

Design and Building Practitioners Regulation 2020

Stakeholder Feedback Template Form

This template has been designed to help you make a written submission as part of the public consultation on the Design and Building Practitioners Regulation 2020.

The template contains three sections to guide stakeholders to providing feedback on:

- [Regulatory Impact Statement](#)
- [Draft Design and Building Practitioners Regulation 2020](#)
- [Draft Continuing Professional Development Guidelines for Prescribed Practitioners](#)
- [Draft Continuing Professional Development Guidelines for Professional Engineers](#).

You don't have to give feedback on all sections and can feel free to choose which questions or fields that would like to fill in.

Submissions close 5:00pm 11 January 2021

Your Name: Jonathan Russell, General Manager for Policy and Advocacy
Organisation Name: Engineers Australia
Date: 23 December 2020

About you

Engineers Australia is the peak member-based professional association for engineers. Established in 1919, Engineers Australia is constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

The term 'community' is used in its widest sense, and the issues raised in this submission seek to improve outcomes for everyone. Engineers Australia's contribution is designed to help create a legislative framework to deliver a better-performing engineering sector with greater accountability of those involved—especially professional engineers.

Our work is supported by around 100,000 members, including about 25,000 in NSW. Engineers Australia maintains national professional standards, benchmarked against international norms. As Australia's signatory to the International Engineering Alliance, this includes accreditation of undergraduate university engineering programs. Furthermore, Engineers Australia manages Australia's largest voluntary register for engineers, the National Engineering Register (NER).

Engineers Australia provides advice to the NSW government on its building sector reforms, as a member of the NSW Building Commissioner's Building Reform Expert Panel (BREP) Steering Committee and each of the six associated pillars.

This submission is informed by the Engineers Australia's representatives on the BREP Pillars, plus feedback and advice on the draft Regulations provided by NSW-based members at large.

Regulatory Impact Statement (RIS)

Please use this section to provide feedback on the RIS. The questions from the RIS have been reproduced here for convenience. Page numbers in brackets refer to the section in the RIS.

Scope of reforms (page 15)

- 1. Do you think the reforms should be expanded to other types of buildings over time? Why/Why not? If so, which types of buildings do you think should be next?**

Building Sector reforms generally

The building sector reforms should apply to all classes within the National Construction Code (NCC). This would recognise the importance of public safety and compliance for the entire building sector. Application of the reforms to all NCC classes would also help harmonise the various related laws contained in the Environmental Planning and Assessment Act, Building and Design Certifiers Regulation, and the Design and Building Practitioners Act.

If the NSW Government wishes to stage the implementation, it is recommended that the second tranche of reforms apply to: buildings with a public nature (e.g. hospitals and schools); buildings that store hazardous materials; and, Class 3 and other Class 9 buildings which house vulnerable sleeping populations and for which health and safety are critical.

Registration of engineers

It is recommended that the Regulations do not restrict the scope of Part 3, Division 1, clauses 31-33 of the Design and Building Practitioners Act. The Act was passed by the NSW Parliament with an understanding that those sections had an application that extended beyond the building sector to require engineers in any industry to be registered to practice. The Regulations at clause 14 utilise clause 31(2)(b) of the Act to restrict the Act's application to just engineering for the purposes of designing or constructing a class 2 building or a building that contains a class 2 part. That is not in the best interests of the community, nor in the spirit for which the Act was passed by the NSW Parliament in 2020.

The above notwithstanding, Engineers Australia provides this submission to help ensure that the building sector reforms are as efficient and effective as possible. Also, with respect to registration of professional engineers, Engineers Australia recommends — as a bare minimum — that the Regulations enable removal of the restrictive nature of clause 14 in the Regulations at a later date.

With regard to removing the restriction on the scope for engineer registration, the Regulations should specify a date for that to occur. It could be done in phases, for example by specifying a date for the engineer registration provisions to extend to work on all classes of the NCC, and a subsequent date for the engineer registration provisions to extend to those who perform work in any other industry sector.

2. Do you agree that the reforms should only apply to existing arrangements where the Complying Development Certificate or Construction Certificate has been applied for on or after 1 July 2021? Why/Why not?

Yes, because this would give the industry time to digest the regulatory changes, develop strategies to ensure compliance, and implement new working procedures accordingly.

Regulated design (page 17)

3. Are the proposed exclusions from 'building work' appropriate? Why/Why not?

The proposed exclusions are generally agreed, with the following exceptions:

- 'Renovation' work that is related to active or passive fire safety systems should not be excluded. For those, the whole system needs to be recertified to ensure functionality. This is because partial renovation or replacement of a system can affect another system with which it interfaces. For example, a partial renovation of an automatic smoke detection system with stair pressurisation or fire curtain deployment could be compromised if the combined interfaced system is not certified. Inappropriate minor building alterations can affect existing fire safety systems. For example, a sprinkler system can be obstructed by a change in walls, ceilings, or by building in fixtures or shelving and racking.
- Waterproofing in a Sole Occupancy Unit should not be exempted. Failure of showers and other wet areas has already been exposed as a major issue in the early Occupation Certificate audits by the office of the NSW Building Commissioner. It is a very common problem and causes huge frustration for residential apartment owners and tenants.

