

MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT HĪKINA WHAKATUTUKI

Proposals to change the

occupational regulation of

engineers in New Zealand

Proposals document

September 2014

New Zealand Government

Proposals to change the occupational regulation of professional engineers in New Zealand

Proposals document

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Minister's Foreword

The Canterbury earthquakes have been a harsh reminder of how dependent society is on the quality and professionalism of engineering. This paper is about reforming the way professional engineers are regulated to ensure they have the right skills and knowledge for the work they do, and that we improve the public accountability of engineers where they do not match up to accepted professional standards.

New Zealand can be proud of the engineering advances we have made over the past 80 years in improving the safety of buildings during seismic events. The 1931 Napier earthquake killed 256 people or about 1% of residents. The 2011 Christchurch earthquake was of similar severity and killed 185 people or 0.05% of residents. This 95% improvement in survivability is largely due to the developments in engineering to design and build structures that are resistant to earthquakes.

The tragedy of the Christchurch earthquakes is that some notable buildings failed, not due to a lack of knowledge at the time they were built, but because the standards of the day were not applied.

These proposals for reforming the regulating of engineers are based on the thorough examination by the Royal Commission of Inquiry into the Canterbury Earthquakes. There are four major proposals in this paper.

Firstly, we need to ensure people designing buildings have the right knowledge, skills and competence. We are proposing a legal requirement for suitably qualified and experienced engineers for designing significant buildings.

Secondly, we need a robust system to properly hold engineers to account when their work is sub-standard.

Thirdly, we need greater rigour in the assessment of chartered professional engineers and to be more specific across the broad practice of engineering about an engineer's areas of competency.

Fourthly, we need to ensure better checks and balances in the system of regulating engineers to ensure the public interest is served.

We value your views and input to these proposals. This is a once in a generation opportunity to develop a revised regulatory system that will promote high quality engineering design and practice by the engineering profession in New Zealand.

Hon Dr Nick Smith Minister for Building and Construction

Contents

Minister's Foreword	.3
Contents	.4
Introduction	.5
Purpose	
How to have your say	
Publication of submissions, the Official Information Act and the Privacy Act What happens next	
Contacts	
Section 1: Background	.7
Understanding the building regulatory system changes since the 1990s	
The Canterbury Earthquakes Royal Commission	
Why regulate an occupation?	
MBIE's review of engineers' regulatory system	
Section 2: Current regulatory system for professional engineers	
Governance	
How the regulatory regime interacts with the building control system	
Section 3: Issues with the current regulatory system for professional engineers	
Section 4: Proposed regulatory system - key features	16
Issue 1 - Provide greater assurance that people with the right knowledge, skills and competence are designing commercial and multi-unit/multi-storey	
residential buildings	16
Issue 2 - Help to ensure that engineers are held to account when engineering designs are sub-standard.	16
Issue 3 - Investigate concerns expressed about the CPEng title, the standard	10
that it represents, the nature and rigour of the assessment process and other	
concerns	17
Issue 4 - Ensure that there are sufficient checks and balances in the regulatory system to ensure that the public's interests are served	17
Potential benefits and costs of the proposed changes	
Section 5: Detail of proposals and options	
Appendix 1: Details of the proposals aimed at introducing sufficient checks and balances	
compared to the current regulatory system	

Introduction

Purpose

The Ministry of Business, Innovation and Employment (MBIE) is seeking comments on a set of proposals and options to improve the way in which professional engineers are regulated as an occupation within New Zealand.

The proposals in this document result from recommendations of the Canterbury Earthquakes Royal Commission (Part 3 (Volumes 5, 6 and 7) of the Final Report) and a review of the existing professional engineers regulatory system carried out during 2013 and 2014 by officials from MBIE.

The views of the stakeholders interviewed in the MBIE review have been taken into account in shaping the proposals in this discussion paper.

The proposals and options are intended to achieve a revised regulatory regime for professional engineers – 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.

To help achieve these outcomes greater assurance is needed that the:

- engineers who design commercial and multi-unit/multi-storey residential buildings in New Zealand have the right knowledge, skills and competencies;
- engineers will be held to account for any sub-standard work;
- Chartered Professional Engineer (CPEng) title represents a clear and appropriate standard, and that the way that candidates are assessed is rigorous;
- Registration Authority role and other regulatory roles are being performed in ways which serve the interests of the public, as well as supporting the engineering profession; and,
- regulatory system for professional engineers is proportional to the degree of harm and cost that can arise when engineering designs and construction observation are sub-standard.

Overall the proposals in this document apply to all engineers chartered registered under the Chartered Professional Engineers of New Zealand Act 2002 (the Act). Some individual proposals, such as the introduction of mandatory registration, would apply only to those engineers who undertake critical work on commercial and multi-unit/multi-storey residential buildings within the building and construction sector.

How to have your say

Please make your submission online if possible, either using the online survey tool or to this address: <u>EngineersConsultation@mbie.govt.nz</u>.

Paper submissions will also be accepted, using the feedback form downloaded from the Ministry's website at <u>http://www.dbh.govt.nz/UserFiles/File/Consulting/doc/engineers-proposals-document-response.rtf</u>.

Submissions on some or all of the questions are welcome.

The consultation process runs until **5pm, Friday 31 October 2014**.

Publication of submissions, the Official Information Act and the Privacy Act

MBIE intends to publish the submissions online on its website, other than content that may be defamatory. MBIE will not publish the content of your submission on its website if you state that you object to its publication when you provide it.

However, your submission will be subject to the Official Information Act 1982 and may, therefore, be released in part or full. The Privacy Act 1993 also applies. When making your submission, please state if you have any objections to the release of any information contained in your submission. If so, please identify which parts of your submission you request to be withheld and the grounds under the Official Information Act for doing so (e.g. that it would be likely to unfairly prejudice the commercial position of the person providing the information).

For guidance on the Official Information Act, refer to <u>http://www.ombudsman.parliament.nz/resources-and-publications/guides/official-information-legislation-guides</u>

What happens next

After the consultation period finishes, MBIE will analyse feedback and submissions and report back to the government for it to make decisions on policy proposals for changing the engineers' occupational regulatory regime.

If adopted, the proposals are likely to require legislative change – this would provide further opportunity for public input through the select committee process. Depending on the Government's priorities, potential legislative changes could be introduced in 2015.

MBIE will work closely with the Institution of Professional Engineers New Zealand (IPENZ), engineers and others to ensure smooth implementation of any changes. MBIE will also provide information to the public to support such changes.

Contacts

For further information refer to EngineersConsultation@mbie.govt.nz.

Section 1: Background

Understanding the building regulatory system changes since the 1990s

Since the early 1990s, the government has been shifting from a traditional, prescription or standards based building regulatory system to a performance-based system that takes a more outcomes focussed approach towards regulating the design and construction of buildings. The intent of this shift is to improve economic performance by facilitating greater innovation and efficiency in the building sector. This is achieved by allowing "alternative solutions" to buildings that were judged in comparison with approved documents, tests and expert advice to meet the requirements of the new code.

