MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

COVERSHEET

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List of documents that have been proactively released		
Date	**Title**	**Author**
March 2022	*Establishing a new occupational regulatory regime for professional engineers*	*Office of the Minister for Building and Construction*
16 March 2022	*DEV-22-MIN-0036*	*Cabinet Office*
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16 March 2022	*DEV-22-MIN-0037*	*Cabinet Office*
11 February 2022	*Regulatory Impact Statement*	*MBIE*
11 November 2021	*Cost benefit analysis*	*Sapere*
March 2022	*Summary of submissions*	*MBIE*

Information redacted **NO**

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In Confidence

Office of the Minister for Building and Construction

Cabinet Economic Development Committee

Establishing a new occupational regulatory regime for professional engineers

Proposal

1 This paper seeks Cabinet's agreement to establish a new occupational regulatory regime for professional engineers.

Executive Summary

2 Occupational regulation of a profession aims to protect the public from the risks of an occupation being carried out incompetently or recklessly. While many of New Zealand's engineers are highly professional, our system for regulating the profession is flawed. Too many engineers operate outside of a regulatory regime, it is hard to hold engineers to account when standards slip, and there are few means of ensuring the competency of engineers who practise in particularly high risk fields.

3 The collapse of the CTV Building in the 2011 Canterbury earthquake highlighted the risks of inexperienced engineers working in high risk engineering fields and the difficulty in holding substandard or unprofessional engineers to account. To date, this engineer still practices, and an investigation into the supervising engineer's conduct has not yet been concluded.

4 Without occupational regulation and the checks and sanctions it involves, there is a risk that substandard engineering work will lead to catastrophic failures, harm to the public or the environment, significant economic costs, and damage to the public's confidence in the engineering profession. Occupational regulation ensures engineers behave professionally, keep their skills and knowledge up-to-date, are competent if practising in high risk disciplines and can be held to account if standards slip.

5 This paper seeks Cabinet's agreement to a new occupational regulatory regime for engineers, replacing the voluntary Chartered Professional Engineers regime. All persons who provide professional engineering services would need to be registered under this regime. This would ensure engineers meet minimum standards of professional behaviour, undertake professional development, and importantly, ensure all engineers are subject to a complaint and discipline process to hold them to account for substandard engineering or behaviour.

6 The requirement to become registered would apply across all engineering disciplines, including the major disciplines of chemical, civil, electrical and

mechanical engineering and their sub-branches. There will be a power to exclude some engineers in order to avoid duplication with other regulatory regimes or if their work is routine in nature.

7 A new licensing regime would ensure engineers practising in high risk fields, such as structural engineering, are competent, skilled and experienced.

8 The costs of additional regulation are expected to fall on registered and licensed engineers and will mainly be driven by the obligation to undertake continuing professional development. Officials estimate this could be as high as $3000 per engineer per year due to a loss of billable hours. This is a conservative estimate and the actual cost impact is likely to be much lower.

9 Engineering is a discipline informed by evolving science and best practice. Many engineers already undertake continuous on-the-job learning and professional development. Professional development has a direct benefit for individual engineers in terms of keeping their skills and knowledge up-to-date and keeping pace with competitors, and is a common feature of other occupational regulatory regimes and professional body memberships.

10 Fees and levies paid to the regulator are not expected to be significant for those engineers who only need to be registered, with an annual estimated cost of $160 per engineer. The costs for obtaining a licence to work in a restricted field are anticipated to be on par with obtaining registration as a Chartered Professional Engineer and reflect the need to verify an engineer's competence to do higher-risk work. Potentially it could cost $3300 for a licence, with renewal costs of $640 every six years.

11 I consider the likely cost impacts arising from an improved regulatory regime for engineers is appropriate – especially considering the extent to which these costs already largely feature in the current voluntary regulatory regime. On this basis, and in considering the length of time needed to fully set up the proposed regime, I am confident that taking steps to add new regulation now will not exacerbate issues we are currently facing (for example, capability constraints and supply chain issues in the construction sector).

12 A new Board would be established to oversee the regime, discussed in more detail in the accompanying Cabinet paper *Establishing a New Occupational Regulator for Professional Engineers* (Paper 2).

13 The Board, supported by a disciplinary committee, would be empowered to discipline engineers who fail to meet the minimum standards expected of them. Complaints would be able to be heard for breaches of a code of ethical conduct, negligence and incompetence. For the most serious disciplinary issues, an engineer may be stripped of their registration or licensing, preventing them from practising. New criminal offences would also be introduced for anyone who provides professional engineering services without being registered, or practises without a licence where one is required.

14 This paper also seeks agreement to a number of transitional measures to ease engineers into the new regime. The transitional period will be up to six

years, which will allow time for engineers to be registered or licensed in a timely manner while managing risks to supply in the workforce as well as the cost impacts of the proposed regime.

Background

15 Occupational regulation of a profession aims to protect the public from the risks posed by an incompetent or reckless practitioner. A regulated profession typically has restrictions on who can provide services, and sets out and enforces professional standards. However, while occupational regulation is intended to protect the public, it can also impose significant costs, including on any practitioners who are no longer permitted to practise.

16 New Zealand has two main approaches for how we regulate engineers: the co-regulatory approach of the *Chartered Professional Engineers of New Zealand Act 2002* and self-regulation by Engineering New Zealand of its members. These schemes are both voluntary.