Otherwise, the exclusions provide for suitable congruence with other relevant legislation.

It is also noted that the last exemption item (work that is excluded from being residential building work according to Home Building Act 1989) points to a minimum monetary amount, which is slightly different from the explanations of the Regulatory Impact Statement (RIS) (Page 20, Paragraph 1).

4. Are there other works that should be exempted? Please provide the basis for the exemption and when the exemption should be effective (for example, a description of the works or threshold of the value including the reason for that value).

Although no further exemptions are recommended at this stage, additional exemptions may be considered in later stage once the Act and Regulation come into effect and feedback on the practical application of the new laws has been assessed.

Registration of Compliance Declaration practitioners (page 23)

5. Do you support the proposed classes of Design Practitioner? Why or why not?

Engineers Australia generally supports the proposed classes of Design Practitioner, though please also refer to the response against Question 6.

6. Are there other types of Design Practitioners that should be included or any that should be removed? If so, what are they and why?

Achieving national consistency in how practitioners are regulated should be a goal. This is especially true given the National Cabinet’s announcement on 11 December 2020 that, “*All jurisdictions signed the Intergovernmental Agreement on Automatic Mutual Recognition of Occupational Registrations, with the exception of the ACT. The Agreement, which will be subject to revision following consultation and to reflect the legislation agreed by the signatories, will ensure that licenced workers will not bear additional costs to perform the same activities in those jurisdictions and makes it easier to do business across state and territory borders. The ACT will continue to work towards finalising arrangements, with the aim of signing the Intergovernmental Agreement shortly.*” See: <https://www.pm.gov.au/media/national-cabinet-3>.

Regarding building sector practitioners specifically, it should be possible to achieve greater alignment with the Australian Building Codes Board’s (ABCB) National Registration Framework (NRF) with respect to Design Practitioner – Fire Systems. In particular, the ABCB NRF includes a class of Fire Systems Design – passive fire and smoke systems, and that class of practitioner should be included in the NSW Regulation.

It is also noted that a class of design practitioner for acoustics and also for vertical transport should be considered. Further consultation on these potential classes is recommended.

Three occupational categories of the engineering team

It is noted that the Regulation seeks to regulate work that is typically performed by members of all three occupational categories of the engineering team. That is, professional engineers (Washington Accord qualification), engineering technologists (Sydney Accord qualification) and engineering associates (Dublin Accord qualification). It is appropriate that professional engineering work is regulated as per the draft Regulation (bearing in mind the other comments in this submission), but there are several instances where the work being controlled by Regulation could appropriately be performed by engineering technologists or associates.

As such it is recommended that, for each class of engineering design practitioner, that two other grades are created to ensure that engineering technologists and associates have the authority to deliver design services appropriate to their level of expertise. The method for determining the cut-off for each class should not relate to the number of building stories, or complexity of the building as defined by the ABCB. Instead, the demarcation should be measured against the nature of the work performed, e.g. a BCA compliant lighting system to be designed by a lighting designer registered as a design practitioner – electrical technologist/associate.

Without this change, there is a risk that many suitable practitioners will be blocked from providing legitimate services. Similarly, it could result in a misapplication of professional engineers who would be forced to supervise and sign-off on work that could appropriately be managed by those other two grades of engineer.

7. Do you support the proposed qualification, skills, knowledge and experience requirements for each class of practitioner? Why or why not? Please make suggestions for additional or alternative requirements.

The proposed qualifications, skills, knowledge and experience requirements for Design Practitioners are generally supported, but some amendment is recommended as follows:

- The qualifications for “Design Practitioner – façade engineering” should be registration as a professional engineer in the classes of structural, civil or mechanical.
- In addition, we note potential discrepancies for mechanical or electrical designers for fire systems, which could lead to confusion. This is because for mechanical and electrical engineering, these design practitioners need to be registered as a professional engineer; however, the fire systems designers carrying out work including design of fire alarm systems and smoke control systems do not need to be professional engineers. Both mechanical or electrical and fire systems designers can ‘vary’ a regulated design, yet the required qualifications level do not align. We suggest in the regulation this could be clarified further, e.g. an electrical engineer who intends to prepare or vary an Emergency Warning and Intercommunication System (EWIS) design, whether they should/shouldn’t obtain additional registration as a design practitioner – fire system design (Detection and alarm systems).

8. Other than qualifications, skills, knowledge and experience requirements, are there any other eligibility criteria that applicants should meet to be eligible for registration?

There are no other eligibility criteria that applicants should meet to be eligible for registration.

9. Do you agree that practitioners should be required to have 5 years of recent and relevant practical experience?

Yes, and it is also recommended that the requirement be for the experience to be the equivalent of five years of full-time-equivalent relevant experience, and that it was in the last 10 years, as stipulated in the Regulation.

