

SUBMISSION

OCCUPATIONAL REGULATION

OF ENGINEERS

Engineering New Zealand (formerly IPENZ) is New Zealand’s professional home for engineers. We are New Zealand’s strongest and most influential voice on engineering issues, with over 20,000 members who want to help shape the public policy agenda and engineer better lives for New Zealanders.

Thank you for the opportunity to provide feedback on the Ministry of Business, Innovation and Employment’s (MBIE) *A proposed occupational regulatory regime for engineers*. Thank you also for your ongoing engagement with us.

The regulation of engineers is critically important to the public and everyone in the profession.

OUR POSITION

We support the occupational regulation of engineers. We support the wide inclusion of engineers within a regulatory regime and the restriction of certain high-risk engineering work to engineers whose competency has been assessed.

We support the Government’s oversight of a regulatory regime and the profession’s ongoing role in the oversight and management of the regime. We support MBIE’s recommendation that Engineering New Zealand should be the regulatory service provider.

We support the inclusion of the whole profession in a regulatory regime (engineers, engineering technicians, engineering technologists and engineering geologists). It is our view that the Regulator should run parallel registers of engineers, engineering technicians, engineering technologists and engineering geologists.

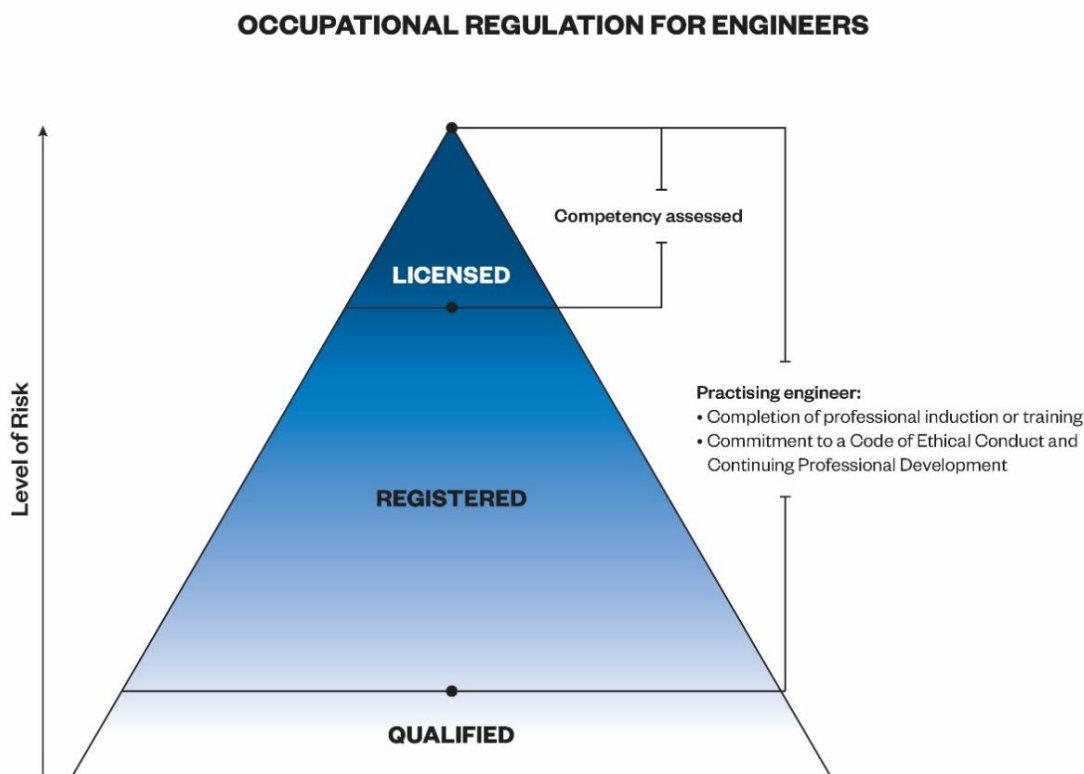
We also support the regulatory regime addressing the need for competency assessments within many of the industries engineers work in.

Finally, we support protection of the title ‘engineer’. We also support protection of the titles ‘engineering technician’, ‘engineering technologist’, ‘engineering geologist’, ‘licensed engineer’ and ‘licensed engineering geologist’.

OUR SUBMISSION

We have focused this submission on the high-level policy questions MBIE is looking to answer: whether engineers should be registered and licensed, and the structure of the system MBIE proposes.

In this submission we outline our support for widespread, mandatory inclusion of engineers within a regulatory regime and the restriction of certain engineering work to those with a licence. We recommend the system for registration and licensing look like this:



In this submission we also outline our support for the system structure MBIE proposes (namely the establishment of a Regulator and a regulatory service provider). We also outline our views on what should be included in primary legislation.

If MBIE's proposals progress, considerable work will be needed to implement the proposals and introduce the regime. Much of the detail is still to be worked through. Our aim in this submission is to reflect productively on MBIE's consultation questions while highlighting interdependencies which will need to be worked through in time.

OVERVIEW

This submission builds on [our submission](#) to MBIE on its occupational regulation consultation in 2019 (part of the Building System Legislative Reform consultation). In this submission we remember and reiterate what we heard from members during that consultation. We also reiterate what [we heard from members](#) when we consulted on our review of the Chartered Professional Engineer (CPEng) scheme in 2020.

To support MBIE's consultation we have also encouraged individual members, CPEng holders, students, and technical groups to submit independently. It is in all our best interests to ensure the weight of views across the profession, and the wider industries affected by the proposed changes, is heard.

