

31 October 2014

Submission to: Ministry Business, Innovation and Employment
Proposals to change occupational regulation of engineers in New Zealand

Submitted to: EngineersConsultation@mbie.govt.nz

To Whom It May Concern:

**RE: PROPOSALS TO CHANGE THE OCCUPATIONAL REGULATION OF
ENGINEERS IN NEW ZEALAND**

1. The New Zealand Institute of Architects (NZIA) welcomes the opportunity to make a submission on the *"Proposals to change the occupational regulation of engineers in New Zealand"*. Given the issues raised in the proposal both the NZIA and the New Zealand Registered Architects Board (NZRAB) have each made a submission.
2. The NZIA considers the proposed changes to be significant for the construction industry and for improved public assurance. Whilst much of the proposal is supported by the NZIA, the Institute would strongly argue that the reforms should seek similar outcomes across all "design professionals" (engineers, architects and design licensed building practitioner) – otherwise the public assurance and other benefits will be limited. We have taken the opportunity to detail how the registered architects registration authority model could be applied to the design LBP's.
3. The NZIA, which was founded in 1905, is the professional body that represents more than 90 per cent of New Zealand's registered Architects, as well as hundreds of architecture graduates and students. The Institute promotes high standards of building design and professional performance. It produces material essential to architects' practice, operates design and technical programmes to educate its members, and runs a rigorous, peer-reviewed awards programme that sets the benchmark for New Zealand architecture. The Institute seeks to collaborate with central and local government, other professional organisations and the wider construction industry.
4. Whilst the Institute is supportive of many of the proposals included in the discussion document, we would strongly encourage the Government to consider the following:

5. **recognising the ‘design’ relationship between the engineer and architect** – the Institute of Architects would strongly argue that the revised regulatory regime outcomes¹ is equally applicable to architects as it is to all engineers chartered registered under the *Chartered Professional Engineers of New Zealand Act 2002*. This position was advocated by the Institute in a recent letter to the Hon. Nick Smith, (22 July 2014), *Protecting the public from future risks*.
6. The findings of the *Canterbury Earthquakes Royal Commission of Inquiry* supports this position, by specifically recommending (in recommendations 163 and 185):

“163 *A structural Chartered Professional Engineer should be engaged at the same time as the architect for the design of a complex building.*

185 *The Institution of Professional Engineers New Zealand, the New Zealand Institute of Architects, and the New Zealand Registered Architects Board, supported by the Ministry of Business, Innovation and Employment, should work together to ensure greater collaboration and information sharing between architects and structural engineers.”²*
7. Like chartered professional engineers, the title of “Architect” is protected under the *Registered Architects Act 2005*, which is managed by the statutory entity, New Zealand Registered Architects Board (NZRAB). As such the proposals could be implemented for both Registration Authorities.
8. Architecture is one of the most influential professions in our society. The profession of architecture involves everything that influences the way in which the built environment is planned, designed, made, used and maintained. With the lessons of the Canterbury Royal Commission of Inquiry well documented, the Institute would strongly encourage the Government to include within the proposals recognition of the restricted class of proven competence of both the chartered professional engineer and the registered architect.
9. Currently a mixed model operates across the Registration Authority’s being the Registered Architects Board and Design, Licensed Building Practitioner Scheme. Both a Registered Architect and Licensed Building Practitioner, Design Licence Area of Practice 3, (LBP, Design 3) can work on complex buildings despite differing levels of public assurance in their registration and ongoing competence reviews.
10. The Registered Architect registration authority assurance is stronger than the LBP scheme through a combination of continuing professional development, initial and continuing registration requirements and code of ethics. Currently, a Design LBP can design any category of building, but must only undertake the work they are competent to do, and recognise when other skills or supervision is required. For the Design LBP, there is no Code of Ethics and the learning activities (1 point for 1 hour) requirement lacks rigour for complex buildings, particularly on what qualifies for learning points.

¹ “A regime that contributes to: ensuring that buildings are safe; removing unnecessary cost and delays from the building performance system; and improving construction sector productivity”.

² Canterbury Earthquakes Royal Commission (2012). *Final report, volume 5, summary and recommendations in volumes 5-7 Christchurch, the city and approach to this inquiry*. Canterbury Earthquakes Royal Commission, Christchurch.

For registered architects there is a code of ethics and an independent assessment of learning outcomes and points allocation for continuing professional development.