17 The Chartered Professional Engineer (CPEng) credential was established as a voluntary occupational regulatory regime. CPEng is a statutory title that recognises an engineer's general competence and professionalism. The CPEng credential is administered by Engineering New Zealand, the largest engineering professional body in New Zealand, with oversight from the Chartered Professional Engineers Council.

18 In addition to the two main approaches, there are regulatory regimes for specialised engineering disciplines. They include the *Civil Aviation Act 1990*, which covers some aviation engineers and the *Maritime Transport Act 1994*, which covers maritime engineers.[1]

19 However, despite the inherently risky work that engineers do, many engineers do not belong to a regulatory regime. These engineers do not have any checks on their professionalism and there few means to hold them to account should their standards slip. Officials estimate around 38,000 engineers are not subject to any occupational regulation.

20 The lack of a comprehensive regulatory regime means that even a particularly incompetent engineer cannot be prevented from practising. There are also no restrictions on who can practise in higher risk engineering fields, such as structural engineering.

21 The current governance arrangements are also problematic. As a private organisation, Engineering New Zealand, as administrator of CPEng, is not subject to the usual accountability and transparency provisions expected of a modern regulator, and lacks clear independence from the profession.

22 The problems with the current regime were highlighted by the collapse of the CTV Building in 2011 and the difficulty in holding the responsible engineers to

[1] Others include electrical engineers undertaking prescribed electrical work, heavy vehicle certifying engineers, recreational safety engineers who certify amusement devices and design verifiers for pressure equipment, cranes and passenger ropeways.

account. The design engineer misrepresented his competence and was not adequately supervised by his senior engineer. The senior engineer still practises, and an investigation into his conduct has not yet concluded by Engineering New Zealand.

MBIE consulted on proposals to regulate engineers in May 2021

23 In May 2021, the Ministry of Business, Innovation and Employment (MBIE) consulted on a proposal that would:

23.1 Require all persons who provide professional engineering services to be registered.

23.2 Require all persons practising in high risk fields to be licensed.

23.3 Establish a new regulator to oversee the regime [DEV-21-MIN-0087 refers].

24 MBIE received 250 submissions, predominately from the engineering profession. Eighty-four per cent of submitters agreed that there were grounds for intervention, and 81 per cent agreed that all engineers should be subject to occupational regulation.

25 Those that disagreed with reform to occupational regulation thought that the current regime was adequate at managing risk, the blame lay elsewhere (e.g. other regulatory authorities not enforcing standards), companies were best placed to set their own systems to manage risk, products should be regulated and not engineers, or that some engineering services did not pose a risk to the public. I disagree with these points, and address them in more detail below.

Wider context

26 The proposals in this paper are being progressed as part of Phase Two of the Building System Legislative Reform Programme (the Reform Programme), which is a series of reforms to building laws to lift the efficiency and quality of building work, and provide fairer outcomes if things go wrong.

27 The reforms are progressing in three phases:

27.1 *Phase One* has progressed as the *Building (Building Products and Methods, Modular Components, and Other Matters) Amendment Act 2021* and associated regulations currently being developed.

27.2 *Phase Two* focuses on the professionals in the building and construction sector and responds to issues identified by MBIE, members of the building sector and others in the building system, as well as the Canterbury Earthquakes Royal Commission.

27.3 *Phase Three* will address issues around risk and liability settings, with an initial focus on strengthening consumer protection measures in the *Building Act 2004*.

A two-tier occupational regulatory regime for all engineers

28 I seek Cabinet's agreement to establish a two-tiered occupational regulatory regime for all persons who provide professional engineering services. This would require:

28.1 all persons who provide professional engineering services to be registered

28.2 all persons to be licensed if practising in specified high risk practice fields.

29 Occupational regulation for engineers will ensure that:

29.1 all members of the profession will be subject to the same minimum standards of professional behaviour

29.2 engineers will be expected to keep their skills and knowledge up-to-date, which is essential in a rapidly evolving and innovative profession

29.3 risks in high risk engineering fields will be reduced as engineers have demonstrated their competence and skill, reducing the risk of harm to the public or the environment, and avoiding remediation costs

29.4 substandard engineering or poor behaviour can be addressed across the profession, with the ability to prevent an engineer from practising for the most serious offences.

30 A new Engineers Registration Board (the Board) would be created to oversee the regime. The new governance arrangements are covered in more detail in the accompanying Cabinet Paper 2 *Establishing a New Occupational Regulator for Professional Engineers*.

A new registration requirement will lift the professionalism of engineers and provide accountability

31 I seek Cabinet's agreement to require all persons who provide professional engineering services to be registered. This would encompass all engineering disciplines – including the major disciplines of civil, chemical, electrical and mechanical engineering and their numerous sub-branches. Engineers would be entitled to use a protected title. For now, I use the term Registered Engineer, but this may change during the drafting process.

32 It would become an offence to provide professional engineering services without being registered or to claim to be registered when one is not, fineable upon conviction up to $10,000.

33 Requiring a practitioner to be entered onto a register before they can practise is an effective tool for ensuring all members of a profession are suitably qualified and practitioners can be held to account for poor conduct. The register also allows consumers to know whether a person is registered or licensed, and their registration or licence history, including whether they have been disciplined in the past three years.

34 Requiring all professional engineers to be registered was broadly supported by submitters, but around 20 per cent did not agree. Some aspects of engineering are perceived as lower risk than others and some submitters argued they should be excluded. Examples were given of software and mechanical engineering.