THE BENEFITS OF OCCUPATIONAL REGULATION

Effective occupational regulation lifts professional standards, sets clear expectations around the competencies and qualifications required to perform certain work, and gives assurance to the public that they are engaging the right people for the job.

Effective occupational regulation also allows individual engineers to be held to account for professional misconduct. The profession supports this, acknowledging that engineers' work often has significant impacts both on life-safety and the economic wellbeing of individuals and the nation. Where an engineer fails to perform their duties with appropriate care and skill, they must be held to account. This is in the interest of both the public and the profession.

The occupational regulation of engineers also provides opportunity to limit some engineering work to those who have demonstrated their competency to perform that work. We support the introduction of such restrictions, recognising this is often in the best interests of the public. In many cases, engineers acting outside their competence have the potential to cause significant injury, or even death, as well as economic harm to members of the public.

WHAT OCCUPATIONAL REGULATION CANNOT ADDRESS

Failures still happen even within regulated occupations. We continue to advocate to Government for the ongoing review of regulatory settings across the industries engineers work in, especially building and construction. We encourage strengthening the role of standards, quality assurance processes (including peer review), better procurement processes with fairer contractual settings, and asset management requirements, as well as greater capability and consistency in the building consent process across the country's 60+ building consent authorities. The profession, through Engineering New Zealand, ACE New Zealand, the Construction Sector Accord and other partners, is already undertaking a lot of work in this space, and we welcome the opportunity to discuss this work further with the Government.

This said, occupational regulation is one lever the Government can use to strengthen the system engineers work in, to better assure competence and accountability.

PRINCIPLES

In our 2019 submission to MBIE on occupational regulation, we outlined the principles that should drive work on occupational regulation. Our views on this have not changed. It is our view that a strong regulatory framework for a profession:

- is **simple to understand and operate**. Simple frameworks are more effective than frameworks with unnecessary layers of regulation that duplicate process and cost
- pitches **government oversight at the right level** of regulation, letting the profession take an appropriate amount of responsibility
- **works for the whole profession (and wider industries)**. The framework needs to make sense for all disciplines and industries.

In this submission we reflect on MBIE's proposal, with recommendations to strengthen the proposal in line with the principles above.

OVERALL, WE SUPPORT MBIE'S PROPOSALS

We want a system that better protects the public and works for the profession, and the industries and sectors the profession works in. We agree with MBIE that such a system could consist of two layers:

1. Widespread registration of engineers in a regulatory regime
2. Restriction of some engineering work through licensing.

We also agree that:

- governance of the registration function should be separated from Engineering New Zealand's Governance Board¹
- registration must include a commitment to a Code of Ethical Conduct and Continuing Professional Development (CPD), and
- there needs to be greater government restriction on who can undertake high-risk engineering work.

This submission sets out our position on registration, licensing and the system structure proposed by MBIE. It also answers each of MBIE's consultation questions (**Appendix A**).

REGISTRATION AND LICENSING

We support MBIE's high-level proposals for registration and licensing. Support for both registration and licensing came through strongly in our discussions with members and stakeholders during MBIE's consultation period.

One of our key discussion points during MBIE's consultation was whether or not registration should be tied to a competency assessment. Many members favour the current system where chartered engineers have their competency assessed before they are registered. There is strong support for competency-based registration continuing.

However, after considerable conversation with members, groups, branches and stakeholders, we have come to the view that mandatory non-competency based registration is the simplest and most straightforward way to include all practising engineers in a regulatory regime. This inclusion is critical to addressing two of the significant risks we see in the system – namely the inability of the system to hold engineers to account and the inability of the system to restrict who can practise as an engineer.

The added benefit of mandatory registration is that it draws all practising engineers into a professional regulatory system. To practise as a professional, engineers must be registered. Registration then becomes synonymous with professional commitment. **Registration is about professionalism.**

This leads us to the role of technical competency assessments. The need for technical competency assessments is considered essential in some industries (for example, construction) and not others (for example, research and development). The reasons for this are that some industries have tight control processes in place that provide checks and balances and ensure acceptable levels of individual technical

¹ We are currently in the process of separating the governance of Engineering New Zealand from the governance of the Registration Authority for Chartered Professional Engineers.

competency. Other industries do not have these checks and balances. Through this consultation, MBIE will receive significant feedback on quality assurance systems that exist within the building and construction industry. We support the raising of these matters, as occupational regulation alone will not address the issues we see.

It is our view that where there is a need for technical competency assessments, these assessments should be carried out within a licensing system. **Licensing then becomes about competency and restricting certain work to those whose competency has been assessed.**

Therefore, while we broadly support MBIE's proposals, we recommend a reframing of the objectives of licensing. Through this submission we outline our recommendations on addressing the risks MBIE identifies, while also addressing the wider need of the public, profession and industry for competency standards setting and assessments.

We propose:

- widespread, mandatory registration of suitably qualified engineers after the completion of professional training or induction; and
- licensing of engineers wherever there is a need to ensure competency.

For those engineers in New Zealand who wish to maintain a general quality mark outside the licensing system, for instance to support international mobility, Engineering New Zealand will continue to offer international voluntary registration for 'International Professional Engineer', 'International Engineering Technician', and 'International Engineering Technologist'.