11. The Institute would argue that the Registered Architect assurance mechanisms are on par with the CPEng requirements. Given the interrelationship between engineers and architects, it would be prudent to include both CPEng engineers and Registered Architects as the professionals of appropriate skill and competence to work on commercial and/or multi-storey/multi-unit residential development.
12. The Institute is concerned that a proposal that only recognises the chartered professional engineer does not acknowledge the critical interrelationship of engineers and architects in buildings and their overall public safety. The New Zealand public needs assurance and confidence in the professions involved in commercial and multi-unit/multi-storey residential buildings complex building work, which are both Chartered Professional Engineer (CPEng) and Registered Architects. In addition to providing public confidence by restricting the class of proven competence in both engineering and architecture, the Government would also be providing a level of certainty in the construction industry (e.g. building owner, tenant, insurer, etc.).
13. The “greater assurance” proposed by the proposals for the public is also needed around the design professionals (registered architect and licensed building practitioner - design). Each of the bullet point tests on page 14 of the proposal document is equally valid for these design professionals.

“Greater assurance is needed:

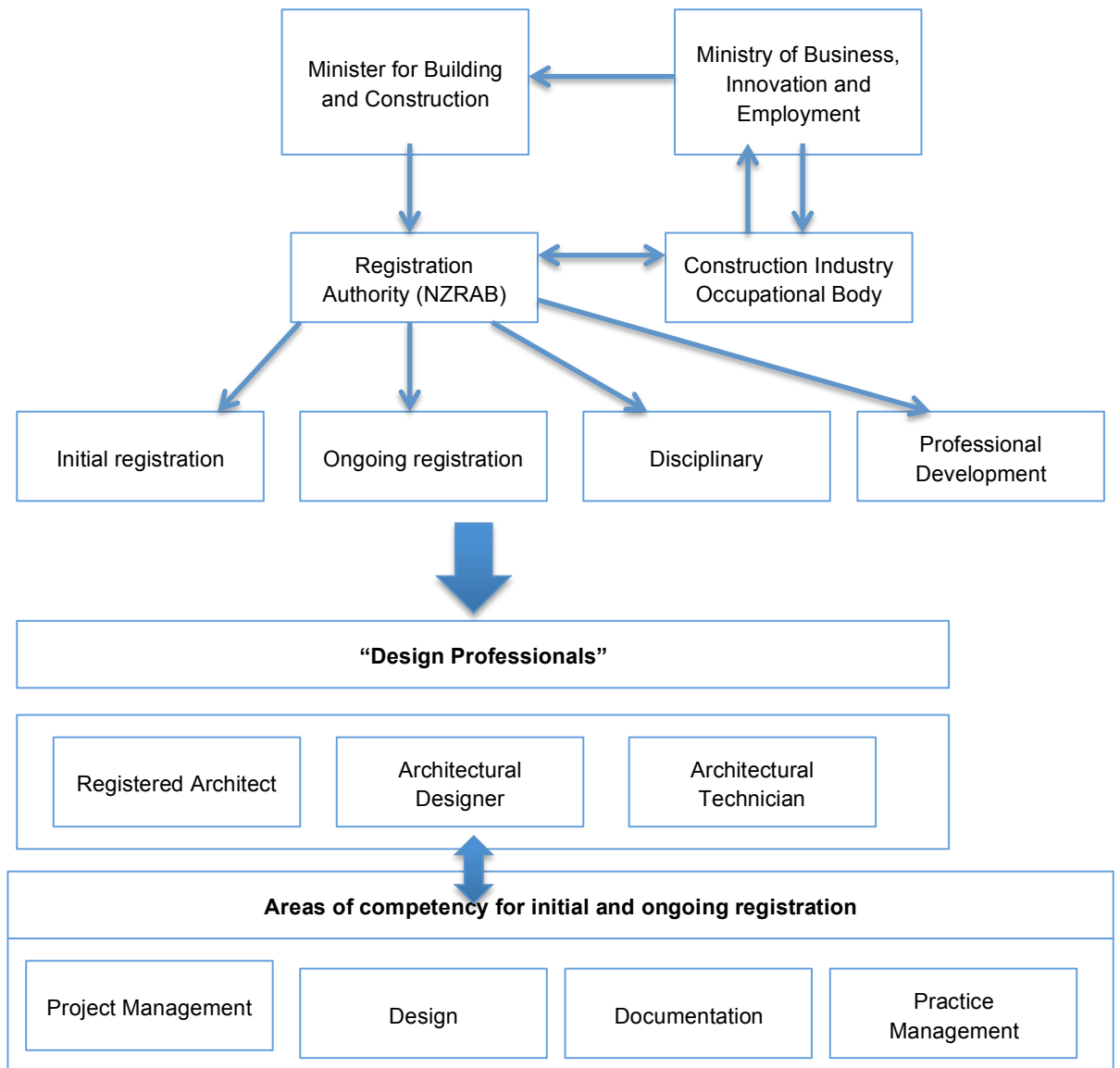
 - *that the design professional who design commercial or multi-unit/multi-storey residential buildings are competent;*
 - *that design professional will be held to account for any sub-standard work;*
 - *that the Registered Architect title can be relied upon to identify who is a competent design professional;*
 - *that the Registration Authority role is being performed in ways which serve the interests of the public while also supporting the profession; and*
 - *that the regulatory system for design professionals is proportional”.*
14. The Institute would strongly encourage the Government to create a single unified Registration Authority for design professionals (i.e. registered architects and licensed building practitioners – design). As previously stated, the Registered Architects Act and the NZRAB as the Registration Authority provide the appropriate and rigorous system of assurance of the initial and continuing registration of architects; the architects competence; and quality of work. The LBP, Design scheme does not offer the same assurance outcomes despite being able to work on the same building types proposed to be restricted to CPEng.
15. Both the NZIA and NZRAB would welcome the opportunity to discuss with the Minister (Hon. Nick Smith) the establishment of a unified design professional registration authority based on the NZRAB model.
16. Under this approach, Registered Architects and CPEng engineers would be the professional competencies required for commercial and/or multi-storey/multi-unit residential developments.