35 All elements of engineering have the potential for significant harm to the public or individuals, or could cause economic harm or environmental damage. I do not consider it acceptable to regulate one part of engineering while leaving the public exposed to risk in others.

36 Some submitters also argued that because their product is regulated, engineers involved in the design of these products should not be. Examples were given of engineers designing medical devices, which is regulated under the *Medicines Act 1981*.

37 While product regulation is important, I consider it is equally as important to ensure all engineers operate to the same professional standards and can be held to account for poor performance or behaviour. I also wish to avoid creating loopholes, which may allow engineers that have been deregistered due to disciplinary action to continue practising engineering in a different field.

Providing clarity on 'professional engineering services'

38 I propose to restrict who can provide 'professional engineering services' to registered persons. During consultation, 'professional engineering services' was intended to refer to:

Any act of planning, designing, composing, evaluating, advising, reporting, directing, supervising, or managing that requires the application of engineering principles and judgement and concerns the safeguarding of life, health, property, economic interest, the public welfare or the environment.

39 Half of the submitters disagreed with this wording for different reasons: some thought it was too broad, capturing other trades and professions, others thought it was too narrow. What is clear is that any definition needs to be applicable to all engineering disciplines, its scope must be clear, and it needs to be future proof as technology and engineering practices change over time. I consider the definition that was consulted on is an appropriate place to start legislative drafting, and I expect that it will be refined both prior to the introduction of a bill and at select committee.

40 I propose excluding some engineering services from the definition of professional engineering services, such as services that are prescriptive or routine in nature. I also propose a similar power to explicitly include some services in the definition to provide clarity in the future if it is required.

41 I am conscious that other occupations provide services that may fall within the meaning of professional engineering services, but who follow prescriptive standards or the services are routine in nature. Examples include electricians, marine engineers or licensed aircraft maintenance engineers. Typically, these groups of people would not hold a Bachelor of Engineering degree or an equivalent qualification.

42 I do not intend to capture these occupations as they are either currently regulated or have a lower level of risk. I propose including a mechanism to exempt certain persons or services from the requirement to be registered, meaning they would not be able to use the protected title or be subject to any conditions of registration. At this stage, I expect these exemptions to be set out in regulations.

43 If needed, the Board may prepare guidance material to clarify who is included and who is not, similar to the approach taken by Victoria, Australia. This will assist people to assess if they are providing 'professional engineering services'

The Board would determine who is eligible for registration

44 I propose that the Board sets the eligibility requirements for registration through rules. The Board would consult with any relevant Minister, any relevant professional body, and the public when developing rules for eligibility. The Board must also be satisfied that the Minister agrees with the rules for eligibility before approving them.

45 Eligibility for registration would be set at a level that ensures engineers at all levels of their career are subject to regulation. Registration is not intended to provide an indication of competence - there are other means for indicating competence, such as professional memberships and advanced qualifications. My expectation is that registration would require a Bachelor of Engineering degree or equivalent, with allowances for those who gained knowledge and skills through other means (e.g. an apprenticeship).

46 Most submitters (80 per cent) also thought experience should be a consideration for registration. However, other submitters, including Engineering New Zealand, supported engineers being subject to professional standards early in their careers. I consider it important that even newly qualified engineers are subject to the same professional standards and disciplinary processes as their more experienced colleagues.

Engineers will be subject to conditions of registration

47 In order to maintain registration, I propose that registered engineers be:

47.1 subject to a code of ethical conduct, established through regulations

47.2 required to meet prescribed professional development requirements, as set out in rules developed by the Board and approved by the Minister for Building and Construction

47.3 required to make an annual declaration that they have met the above requirements in order to maintain registration. The Board would be able to audit an engineer's professional development records, and may request that an engineer submits their records of professional development.

48 Submitters overwhelmingly supported a code of ethical conduct and professional development obligations (94 per cent) and for both of these to be linked to ongoing registration (86 per cent).

49 A code of ethical conduct is important in a profession as it sets the minimum standards of professional behaviour, and allows poor behaviour to be sanctioned. Professional development helps ensure an engineer's skills and knowledge is kept up-to-date. Professional development is a common feature of many professional occupational regulatory regimes, including for CPEng and Engineering New Zealand membership.

Measures to avoid duplication with other regimes

50 I propose that the Act will provide for preventing overlap with other regulatory regimes. At this stage, this will likely be achieved by allowing regulations to be made that treat a person as registered if they have already been recognised by another enactment. These engineers would be subject to the same code of ethical conduct as their peers, and entitled to use the protected title. The Board would be able to waive fees in full or in part for these engineers.

51 Some submitters were concerned that the new regime would duplicate or undermine existing regulatory regimes for some specialised groups of engineers, such as those under the *Maritime Transport Act* or *Civil Aviation Act.*

52 I want to avoid unnecessary duplication and cost to these engineers, but these engineers should be subject to the same professional standards as their colleagues, as articulated through a code of ethical conduct. Poor behaviour that is not sanctioned has the potential to bring the entire profession into disrepute.

53 While these specialist regimes restrict entry, and some include a disciplinary process, they all lack a code of conduct to specifically hold professional engineers to account for unprofessional behaviour. Some, however, require an applicant to meet a fit and proper person test[2]. A code of ethical conduct

[2] For example, under the Maritime Transport Act 1994, maritime engineers must meet a fit and proper person test before they can become or remain certified. There are similar provisions in civil aviation rules.

can cover a broader range of professional behaviours than a fit and proper person test.

