

Consultation submission from

**Building Officials Institute of
New Zealand (BOINZ)**

**A Proposed Occupational Regulatory Regime
for Engineers**



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How to submit this form

How to submit this form

This form is used to provide feedback on proposals found within the consultation document *A Proposed Occupational Regulatory Regime for Engineers*.

When completing this submission form, please provide comments and reasons explaining your choices. Your feedback provides valuable information to help the Ministry of Business, Innovation and Employment (MBIE) think about how to respond to the issues raised.

You can submit this form by 5pm, Friday 25 June 2021 by:

- email: building@mbie.govt.nz, with subject line 'Engineers consultation 2021'
- post to:

Building Policy
Building, Resources and Markets
Ministry of Business, Innovation and Employment
PO Box 1473
Wellington 6140

Use of information

The information provided in submissions will be used to inform MBIE's policy development process, and will inform advice to Ministers on the Licensed Building Practitioner scheme. We may contact submitters directly if we require clarification of any matters in submissions.

Release of information

MBIE intends to upload PDF copies of submissions received to MBIE's website at www.building.govt.nz. MBIE will consider you to have consented to uploading by making a submission, unless you clearly specify otherwise in your submission.

If your submission contains any information that is confidential or you otherwise wish us not to publish, please:

- indicate this on the front of the submission, with any confidential information clearly marked within the text
- provide a separate version excluding the relevant information for publication on our website.

Use of information

The information provided in submissions will be used to inform MBIE's policy development process, and will inform advice to Ministers on proposals for occupational regulation of engineers. We may contact submitters directly if we require clarification of any matters in submissions.

How to submit this form

Release of information

Submissions remain subject to request under the *Official Information Act 1982*. Please set out clearly in the cover letter or e-mail accompanying your submission if you have any objection to the release of any information in the submission, and in particular, which parts you consider should be withheld, together with the reasons for withholding the information. MBIE will take such objections into account and will consult with submitters when responding to requests under the *Official Information Act*.

Private information

The *Privacy Act 2020* establishes certain principles with respect to the collection, use and disclosure of information about individuals by various agencies, including MBIE. Any personal information you supply to MBIE in the course of making a submission will only be used for the purpose of assisting in the development of policy advice in relation to this review. Please clearly indicate in the cover letter or e-mail accompanying your submission if you do not wish your name, or any other personal information, to be included in any summary of submissions that MBIE may publish.

Submitter information

Submitter information

MBIE would appreciate if you would provide some information about yourself. If you choose to provide information in the “About you” section below it will be used to help MBIE understand the impact of our proposals on different occupational groups. Any information you provide will be stored securely.

A. About you

Name: Nick Hill

Email address: Nick.Hill@boinz.org.nz

B. Are you happy for MBIE to contact you if we have questions about your submission?

Yes No

C. Are you making this submission on behalf of a business or organisation??

Yes No

If yes, please tell us the title of your company/organisation.

Building Officials Institute of New Zealand (BOINZ)

D. The best way to describe your role is:

- | | |
|--|--|
| <input type="checkbox"/> Engineer (please specify your discipline below) | <input type="checkbox"/> Other engineering professional (please specify below) |
| <input type="checkbox"/> BCA/Building Consent Officer | <input type="checkbox"/> Consumer of engineering services |
| <input type="checkbox"/> Architect or designer | <input checked="" type="checkbox"/> Other (please specify below) |
| <input type="checkbox"/> Builder or tradesperson | <input type="checkbox"/> Prefer not to say |

Please specify here.

Chief Executive

Building Officials Institute of New Zealand (BOINZ)

E. If you are an engineer, are you:

- Chartered Professional Engineer
 Engineering New Zealand member
 Neither

The case for intervention

The case for intervention

Occupational regulation of a profession aims to protect the public from harm caused by incompetent or reckless practitioners. Our current approach to regulating engineers is not adequately protecting the public. Many engineers are practising outside of a regulatory regime, the public lacks information on who is competent to practice, there are few restrictions on who can practice in high risk fields, and the current governance structure is not sufficiently accountable, transparent, or independent from the profession.

Questions for the consultation

**1. Do you agree there is a case for occupational regulation of professional engineers?
Why do you think so?**

Yes, we consider that there is a strong case for the occupational regulation of professional engineers. This would raise standards, enhance accountability, increase public confidence and limit critical building engineering work to those who are appropriately qualified.

We believe that occupational regulation of engineers will bring a consistency process allowing public awareness of various expectations and deliverables applicable to an engineer's competency and capability to practise.

2. Have we identified the issues with the status quo correctly? Are there any issues that we have not included?

BOINZ considers that the issues with the status quo have been identified correctly.

The case for intervention

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?

BCAs may have a database/list of active engineers within their region and the levels of competency these engineers have declared. Similarly, BCA may be aware of engineers that have worked outside their competency level or provided conflicting advice.