REGISTRATION

WE AGREE WITH WIDESPREAD, MANDATORY REGISTRATION

We agree with the **widespread, mandatory** inclusion of engineers in the regulatory regime. To this end, we support the widespread, mandatory registration of practising engineers and the ability of practising engineers to obtain annual practising certificates. As MBIE outlines in its discussion document, mandating the registration of practising engineers ensures these engineers commit to a Code of Ethical Conduct and CPD. It ensures professional accountability. This is good for the profession and for the public.

LEVEL OF REGISTRATION

We support MBIE's proposal that the registration of practising engineers should be early in an engineer's career, upon the completion of a suitable qualification and a commitment to a Code of Ethical Conduct and CPD. We also recommend that to be registered and obtain a practising certificate, engineers must complete some manner of professional induction or training. New graduates have had limited exposure to what it means to be a professional. Undertaking professional induction or training will go some way to introducing professional standards early in a new engineer's career. Professional induction or training provides an opportunity for exploration of the Code of Ethical Conduct, cultural competency training and other aspects of professional responsibility. Many firms already run strong graduate programmes under the guidance and mentorship of more senior staff. There are opportunities to support and strengthen what the industry has developed.

UNIVERSAL COVERAGE

MBIE proposes the universal registration of all practising engineers. We agree with this, acknowledging, as MBIE has done, that the intention of universal registration is to cast the net wide and bring all practising engineers within a regulatory regime. There are many benefits to universal coverage. One of these benefits is the use of the protected title.

During MBIE's consultation process, we discussed universal coverage with members, technical groups, industry representatives and other stakeholders. Common concerns expressed were whether there is a need to register engineers based overseas who provide specialist support to New Zealand projects. We welcome direction from Government.

ENGINEERING TECHNICIANS, ENGINEERING TECHNOLOGISTS AND ENGINEERING GEOLOGISTS

It is our view that a regulatory regime for engineers must include allied engineering professionals, notably engineering technicians, engineering technologists and engineering geologists. The work of all engineering professionals exposes the public to risk. Engineering technologists, engineering technicians and engineering geologists work alongside engineers to deliver engineering projects, and their work cannot always be neatly carved out. Excluding engineering technicians, engineering technologists and engineering geologists will limit the effectiveness of the regulatory regime.

It is our recommendation that the Regulator run concurrent registers for engineers, engineering technicians, engineering technologists and professional engineering geologists.

DEFINITIONS

On page 20 of MBIE's discussion document, MBIE proposes a definition of a professional engineer as any person who provides professional engineering services. MBIE then goes on to define professional engineering services. This definition is very broad and led us to review definitions from overseas jurisdictions. It is our view that MBIE's definition is widely consistent with overseas jurisdictions (notably Canada). In particular the *application of engineering principles* is key to defining the work of engineers.

Addition of the word "investigating"

We recommend that MBIE include the word "investigating" in its definition. Examples of "investigating" engineering work include geotechnical investigations and forensic building investigations. Investigations often provide information that is critical to engineering assessment and design.

Inclusion of categories of engineers

Under MBIE's definition of "professional engineer" on page 20, we encourage the inclusion of protected titles. On page 8 of this submission, we outline our thoughts on protected titles, notably "engineer", "engineering technologist", "engineering technologist", "engineering geologist", "licensed engineer" and "licensed engineering geologist".

Inclusion of the major disciplines

We have discussed the inclusion of the major engineering disciplines within a definition. While we acknowledge much of the detail of the definitions will be refined through legislative drafting processes, we recommend either removing the discipline list or extending it. Our thinking on this is that there is no clear line of sight to significant disciplines, such as software, within the current list. It is our view that the

inclusion of disciplines such as software is critical to addressing the risk MBIE identifies in its discussion document. Prescribing a limited set of disciplines to be included in regulation also limits the Regulator's ability to cover new engineering disciplines that may emerge in the future.

If the list were to be expanded, the list could include "any other prescribed area of engineering" (as published by the Regulator online).²

LICENSING

A LICENCE SHOULD BE REQUIRED WHENEVER THERE IS A NEED TO ENSURE COMPETENCY

MBIE proposes introducing licences for high-risk engineering work. We agree with MBIE's proposal and the introduction of licences to restrict those who can carry out high-risk engineering work.

We recommend an expansion of MBIE's licensing proposal to allow for the introduction of licensing classes wherever there is a need to restrict work to those whose competency must be assessed. As above, our view is that licensing classes enable the Regulator to restrict certain engineering work to those who are competent. This is good for the public and for the profession. It addresses the needs of both Government and industry to manage risk.

We want to design a system that is simple and works for the whole profession and industry. To do this we must address the current issue of concurrent registers of competency-assessed engineers. An example of this is the overlap and confusion caused by the CPEng register, the Chartered Member of Engineering New Zealand register and registers run by local and regional bodies (for example [Auckland Council's Producer Statement Authors list](#)). For brevity we will not go into the history of each register or the compounded reasons for the failure of one register to address risk and to preclude the creation of further registers. But the creation of a Regulator is an opportunity to establish a future regime that is fit-for-purpose, addresses risk and simplifies the compliance framework engineers work within.

We therefore recommend the Regulator be empowered in legislation to establish licence classes for high-risk, life-safety critical engineering work, as well as licence classes to address public and industry requirements.

The key point of difference between registration and licensing then becomes competency assessments, with all licences being granted only after an assessment of competency.

THE ROLE OF TECHNICAL SOCIETIES AND ENGINEERING ASSOCIATIONS

Our technical societies, as well as affiliated engineering associations representing specific disciplines or engineering expertise, are well-placed to help develop and support licensing classes. In many cases, Bodies of Knowledge and Skills have already been developed for high-risk engineering work. The development of licensing classes can leverage off this work.