The Building Act changes in 1991 and 2004, and subsequent legislative and regulatory amendments, place increasing reliance on building professionals to propose acceptable solutions and to provide assurances around the quality of the designs and construction alongside building consent authorities (BCAs). For professional engineers, these assurances centre on the structural integrity of buildings.

The changes to the Building Act focussed on the residential housing market where the greatest volume of construction occurs and where many major quality issues have been identified in the past for example leaky homes. It was assumed that residential consumers required greater regulatory protections as their lack of knowledge of building design, construction systems and processes meant they could not make fully informed decisions about the houses they intended to have built.

The Canterbury earthquakes exposed similar risks for commercial construction projects. However, the critical difference from the residential market was that building occupants, users and passers-by bore most of the life safety risk. This group was significantly affected by the design and construction decisions made by owners, building professionals, and BCAs which resulted in building structural failure.

The Canterbury Earthquakes Royal Commission

The proposals in this consultation document contribute to delivering the Government's response to the recommendations of the Canterbury Earthquakes Royal Commission. Decisions taken on these proposals will form part of the Government's full response to the Royal Commission Final Report.¹

The Canterbury Earthquakes Royal Commission heard considerable detailed evidence about specific building collapses and has made recommendations based on lessons from those failures.

The Commission's views were that a wholesale change of the current regulatory regime for engineers was not needed. However, there were some issues regarding engineers and engineering practice about which they made recommendations for change.

The Royal Commission concluded that:

 structural designers of buildings in seismic conditions need to have a good basic understanding of the fundamental requirements of design, and the assumptions inherent in seismic analysis;

¹ The Royal Commission's final report Part 3 covering: Christchurch, the City and approach to this Inquiry (Volume 5); CTV (Volume 6) and Roles and Responsibilities (Volume 7) was delivered on 29 November 2012 and released by the Government on 10 December 2012. http://canterbury.royalcommission.govt.nz/Final-Report---Part-Three

- the current arrangements for assessing and ensuring engineers' professional competence are very reliant on competence assessment in practice areas that are widely defined;
- there were no formal protections in place, other than CPEng requirements and IPENZ Code of Ethics, to ensure that structural engineers do not operate outside their areas of competence; and,
- there should be greater assurance that complex buildings will be adequately designed to minimise the risk of building failure and thus potential loss of life in case of an earthquake or other event.

In summary, the Commission's main recommendations regarding improving engineering roles, responsibilities and practice included:

- requiring an engineer to certify the structural integrity of a building's design for buildings that are determined to be not complex (Recommendation 166);
- publishing information on engineers' areas of practice on the register of engineers to inform consumers of individual's competencies (Recommendation 178);
- ongoing provision of post-graduate continuing education for current practising engineers (Recommendation 179);
- increasing the structural and geotechnical knowledge of civil engineering graduates (Recommendation 180);
- legislating for a new class of engineer called a "Recognised Structural Engineer", with specific prescribed qualifications, competencies and acknowledged expertise in structural design, to be responsible for certifying the design of complex buildings (Recommendations 167, 181 and 182);
- IPENZ revising the engineers Code of Ethics, particularly around reporting of substandard building design and construction (Recommendation 183); and,
- IPENZ's Code of Ethics and the CPEng rules are amended to provide an obligation to advise the relevant territorial authority and IPENZ of identified structural weaknesses that have health and safety risks (Recommendation 184).

The Government's response to the Royal Commission in March 2013 noted that *"current regulation of engineers is focussed on title protection and therefore engineers can practice with no assessment of their competence."* The response proposed to look at *"all the occupations engaged in the building and construction sector to be assured that the occupational regulatory framework is fit for purpose and in particular we are not creating further buildings with structural issues."*

² Cabinet paper: Royal Commission of Inquiry into Building Failure Caused by the Canterbury Earthquakes: Final Report Recommendations - http://www.dbh.govt.nz/UserFiles/File/Publications/Sector/cabinetpapers/cerc-cabinet-paper.pdf

Why regulate an occupation?

Occupational regulation is considered necessary when "there is a possibility that incompetent service by members of the occupational group could result in significant harm to the consumer or a third party."³ This could apply to nearly all occupations however the significance of harm can vary and compliance costs of intervention can outweigh the benefits. Therefore, government intervention is limited to occupations where the harm could potentially be significant.

"Significant harm is defined as covering significant harm to one person or moderate harm to a large number. Moderate harm to a large number might arise from one event or from the aggregated actions of different providers of a service. Significant harm that is irreversible (such as permanent disability) is more likely to justify intervention than reversible harm (such as moderate food poisoning)."⁴

Occupational regulation tends to be considered where there is potential for significant, irreversible harm to individuals or groups resulting from the non-performance of practitioners. Additionally, there is a stronger case for intervention if the risk of harm is involuntary for the individuals and groups because they are unaware of it, even though the probability of it occurring is low. A strong case for government intervention exists if significant irreversible harm is likely, existing means of protection are insufficient, and the industry is unable to regulate itself adequately.⁵ Engineering work fulfils these criteria and so the occupation is regulated.

The damage and loss of life resulting from the Canterbury earthquakes in 2011 highlighted the life safety risks and economic costs that can arise when buildings under stress do not perform. The harm resulting from even a single building failure can be very high.

The earthquakes also demonstrated the critical importance of structural and geotechnical engineers, in particular, in the building system and the pivotal role they play in ensuring the integrity of buildings. Fire engineers are included as they play a similar role with regard to ensuring that a building's structural integrity is protected in the event of a fire.

MBIE's review of engineers' regulatory system

MBIE's review of the professional engineers' regulatory system was carried out by officials during 2013 and 2014. The review covered the existing legislative framework for regulating engineers set out in the Act, as well as the implementation and administration of the system by central government and the Registration Authority.

The review process included interviews with, and input from, the current statutory Registration Authority (IPENZ), its monitoring body (Chartered Professional Engineers Council (CPEC)), engineers, local government representatives, professional engineers, representatives from associated regulators and other building professionals.

The views of the stakeholders interviewed in the MBIE review have been taken into account in shaping the proposals in this proposals document.

³Cabinet Office circular CO (99) 6 "Policy Framework for Occupational Regulation", 8 June 1999

⁴ Cabinet Office circular CO (99) 6 "Policy Framework for Occupational Regulation", 8 June 1999

⁵ MBIE Policy framework for occupational regulation, <u>http://www.med.govt.nz/business/better-public-</u> services/regulatory-reform/information-for-policy-makers/policy-framework-for-occupational-regulation

Section 2: Current regulatory system for professional engineers

MBIE is responsible for building and construction policy including the occupational regulation of professional engineers. MBIE administers the governing legislation for the building and construction sector, the Building Act 2004 and the Chartered Professional Engineers of New Zealand Act 2002 (the assumed these responsibilities from the former Department of Building and Housing when MBIE was established on 1 July 2012.