54 Providing a regulatory power that can automatically register these engineers into the regime would avoid duplication and unnecessary cost, and could be similar to what is provided in section 291 of the *Building Act 2004* for licensed building practitioners. While submitters preferred to be clearly excluded from the new regime, several indicated that such a provision or similar would be acceptable.

Providing for expert engineering services from overseas engineers

55 I propose that the Act will create a temporary registration class for engineers who ordinarily reside outside of New Zealand, and who cannot be supervised by a New Zealand registered engineer. These engineers would be subject to a code of ethical conduct but not have any professional development obligations. Temporary registration would be limited to no more than three months. The Board would also set eligibility requirements for these engineers through rules.

56 This temporary registration class recognises that engineering can be a global activity, with overseas-based engineers providing specialist services. Companies may also bring specialist expertise into New Zealand. New Zealand engineers providing services exclusively to overseas clients would also need to be registered.

57 For the most part, overseas engineers would be able to be supervised by a New Zealand registered engineer, who would assume responsibility for the overseas engineer's conduct. Those overseas engineers would not need to be registered. However, some engineering services are sufficiently specialised that it is not appropriate for a New Zealand registered engineer to take on that role.

58 A temporary registration class reduces the ongoing burden of registration for an overseas engineer who may be required to register in multiple jurisdictions, while allowing the Board to act on any complaints about that engineer's conduct in the future.

59 Under the Trans-Tasman Mutual Recognition Arrangement, engineers registered under a comparable scheme would be entitled to register in New Zealand upon paying the fee. Registration schemes are currently in place for Queensland, Victoria and New South Wales.

Licensing for practitioners working in high risk practice fields

60 I propose to introduce a new licensing regime that restricts who can provide services in high risk engineering practice fields. While all aspects of engineering have potential risk, some engineering practice fields pose a higher risk to health and safety than others and warrant additional checks on an engineer's competence and experience. Examples include structural, fire, and recreational safety engineering.

61 I propose that these restricted practice fields are set by regulation and established where there is a need to demonstrate competency in order to protect the health, safety or wellbeing of members of the public. The Board would set standards of competence and the assessment process in rules to support the regulations.

62 My proposal to establish new licensing classes through regulations was preferred by two thirds of submitters. The remaining submitters preferred the certainty of licensing classes being established in primary legislation.

Establishing licensing classes

63 Submitters, particularly professional bodies, sought to be closely involved in developing regulations to establish licensing classes. I agree, and propose that the Minister be required to consult with any other relevant Minister, any relevant professional body and the public in general when developing regulations specifying licence classes.

64 I propose that a licence would be valid for up to six years before an engineer must reapply. Six years is consistent with the current Chartered Professional Engineers reapplication process. Reapplying for a licence allows the Board to satisfy itself that the engineer remains competent to practise in the restricted engineering class. Engineering is a rapidly evolving profession, with high levels of innovation and continuing lifting of standards that require regular checks on an engineer's knowledge and skills.

Licensing offences and penalties

65 I propose that it would become a criminal offence to carry out or supervise restricted engineering services without a licence, or to breach any conditions of the licence. A person convicted of such an offence would be liable to a fine of up to $50,000. It would also be a criminal offence to knowingly engage someone who is not licensed to undertake restricted work. An individual may be fined up to $50,000 or a body corporate may be fined up to $150,000 upon conviction.

66 These levels of fines are higher than similar proposed offences for providing engineering services without being registered (up to $10,000) and reflect the greater level of risk to the public of restricted engineering work. The fines are consistent with what is provided in the *Building Act 2004* for undertaking or supervising restricted building work without being licensed.

67 I propose the Board would also have the power to audit a licensed engineer's work, both randomly or as part of an investigation into an engineer's conduct. An engineer may be referred for disciplinary action as a result of an audit.

Alternatives considered

68 I considered whether to adapt the Chartered Professional Engineers regime to allow endorsements to act as a licensing classes. A small majority of submitters supported this proposal. However, key professional engineering

bodies did not, including Engineering New Zealand and the Structural Engineering Society of New Zealand.

69 I decided against adapting CPEng as poor quality engineering work by some CPEng engineers have diminished its reputation and it is no longer considered the mark of quality it once was. Obtaining a licence would require a greater degree of scrutiny than CPEng currently requires. I am also concerned about consumer confusion about what sort of engineer can do the work if CPEng is retained.

70 I also consulted on whether companies, rather than individuals, should be licensed. Most submitters (63 per cent) supported individual licensing only, while 25 per cent wanted both individuals and companies licensed. I decided against licensing companies as it places the responsibility of ensuring competence on a company, not the Board, and risks incompetent engineers moving from company to company.

Engineering Associates Act 1961

71 I have also considered the future role of the *Engineering Associates Act 1961* (the Associates Act). The Associates Act provides for the registration of 'registered engineering associates' for senior engineering technicians and technologists, a group of qualified professionals who support the work of professional engineers.

72 Registration is voluntary under the Associates Act. The number of registered engineering associates has steadily declined over the last decade and there are currently fewer than 800 people registered. MBIE estimates this is less than 5 per cent of engineering technicians and technologists working in New Zealand.

73 It is not sustainable to maintain a standalone regime for registered engineering associates. The decline in numbers has led to consistent financial deficits for the Engineering Associates Registration Board. In February 2022, Cabinet agreed to raise the fees [DEV-22-MIN-0008 refers].