Therefore, the setting of eligibility requirements for licensing should be managed by the Regulator with support from the relevant technical society or engineering association (for example the Structural

² Professional Engineers Registration Act 2019 (Victoria, Australia)

Engineering Society of New Zealand, the New Zealand Geotechnical Society, or the Electricity Engineers Association). With this approach we would expect eligibility requirements for licences to differ between disciplines. This includes the role of reassessments or audits for ensuring ongoing competency.

We recommend the Regulator be required to consider the recommendations of technical societies and engineering associations in the development of licensing classes.

Bodies of Knowledge and Skills

As above, a number of technical groups have developed Bodies of Knowledge and Skills. It is our view that these Bodies of Knowledge and Skills must set the baseline for licensing competency assessments. As an example, the New Zealand Geotechnical Society has developed a Body of Knowledge and Skill for both Geotechnical Engineering and Engineering Geology.

The role of audits

MBIE has asked whether licensed professionals should be reassessed at set intervals (CPEng is currently a six-year reassessment) or whether powers to audit should be introduced for the Regulator. We support primary legislation enabling the Regulator to require regular reassessments and/or audit. Requirements for reassessment or audits of competence should be at the discretion of the Regulator, informed by the relevant technical societies or associations.

FINAL THOUGHTS ON REGISTRATION AND LICENSING

PROTECTION OF TITLE

We agree with MBIE's proposal to protect titles. As with other regulated professions, engineers who are registered need to be able to use a protected title. Protected titles ensure public transparency on who is, and who is not, registered. They allow for action to be taken against non-registered individuals using the title.

We recommend MBIE protect the following titles:

- Engineer (four-year Washington Accord degree or equivalency)
- Engineering Technician (diploma in engineering)
- Engineering Technologist (Bachelor of Engineering Technology)
- Engineering Geologist (honours degree in engineering geology or equivalent, or an honours degree in geology and a postgraduate qualification in engineering geology)
- Licensed Engineer
- Licensed Engineering Geologist

Should the Government proceed with the registration of engineers early in their career, all those on the register are encompassed within the profession and the titles signal they are acting within that profession. However, the first four titles above do not indicate experience or competence. For this reason, we recommend the terms "licensed engineer" and "licensed engineering geologist" also be protected.

We have had extensive conversations with our groups and members, who have different opinions on whether the title 'engineer' should be protected, or if this should be 'professional engineer' as MBIE has

proposed. We recognise protecting the title 'engineer' will be challenging – this title is currently used in many different ways by people who do not have a Washington Accord degree or equivalency. It would take significant public education to embed 'engineer' as a protected title. However, we do not think this is an insurmountable barrier. We think protecting 'engineer' would ultimately provide greater clarity and simplicity than 'professional engineer'.

Registered engineer title

The Chartered Professional Engineers of New Zealand Act 2002 prohibits the use of the title “registered engineer” (clause 77). This is because historically the term “registered engineer” applied to those whose competency had been assessed and who were registered under the repealed Engineers Registration Act 1924.

To avoid confusion, when considering titles we recommend the term “registered engineer” be avoided or prohibited.

RAISING THE BAR

MBIE argues that mandatory registration lifts professional standards. We have discussed this point extensively and consider there is an argument for this. As MBIE has also outlined in its discussion document, registration provides a mechanism for ensuring all practising engineers commit to a Code of Ethical Conduct and CPD. While these things alone do not guarantee increases in competency or a “raising of the bar”, they provide a platform for it.

Through mandatory inclusion within a professional register, professionals can be held to account if professional standards are not maintained. Through complaints and disciplinary processes, engineers are assessed by their peers on their performance as professionals. This drives ongoing analysis of acceptable performance across the profession, and the dissemination of disciplinary decisions is a vehicle for change.

The role of membership in raising the bar

What MBIE’s document does not mention is the role membership with a professional body plays in lifting professionalism and competence standards. Membership of professional bodies, such as Engineering New Zealand, connects professionals with their peers and fosters an environment that promotes professional development and growth, along with other benefits to the profession and society. Professional bodies work to support the advancement of the profession.

Membership of Engineering New Zealand links engineers and provides opportunities to learn and develop professional knowledge and skills, through wider branch and group networks. The work of membership bodies plays a significant role in lifting professional standards.

INTERNATIONAL MOBILITY

In its submission, ACE New Zealand highlights considerations of international mobility, outlining New Zealand’s dependence on engineers trained overseas. We need to allow engineers to easily migrate and practise in New Zealand. We need to ensure any new system meets international benchmarks. We agree with ACE New Zealand it is critical that whatever regulatory system we adopt does not disrupt our place on international accords or disrupt our mobility agreements.

We have discussed points of international mobility and the implications of MBIE’s proposals with overseas counterparts. Transitional arrangements will need to include the impact of the new regulatory regime on

our international agreements. These international agreements set an exemplar of graduate attributes and professional competencies, and these will continue to underpin academic standards for registration, as well as general competency requirements for licensing. We are confident compatibility can be worked through during the coming transition period, should MBIE's proposals progress.

As mentioned above, for those engineers in New Zealand who wish to maintain a quality mark with international mobility, Engineering New Zealand will continue to offer international voluntary registration for "International Professional Engineer", "International Engineering Technician", and "International Engineering Technologist". This will be best facilitated by ensuring that the competence standards for licensing, in addition to specific technical requirements, align with the international competency benchmarks.