The current occupational regulation for engineers is a Certification⁶ type model. In this model, an agency independent of government is empowered by statute to certify to the public that individuals have satisfied particular requirements that indicate their competence in a particular field.

The Act reformed the law relating to the registration of engineers in 2002 and established the title of CPEng as a protected mark of quality. To achieve this purpose, the Act:

- a) establishes a registration system for chartered professional engineers, under which persons who wish to be chartered professional engineers must meet minimum standards to be, and continue to be, registered;
- b) requires a code of ethics and a complaints and disciplinary process to apply to chartered professional engineers;
- c) requires a professional body to carry out the functions relating to the registration system, the code of ethics, and the complaints and disciplinary process, and establishes a statutory body to oversee aspects of those functions.⁷

The Act also:

- appoints the Institution of Professional Engineers New Zealand (IPENZ) as the Registration Authority;
- establishes the Chartered Professional Engineers Council (CPEC) to review and report to the Minister on the Registration Authority's performance; review and approve proposed rules and standards; and hear disciplinary appeals.

Changing the roles and responsibilities of these bodies and how they are governed will require amendments to the Act.

Governance

In fulfilling its statutory obligations under the Act, the Registration Authority has created a delegated decision-making structure to ensure there is not conflict of interest with other roles undertaken by IPENZ as the Membership-based professional body for engineers.

At a governance level, decision making is separated through the creation of a Registration Authority Governing Board. No member of the governing board of IPENZ or its staff participates as a decision maker on registration or disciplinary matters under the Act. Subcommittees are established to undertake Registration Authority's core functions which are to:

- propose rules and standards for the CPEng title;
- design and implement the assessment process for CPEng registration;
- administer the register and provide registration information to the public; and,
- investigate complaints, hold disciplinary hearings and enforce the resulting disciplinary penalties.

⁶ As defined in CO (99) 6 Policy Framework for Occupational Regulation, 8 June 1999

⁷ Chartered Professional Engineers of New Zealand Act 2002, Section 3

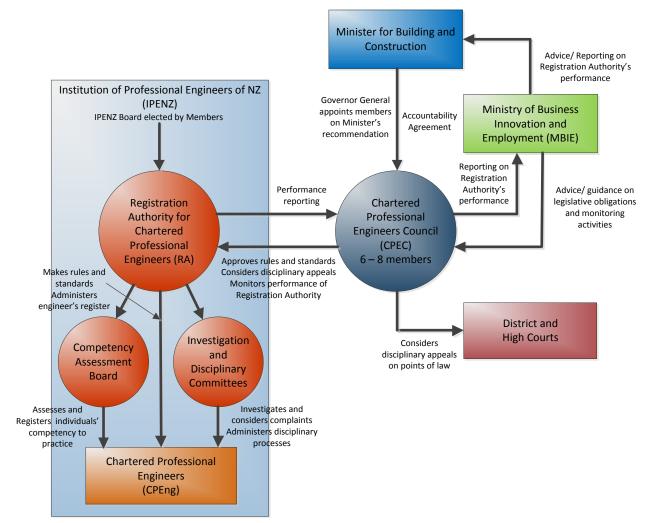
IPENZ operates a single investigations process for reviewing complaints made against engineers for both IPENZ members and/or CPEng registrants. Depending on the nature of the alleged breach, disciplinary matters requiring further action are then referred to the respective IPENZ or CPEng committees for hearings and enforcement of decisions.

The Registration Authority is funded entirely by the registration charges paid by chartered professional engineers and applicants for registration.

CPEC is a statutory body and its members are appointed by the Governor-General on recommendation of the Minister. CPEC has six to eight members, of which three are nominated by IPENZ, one nominated by the Association of Consulting Engineers of New Zealand (ACENZ), one consumer representative and up to three others nominated by the Minister.

CPEC is funded via an annual levy of \$70,000 paid by the Registration Authority.

The figure below shows the current regulatory system for engineers.



How the regulatory regime interacts with the building control system

The current building control system relies heavily on Building Consent Authorities (BCAs), engineers and other building professionals to ensure that buildings are safe and are built in accordance with the Building Code.

In practice, engineers provide assurance, alongside BCAs, that the structural, geotechnical and fire integrity of commercial, multi-unit/multi-storey residential and complex buildings meet Building Code requirements.

It is a staged assurance process occurring during design, construction and at practical completion through the project engineer. Additional checks can be done via the peer review process by independent engineers and through consent authorities, but this is generally for more complex buildings.

It is important that all engineers whose work is critical to the structural integrity of commercial and multi-unit/multi-storey residential buildings have the necessary knowledge, skills and competency to produce buildings that will not fail during earthquakes and other adverse events. The regulatory regime should ensure that only those engineers who have sufficient capability and experience are legally able to undertake work relating to the structural integrity of these buildings and can be held to account for sub-standard work.

Section 3: Issues with the current regulatory system for professional engineers

The Canterbury earthquakes highlighted the risks to public safety, and the harm that can result, when buildings under stress do not perform as required. The earthquakes demonstrated that the engineering design of a commercial building is pivotal to its structural integrity and to the safety of people who use the building.

In the MBIE review, officials evaluated the current regulatory system for professional engineers against the principles and criteria for good regulation agreed by Cabinet.⁸ The current system was also compared against the way in which other occupations in New Zealand and engineers in other countries are regulated.

The regulatory system for professional engineers was also assessed against how well it is serving the desired outcomes for the building and construction sector. The most important outcome is to ensure that people who use buildings are safe. The regulatory system for engineers should also contribute to:

- removing unnecessary cost and delays from the building performance system; and,
- improving construction sector productivity

The regulatory system for engineers is not supporting these desired outcomes. This is because:

- 1) The public cannot be sure that commercial and multi-unit/multi-storey residential buildings are being designed by engineers with the right knowledge, skills and competence levels, as there are no legislative controls on who can design a commercial or multi-unit/multi-storey residential building, unlike:
 - in the residential sector, in which practitioners must be licensed to supervise or carry out restricted building work (registered engineers are deemed to be licensed building practitioners for this purpose); or,
 - for dam safety annual Dam Compliance Certificates and Dam Safety Assurance Programmes will need to be signed off by a recognised engineer (once the relevant regulation commences);
- Engineers are not always held to account when their engineering designs are substandard – this is partly because CPEng registration is voluntary, and those engineers who are not registered cannot be disciplined by the Registration Authority;
- Concerns about the CPEng title have been expressed by some professional engineers and BCAs - stakeholders have questioned the rigour of the assessment process, whether CPEng is set at the 'right' level for entry to the profession, whether CPEng is equivalent to overseas titles, and other matters. These issues need further investigation;
- 4) The regulatory system is based on self-regulation but without sufficient checks and balances to ensure that the public's interests are being served:
 - IPENZ is the Registration Authority for CPEng in this role IPENZ has a major influence over the standard represented by the CPEng title, the competency levels required to achieve the title, the requirements for continued professional development, and the performance incentives on engineers.