74 While registration as a registered engineering associate is required in order to perform some tasks in the private and public sectors, there are other non-statutory means of indicating standards of engineering technologists and technicians (such as industry memberships and qualifications). I do not consider that the risk associated with this work justifies mandatory registration of all technicians and technologists.

75 However, there are benefits to providing a mechanism for those who choose to be registered to show that they meet minimum standards and are subject to a disciplinary regime. An MBIE survey of registered engineering associates conducted in 2021 found that most consider the current credential to be valuable to their careers. It may also be useful to provide a pathway for these engineering professionals to practise in licensed higher-risk fields.

76 I propose that the Associates Act is repealed and that the new Act provides for voluntary registration of engineering technicians and technologists under a separate register, overseen by the new engineering regulator. This approach will be more efficient than the current approach. Being overseen by the same Board as professional engineers may also raise the profile of the registered engineering associate credential, attracting new registrations.

77 Engineering associates would be subject to the same conditions of registration as professional engineers, including eligibility requirements, a code of conduct and continuing professional development. The Board would be responsible for setting eligibility requirements, such as minimum qualifications, by way of rules. The regime would protect the title Registered Engineering Associate or an equivalent title that covers the same group.

Disciplinary actions

78 A robust complaints and disciplinary process will be critical for ensuring engineers are held to account for poor practice or performance and that the public has confidence in the profession.

79 Managing complaints and discipline needs to be robust, fair, impartial and transparent to ensure that all parties have confidence in the regime. Cabinet Paper 2 seeks agreement to the governance arrangements for investigating and hearing complaints. It proposes a Complaints Officer to receive and investigate complaints and a Disciplinary Committee set up by the Board, with appeals to the district court.

80 I consider the grounds for discipline for engineers could be based on the current grounds set out in section 21 of the *Chartered Professional Engineers of New Zealand Act*, with some additional grounds based on the Licensed Building Practitioner scheme (under the *Building Act*).

81 I propose that the grounds for discipline are where an engineer has:

81.1 been convicted of an offence punishable by six months or more imprisonment if the offending reflects adversely on the person's fitness to be registered

81.2 breached the code of ethical conduct for registered persons

81.3 provided false or misleading information to the Board, including as part of being registered or licensed, or to another person becoming registered or licensed

81.4 carried out or supervised engineering work restricted by a licensing class negligently or incompetently, including in ways that create a risk to people or property

81.5 carried out or supervised restricted engineering work that the person was not licensed or otherwise authorised to do, including breaching any licence conditions

81.6 held themselves out as being licensed to do restricted work that they were not licensed or otherwise authorised to do.

82 I propose that actions that the Board may take if it finds that grounds for discipline apply would include one or more of the following:

82.1 Cancel a person's registration or licence (or both), and order that the person may not re-apply for a certain period.

82.2 Suspend a person's registration or licence (or both) for up to 12 months, and the Board may impose conditions that the person must meet.

82.3 For restricted work, limit the scope of the work that the person is allowed to do.

82.4 Issue a formal censure (statement).

82.5 Require the person to undertake specified training.

82.6 Order that the person pay a fine of up to $10,000.

83 A maximum fine of $10,000 is comparable to other occupational regimes where fines are imposed by a statutory board, rather than by a tribunal or court.

84 I propose that it may also be a criminal offence to knowingly make a false or misleading statement under the Act or its regulations. A person would be liable upon conviction to a fine not exceeding $20,000 for individuals or not exceeding $60,000 for body corporates. This level of fine is consistent with similar provisions in the *Building Act 2004*. As noted above in paragraph 74.3, the Board may also take disciplinary action for providing false or misleading information.

85 The Board would have the power to suspend or place conditions on an engineer's registration or licence pending the outcome of an investigation, if it is in the public interest.

86 The Board would be able to consider complaints and take disciplinary action and that action would be enforceable even if a person is no longer registered or licensed.

Transitional arrangements

87 It will take time to establish a new regime. New governance arrangements need to be put in place, a register and criteria for registration need to be established, and requirements need to be set out for ongoing registration. Registration will take priority over licensing. I anticipate it will take up to six years from the passage of the Bill before the regime is fully operational.

88 I propose that the Act contain appropriate transitional arrangements for existing professional engineers. At this stage, this is likely to include:

88.1 The Chartered Professional Engineers regime will expire six years after the Act's enactment, allowing time for the licensing regime to replace the CPEng credential. The Act may be repealed or amended over this six year period, as appropriate.

88.2 Engineering New Zealand may continue to administer the CPEng regime, overseen by the Chartered Professional Engineers Council, for an appropriate period, possibly until the six year expiry date.

88.3 The Minister may transfer the functions of the Council to a new entity and dismiss Council members.

88.4 The Board may continue to hear complaints against any CPEng for historic sub-standard work or behaviour

89 In order to ease professional engineers into the regime, I propose putting in place appropriate measures. These may include the following:

89.1 The Act may include provisions to transition engineers onto the register if they have already demonstrated that they meet eligibility requirements, such as engineers that hold a current CPEng registration or members of professional bodies.

89.2 During the transitional period, the Board may have up to two years upon receiving an application for a new registration or licence to make a decision. This would avoid the Board being inundated with applications. Applicants for registration would be able to provide engineering services while a decision is made on registration.

89.3 The Board may grant a provisional licence, for up to two years and with conditions, while it considers an application for licensing.