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?

BOINZ believes that the level of engineering work undertaken by the majority of the engineers operating in the construction sector is of a competent standard.

An observation that our members have made across a number of engineering disciplines, relates to the over-reliance of “anticipated” specific site considerations or conditions, without actual detailed examinations being undertaken. We believe there should be a more stringent requirement placed on the engineer to make “adequate site specific investigations” to ensure the design is fit for purpose. Current practice in some disciplines is putting an over-reliance of construction monitoring as opposed to adequate investigation prior to consenting applications.

A common problem experienced by our members processing applications for building consent, is a lack of co-ordination of design between disciplines including engineers. For example, in both fire design and structural designs there are often references to say what needs to be covered in architectural designs without the check that what has actually been designed meets the engineering requirements. We believe this is influenced by procurement procedures not allowing in all cases for the appropriate time and co-ordination to be undertaken and paid for. We believe there could be improvements made into the professional code of conduct to provide for better oversight and quality outcomes.

Proposal 1. Establish a new registration requirement for persons who practice professional engineering

Proposal 1: Establish a new registration requirement for persons who practice professional engineering

All persons who provide professional engineering services would need to be registered. Registered engineers would be subject to a code of conduct, continuing professional development obligations and a complaints and disciplinary process.

Questions for the consultation

5. Does our working definition of professional engineer and professional engineering services adequately reflect the profession? Can you suggest any changes?

BOINZ supports a regulatory regime including a range of related and supporting roles such as engineering technicians, engineering technologists and engineering geologists. As such we would encourage the definition of a professional engineer, providing engineering services to be **'appropriately qualified and competent'** to provide the services rendered. 'Appropriately qualified and competent' should be added to the definition of a professional working in the engineering area.

6. Do you agree that the regime should cover all professional engineers? Are there any disciplines that should be exempted and why?

BOINZ agrees that the regime should cover all professional engineering disciplines. In the construction sector we do not see any areas of engineering that should be exempt.

Proposal 1. Establish a new registration requirement for persons who practice professional engineering

7. Do you agree with establishing a new protected title? Do you have a preference for what it is?

BOINZ agrees that persons who practice professional engineering should be subject to the following *obligations*:

- Code of Conduct
- Continuing professional development
- Complaints and discipline process

Also, BOINZ agrees that persons practicing professional engineering must meet the following *minimum standards*:

- Be a fit and proper person
- Be suitably qualified
- Have a level of expertise or demonstrate competence

BOINZ agrees that it is desirable to get new and graduate engineers on a register and into the occupational regulation system early, but what title should they be given? BOINZ disagrees that this title requires protection.

BOINZ notes that the proposal is silent about who undertakes the fit and proper person test. By comparison, in the proposed recently consulted MCM regime, the fit and proper person test is undertaken by MBIE as part of the registration process, following the accreditation by the MCM accreditation body.

BOINZ strongly recommends that the protected title for persons practicing professional engineering be allocated to persons that meet the minimum standards and obligations as proposed, including having appropriate qualifications and demonstrated competency.

While **supervision** is included in the proposal for registered, or professional engineers in their progression all the way through the hierarchy to Licenced Engineers, it is silent on who can supervise a graduate engineer through the entry pathway process (eg internship) to a level that they are able to demonstrate competence, in order to obtain a practising certificate.

BOINZ recommends that supervision of graduate and new engineers be undertaken by Registered, or Professional Engineers (depending on the title agreed) operating within the same field/scope of work.

BOINZ suggests that supervision of graduate and new engineers should be for a minimum of two years within which time the graduate should be actively working under supervision.

Protected title

BOINZ notes that 'Registered' as a title, is a high level descriptor, as used in the parallel regime for Architects.

Therefore, BOINZ suggests the word 'Registered' only be used for high level recognition of Engineers that meet the minimum standards and obligations (listed above), so there is no confusion.

BOINZ recommends that 'Registered' should not be the entry level term for getting new and graduate engineers onto a register.

BOINZ agrees with the terms 'Registered Engineer' or 'Professional Engineer' being a protected title for engineers that meet the minimum standards, and obligations.

BOINZ agrees with the term 'Licensed Engineer' as the protected title for those engineers operating in a high-risk specialised area.

Proposal 1. Establish a new registration requirement for persons who practice professional engineering

BOINZ is concerned that the registration process and description of the individual prior to achieving the necessary competence levels, means that there is no transitional title for these individuals although they have gained an engineering qualification. Calling them registered or professional engineer implies that they have achieved the standards and obligations which they may not have.

We note in the consultation document you draw attention to international best practice, which requires developing engineers working under supervision of a Registered Engineer. We also note the proposal as written entitles a registered engineer to call themselves a professional engineer (PE). BOINZ supports alignment with international naming conventions. On this basis the use of 'registered' would also align with 'registered architect'

BOINZ supports a competency achievement prior to being a registered engineer or a professional engineer (title dependent) to align with international best practice.