⁸ Cabinet Office circular CO (99) 6 *"Policy Framework for Occupational Regulation"*, 8 June 1999.

However at present:

- the government has little leverage over the Registration Authority, as its governing board is not appointed by the Minister (this governing role is played by the IPENZ Board, which is elected by IPENZ members); and
- there is insufficient scrutiny of the way that these regulatory roles are being performed by IPENZ because the body set up to monitor its performance, CPEC, lacks sufficient powers and resources to play its role effectively;
- further, as a private membership organisation, IPENZ faces a potential conflict of interest between:
 - its role as the Registration Authority the way that this role is performed is critical to ensuring that the public's interests are served; and,
 - its role as the representative body for the profession, in which it provides services and advocacy for its members, and supports the interests of the profession;
- the regulatory system for professional engineers is quite different to some other occupations that have potential to create risk to public safety. For example, for health practitioners and in civil aviation, the regulatory authorities and their functions are clearly separated from practitioners' associations, professional bodies and unions;

As a consequence of the above issues, overall the regulatory system for professional engineers is not proportional, as there is an imbalance between:

- the level of control over who can design a commercial or multi-unit/multi-storey residential building (no formal requirements) and the extent of leverage over and monitoring of the performance of the Registration Authority (insufficient) versus;
- the degree of harm and cost that can arise when engineering designs are substandard and buildings lack structural integrity as a result. There is potential for severe harm and high cost.

This matters - significant growth is projected in commercial building activity over the short to medium term - 7.6% per annum over March 2014 to March 2016. This growth is driven partly by the rebuilding of Canterbury. Concerns have been raised about the design and safety of seven new buildings in Canterbury – as a result, four disciplinary investigations are underway involving professional engineers.

Greater assurance is needed:

- that the engineers who design commercial or multi-unit/multi-storey residential buildings are competent;
- that professional engineers will be held to account for any sub-standard work;
- that the CPEng title can be relied upon to identify who is a competent engineer;
- 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 professional engineers is proportional.

Key Questions

- **1.** How well does this characterise the issues arising from the current regulatory system for professional engineers? What issues, if any, are missing?
- **2.** In your view, what are the problems with the current regulatory settings? What brings you to this view?
- **3.** How significant are these problems for engineers, the construction sector, clients and/ or the public?
- **4.** What are the possible impacts on the structural integrity of buildings and on public safety?
- 5. What evidence is available that could inform any further analysis of the issues?

Section 4: Proposed regulatory system - key features

It is important to ensure that the regulatory system serves the interests of the public, while also supporting the engineering profession. The current system is not balanced in this regard. Changes are needed to provide greater assurance that people who use commercial and multi-unit/multi-storey residential buildings are safe.

To address the issues outlined above, a set of changes are proposed to the regulatory system for professional engineers.

These changes would be supported by the profession's Code of Ethics to ensure that the safety of a building's end user is at the forefront of the design thinking.

The following proposals address the four issues noted in Section 3:

Issue 1 - Provide greater assurance that people with the right knowledge, skills and competence are designing commercial and multi-unit/multi-storey residential buildings.

- Require a chartered professional engineer (registered in an appropriate practice field e.g. structural, geotechnical or fire) to certify the structural integrity of the design of buildings that require a building consent and are:
 - commercial buildings; or,
 - multi-unit/multi-storey residential buildings; or,
 - assessed by BCAs as being complex in design and structure.

This requirement would mean that registration as a CPEng would be mandatory for those engineers who review and certify engineering work for any commercial, multi-unit/multi-storey residential and complex buildings requiring a building consent.

- 2) Introduce consumer/user participation in preparing and making professional registration rules, and setting competence and ethical standards.
- 3) Require the Registration Authority to publish more detailed information about professionals and their competency levels.
- 4) Require engineers to notify BCAs of observed breaches of building consent and/or Building Code.

Issue 2 - Help to ensure that engineers are held to account when engineering designs are sub-standard.

5) Separate the consideration of serious complaints from the professional body representing the interests of professional engineers (IPENZ) to a new sector body (see proposal 9) below) to avoid any potential conflicts of interest in the carrying out of this role.

Introduce a disciplinary process for addressing non-serious breaches of the Act.

- 6) Increase the range and level of sanctions and penalties (for actions including breaches of the engineers' Code of Ethics, performing engineering services in a negligent or incompetent manner⁹) to better reflect the seriousness of breaches - the following range of disciplinary penalties would replace the existing penalties in the Act:
 - The person is censured and/or receives a warning notice notifying them of further disciplinary action if their actions are repeated;
 - The person is required to work under supervision for a specified period;

⁹ The full range of disciplinary grounds can be found in section 21, Chartered Professional Engineers of New Zealand Act 2002.

- The person must pay a fine not exceeding \$20,000 (an increase from the current maximum fine of \$5,000, and representing an amount midway between the maximum fine for health practitioners of \$30,000 and the maximum fine for architects of \$10,000);
- The person's registration is suspended for a specified period (no more than 12 months) after which the person's registration is reinstated (without them having to reapply); and,
- The person is de-registered for a specified period (this could be for a period of between one to five years) meaning that the person would no longer be able to use the title of chartered professional engineer or practice for that period. The person would need to re-apply for registration after the de-registration period had expired.

Issue 3 - Investigate concerns expressed about the CPEng title, the standard that it represents, the nature and rigour of the assessment process and other concerns

- 7) The CPEng requirements for structural, geotechnical or fire engineers are independently reviewed to examine:
 - whether CPEng represents a clear, measurable and appropriate standard for an 'entry level' qualification;
 - the rigour, specificity and objectivity of the assessment process;
 - the consistency of judgements across different groups of assessors;
 - whether CPEng is equivalent to relevant overseas titles or qualifications;
 - whether the 'areas of practice' within the title represent a clear and appropriate competency framework; and,
 - introducing a tiered qualification system within CPEng where a practitioner's qualifications and experience are tied to, and could limit, the type of design and supervision work they are allowed to undertake.

An advisory group would be established for this purpose, with input from professional engineers, relevant consumers, employers, BCAs and others.

Issue 4 - Ensure that there are sufficient checks and balances in the regulatory system to ensure that the public's interests are served

8) IPENZ is retained as the Registration Authority so the profession continues to play a leadership role in occupational regulation of engineers.

The Registration Authority Board members would be appointed by the Governor-General on the recommendation of the Minister for Building and Construction. IPENZ would nominate 50% of the Board's members for appointment and the Minister for Building and Construction would nominate the remaining 50%.

The composition of the Registration Authority Board would be changed to reflect a broader range of professional engineering and interest groups;

The Registration Authority's functions would include:

- proposing occupational regulatory rules and standards;
- designing and implementing the assessment process; and,
- hearing less serious complaints and making disciplinary decisions.

- 9) Establish a new construction industry occupational body that would have the responsibility to:
 - approve occupational regulatory rules and standards;
 - make disciplinary decisions and take action on serious breaches of the Act;
 - hear appeals of Registration Authority's disciplinary decisions;
 - monitor, review and report to the Minister on the performance of the Registration Authority;
 - upon the Minister's request, undertake quality and performance audits of the Registration Authority's processes; and,
 - ensure best practice systems and processes are in place for the Registration Authority.