Financial Implications

90 Establishing a new occupational regulatory regime for professional engineers will have financial implications for regulated persons and for government.

91 The ongoing costs of the regime would be funded through cost recovery from regulated persons – registered and licensed persons and others that receive services from the regime. Fees and levies would be set by way of regulations. However, I expect there will be upfront costs for government to establish the regime and to cover any funding shortfall as engineers become registered and licensed.

Establishment costs

92 MBIE estimates that establishment costs would be in the order of $7.5 million over six years (MBIE's estimate of how long it would take to establish the regime). The bulk of this cost is to develop an appropriate IT system to

manage professional development records, display the record of registration and licensing, and any other requirements, estimated at $5 million.

93 MBIE also anticipates a funding shortfall of $1.2 million over this period as engineers transition to the registration and licensing regime. Officials have also allowed for a deadweight loss of $1.2 million, assuming government will fund these implementation costs.

Ongoing administrative costs

94 Costs of administering the registration of engineers will include matters such as a one-off qualification check and the costs of running the Board and complaints and disciplines regime. Officials estimate these costs at between $76 and $249 per engineer, with an average of $163.

95 The cost for licensing will be higher than for registration as licensing would require an assessment of an engineer's competence. Based on the costs of obtaining CPEng, MBIE estimates it could cost $3,300 to obtain a licence, with renewal costs of $640 every six years.

Ongoing costs for engineers to comply with the regime

96 In addition to the administrative costs, engineers would bear the costs of complying with the regime. The requirement for professional development represents the most significant costs to engineers due to the opportunity cost of lost billable hours and the costs of any training. The cost per engineer has been estimated as $3000 per annum, but this will depend on how much development occurs during leisure time and how much is part of on the job training.

Legislative Implications

97 I have sought a position on the 2022 Legislation Programme for a bill to reform the occupational regulation of engineers. This bill may proceed as an omnibus bill or cognate alongside other proposed reforms to occupational regulation. The aim of these bills will be to ensure people have confidence in engineers and regulated building practitioners, and their work.

98 The proposed Act would bind the Crown. This is consistent with other occupational regimes (such as under the *Building Act 2004* and *Plumbers, Gasfitters and Drainlayers Act 2006*) and the *Health and Safety at Work Act 2015*. In the interests of public safety, professional engineers employed by the Crown, or contracted to provide services, must meet the same professional standards as their colleagues in the private sector.

Impact Analysis

Regulatory Impact Statement

99 MBIE's Regulatory Impact Analysis Review Panel has reviewed the Impact Statement prepared by MBIE (Attachment One). The Panel considers that the

information and analysis summarised in the Impact Statement is sufficient to meet the criteria necessary for Ministers to make informed decisions on the proposals in this paper.

Climate Implications of Policy Assessment

100 The Climate Implications of Policy Assessment (CIPA) team has been consulted and confirms that the CIPA requirements do not apply to this proposal as the threshold for significance is not met.

Population Implications

101 The proposals in this paper are not expected to have significant implications for population groups.

Human Rights

102 This paper has no implications under the New Zealand Bill of Rights Act 1990 or the Human Rights Act 1993. There are no gender or disability implications arising from this paper.

Consultation

103 The following agencies have been consulted on this paper: Accident Compensation Corporation, Civil Aviation Authority, Ministry of Housing and Urban Development, Department of Internal Affairs, Department of the Prime Minister and Cabinet, Maritime New Zealand, Ministry for the Environment, Ministry of Justice, Ministry of Transport, Parliamentary Counsel Office, Public Service Commission, Taumata Arowai, the Treasury, Waka Kotahi NZ Transport Agency, WorkSafe New Zealand.

Ministry of Transport comment

104 The Ministry of Transport, having consulted with the regulating authorities Maritime New Zealand and the Civil Aviation Authority, appreciates the merits of the proposed regulatory framework for structural engineers. However, maritime and aviation engineers, which appear to be captured by the proposal, are already regulated by robust regimes that sit within internationally mandated systems overseen by the International Maritime Organization and International Civil Aviation Organization respectively. The Ministry considers that duplicating regulatory responsibilities for marine and aviation engineers would impose unnecessary and, in its view, unjustified costs for these engineering' sectors, which have a managed level of risk monitored by competent regulatory authorities.

Ministry for Business, Innovation and Employment response

105 MBIE considers it important that all professional engineers are subject to the same minimum standards of professional behaviour articulated through a code of ethical conduct as any unsanctioned transgressions have the potential to bring the entire profession into disrepute.

106 MBIE agrees that duplication of regulation is unwarranted. The paper proposes two key measures to avoid this:

106.1 A mechanism to exempt certain persons or services from the requirement to be registered, likely to be set out in regulations. This is described in more detail at paragraphs 33-35. The Ministry anticipates this mechanism would be used to exempt marine engineers and licensed aircraft maintenance engineers.

106.2 The Act would provide for preventing overlap with other regulatory regimes, potentially by treating a person as registered if they have been recognised by another enactment. This is discussed further at paragraphs 43-47.

107 MBIE consulted on draft proposals in May 2021. It received 250 submissions, predominately from engineers. The majority of submitters supported the proposals.