17. The Institute considers that a unified design registration authority could seamlessly work with the proposed Construction Industry Occupation Body.
18. **clarification of the “review” role** – it is unclear in Issue #1 how the mandatory registration as a CPEng for those engineers who review and certify work would work in practice. What would this review cover? How would it work with risk-based consenting, which introduces new obligations around quality assurance and changes to construction monitoring?
19. For example, Producer statements have no statutory status under the *Building Act 2004*. Nevertheless, they remain in widespread use today and are used for design and construction purposes to assist building consent authorities (BCAs) to establish compliance with the *Building Code* and the *Building Act*. As they have no statutory or formal status, accepting producer statements is discretionary for BCAs. Would a Producer Statement be covered under the review role?
20. Similarly, would the proposed review role, cover both the peer review brief and peer review roles that are agreed by the building consent authority? These “review” processes have different expectations and approval processes, for example, a peer review brief outlines the expectations and minimum requirements that will be used by the Council to benchmark, evaluate and approve the proposed alternative solution or specific design whereas a peer review is used to assess whether the design complies with relevant regulations, consent requirements and legislation.
21. **introduction of consumer/user participation** - the Institute does not support the proposal to introduce consumer/users in the making of professional rules and in setting of competence and ethical standards. The Institute believes that an appropriate alternative would be for the Construction Industry Occupational Body to establish an Advisory Group, which would be supported by the Ministry of Business, Innovation and Employment (MBIE). The purpose of this Advisory group would be to gather and collate consumer/public insights into the professional practices and expectations of engineers. These perceptions would be balanced with evidence provided from reviews of operating standards and practices, disciplinary findings and best practice.
22. **ensuring engineers are fit to practice** – should be a fundamental purpose of both the Registration Authority and the proposed Construction Industry Occupational Body. Both of these bodies should protect the public and ensure that the engineer is fit to practise within three broad areas – conduct (the professional behaviour of the engineer); competence (the engineer’s application of knowledge and skill) and health (the engineer’s own physical and mental well-being). Similar expectations currently apply for doctors and lawyers and given the significance of the public safety and assurance being sought, a similar outcome should be implemented for engineers and could equally be implemented for registered architects.
23. **notify BCA’s of observed breaches of building consent and or Building Code** – whilst the background to this issue is understood, clear guidance, confidentiality and rigour will be needed to ensure efficient and effective implementation.

The Institute would encourage the Government to clarify the legal liability implications on engineers for engaging in this proposed process. The Institute is of the opinion that engineers should not be legally liable for any statements made so long as they have acted in good faith and with reasonable care. This position on legal liability operates currently for doctors.