SYSTEM STRUCTURE

WE SUPPORT THE PROPOSED GOVERNANCE ARRANGEMENTS, BUT ADVOCATE FOR THE BOARD OF THE REGULATOR BEING REPRESENTATIVE OF THE PROFESSION

We support the model proposed by MBIE for the governance and accountability of the Regulator. We agree an independent board should oversee the work of the regulatory service provider and that this board should be held to account by a Minister of the Crown.

In the drafting of legislation to establish the Regulator, we ask the Government to follow the precedent of other professions (notably that of the governance arrangements of medical professions pursuant to section 120 of the Health Practitioners Competence Assurance Act 2003) and ensure the majority of appointments to the Regulator are engineers, but with a mix of other skills as needed. This ensures professional oversight of the register and the powers and functions of the Regulator.

WE AGREE TO THE PROPOSED POWERS AND FUNCTIONS OF THE REGULATOR

In principle we agree to the proposed powers and functions of the regulator, as outlined on page 23 of the discussion document. We welcome the establishment of a dedicated regulator to:

- propose new rules and regulations for registration and licensing
- administer the register (including making decisions on applications, monitoring compliance and overseeing the complaints and disciplinary process)
- set requirements for CPD
- develop a code of conduct
- share information about an engineer's conduct with any relevant agency.

It is our view that that, at a minimum, the following needs to be defined in primary legislation:

- intent/purpose of the register of engineers and protection of title
- requirements of the register (eg form, public accessibility)
- clarification on scope of practice (or restricted work) as being defined in regulation
- requirements for addition to and removal from the register, including key obligations, powers and rights related to notifying competence concerns, investigating competence concerns, suspension, and managing risk (see below for additional detail)

- governance, oversight and accountability provisions relating to the structures and administration of the licensing system, including delegation to an authority, functions of the authority, and powers of delegation on decisions pertaining to the register.

We welcome further opportunity to discuss these with MBIE as it progresses work to legislate an occupational regime for engineers.

ENGINEERING NEW ZEALAND AS THE REGULATORY SERVICE PROVIDER

MBIE have asked who should administer the functions of the regulator, whether this should be MBIE, Engineering New Zealand or other delegations.

Historically, Engineering New Zealand (IPENZ) has managed the substantive registration of engineers in New Zealand. We know first-hand what it means to regulate this diverse profession and are committed to supporting the profession to thrive. We are also significantly invested in the infrastructure to support widespread registration, including the databases to support the effective administration of systems.

Effectively regulating any profession requires a systemic response. The right legal framework is only one piece of a much larger set of interdependencies encompassing training and education, collegiality, development and maintenance of standards and guidelines, accreditation and proportionate accountability, and integration across the different professions in the industry. These pieces are part of a cohesive whole.

We support MBIE's proposal that Engineering New Zealand should be the regulatory service provider and welcome this opportunity.

COMPLAINTS AND DISCIPLINARY PROCESSES

When considering opportunities to shape a future complaints, disputes and enforcement process for engineers, we consider the following to be important.

- **Flexibility in the early resolution processes:** Currently, around 50 percent of complaints received by the Registration Authority of Chartered Professional Engineers are resolved through early resolution, meaning that the formal processes can be reserved for serious complaints. A binary process (for example a process which requires formal investigation of every complaint) is neither cost-effective nor practical and can be at odds with the intent of an accountability system. The system needs to be flexible to allow different responses depending on the nature of the concerns raised, including a discretion to take no further action in some circumstances. All decisions need to be transparent to the complainant.
- **Roles and responsibilities:** The current CPEng system is structured in such a way that it pits complainant against respondent – much like a court process where you have a plaintiff and defendant. While this may be appropriate for a complaint resolution regime (like a Commissioner or Ombudsman), it is ineffectual for professional accountability. It can be highly taxing and stressful for complainants, and discourage the public and other engineers from raising serious competence concerns. We consider an ideal professional accountability system has the Regulator take the lead in any action against registrants/licensed practitioners – even where this action originates from a complaint from a member of the public (for example, the health practitioners' model sees the process led by a professional conduct committee).

- **Clear and simple:** The current formal complaints process for the Registration Authority is administratively heavy and can include up to nine different decision-makers across a three-phased process. This affects the efficiency and responsiveness of the Registration Authority to complaints and competence concerns. Ideally, if a complaint is not appropriate for early resolution and needs a formal response, that process should have no more than two stages – investigation (for example, by an investigating committee or professional conduct committee) and, if appropriate, a disciplinary process.
- **Resolution powers:** Different complaints require different levels of resolution. The current system is binary and requires an investigating committee to investigate and either dismiss the complaint or refer it to a disciplinary committee. The investigating committee has no power to resolve a complaint. These committees should have greater powers to make negative comment and educational recommendations on matters that require a level of censure but not a disciplinary response, instead of being a step in the process (for example, see section 80 of the Health Practitioners Competence Assurance Act 2003 in relation to the recommendations and determinations of professional conduct committees).
- **Appeals should go to the District Court:** Currently, appeals go to Chartered Professional Engineers Council. The majority of appeals in other professional disciplinary processes proceed straight to the District Court, which is appropriate.
- **Delegation powers:** Currently, the Registration Authority has the ability to delegate powers to make decisions on complaints to other persons. We consider this power very important.