The new body's members would be appointed by the Governor-General on the recommendation of the Minister for Building and Construction.

CPEC would be disestablished. The new construction industry occupational body would be empowered to undertake CPEC's functions particularly those acquired in the transition to the CPEng Act 2002 from the Engineers Registration Act 1924.

Details of this proposal are summarised in Table 1 appended to this proposals document.

- 10) Introduce Minister initiated performance audits of the Registration Authority facilitated or undertaken by MBIE.
- 11) Introduce powers for MBIE to obtain design and construction information from engineers about buildings that they have designed or certified.

Together the above changes would deliver a regulatory system that is more proportional than the current system, as the level of regulatory oversight and sanction could be matched to the harm and cost that may result when work by professional engineers is substandard.

The proposed changes to the regulatory regime are discussed in more detail in Section 5 of this proposals document. The proposal numbers noted above and on the previous page reflect the relevant proposals in Section 5.

Key Questions

- 6. Do you think that the above package of proposals and options are the appropriate ones to consider for improving current regulatory settings for engineers? If not, why not?
- 7. Which particular proposals and options do you consider are not appropriate? Please explain why.
- **8.** In your view, what other options should be considered to improve current regulatory settings? How would you see these working?
- 9. How would these proposals impact on you and your business or group?

Potential benefits and costs of the proposed changes

For current and future chartered professional engineers, these changes could mean:

- clarity around role and practice areas providing protection for individuals;
- better professional development resulting in higher skills and competence levels for individuals; and,
- potentially higher registration charges for practitioners. These may be offset by lower administration costs for operating the regulatory regime that are passed on to practitioners.

For BCAs, these changes could mean:

- greater transparency and assurance about the skills and experience of the engineers working within the building control system and assurance that practitioners can do what they profess they can do;
- reducing duplication in systems and activities, especially in checking engineers credentials and maintaining separate practitioner competency lists; and,
- reduced processing issues with consents as greater confidence can be placed in the quality of engineering work.

For the consumers and building users, these changes could mean:

- greater transparency of the skills and experience of the engineers they seek to engage and assurance that practitioners can do what they profess they can do; and,
- confidence that the commercial and multi-unit/multi-storey residential buildings they commission, use or pass by are designed to meet the requirements of the NZ Building Code;

For the Government, these changes could mean:

- public interest objectives receive greater focus in the Registration Authority's decision making;
- greater transparency and assurance about quality of professional engineers being registered by the Registration Authority; and,
- possible additional transition and ongoing operating costs, would most likely be covered by increased registration charges or levy paid by the Registration Authority. There is a potential for long term efficiency gains from the proposed changes.

Key Questions

- **10.** How well does this summary represent the potential benefits and costs of the proposed changes? Which, if any, do you disagree with? Why?
- **11.** What other potential benefits, costs and risks not listed above should be taken into account?

Section 5: Detail of proposals and options

Issue 1 - Provide greater assurance that people with the right knowledge, skills and competence are designing commercial and multi-unit/multi-storey residential buildings

The Building Amendment Act 2012 introduces a commercial building consenting process based on a risk profile for the proposed building work, and a quality assurance system to address those risks. The associated provisions have been enacted but have not yet come into effect.

Under these provisions, the risk profile and quality assurance system will have to be agreed between the BCA and the project owner before for a building consent can be applied for.

It is envisaged that a commercial building consent will be required either for all commercial and multi-unit/multi-storey residential buildings or for those buildings that are assessed as complex in terms of structure and design. Work is currently underway, in consultation with building and construction sector stakeholders, on how a 'complex building' should be defined.

<u>Proposal 1.</u>

A chartered professional engineer (registered within an appropriate practice field – e.g. structural, geotechnical or fire) would be required to certify the structural integrity of commercial and multi-unit/multi-storey residential buildings requiring consent

It is proposed that a chartered professional engineer (registered in an appropriate practice field – e.g. structural, geotechnical or fire) is required to certify the structural integrity of the design of buildings that:

- require a commercial building consent; or
- are multi-unit/multi-storey residential buildings; or
- are assessed by BCAs as being complex in design and structure.

The processes of review and certification would be linked to key stages of the building control process (i.e. review and certification could be required both before the building consent is issued, and before the final code compliance certificate was issued).

This requirement would mean that registration as a CPEng (within the appropriate practice field) would be mandatory for those engineers who wished to play the role of reviewing and certifying a building's structural integrity for these types of buildings. Typically this person would be the lead engineering designer on the building project.

To help ensure that buildings are safe, there is a clear need to ensure that:

- the right engineers design the right buildings;
- the engineers are qualified and have the experience to do so;
- the engineers operate within the building control system; and,
- engineers can be held to account for the quality of their work.

At the same time, it is important to avoid creating or exacerbating possible skills shortages of professional engineers in future, given that substantial growth in demand for their services is expected in the context of a projected growth in commercial building activity. This proposal attempts to strike a balance between ensuring that buildings have structural integrity and thus users of buildings are safe, and avoiding the creation of skills shortages (there is a risk skills shortages could be created if the mandatory requirement for CPEng registration was extended to all engineers working within the building and construction sector).

Key Questions

- **12.**Should a chartered professional engineer be required to certify the structural integrity of buildings that, in future require a:
 - commercial building consent;
 - multi-unit/multi-storey residential building consent; or,
 - building consent for buildings assessed by consent authorities as being complex?
- **13.** At what stages in the building control process should engineering review and certification processes be required?
- 14. What are the main benefits and costs of this proposal?
- **15.** How would this proposal impact on the engineering profession?
- **16.** How would this proposal impact on the quality, integrity and safety of buildings?

Proposal 2.

Introduce consumer participation in preparing and making professional registration rules, and setting competence and ethical standards supporting the proposed public interest purpose statement in the Act

In addition to engineering groups and IPENZ, it is proposed that the Registration Authority is required to consult with a targeted set of consumer group representatives on any changes to its proposed rules and standards.

Significant consumer participation would become part of setting entry standards and discipline for the profession as per best practice. Consumer groups in this context include building owners and landlords, property management organisations, commercial real estate representatives and/or building occupants and user representatives.

This would support the public interest principle being introduced into the Act so that engineers mitigate the risks of building failure to the safety of the end users at all stages of the building design and construction process.

Key Questions

17. Would it add value to have consumers involved in making the professional registration rules, and setting competence and ethical standards? What value would be gained by having consumers involved?

Proposal 3.

The Registration Authority would publish more detailed information about professional engineers and their competency levels

It is proposed that the Registration Authority publish more detailed information about professional engineers and their competency levels in their public register. The following details are currently published by the Registration Authority on its website:¹⁰

- Name of professional;
- Company details;
- Original registration and next re-assessment dates;
- Fields of practice (areas of expertise); and,
- Previous disciplinary actions upheld.

