

Consultation submission form

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: Wayne Scott

Email address: wayne@minex.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.

MinEx – Extractive’s Health & Safety Council

D. The best way to describe your role is:

- Engineer (please specify your discipline below) Other engineering professional (please specify below)
- BCA/Building Consent Officer Consumer of engineering services
- Architect or designer Other (please specify below)
- Builder or tradesperson Prefer not to say

Please specify here.

MinEx is the national Health and Safety Council for New Zealand’s extractives sector – the mining, quarrying and tunnelling industry. Our principal purpose is to help the industry achieve its goal to be free from fatalities, injuries and diseases. We also play an active role alongside our industry partners the Aggregate and Quarry Association, Straterra, Institute of Quarrying, and AusIMM in improving education and professional standards in the extractives sector.

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?

The MBIE proposal for universal regulation and registration of all professional engineers goes too far, given there are numerous examples of engineers working in areas where their work has little or no interaction or impact on the public.

The extractives sector employs a number of engineers in the various disciplines including mining, civil, mechanical, electrical, geotechnical and chemical.

Mining activities and the appurtenant physical structures built to support these activities are generally in geographically remote locations and are physically isolated from the public and consequently are of low risk to the public.

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

The proposal does not mention engineers working in the extractives sector including mining, quarrying and tunnelling. These engineers undertake design, planning, scheduling and operational management for mines, quarries and tunnels in New Zealand. They would meet the proposed definition of a professional engineer however we do not believe this was intended when the proposed registration system was formulated.

The Otago School of Mines operated at the University of Otago until 1987 when it was transferred to the University of Auckland, then was disestablished in the 1990s. Mining engineers working in NZ are generally either graduates of Otago or Auckland university or are graduates from overseas universities.

These engineers generally choose to become members of the professional body, the Australasian Institute of Mining and Metallurgy (AusIMM). The AusIMM has a chartered professional accreditation with competency standards and minimum professional development (PD) requirements to retain such accreditation. The PD opportunities include world class mining conferences, leadership events, online learning and industry news to help build and accelerate careers.

Should the MBIE proposal of universal registration include mining engineers, there would be a duplication of cost and time for AusIMM members who would have to maintain two separate registrations. Similarly for electrical engineers, the current requirement to register with the EWRB would result in duplication – there is no added benefit to being registered as proposed by MBIE.

It is also worth noting that the mines, quarries and tunnels are highly regulated by the Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016. These regulations require a number of statutory appointments for safety critical roles to be made depending upon the size and type of operation.

The case for intervention

WorkSafe NZ, through the NZ Mining Board of Examiners (BoE), issue certificates of competency (CoC). These certificates are required to be held by the persons appointed to the statutory roles. To attain a CoC, applicants must undertake formal studies (unit standards specified by the BoE), be assessed to be a fit and proper person, and pass an oral examination to test their competency in operating and safety systems, knowledge and application of relevant legislation, management of emergencies, and leadership and communication attributes.

Each CoC is granted for a 5-year term and renewal of these is subject to the undertaking of continuing professional development (CPD).

There are CoCs for manager positions (1st Class, A Grade and B Grade), Mechanical Superintendent, Electrical Superintendent and Ventilation Officers.

A number of these CoC holders are engineers - generally mining, mechanical or electrical. The gaining and maintaining of these CoCs through CPD is costly and time consuming, with some course fees to gain the necessary unit standards in excess of \$50,000. Ongoing professional development adds to this cost. Some of this CPD may be similar to that being proposed by MBIE for professional engineers but only CPD of a technically acceptable nature.

For CoC holders who are also professional engineers, the MBIE proposal for universal registration would result in further cost and time imposts for seemingly no additional benefit.

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?**

Engineering NZ, AusIMM, EWRB.

- 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?**

The Pike River Mine explosion in a coal mine on the West Coast of NZ that killed 29 miners in 2010 resulted in a Royal Commission which identified a number of contributing factors for the explosion including poor design, planning and execution, some of which was overseen by engineers.

The recommendations of the Royal Commission resulted in the establishment of a new government regulator for health and safety (WorkSafe NZ), the implementation of industry specific legislation, the formation of the NZ Board of Examiners, and the establishment of the statutory appointments and competencies (CoCs) mentioned previously.

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

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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?**

We believe that the definition of a professional engineer is too broad and may unintentionally capture tradespersons currently undertaking engineering type occupations, technicians and technologists. We suggest the definition be narrowed to exclude them.

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

We do not agree that the regime should cover all professional engineers. As mentioned previously, the registration and licensing should be confined to high-risk work where public safety might be impacted.

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

No comment.

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

No comment.

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?

Limiting registration to those with an engineering qualification would exclude mining engineers who are graduates from the Otago School of Mines (refer to the comments made in point 2 above for further background).

The degree generally conferred on graduates from the Otago School of Mines was a four-year degree in mineral technology with a major in mining. Should mining engineers be required to be registered or licensed, it is submitted that the B Min Tech (Hons) degree with a major in mining should be accepted as a mining engineering qualification.

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?

The extractives sector uses overseas engineers for specialist work, statutory positions and for peer review of engineering work. The MBIE proposal is unclear about how overseas engineers who consult would be treated or if they would be required to be registered.

Often, these engineers are needed at short notice for urgent or emergency work. Requiring them to register prior to undertaking work in NZ would add costs and delays to this work.

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.

No comment.

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?

No comment.

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

No comment.

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

Yes.

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?

We believe that electrical engineers should continue to be registered by EWRB rather than the regime proposed by MBIE.

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

No comment.

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

No, we believe that these positions should be explicitly excluded from the regime.

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

We think the scope should be contracted rather than expanded with registration limited to engineers whose work poses a risk to the public.

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

No comment.

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?

Licensing should be limited to engineers undertaking high-risk work. The Minister should have the flexibility to decide the practice fields as appropriate rather than prescribe these in legislation.

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?

We agree with the proposed list of criteria.

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?

The eligibility criteria should be dependent upon the practice field and be decided in consultation with the relevant technical/professional body.

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

We agree that continued checks of competency is important.

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

This could be decided in consultation with the relevant technical body.

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

Competency checks could be achieved by reference checks, oral interviews/examinations, and by submission of work completed within their practice field particularly if this work has been peer reviewed.

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

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

No comment.

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

Licensing should be of the individual professionals and not companies, as competency can only be assessed on an individual basis and the licensing of companies will lead to inconsistency in standards.

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?

We support the two-tier model.

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

No preference.

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

We support the proposed functions.

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

The proposed grounds for discipline seem appropriate, apart from 'being convicted of an offence before or after registration that was punishable by term of imprisonment of no less than six months'. This seems too harsh and too rigid. For example, the offence may have occurred decades earlier with no subsequent offending or the offence may have no relevance to that person's ability to undertake engineering work.

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 agree with automatic deeming of engineers undertaking high-risk work – an assessment based on the achievement of set criteria should be made.

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

No comment.

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

We have no preference on this topic.