The Board of the Regulator as the decision-maker

We do not support the Board of the Regulator being the final decision-maker. In our experience, the Board needs to be able to delegate the power to hold hearings and make decisions on complaints and disciplinary matters. The skills and expertise of a regulatory board are not the same as those required of a decision-maker acting in a quasi-judicial role. The two functions – that of a governance board and that of a professional disciplinary body – require different skills and expertise from members and should ideally be separated.

It is critical that decision-makers deciding whether to uphold complaints against engineers have the right attributes and qualifications to ensure a fair and robust disciplinary process.

Appeals to the District Court

For reasons given in the paragraph above, we agree with MBIE's recommendation that appeals against disciplinary decisions and decisions of the Board should go to the District Court.

Primary legislation

Should MBIE's proposals proceed, we consider the primary legislation should include:

- Clear definition of who/what is covered by the complaints and discipline powers of the Act
- Definition of who can complain
- Obligations to notify (for example, notification of convictions and notification that practice is below the required standard of competence (see sections 34 and 67 of the Health Practitioners Competence Assurance Act 2003))
- Options upon receiving complaint – no further action, refer to another body, alternative resolution or investigation
- Powers to commence an own motion investigation

- Powers to require information – mandatory (see section 77 of the Health Practitioners Competence Assurance Act 2003)
- Powers to share risk information and respond to risk (same as Health Practitioners Competence Assurance Act 2003 – for example, see sections 35 and 39 of that Act)
- Disciplinary thresholds – for example negligence, incompetence, breach of code of ethics, criminal convictions, fraudulent disclosure of information to registration authority or licensing authority
- Types of orders – for example fines, suspensions, removal and publishing or notifying the decision
- Provisions similar to section 26 of the CPEng Act (“except as otherwise provided in this Act, a decision authority may regulate its own procedure for making decisions under this Part”)
- Right of appeal (to the District Court)
- Procedure for decisions – for example natural justice, giving reasons for decisions and others
- Obligations on licensed individuals to notify the regulatory service provider of convictions
- Power to enforce any orders made
- Definition of a fit and proper person.

THE COST TO INDUSTRY

We recognise strengthening the regulatory regime for engineers will come at a cost. As is currently the case, much of this cost will be shouldered by the industry. Costs will include the financial and time requirements of applying, registering, maintaining annual practising certificates and, if relevant, licensing. There are also considerable costs to the profession to support the setting of standards, governance, assessments, reassessments, audits and complaints/disciplinary processes.

In its submission to MBIE, ACE New Zealand has outlined that in 2020, the profession volunteered approximately 3,500 hours for 421 CPEng first-time assessments alone. This is a cost of approximately \$670,000. This figure alone does not include the profession’s input into complaints and disciplinary processes or reassessment processes run by Engineering New Zealand. Nor does this include volunteers who support the system in governance roles, through technical societies who input into CPEng processes, or those who mentor CPEng applicants.

Both Engineering New Zealand and ACE New Zealand have heard clearly from the profession and industry that regulatory compliance costs are part of doing business. This said, it is in the collective best interest to ensure compliance costs address risk and are proportionate. This is particularly relevant at the current time, as a number of the industries engineers work within are under considerable pressure to deliver key infrastructure projects. Should MBIE’s proposals progress, we are ready to support further analysis of impacts and options, once policy decisions have been agreed by the Government.

CONCLUSION

Thank you again for the opportunity to provide comment on MBIE’s proposal *A proposed occupational regulatory regime for engineers*.

To summarise, we support:

- mandatory and widespread **registration** early in an engineer's career and following professional training or induction and a commitment to CPD and a Code of Ethical Conduct
- **licensing** to address both high-risk, life-safety work and the needs of industry to ensure an engineer's competency has been assessed
- a regulatory regime that includes all engineers and provides protection of title for 'engineer', 'engineering technician', 'engineering technologist', 'engineering geologist', 'licensed engineering geologist' and 'licensed engineer'.

As our submission highlights, we also support MBIE's recommendation that Engineering New Zealand be the regulatory service provider. Should MBIE's proposals proceed, we look forward to working with MBIE and the profession on transition requirements, arrangements and next steps. We will provide further information to MBIE on our views on these in due course.

APPENDIX A:

RESPONSES TO MBIE'S CONSULTATION QUESTIONS

THE CASE FOR INTERVENTION

- 1. Do you agree there is a case for occupational regulation of professional engineers? Why do you think so?**
 - o We strongly agree there is a case for the occupational regulation of engineers. Please see our comments above.
- 2. Have we identified the issues with the status quo correctly? Are there any issues that we have not included?**
 - o MBIE has correctly identified the issues with the status quo as far as the occupational regulation of engineers is concerned. As we have outlined above, occupational regulation is only one mechanism needed to strengthen the systems engineers work within. In MBIE's conversations about addressing issues of quality within these systems, we continue to encourage a holistic, system view and subsequent problem definition.
- 3. We are unable to verify the number of practising engineers and those who may be operating at substandard levels. Can you suggest information sources for us?**
 - o MBIE's discussion document references work by PwC and Engineering New Zealand to ascertain the number of engineers in New Zealand. Based on this work, MBIE's figure of an additional 14,000 engineers to be registered is likely low. Depending on the requirements of registration, it is our view that up to 50,000 engineers may be required to be registered.
- 4. What is your perception of the overall performance of engineers? Does your perception depend on the engineering discipline? Do you have examples of poor engineering you can share?**
 - o Engineers in New Zealand undertake world-class engineering work. We are proud of our profession's work and honoured to represent engineers. This said, Engineering New Zealand and the Registration Authority for Chartered Professional Engineers manage the complaints and disciplinary process for the profession. This work provides us with insight of professional failures, some of which are high-profile. Some of these issues originate from professional failings, but they also sit within the context of a safety system that enables errors to go undetected.