Further details proposed for publishing are:

- Particulars of engineering qualifications;
- Previous work experience description (and/or links to company website showing work completed); and,
- Other relevant matters e.g. panel memberships, peer review experience.

This enables the public, consumers and other interested parties to review details about individual professional engineers and make informed decisions on a professional engineer's competency.

Key Questions

- **18.** Should the Registration Authority publish more information about engineers' qualifications, experience and practice areas as proposed?
- **19.** If so, what additional information might be beneficial for consumers and territorial authorities to determine an engineer's experience and competency?

Proposal 4.

Require engineers to notify BCAs of observed building consent and/or Building Code breaches

Failure to notify building consent authorities of potential design and construction issues would become a disciplinary ground under the Chartered Professional Engineers Act. This will better align engineers' occupational regulation with the provisions of Building Act 2004 (Section 89).

It will help enable engineering design and construction issues to be identified early which should reduce the risk of significant building faults and potentially reduce the cost of remediating any issues identified.

This proposal is not intended to cut across good professional behaviour where engineers notify colleagues of potential issues in design and construction. However, it does enable the territorial authority to be notified of risks and addresses potential inaction or conflicts between practitioners that might arise when issues are identified.

¹⁰ http://www.ipenz.org.nz/IPENZ/registration/Search_registers.cfm

A breach of this section, where an engineer notices an issue but does not report it, would be included as grounds for disciplinary action under the Act to be assessed through the Registration Authority's disciplinary processes.

Key Questions

- **20.** Should engineers be required by law to notify building consent authorities and building owner of breaches of building consent and/or Building Code for commercial and multi-unit/multi-storey residential buildings, similar to the Building Act 2004 (Section 89)?
- 21. What are the likely benefits, costs and risks of this proposal?

Issue 2 - Help to ensure that engineers are held to account when engineering designs are sub-standard

Proposal 5.

Decisions on complaints and disciplinary hearings and actions and introduce a disciplinary process for addressing non-serious breaches of the Act

The Registration Authority's Investigating Committee (within IPENZ) would continue to investigate complaints against CPEngs to determine validity and severity of the alleged issue. To minimise investigation and administration costs, the disciplinary investigation process would continue to be combined with any investigation by IPENZ of a member's conduct.

Rather than using sanctions for every transgression, options for mentoring and/or providing practitioners with professional assistance or education would be developed to address minor competency issues and knowledge gaps.

It is proposed that the Registration Authority's Disciplinary Committee would make decisions on very simple or minor technical issues or breaches where mentoring, professional and educational development or peer review/ monitoring are considered to be more appropriate responses than punitive disciplinary sanctions.

The Investigating Committee would refer complex complaints and serious breaches of the CPEng Act to a new construction industry occupational body (refer proposal 9 for details) for disciplinary hearings and decisions. Serious breaches could include actions that have significant life safety implications.

In certain particularly serious circumstances and at the discretion of the Board, temporary suspension of an engineer's registration or working under supervision (peer review for all work) are proposed measures while breaches are investigated.

At this stage, the administration and management of complaints and discipline would remain with IPENZ.

Key Questions

- **22.** Would a mentoring type arrangement or supervision, work for disciplinary breaches that occur through deficiency of knowledge or minor competency issues? Are these types of responses practical to implement? If not, what is an appropriate sanction for this type of error?
- **23.** Should the management of complaints and discipline for professional engineers be separated from the professional body, IPENZ? If so, who should manage complaints?
- 24. What are the potential benefits, costs and risks of these proposals?

<u>Proposal 6.</u>

Revise sanctions for proved disciplinary actions

The current sanctions and sanction criteria need to be re-assessed to better reflect the seriousness of breaches and strengthen incentives on engineers to perform. Grounds for disciplinary actions include where a CPEng:

- has been convicted, whether before or after he or she became registered, of any
 offence punishable by imprisonment for a term of 6 months or more if, in the
 Authority's opinion, the commission of the offence reflects adversely on the
 person's fitness to practise engineering; or
- has breached the code of ethics contained in the rules; or
- has performed engineering services in a negligent or incompetent manner; or
- has, for the purpose of obtaining registration or a registration certificate, made any declaration or representation or documentation knowing it to be false or misleading or not genuine¹¹.

It is proposed the following range of disciplinary penalties replace the existing penalties in the Act, in increasing order of severity, should breaches of the disciplinary grounds be proved:

- a) The person is required to work under supervision for a specific period or undertake professional development or educational training;
- b) The person is censured and/or receives an officially warning notifying them of further disciplinary action if their actions are repeated;
- c) The person must pay a fine not exceeding \$20,000 (this would be an increase to the current maximum fine of \$5,000, and would be midway between the maximum fines for to the maximum fines for health practitioners and veterinarians (\$30,000) and architects (\$10,000);
- d) The person's registration is cancelled for a specified period (no more than twelve months) after which the person's registration is reinstated (without them having to reapply);
- e) The person is de-registered for a specified period (this could be between one and five years) and the person would no longer be able to use the title of chartered professional engineer for that period. Within the building and construction sector,

¹¹ Section 21, Chartered Professional Engineers of New Zealand Act 2002

de-registration would mean that the person could no longer undertake roles for which registration was mandatory (i.e., responsibility for the structural integrity of commercial and multi-unit/multi-storey residential buildings). The person would need to re-apply for registration after the de-registration period had expired.

Key Questions

25. Are the disciplinary sanctions proposed strong enough to incentivise engineers not to breach the grounds for discipline in the Act? If not, what sanctions would be appropriate for minor breaches or mistakes and serious breaches such as misconduct, negligence or bringing the profession into disrepute?

Issue 3 - Investigate a number of concerns raised about the CPEng title, the standard that it represents, and the nature and rigour of the assessment process

Proposal 7.

The requirements for CPEng for structural, geotechnical and fire engineers are independently reviewed to ensure that they are set at an appropriate quality level and that the assessment process is rigorous and consistent for all applicants

It is proposed that the standards, assessment requirements and competency framework for CPEng for structural, geotechnical and fire engineers are reviewed with a view to address the following concerns:

- CPEng is an entry level qualification which only requires a minimum of three years relevant experience that may be insufficient to be responsible for the design and supervision of complex buildings;
- The current approach does not ensure those certifying the structural integrity of the design of a complex building have sufficient knowledge and experience to ensure a complex building works as an integrated structural system.

The Canterbury Earthquakes Royal Commission suggested that creating a Recognised Structural Engineer (RSE) as a higher qualification than CPEng would bring New Zealand's qualifications for professional engineers in the structural and geotechnical fields in line with the two-tier structure applied in the United States, Canada and the United Kingdom.