8. Is a qualification enough for registration? Should we also include experience and an assessment of competence?

BOINZ strongly disagrees on the basis that occupational capability should include a more thorough assessment including experience and competence. The process should recognise and capture both a person, who has gained a qualification, and subsequently a person with that qualification who has achieved competence. This allows the process to capture and recognise engineers along the competence pathway, all the way through to the Licenced engineer category.

For public transparency, the qualification entry and competency requirements need to be a simple and easily understood process ensuring there is no confusion as to the level of engagement of the engineer.

We see the process capturing anybody with a qualification that operates in the engineering fields, delivering certainty and accountability during an engineering career.

A new or graduate engineer should be required to undertake two years under the supervision of a Registered or Professional Engineer, ensuring exposure and experience to the requirements of engineering professionalism, and the discipline they are trained in, before a Practising Certificate is issued.

The cost of demonstrating competence is raised in the consultation and BOINZ is of the view, the cost of a qualification and subsequent competence training is a cost to the engineer and/or their employer and one that consumers will and should pay on amortised recovery portion basis, to achieve quality engineering outcomes.

We would also add that information in respect of a qualification and competence should be available on a central register for people seeking engineering services and BCAs for assessment purposes.

Proposal 1. Establish a new registration requirement for persons who practice professional engineering

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?

It is likely that some engineers would be excluded. Pathways based on other qualifications should be established accordingly to allow continued participation by existing competent engineers. We do not see grandfather pathways as appropriate in the engineering sector.

We believe that work needs to be undertaken to ensure that there doesn't exist an exclusion policy, by default, that prevents existing practitioners and individuals with high exposure and experience from legally operating.

We would ideally also see the Regulatory Service Provider aiding, assessing and recommending international engineering mobility needed for projects in New Zealand where capacity and capability issues exist.

Proposal 1. Establish a new registration requirement for persons who practice professional engineering

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?

BOINZ does not engage engineers from overseas. However, we would expect an equivalence assessment in respect of qualifications, supported by a competency CV that would allow an evaluation by experienced NZ engineers to recommend an international registration for an individual to practise in NZ. We believe the most appropriate organisation to assess this is Engineering New Zealand as the Regulatory Services Provider. Please also see our answer to Question 9.

Overseas engineers will need to be assessed they meet Registration requirements in the same way as NZ engineers, but by using their overseas credentials they will need to have their:

- Qualification checked as appropriate for NZ Registration
- Competence checked and that their overseas experience is appropriate to NZ
- Understanding of the NZ legislative requirements checked

Any knowledge or competency gaps can be filled before reassessment and registration.

BOINZ believes that it could be appropriate for designs created by overseas engineers to be peer reviewed by an appropriately Registered engineer if they provide formal PS/2 documentation for the specific piece of design. Supervision alone would not be a high enough threshold.

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.

Yes, BOINZ agrees.

Proposal 1. Establish a new registration requirement for persons who practice professional engineering

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?

Yes, we agree.

The practising certificate should be issued after a period of supervision of no less two years and then reviewed regularly, for example five-yearly with the ability for random audits, by either MBIE and/or Engineering New Zealand as the Regulatory Services Provider.

BOINZ recommends that a practising certificate is a prerequisite for registration

13. How often should an engineer need to renew their practising certificate?

Five-yearly, with the ability for random audits, either by MBIE and/or Engineering New Zealand as the Regulatory Services Provider.

14. Should issuing a practising certificate be contingent on an engineer completing their continuing professional development commitments?

Yes, it should be contingent on CPD commitments being completed.

Proposal 1. Establish a new registration requirement for persons who practice professional engineering

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

BOINZ supports bringing electrical engineers into the proposed regime.

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

BOINZ suggests MBIE consider a range of engineering disciplines that reflect building systems, such as heating ventilation and air-conditioning (HVAC), illumination engineering, hydraulic services, lifts and acoustics. All these disciplines have health and safety implications and are essential for building compliance and quality buildings.

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

Yes, they should be included, with particular care being taken around the naming of their roles to avoid confusion in the industry.

Proposal 1. Establish a new registration requirement for persons who practice professional engineering

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

Yes, BOINZ supports this mandatory registration as this would make them accountable for their work.

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

Yes, this will raise standards and provide accountability. It will also create a purposeful benefit in terms of career pathways. Additionally, it will provide confidence for their customers to know there is a recognised competency level against which they have been assessed.

Proposal 2. Restrict who can carry out or supervise high risk engineering work**Proposal 2: Restrict who can carry out or supervise high risk engineering work**

High risk practice fields would be restricted to licensed engineers only. Unlicensed engineers would only be permitted to practice if under the supervision of a licensed engineer or under a prescriptive standard.