Communications

108 I will issue a media statement following Cabinet decisions.

Proactive Release

109 This Cabinet paper and associated minute will be published on MBIE's website, subject to any necessary redactions.

Recommendations

The Minister for Building and Construction recommends that the Committee:

1 **note** that occupational regulation aims to protect the public from the risks of incompetent or reckless engineering work;

2 **note** that the regulatory regime for engineers in New Zealand is not fit-for-purpose and risks significant harm to life, health, property, economic interests, the public welfare or the environment;

3 **note** that Cabinet agreed to publicly consult on a proposed two-tiered regulatory regime that would:

3.1 introduce a mandatory registration requirement for all persons providing professional engineering services

3.2 restrict practise in high risk engineering disciplines to persons holding a licence

3.3 establish a new two-tiered regulator to oversee the regime [DEV-21-MIN-0087 refers];

4 **note** that 250 submissions were received on proposals, the majority supporting the proposed changes;

5 **agree** to establish a new occupational regulatory regime for persons providing professional engineering services, featuring mandatory registration, licensing where there is a need to demonstrate competency, and a new regulatory board, subject to agreement to the recommendations below;

Registration

6 **note** that mandatory registration would lift the professionalism of the engineering profession and provide an avenue for substandard performance to be addressed;

7 **note** that the majority of submitters supported mandatory registration for all professional engineers, regardless of discipline;

8 **agree** that any person who provides professional engineering services must be registered;

9 **agree** that only persons entered onto the register may call themselves a registered engineer or a similar term developed during the drafting process;

10 **agree** that the purpose of the register will include enabling members of the public:

10.1 to determine whether a person is registered

10.2 to determine if a person is licensed

10.3 to view the status and relevant history of a person's registration or licence, including whether a person has been disciplined under the Act in the past three years;

11 **agree** that some engineering services may be excluded from the requirement to be registered, such as when those services are prescriptive or are routine in nature;

12 **agree** that the Board will set rules for eligibility for entry onto the register;

13 **agree** that the Board must consult with any relevant Minister, any relevant professional body, and the public when developing rules for eligibility;

14 **agree** that the Board must also be satisfied that the Minister agrees with the rules for eligibility before approving them;

Conditions of registration

15 **agree** that all persons entered onto the register will be subject to a code of minimum standards of ethical conduct;

16 **agree** that a code of minimum standards of ethical conduct will be established by regulations;

17 **note** that continuing professional development helps ensure registered engineers maintain and improve their competence;

18 **agree** that that the Board may set requirements for continuing professional development through rules;

19 **agree** that the Board must consult with any relevant Minister, any relevant professional body, and the public when developing rules for continuing professional development;

20 **agree** that initial and ongoing registration will require meeting any standards or requirements around professional development set by the Board through rules;

21 **agree** that registered engineers must make an annual statement of compliance with the code of ethical conduct and with professional development obligations, if any;

22 **agree** that failure to meet any standards or requirements without a reasonable excuse may result in the Board taking appropriate action, including deregistration or suspension;

23 **agree** that there is an obligation on registered persons to notify the Registrar of any change in circumstances;

24 **agree** that registered persons, or persons seeking registration, must provide the Registrar or Deputy Registrar with the required information, at the required times, or in the required manner, as set out in regulations;

25 **agree** that the Board may carry out audits of a registered person's professional development records;

Engineers regulated under other regimes

26 **agree** that the Act will provide for preventing overlap with other occupational regulatory regimes, such as under the civil aviation or maritime transport regimes;

27 **agree** that the code of ethical conduct will apply to those persons recognised under other regulatory regimes;

28 **agree** that the Board may waive fees or levies in full or in part for such engineers;

Overseas engineers

29 **note** that there will be professional engineering services provided by engineers resident outside of New Zealand that are sufficiently specialised that it would not be appropriate for them to be supervised by a New Zealand registered engineer;

30 **agree** to establish a temporary registration class for engineers based outside of New Zealand, whereby registration is granted for an individual applicant for no more than three months, following application by an applicant and consideration and approval by the Board;

31 **agree** that all engineers with temporary registration are subject to the code of ethical conduct for the duration of registration and may be subject to disciplinary action as a result of conduct during the period of temporary registration, but are not subject to any continuing professional development requirements;

Licensing of high risk engineering practice fields

32 **note** that some engineering practice fields pose a higher risk to life, health, property, economic interests, the public welfare or the environment;

33 **note** that in 2019, submitters expressed strong support for restricting who can offer engineering services in high risk practice fields;

34 **agree** that licensing classes may be established that restrict who can provide specific professional engineering services to those that hold a licence;

35 **agree** that the Minister will recommend the designation of licence classes to be made by regulations;

36 **agree** that the Minister must take certain matters into account when recommending the designation of a licence class to ensure that licensing is targeted at high-risk situations. These matters may include:

36.1 Protecting the life, health, property, economic interests, the public welfare or the environment;

36.2 Promoting the competency of persons who do, or assist doing, the class of engineering work;

37 **agree** that regulations specifying a licence class must contain at a minimum:

37.1 What engineering work is to be restricted

37.2 The frequency at which a licence must be renewed, being no more than every six years;

38 **agree** that when developing a recommendation, the Minister must consult with:

38.1 any relevant Minister

38.2 any relevant professional body

38.3 the public;

39 **agree** that the Board may develop rules that set out the standards of competence and the assessment process for licencing classes;

40 **agree** that the Board may undertake audits of a licensed engineer's work to satisfy itself that the licensed engineer remains competent, in response to a complaint or at intervals the Board sees fit;