A Terms of Reference for this review would be prepared by MBIE in consultation with IPENZ, the Registration Authority, academics and engineers. The review would be undertaken with significant input from the profession and other stakeholders and would examine:

- whether CPEng represents a clear, measurable and appropriate standard for an 'entry level' qualification;
- the rigour, specificity and objectivity of the assessment process;
- the consistency of judgements across different groups of assessors;
- whether CPEng is equivalent to relevant overseas titles or qualifications;
- whether the 'areas of practice' within the title represent a clear and appropriate competency framework; and,
- introducing either a new qualification or a tiered qualification system within CPEng where a practitioner's qualifications and experience are tied to, and could limit, the type of design and supervision work they are allowed to undertake.

Key Questions

- **26.** For structural, geotechnical and fire engineers, should the requirements, assessment process and competency framework for CPEng be reviewed? Why?
- 27. Is there a need for a new higher qualification such as a Recognised Structural Engineer or for CPEng to be tiered to identify practitioners' competency to undertake more complex engineering design and construction oversight work? If so, why?
- **28.** Should the requirements for, and provision of, post-graduate continuing professional development be strengthened to enable graduates to obtain CPEng? If so, what suggestions do you have?

Issue 4 - Ensure that there are sufficient checks and balances in the regulatory system to ensure that the public's interests are served

Institutional arrangements for the regulation of engineers should achieve the following objectives:

- A higher level of transparency and accountability;
- A high level of professional input into the development of professional standards and assessment procedures;
- Cost efficient delivery of registration; and,
- Effective monitoring and enforcement of professional standards.

Separating some of the functions of the Registration Authority from the professions representative body provides for a high level of transparency and accountability:

- There would be greater transparency for the Minister and the public on the Registration Authority's roles and functions and how these are carried out;
- There would be strengthened responsibility lines, particularly to the Government (the Minister can set the Registration Authority's performance requirements and monitor adherence to these); and,
- Most potential (actual and perceived) conflicts of interest between the IPENZ's regulatory and professional membership functions are addressed.

A high level of professional input into the development of professional standards and assessment procedures can be achieved through:

- Having engineers as members of the Registration Authority Board (this will enable changes in technical thinking, construction and professional practice that affect the profession to be identified early, understood and responded to); and,
- Comprehensive professional and technical input from the engineering profession into the development standards and competency assessment through standards development committees that involve the profession.

Key Questions

29.Do you agree with the following objectives for the institutional arrangements for the regulation of engineers:

- A high level of transparency and accountability.
- A high level of professional input into the development of professional standards
- Cost efficient delivery of registration
- Effective monitoring and enforcement of professional standards

Are any objectives missing?

Proposal 8.

Appointment/ removal of Registration Authority Board members

IPENZ is retained as the Registration Authority so the profession would continue to play a leadership role in occupational regulation of engineers. IPENZ would continue to carry out supporting administrative functions for the Registration Authority.

It is proposed that the Governor-General appoint the members of the Registration Authority Board on recommendation of the Minister for Building and Construction.

50% of the Board members would be nominated by IPENZ. The remaining 50% of members, including the Board Chair, would be nominated from engineering sector groups, academia, and building and consumer groups on advice from MBIE officials on Board skills requirements for prospective members.

This approach changes the current accountability relationships as the Board would become directly responsible to the Minister for its decisions and actions. This has three main benefits:

- The Minister has levers to set expectations, review performance and address delivery issues with the Registration Authority, including changing the Board members if necessary;
- The Minister can influence the Registration Authority's strategic direction so it reflects government's policy objectives for the profession. In exercising its statutory obligations and decision making authority, the Board must have regard to government policy objectives if directed to do so by the Minister. The Minister provides this direction via an annual Letter of Expectations to the Board;
- Registration Authority Board member's appointments and their decision making are clearly separated from the professions representative body. This separation of powers removes the potential for perceived or actual conflicts of interest between the statutory functions and professional support activities of IPENZ and aligns with best regulatory design practice.
- Having IPENZ nominate half the Board maintains the input of the profession into the regulatory regime and continuity for the profession.

The composition of the Registration Authority Board would be re-defined and prescribed in legislation to reflect the role of the profession and a broader range of professional engineering and interest groups. It is proposed that the non-IPENZ nominations for the Registration Authority Board are drawn from representatives of the following groups:

• Association of Consulting Engineers New Zealand (ACENZ)

- Structural Engineering Society New Zealand
- New Zealand Society for Earthquake Engineering
- New Zealand Geotechnical Society
- Universities of Auckland and Canterbury engineering schools
- Consumer groups and/or building users
- Other CPEng practitioner groups

A broader representation of engineering interests than at present would provide greater separation and independence from the professions representative body in the Board's decision making.

Key Questions

- **30.** Should the composition of the Registration Authority Board and the member's appointments process be changed? Why?
- **31.** Are all the relevant interest groups and engineering practice areas represented in the composition of the Registration Authority Board? If not, which groups should be added?

Proposal 9.

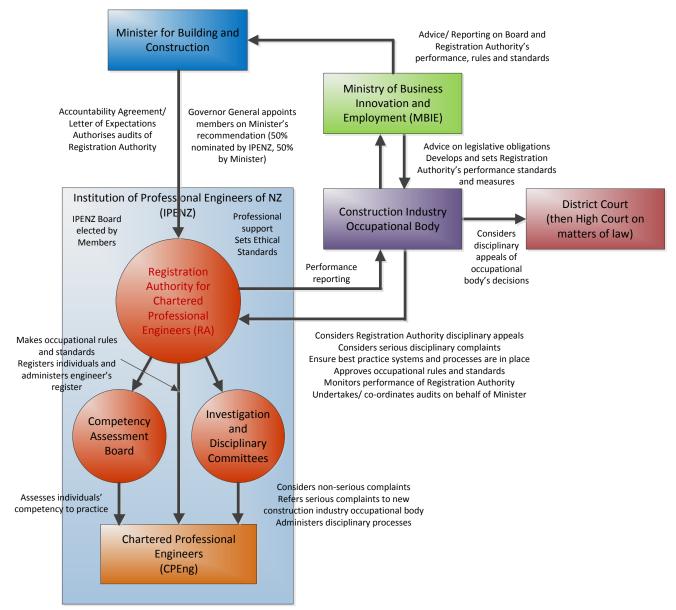
A new institutional structure is proposed for the regulation of engineers

The Registration Authority remains within, and continues to be administered, by IPENZ.

It is proposed to establish a new construction industry occupational body that would be responsible for CPEC's current performance monitoring and oversight functions on the Registration Authority, approving rules and standards and hearing serious complaints against engineers and appeals from the Registration Authority.

CPEC would be dis-established and transition arrangements would be put in place to manage the transfer of functions from CPEC to the new body.

The proposed regulatory system with revised functions is shown in the figure overleaf.