Questions for the consultation**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?**

The empowering provision enabling licensing for high risk practice fields should be in primary legislation, with Regulations specifying what those practice fields should be. The Minister, through Rules developed by the regulator can then prescribe the necessary licensing requirements. This is the process used for restricted building work for LBPs, and so should be developed to be consistent with that regime.

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?

Yes, we do agree with the proposed criteria.

Proposal 2. Restrict who can carry out or supervise high risk engineering work**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?**

This should be the responsibility of the regulator via Rules it develops. They should do this in conjunction with the relevant technical societies and institutes as appropriate. The requirements may well differ depending on the practice field.

In respect of this question for Registered Engineers or Professional Engineers, we would draw your attention to the fact that the registrar, should in the first instance, capture the scope of the qualified and subsequent Registered Engineer or Professional Engineer. Such information would help determine the applicability for the issue of a License for a high risk engineering field.

We do support the criteria in respect of licencing for high risk classes.

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

Yes, they should, five-yearly, with the ability for random audits, either by MBIE and/or Engineering New Zealand as the Regulatory Services Provider.

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

This should be left to the regulator to determine but we would suggest:

Five-yearly, with the ability for random audits, either by MBIE and/or Engineering New Zealand.

Proposal 2. Restrict who can carry out or supervise high risk engineering work**25. What tools would be most useful to check competency in your practice field?**

Feedback from BCAs on engineering work submitted, should be included, and this feedback should be a funded service from the Building Regulator.

Practising engineers in their own right should be required to maintain a complaints register, which should include commentary on resolution or legal outcomes.

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

Using CPEng as equivalent to Licensed might be confusing, but CPEng is well known and internationally recognised.

We believe if CPEng is the credential used for 'Licenced' there will be current CPEng engineers that will not or do not want to operate in the high risk areas (yet to be defined) that will not be able to continue to use CPEng.

BOINZ recommends that CPEng credential not be used for 'Licenced' Engineers.

For simplicity we would see a CPEng reflecting a tenure and assessment process following 6 years of operating as a Registered or Professional Engineer. It could also provide a supervisory function, while still aligning with international covenants and be assessed and granted by Engineering New Zealand.

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

BOINZ prefers licensing of individuals but with a chain of responsibility back to companies so that action can be taken against a company if it has been negligent in supporting and supervising its employees.

Proposal 3. Establish a new two-tiered regulator comprised of an independent regulatory board and a regulatory service provider**Proposal 3: Establish a new two-tiered regulator comprised of an independent regulatory board and a regulatory service provider**

A new two-tiered regulator would oversee the regime. A regulatory board would report to the Minister for Building and Construction, with the Ministry of Business, Innovation and Employment (MBIE) providing oversight and monitoring. The regulatory board would determine who can be registered, what work needs to be licensed, and investigate complaints. The Minister would have the ability to designate a regulatory service provider to provide all or some of the board's functions. Appeals would be heard by the District Court.

Questions for the consultation**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?**

Yes, we agree. We also recommend that the Regulatory Services Provider triage complaints as part of the tasks it performs for the Independent Regulatory Board, such as recommending censure, minor to modest fines and full board investigations/legal prosecutions with significant penalties.

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

BOINZ recommends that Engineering NZ be the Regulatory Services Provider as it is best placed because of its sector knowledge, administrative capability and ability to peer assess.

Proposal 3. Establish a new two-tiered regulator comprised of an independent regulatory board and a regulatory service provider

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

Yes, we agree with the proposed functions.

We also recommend that the Regulatory Services Provider triage complaints as part of the tasks it performs for the independent regulatory board, such as recommending censure, minor to modest fines and full board investigations/legal prosecutions with significant penalties.

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

We think all of the grounds have been covered.

However, consideration needs to be taken that some offences may not include a prison term, but may carry a conviction outside the scope of the points outlined in the proposal.

Implementation

Implementation

It will take time to transition to a new regime. The board would have the ability to recognise some existing engineers as registered or licensed. Once the regime is in place, the Chartered Professional Engineers scheme would be disestablished.

Questions for the consultation

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

We do not support grandfathering as there are no formal assessments processes.

However, we believe there are options to recognise existing engineers as Registered Engineers (or Professional Engineers), for example current CPEng. There will be other cases for which Engineering New Zealand will be best placed for advice.

We do not support a position that the Building Regulator would automatically deem existing practitioners as Licenced Engineers. This said there may be a small number of exceptions that can be best advised by Engineering New Zealand.

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

We agree with what is proposed.

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

We refer to our earlier comments in respect of the career pathway outlined in Question 8 and 26, where we see an opportunity for CPEng to exist following 4-6 years' experience and a competency assessment and having the option to provide supervisory function. This would necessarily support international correlation and assist the CPD function vital to the profession.