24. **Registration Authority to publish more detailed information** – the Institute supports greater transparency and public information on the professional and their competency level. Whilst there are public assurance benefits in making this information available, such information is essential if the risk-based consenting provisions (*Building Amendment Bill No.3*) are to be successfully enacted, with supporting regulations.
25. Several of the Institute’s members are currently involved in the risk-based commercial consenting pilot with Christchurch City Council. The Institute is supportive of this trial and believes that there can be significant improvements in process and practice for engineers and architects. Many of these improvements will require updates to the public register of professionals and their competence levels and to the consistent and equitable application of the information to projects by territorial local authorities. Again, a unified registration authority for design professionals (registered architects and LBP – Design) would be desirable, if based on the NZRAB model.
26. As identified by the Institute’s members, a key aspect of the risk-based assessment methodology is an assessment of both the professional and Practice risk for the nominated project. At this time, neither the Registration Authority (engineer or architect) has the powers to evaluate Practice based registrations. The Institute considers this information important to the future consistent implementation of the risk-based consenting methodology. The Institute would welcome the opportunity to work closely with MBIE and Christchurch City Council in the evaluation of the pilot projects and development of draft regulatory provisions.
27. **tiered qualification systems within CPEng** – the Institute supports the introduction of this system, which matches a practitioner’s qualifications and experience to the type of design and/or supervision work that can be undertaken. Again, the Institute would argue that a tiered qualification is also required for design professionals to recognise only Registered Architects role in commercial and multi-unit/multi-storey residential buildings and their integral design relationship with engineers.
28. A tiered system would require a unified design registration authority, assessment of competence, registration, code of ethics and disciplinary procedures. A schematic of a unified design registration authority based on the NZRAB model, shown on the next page.
29. **Registration Authority functions** – the Institute would encourage the Government and officials to develop a simple, robust and consistent definition of “less serious complaints”. The definition will be important to the roles and responsibilities of the Registration Authority and the new body created under this proposal.

30. **Construction Industry Occupational body** – the Institute would encourage the Government to appoint a diverse range of skills and interests to this body (i.e. construction, legal, engineering, design, educators, etc.).
31. **New powers to obtain design and construction information** – the Institute would suggest that this power be broadened to include both the territorial local authority (TLA) and the engineer. Much of the information will be available from the TLA who would have issued consent, required a peer review brief and/or accepted a peer review. It will be important that MBIE provides clear guidance to the professional on how and what this new power will be used for.



Suggested unified design professional registration authority – under NZRAB model

32. **risk-based consenting, Building Amendment Act No.3, 2012** - the Institute and its members are working collaboratively with MBIE and Christchurch City Council on the commercial projects trial. Much is to be learnt from this trial and the Institute would welcome the opportunity to work closely with MBIE on operative provisions, practices, client and professional education.
33. It is important to note that the risk-based assessment is both an evaluation of the individual and the Practice. As identified in paragraph 26, such information is needed from the Registration Authority.
34. The 'risk assessment' methodology will require significant education of clients, insurers, design professionals (engineers and architects) and building consent authorities. To enable a complete risk assessment to be prepared, the Client will need to have engaged its design and construction team at project commencement. Currently, design teams are often engaged, develop the design, secure consent and then the contractors/builders are engaged. Risk-based consenting requires a different project establishment process, which leads to a change in professional fee structures and potentially new project roles (e.g. Coordinating Professional).
35. **focus on structural integrity** – The Institute appreciates the importance of the structural integrity of buildings but as identified earlier in this submission, complex multi-unit residential and commercial buildings require the design inputs of both the engineer and architect. Recent experiences (Cook Strait and Seddon earthquakes) have shown that non-structural items can potentially cause death and/or serious harm and the “safety” of a building whilst including the structure, also involves, fire systems, access/egress, sanitation, etc.
36. **disciplinary process for non-serious breaches of the Act** – the Institute supports and welcomes the proposal to allow options such as mentoring and/or practitioner assistance or education in cases of non-serious breaches.
37. The Institute appreciates the opportunity to make this submission and looks forward to continued engagement as the proposal develops.
38. As identified in this submission, the regulatory system improvements required, needs to recognise the interrelationships between engineers and architects in commercial and multi-unit/multi-storey residential buildings. This interrelationship is acknowledged by the Canterbury Earthquakes Royal Commission and is integral to the successful implementation of risk-based consenting. Changes to Chartered Professional Engineer which align competency and type of project, should also be implemented for Registered Architects, through a unified registration of competency for design professionals (i.e. Registered Architect, Licensed Building Practitioner – Design)

39. The Institute would be happy to discuss the submission further. Please contact:
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Kind regards

A handwritten signature in blue ink that reads "Teena Hale Pennington". The signature is written in a cursive style with a large initial 'T'.

Teena Hale Pennington
Chief Executive

Cc.

*Chair, Deputy Chair and Chief Executive, New Zealand Registered Architect's Board
Chief Executive and Professional Services Manager, IPENZ
Chief Architect, Manager Engineering, Design and Science, Ministry Business, Innovation and
Employment*