It is proposed that:

- The Chartered Professional Engineers Registration Authority's functions would be to:
 - o make rules and standards and designing the assessment process for CPEng;
 - make decisions on the competency and registration of individual engineers and administering the registration and re-assessment processes;
 - o administer the register of chartered professional engineers; and,
 - investigate disciplinary complaints, making disciplinary decisions and take action on non-serious issues and administering the disciplinary process. Serious complaints would be referred to the new construction industry occupational body.
- The new construction industry occupational body's functions would be to:
 - approve occupational regulatory rules and standards proposed by the Registration Authority;
 - make disciplinary decisions and take action on breaches of the Act resulting from the Investigating Committee's investigation of serious complaints;
 - hear appeals of Registration Authority's disciplinary decisions;

- undertake CPEC's functions particularly those acquired in the transition to the Act 2002 from the Engineers Registration Act 1924. This is particularly important for the provisions that relate to disciplining persons registered under the old 1924 Act who designed buildings prior to 2002;
- monitor, review and report to the Minister on the performance of the Registration Authority;
- upon the Minister's request, undertake quality and performance audits of the Registration Authority's implementation processes, report findings to the Minister and enforce any resulting actions; and,
- ensure best practice systems and processes are in place for the Registration Authority.

It is proposed that the new body will have the power to delegate some of its functions to the Registration Authority or other agencies, such as MBIE, if this is more beneficial or cost effective.

- Disciplinary appeals on the new construction industry occupational body's decisions would be heard by the District Court with further appeal to the High Court on matters of law;
- MBIE's functions would be to:
 - o advise and report to the Minister on:
 - the strategic and public interest objectives for the new construction industry occupational body and the Registration Authority that would be articulated to the Chairs of both bodies in Letters of Expectations from the Minister;
 - the composition of the new construction industry occupational body membership and the Registration Authority Board;
 - develop and set the sector's long term performance standards and key indicators by which it would be measured and assessed.

This proposal achieves a higher level of transparency and accountability than the status quo. It also retains a high level of professional input into the development of professional standards and assessment procedures. This would provide more confidence to the profession that an engineer's input will be taken into account in the standards setting and assessment processes.

Key Questions

- **32.** What changes, if any, would you make to the institutional structures, statutory roles and functions outlined in the proposals? What do you consider are the benefits and costs of any changes?
- **33.** Are there other options that should be considered?

Proposal 10.

Introduce Minister initiated performance audits of Registration Authority.

It is proposed that the Minister is empowered to audit the Registration Authority to determine whether it is complying, or has complied, with the provisions of the Act and its performance objectives. To do this, the Minister would appoint an auditor which could be

the new construction industry occupational body, MBIE or an independent agency or company.

In other regulatory regimes with audit powers, such as the Health Practitioners Competence Assurance Act 2003, the Minister is required to provide a copy of the audit report to the Registration Authority and present a copy to the House of Representatives within 12 sitting days of receiving the auditor's report.

For health practitioners, the Registration Authority is required to respond to any concerns by indicating whether they are justified or not. If they are justified, the Authority will identify the steps it will take to address the concerns and a likely timeframe to do so.

Key Questions

34. Are performance audits of the Registration Authority's processes and procedures a good idea? If so, why and what benefits would be gained?

Proposal 11.

Introduce powers for MBIE to obtain design and construction information from engineers about buildings that they have designed or certified.

It is proposed to empower MBIE to require engineers and/or their companies to release design and construction information and documentation about buildings they have designed and/or overseen the construction of. This information would be used to identify and investigate building issues or failures that have significant public interest or life safety implications. It is intended that this power would only be required in certain situations and would not be used for all buildings.

Key Questions

- **35.** How important is it that relevant officials can access engineers' design and construction information to identify and investigate building issues or failures that have significant public interest or life safety implications?
- 36. What would the costs be to provide such information?

Appendix 1: Details of the proposals aimed at introducing sufficient checks and balances, compared to the current regulatory system

Current regulatory system for professional engineers: Status quo	Proposed regulatory system for professional engineers:
The Chartered Professional Engineers of New Zealand Act 2002 (the CPEng Act) institutes IPENZ as the Registration Authority for CPEng. The Registration Authority governing board is appointed by the IPENZ board. The IPENZ board is elected by the IPENZ members.	 IPENZ is retained as the Registration Authority for CPEng. The Registration Authority Board would be appointed by the Minister (rather than by the IPENZ board). However IPENZ would have the right to nominate 50% of the members of the Registration Authority Board. The remaining 50% of members would be nominated by the Minister. Registration Authority Board membership would include representatives of the profession, technical societies, academics, consumers and users.
There are no clear, specific performance expectations for the Registration Authority Board, and there are no performance indicators.	The Minister would set clear performance expectations for the Board, with indicators set by a new construction industry occupational body in consultation with MBIE.
 The Registration Authority's core functions are to: make rules and standards for the CPEng title; assess engineers' competence against the rules and standards for CPEng, and to register people as CPEng; administer the register and to provide registration information to the public; and, investigate complaints, hold disciplinary hearings and enforce the resulting decisions. The Chartered Professional Engineers Council (CPEC) is established to: approve rules and standards for CPEng proposed by the Registration Authority; report to the Minister on the performance of the Registration Authority; and, hear disciplinary appeals. 	 The Registration Authority's core functions are to: make rules and standards and design the assessment process for CPEngs; make decisions on the competency and registration of individual engineers and administer the registration and re-assessment processes; administer the register of chartered professional engineers to provide registration information to the public; and, investigate disciplinary complaints, make disciplinary decisions and take action on nonserious issues and administer the disciplinary process. CPEC would be dis-established. A new construction industry occupational body would be established that would have the responsibility to: approve occupational regulatory rules and standards; make disciplinary decisions and take action on serious breaches of the Act; hear appeals of Registration Authority's disciplinary decisions; undertake CPEC's functions particularly those acquired in the transition from the Engineers Registration Act 1924 to the CPEng Act 2002;

Current regulatory system for professional engineers: Status quo	Proposed regulatory system for professional engineers:
	 Authority; upon the Minister's request, undertake quality and performance audits of the Registration Authority's processes; and, ensure best practice systems and processes are in place for the Registration Authority. The profession led by IPENZ would: advise the Registration Authority on rules for CPEng and competence standards for CPEng registrants; advise the Registration Authority on ethical standards for CPEng registrants; and, provide professional support for registrants and members.
CPEC lacks sufficient powers, resources, capacity and independence to play its role effectively (CPEC has a small budget of \$70,000 per annum, it has no staff, and it meets around 4 – 6 times per year). There is no effective monitoring of the performance of the Registration Authority: IPENZ writes its own report on its performance as the Registration Authority. This report is accepted by CPEC and forwarded to MBIE for submission to the Minister.	A new construction industry occupational body would monitor the performance of the Registration Authority and report to the MBIE. The Minister would have authority to audit the performance of the new Registration Authority Board (with audits carried out by new construction industry occupational body or delegated authority e.g. MBIE).
IPENZ as the Registration Authority investigates complaints against CPEng registrants and decides on disciplinary actions. Appeals on disciplinary decisions are heard by CPEC.	The Registration Authority would investigate complaints about individual engineers on non- serious issues. New construction industry occupational body would consider serious complaints and take disciplinary action. Appeals of Registration Authority decisions would be heard by a new construction industry occupational body. Appeals to the new construction industry occupational body's decisions would be heard by the District Court.