters and are a means of compliance through the nexus of the construction related regulatory framework (Building Act and Building Code).

Most Valuable Features of the National Standards Development Process

- The current system is consensus based. It is open and transparent, involves many stakeholders including the appropriate regulator. Furthermore, vested interests are managed.
- Input is sought from a wide range of interested stakeholders and draws on expertise from practitioners.

- There is a formal public consultation process and all feedback is considered. This is not necessarily the case when the regulator consults.
- The concrete industry contributes directly in the development process through funding and considerable 'in-kind' resource.
- The process separates regulation from practice.
- The system is relatively efficient in terms of the time to publication.
- From a concrete industry perspective, the Cement and Concrete Industry Action Group (CCIAG) is a Standards New Zealand (SNZ) mechanism to regularly review, prioritises and update the portfolio of cement and concrete related standards.

Use of International Standards and the Extent to Which Specific New Zealand Standards Are Needed

New Zealand typically uses International Standards where they are applicable and relevant. There are often however reasons why the adoption of International Standards is simply not feasible in a New Zealand context.

A case in point with construction related Standards is the specific seismic and climatic conditions encountered in New Zealand.

Even if an International Standard were adopted, in many instances a New Zealand Annex would have to be developed to put the Standard in a New Zealand context.

Members of CCANZ tend to use International Standards where no New Zealand or joint AS/NZS is available. In reviewing the need for a New Zealand Standard, the Standards process does facilitate consideration of alternatives. For example, CCANZ understands that through the CCIAG it was decided to adopt the Australian Standard for concrete admixtures (AS1478.1:2000) which superseded the New Zealand Standard, NZS 3113.

Issues in Using New Zealand Standards and in the Development Process

Using Standards

The key issue in using Standards is access. Under the current funding model, SNZ has to charge for Standards which in turn is an impediment to those users expected to comply with those Standards. Levies could be introduced to enable Standards to be more accessible and this could be from the Building Levy in terms of building construction.

The Standards Development Process

Under the current model, Standards are largely funded by industry, through direct investment and the 'in-kind' provision of expert input.

In the construction sector the regulator has invested in what it considers to be the more important Standards. However, this leaves the cement and concrete industry to fund twenty or more standards which are cited by those Standards which the

regulator has invested in. This means that there are a number of ageing Standards which require review.

Another flawed aspect of the development process is the citing of the Standard by the regulator. There is often a time lag from the completion of the Standard to the citing of the Standard in regulations, even where the regulator has participated in the Standard development.

Retain Standards New Zealand

CCANZ believes that it is inappropriate for regulators to develop technical documents with regulatory force as an alternative to citing New Zealand Standards in regulation. The regulator is unlikely to have the diverse areas of expertise which are leveraged through the Standards process, nor will a regulatory technical document have been subject to the same rigorous consultation process. Government agencies should therefore look to SNZ to develop Standards on their behalf.

Funding Model Amendment

CCANZ believes that the current Standards Council Model is not sustainable. The current imbalance in terms of funding could be addressed through a range of funding mechanisms that enable Standards to be reviewed regularly and updated as required. Such mechanisms could include a portion of the Building Levy and industry purchasing of Standards. However, funding should not rely exclusively on the latter.

Furthermore, mention has already been made in this Submission that industry contributes much in the way of indirect costs to the Standards development process. Industry employers may not see Standards development as a high priority, particularly where it consumes significant resource in terms of unfunded employee time.

TRAINING AND EDUCATION

CCANZ believes the role of professional societies includes fostering collaboration between disciplines. While the context for this submission is specifically focused on building failure caused by earthquakes, the rationale below applies to most facets of the building and construction industry - (*section 3.1.3, page 12, question 6 and section 4.3, page 21, question 2*):

1. While the education and training of engineers highlights the role of complementary technical disciplines there is little or no opportunity for students to interact in a cross-discipline fashion with others in the value chain such as architects, urban planners etc.
2. Learned societies are often in contact discussing issues of relevance as indicated by their members. In an extension of the theme highlighted above, the interactions are typically strongest with societies representing technical disciplines close to each other. Suitable forums to engage with complementary disciplines are difficult to initiate and sustain.

The end result becomes one of work-place learning and interaction. Given the nature of construction projects and the inevitable cost pressures brought to bear on all parties involved, these interactions can become adversarial.

CCANZ has identified this as a situation that can be improved and has instituted a programme of events designed to promote context and understanding amongst all parties in the value chain. A subset of these events is specifically targeted at senior under-graduates about to enter the workforce and introduces the CCANZ early-career support programme.

The first pilot 'proof of concept' workshop was held in July 2012 involving Structural Engineers and Architects from Canterbury and VUW. Each engineer was partnered with an architect and given a broad design brief requiring the incorporation of (in this case) state-of-the-art earthquake engineering requirements and the cultural needs of a Wellington CBD development. The project work was complemented by discussion and field trips by practicing engineers and architects involved in local projects of high standing. The feedback from the participants was very positive and highlighted how this type of interaction is not a standard part of the curricula for either discipline.

CCANZ believes that there is a role for learned societies and associations to facilitate events of this nature. Furthermore, professional bodies and associations are the appropriate vendor for these initiatives as they promote better work practices and not detailed expert knowledge as would be expected in a tertiary course. In addition, events such as these are an ideal forum for engagement between associated industry associations and to promote cross-discipline networking of senior career professionals. Furthermore, we believe the programme design can be adapted to foster specific skill building activities such as seismic engineering training as specifically mentioned in the discussion paper (*section 4.3, page 21, question 2*) as part of a typical Continuing Professional Development programme.

Should clarification or further information be required in relation to any points raised in this submission please feel free to contact CCANZ.

We thank you again for this opportunity to comment on the document.

Yours faithfully



Rob Gaimster
CHIEF EXECUTIVE OFFICER