Disciplinary grounds and actions

41 **note** that procedures for managing complaints and discipline need to be robust, fair, impartial and transparent to ensure that all parties have confidence in the regime;

42 **agree** that registered engineers, including licensed engineers (as well as those who have been registered/licensed previously when conduct occurred) can be held to account for breaching minimum standards, based on grounds for discipline set out in the Act;

43 **agree** that the Act will set out the grounds for disciplinary action. These are likely to include if the person:

43.1 has been convicted of an offence punishable by six months or more imprisonment and the offending reflects adversely on the person's fitness to be registered

43.2 has breached the code of ethical conduct for registered people

43.3 has provided false or misleading information under the Act or its regulations, including as part of becoming registered or licensed or as part of another person becoming registered or licensed;

44 **agree** that the Board may take disciplinary action if any of the following grounds apply to registered and/or licensed people, in relation to restricted engineering work:

44.1 has carried out or supervised restricted engineering work negligently or incompetently, including in ways that create a risk to people or property

44.2 has carried out or supervised restricted engineering work that the person was not licensed or otherwise authorised to do, including breaching any licence conditions

44.3 has held themselves out as being licensed to do restricted work that they were not licensed or otherwise authorised to do;

45 **agree** that the actions the Board may take if it finds ground/s for discipline apply, may include one or more of:

45.1 cancel a person's licence and/or registration and order that person may not re-apply for a certain period

45.2 suspend a person's licence and/or registration for up to 12 months, and the Board may impose conditions that the person must meet

45.3 for restricted work, limit the scope of the work that the person is allowed to do

45.4 issue a formal censure (statement)

45.5 require the person to undertake specified training

45.6 order that the person pay a fine of up to $10,000;

46 **agree** that if the Board is taking action relating to a licensed person they may also consider cancelling or suspending that person's registration at the same time;

47 **agree** that the Board may take disciplinary action whether or not the person is still registered or licensed, and that any action is enforceable whether or not the person remains registered or licensed;

Offences

48 **agree** that the Act will establish new criminal offences to protect titles from misuse and otherwise protect members of the public from serious risks as a result of unauthorised work;

49 **agree** that it will be a criminal offence for any person other than a registered engineer or registered engineering associate to use a protected title in connection with their business, employment or profession or otherwise intend to cause another person to believe that the person is a registered engineer or registered engineering associate;

50 **agree** that it will be a criminal offence to provide professional engineering services without being registered;

51 **agree** that a person who commits this offence is liable on conviction to a fine of up to $10,000;

52 **agree** that it will be a criminal offence to knowingly make a false or misleading statement under the Act or any regulations;

53 **agree** that a person who commits this offence is liable on conviction to a fine of up to $20,000 for an individual or $60,000 for a body corporate;

54 **agree** that it will be a criminal offence for any person to carry out or supervise restricted engineering work if they are not licensed to carry out or supervise that type of restricted engineering work, or if doing so breaches their licence;

55 **agree** that a person who commits this offence is liable on conviction to a fine of up to $50,000;

56 **agree** that it will be a criminal offence for any person to knowingly engage another person to carry out or supervise restricted engineering work that that person is not licenced to carry out or supervise;

57 **agree** that a person who commits this offence is liable on conviction to a fine of up to $50,000 for an individual or $150,000 for a body corporate;

Engineering Associates Act 1961

58 **note** that the number of Registered Engineering Associates has been steadily declining;

59 **agree** to repeal the *Engineering Associates Act 1961*, subject to the advice of the Parliamentary Counsel Office;

60 **agree** to establish a separate register for Registered Engineering Associates to be administered by the Board;

61 **agree** that the Act provide for a fair transition for persons currently registered as Registered Engineering Associates to be registered on the new register;

62 **agree** that the Board may set eligibility requirements for admission as a Registered Engineering Associate by way of rules;

63 **agree** that the Board must consult with any relevant Minister, any relevant professional body, and the public when developing rules for eligibility;

64 **agree** that conditions of registration or offenses that apply to registered engineers generally also apply to registered engineering associates, unless a different approach is appropriate;

65 **agree** that only persons entered onto the Registered Engineering Associates register may call themselves Registered Engineering Associate or a similar term developed during the drafting process;

Transitional measures

66 **agree** that the Act may include appropriate transitional measures, including:

66.1 retaining the Chartered Professional Engineers credential and scheme for an appropriate period after the new scheme comes into place, and then removing it

66.2 transitioning persons who have demonstrated their eligibility for registration through other regimes, such as through the Chartered Professional Engineers regime, onto the register

66.3 providing for applications for registration or licensing to be considered, processed and granted in such a way as to avoid the Registrar being inundated with applications while allowing applicants to provide engineering services;

66.4 providing for existing bodies to continue exercising functions for an appropriate period;

Funding of the regime

67 **agree** that the ongoing costs of the regime are recovered from registered and licensed people, and others who receive services provided by the regime;

68 **agree** that primary legislation provides authority to charge registered persons fees and levies to recover the costs of regulatory functions, and that fees and levies may be set by regulations;

Drafting instructions

69 **invite** the Minister to issue drafting instructions to the Parliamentary Counsel Office to give effect to Cabinet decisions in this paper;

70 **agree** that the Minister is authorised to further clarify and develop policy matters relating to the proposals in this Cabinet paper in a manner not inconsistent with the policy recommendations contained in the paper.

Authorised for lodgement

Hon Poto Williams

Minister for Building and Construction