PROPOSAL 1: ESTABLISH A NEW REGISTRATION REQUIREMENT FOR PERSONS WHO PRACTISE PROFESSIONAL ENGINEERING

- 5. Does our working definition of professional engineer and professional engineering services adequately reflect the profession? Can you suggest any changes?**
 - o Please see our comments above. We are generally supportive of MBIE's definition of professional engineer and professional engineering services but recommend the inclusion of the word 'investigating'. We also consider the definition should reference engineers, engineering technicians, engineering technologists, engineering geologists, licensed engineering geologists and licensed engineers, as defined in legislation.

- 6. Do you agree that the regime should cover all professional engineers? Are there any disciplines that should be exempted and why?**
- o It is our view that the regime should cover all engineers, as outlined above.
- 7. Do you agree with establishing a new protected title? Do you have a preference for what it is?**
- o As per our comments above, we recommend the establishment of six protected titles, as follows:
 - Engineer
 - Engineering Technician
 - Engineering Technologist
 - Engineering Geologist
 - Licensed Engineering Geologist
 - Licensed Engineer
- 8. Is a qualification enough for registration? Should we also include experience and an assessment of competence?**
- o Please see our comments above.
- 9. Would limiting registration to those with an engineering qualification (such as a Washington Accord level degree or equivalent) exclude some engineers in the profession? How can we recognise those engineers?**
- o Yes. For this reason we recommend the inclusion of engineering technicians, engineering technologists and engineering geologists into the regulatory regime. These engineering professionals should be registered on separate registers.
- 10. Do you engage engineers from overseas? Would requiring them to be registered affect your ability to engage their services? Or would overseas engineers be able to work under the supervision of a local engineer?**
- o As above, we welcome guidance from the Government on this matter. To ensure universal coverage, we see a case for the Government requiring engineers from overseas to be registered. It is our view that there is no benefit to specialist engineers from overseas being required to work under the supervision of a (possibly less experienced) engineer who is registered in New Zealand. Engineering New Zealand's involvement in international agreements will facilitate alignment of the regulatory regime with associated international benchmarks.
- 11. Do you agree that all engineers should be subject to a code of conduct and continuing professional development obligations? Please share your reasons if you disagree.**
- o Yes, we agree with MBIE that commitment to a code of conduct and continuing professional development must be mandatory for the ongoing registration of engineers.
- 12. Do you agree with the proposal for a practising certificate? Do you have any other suggestions for how we can link registration to continuing professional development?**
- o We agree with this proposal and it is something we have proposed as part of our current CPEng review. Engineering New Zealand can provide further advice on linking registration to CPD if MBIE progresses this recommendation.
- 13. How often should an engineer need to renew their practising certificate?**
- o Annually. This is something we have proposed as part of our CPEng review work.
- 14. Should issuing a practising certificate be contingent on an engineer completing their continuing professional development commitments?**

- o Yes. This is also something we have proposed as part of our CPEng review work. We acknowledge that there may be instances (ie, maternity/paternity leave) where pro rata CPD hours should be considered to enable workforce retention.
- o As ACE New Zealand has highlighted in its submission, we also support practising certificates being contingent on a declaration that no issues have arisen over the year that the Regulator should be aware of. This is in addition to a commitment to the Code of Ethical Conduct and CPD.

15. Should electrical engineers registered by the Electrical Workers Registration Board continue under that regime rather than the new one proposed?

- o It is our view that electrical engineers should be included in the new regulatory regime proposed. We have discussed this question with the Electricity Engineers' Association. The Electrical Workers Registration Board has a statutory duty to register and license (in various classes) persons who are competent to carry out prescribed electrical work (as defined in the classes). One of its classes is 'electrical engineers' and permits electrical engineers to carry out prescribed electrical work of a limited nature that is specific to the individual by reason of his/her previous training and experience. A typical example would be acting as a test technician and carrying out 'hands-on' testing of electrical equipment.
- o Prescribed electrical work is defined in Schedule 1 of the Electricity (Safety) Regulations 2010 and carefully excludes the work of electrical engineers including the design of electrical installations and works, and the supervision of inspection, certification and testing of electrical installations, works and equipment. Therefore, in the course of the work electrical engineers do, their professional work does not require registration or a licence. More importantly, in the context of the discussion document, the Electrical Workers Registration Board does not have the knowledge or expertise that would permit it to make any judgement as to the competency of an electrical engineer other than his/her competency to carry out some limited prescribed electrical work, as it is defined.

16. Are there other engineering practice fields that should also be recognised for similar reasons? What are they, and why should they be recognised?

- o No. It is our view that all practice fields should be included in the regulatory regime.

17. Should we include engineering associates, engineering technologists, engineering technicians and/or engineering geologists in the new regime?

- o Allied professions should be included in the new regulatory regime and registered. Please see our comments above.

18. If we expand the scope, should we make registration mandatory for those practising in these additional areas?

- o We think registration should be mandatory for engineers, engineering technicians, engineering technologists and engineering geologists.

19. Is a recognised statutory credential of value for engineering associates, technologists, technicians, and engineering geologists? Why?

- o Yes. We think allied engineering professionals should have protected titles (recognised statutory credentials). Please see our comments above.

PROPOSAL 2: RESTRICT WHO CAN CARRY OUT OR SUPERVISE HIGH RISK ENGINEERING WORK

20. Do you support the Minister being able to decide what practice fields should be licensed? Or would you prefer greater certainty by setting out licensed practice fields in the primary legislation?

- o We agree the Minister should be able to decide, on the advice of the Regulator, what practice fields should be licensed. Prescribing licence practice fields in primary legislation would prevent the Regulator from responding to emerging fields of engineering, evolving societal expectations, or changes within the profession.

21. Do you agree with the proposed list of criteria that the Minister would use to prioritise the development of licence classes? Are there other criteria that should be considered?

- o Please see our comments above. We agree with the proposed criteria, as outlined on page 26 of the consultation document. In addition, we recommend the Regulator be empowered to establish licence classes where there is a need for a register of competency assessed engineers.

22. What sort of eligibility requirements for licensing would provide a suitable level of assurance on an engineer's expertise? Should they differ depending on the practice field?

- o It is our view that the Regulator should prescribe eligibility requirements for licensing with input from the relevant technical society and engineering associations (for example the Structural Engineering Society of New Zealand or the New Zealand Geotechnical Society). With this approach we would expect eligibility requirements for licences to differ between disciplines.

23. Should licensed engineers undergo regular checks of their continued competency?

- o Yes.

24. How often should the regulator check a licensed engineers' competency?

- o The frequency of competency checks should be determined by the Regulator and the relevant technical group(s). This frequency may differ between licence classes and in setting these checks, the Regulator should take into account the risks being addressed and the cost to the profession of the introduced requirements.

25. What tools would be most useful to check competency in your practice field?

- o We have discussed this with technical societies and consider interviews, referee checks, portfolios and written work are possible tools to check competency. Another option is the introduction of exams (this happens in some jurisdictions). The method and mode of competency checks may vary between licensed disciplines, and should be decided by the Regulator with input from the relevant technical society (or societies) or associations.
- o We also consider there is a case for exploring opportunities for work samples to be provided by third parties (for example, members of the public, Building Consent Authorities and/or Territorial Authorities).

26. Would you prefer using the Chartered Professional Engineering (CPEng) credential for licensing classes rather than creating a new credential? Why?

- o No. The "chartered" credential implies a competency assessment on par with the current CPEng assessment process. Chartership is an international quality benchmark. The title chartered should only be used if the level of assessment remains at a similar level to the current CPEng. If the level of assessment changes (ie, the bar for assessments is higher) then continuing to use the same title for a different scheme will confuse the system.

27. Do you prefer the option of licensing companies instead of individuals? Why?

- o We continue to encourage MBIE to take a system-wide view of identifying and addressing risk. As an alternative to licensing companies, MBIE may wish to restrict the ability of businesses to advertise engineering services to those whose engineers are registered or hold a licence.

PROPOSAL 3: ESTABLISH A NEW TWO-TIERED REGULATOR COMPRISED OF AN INDEPENDENT REGULATORY BOARD AND A REGULATORY SERVICE PROVIDER

28. Do you agree with the proposed two-tier regulator model of a regulatory board and a regulatory services provider? Are there any other models we should consider?

- o Yes, we agree with the two-tier regulator model of a regulatory board and a regulatory service provider.

29. Do you have a preference for who the regulatory service provider should be?

- o Yes. It is our view that Engineering New Zealand should be the regulatory service provider.

30. Do you agree with the proposed functions of the regulator and regulatory service provider? Can you suggest any different functions?

- o Yes, we agree with the proposed functions of the regulator as set out on page 30 of the discussion document. As outlined above, one caveat to this is that the Board needs to be able to delegate the power to hold hearings and make decisions on complaints and disciplinary matters. The skills and expertise of a regulatory board are not the same as those required of a decision-maker acting in a quasi-judicial role. The two functions – that of a governance board and that of a professional disciplinary body – require different skills and expertise from members and should ideally be separated. It is critical that decision-makers deciding whether to uphold complaints against engineers have the right attributes to ensure a fair and robust disciplinary process.

31. Have we missed any other grounds for discipline? Have we proposed grounds for discipline that you think should be modified or removed?

- o We agree with MBIE's proposed grounds for discipline as set out on page 32. Please see our comments above for further thoughts on the complaints and disciplinary process.

IMPLEMENTATION

32. Should the regulator have the flexibility to recognise and automatically deem some existing practitioners as registered and/or licensed?

- o It is our view that the Regulator should have the flexibility to recognise some existing practitioners as qualified for registration based on an existing chartership or registration within another voluntary or regulatory regime, and that these practitioners can be automatically **registered**.
- o Overall we do not think the Regulator should have the flexibility to recognise and automatically deem some existing practitioners as **licensed**. We have significant concerns about grandparenting for license classes. There may be a small number of cases (for example, those with a current Professional Engineering Geologist credential) where professionals have already been assessed at an appropriate level. Examples like this would be an exception and not a rule.

33. Do you have any suggestions for other ways to transition the profession to the new regime?

- o We support MBIE's high-level transition plans as outlined in the consultation document. Depending on where MBIE's proposals land, we will work on behalf of the profession to support clear and transparent transition plans.

34. Should we retain the Chartered Professional Engineer credential in the longer term? If we do, what role should it play?

- o CPEng should only be retained if the level for registration is set at the current CPEng level (after 4-6 years' experience and a competency assessment). Otherwise, CPEng should be repealed. Should

CPEng be repealed, we will work with CPEng holders and Engineering New Zealand members to support their transition and ongoing engagement within the system.