10. Some classes of practitioner have been proposed with authority to work on low and medium rise buildings? Do you support this approach?

We support the concept of restricted practitioner. However, we suggest that in lieu of the use of number of stories of buildings as the criteria for determining what restricted practitioners could do, the ABCB building complexity framework could be used. The framework could be accessed via: https://consultation.abcb.gov.au/engagement/definition-for-building-complexity/supporting_documents/Exposure_draft_Definition_Building_complexity.pdf.

Also see comments in response to Question 6.

Registration of Professional Engineers (page 29)

11. Are there any other areas of engineering that should be captured for the purposes of designing or constructing a class 2 building, or a building containing a class 2 part?

For the purposes of designing and constructing class 2 buildings, or buildings that contain a class 2 part, there are no other areas of engineering that need to be captured at this time.

However, as noted in response to Question 1, registration of professional engineers should apply to those working on any other classes of buildings and in any industry beyond the building sector.

Also see comments in response to Question 6, in which the role of the role of all three occupational categories of the engineering team is explained.

12. Do you support a co-regulatory approach for the registration of engineers?

Yes, Engineers Australia strongly supports a co-regulatory approach for the registration of engineers.

13. Pathway 1 will require an engineer to satisfy certain qualifications, skills, knowledge and experience requirements. Are there any other eligibility criteria that engineers should meet before being registered?

An additional eligibility criterion for registration should be that the engineer has been assessed as competent to practice independently. This additional criterion should be specified as satisfactorily demonstrating the following five elements of the “Australian Engineering Competency Standards Stage 2 – Experienced Professional Engineer”:

- Deal with ethical issues
- Practice competently
- Develop safe and sustainable solutions
- Identify, assess and manage risks
- Local engineering knowledge

For more information about the Stage 2 Competency Standards, please visit the Engineers Australia website at, https://www.engineersaustralia.org.au/sites/default/files/2018-03/competency_standards_june.pdf.

Also note that the Professional Engineers Registration Regulations of Victoria have adopted these 5 Elements of Competency as one of the criteria to be registered in Victoria. They are also similar to the elements accepted by the Board of Professional Engineers Queensland.

14. The Regulation proposes recognition of Washington Accord accredited qualifications. Do you think this is appropriate? If not, what alternative approach do you suggest?

Engineers Australia agrees that the minimum qualification required of a registered professional engineer is an engineering qualification accredited to the Washington Accord.

An important addition to this is that applicants for registration should be eligible if their qualification is not recognised under the Washington Accord, but is independently assessed as equivalent. This is important because although the Washington Accord covers 21 countries (including the biggest source countries), it is not comprehensive. For example, Germany is not a signatory to the Washington accord, but the signatory to the Accord should be authorised to assess equivalence.

Alternatives to the Washington Accord pathway

It is also important to introduce a scheme that does not unnecessarily exclude the small number of people who do not have a Washington Accord degree (or equivalent) but are nonetheless suitable to work as professional engineers. There are two main scenarios for which this is relevant.

The first is that, before 1990, Australian engineering degrees were accredited by Engineers Australia, but not through the Washington Accord which was introduced in 1989. People in this circumstance are probably at least 50-60 years of age and have 40 years of relevant experience. It would be an unintended consequence of the legislation to suddenly exclude them from independent practice.

The second is that holding a three-year degree in a cognate field to engineering, plus significant relevant experience, can in some circumstances lead to an individual being competent to practice as an engineer. For example, someone with a Bachelor of Engineering Technology (a three-year degree) and can demonstrate that they have worked under appropriate supervision as a professional engineer for a significant period could be independently assessed as competent to practice as a registered professional engineer. Similarly, someone with an appropriate Bachelor of Science, plus a relevant Masters degree and significant relevant experience working under supervision as an engineer could also be found, via independent assessment, to be competent to practice as a professional engineer.

In each scenario, Engineers Australia recommends that applicants are required to undergo an independent assessment of their qualifications and experience to ensure they meet the requirements for competent practice under the Act.

Engineers Australia also recognises that there are current engineering roles in NSW which are held by practitioners which will not meet the proposed educational requirements but have demonstrated over time that they are competent to undertake their roles. These sit between the examples given above and would include those with a two-year those with a two-year qualification such as an Advanced Diploma or Associate Degree. While Engineers Australia is not suggesting that these qualifications are included, it is suggested that consideration is given as to how these members of the engineering team are affected and whether an interim solution is possible.

Not all recognised professional bodies for the purposes of registering practitioners under the Regulations will have the capabilities to perform these assessments. Engineers Australia has the established capacity to perform these bespoke assessments.

15. Under Pathway 2 what criteria do you think the professional engineering body should satisfy to be eligible to perform their function?

Engineers Australia agrees with the proposed requirements for pathway 2 and suggest these additional criteria:

- The professional engineering body should be able to demonstrate a financial capacity to remain viable to continue to perform the assessment function for the period of their approved assessment scheme, and
- be able to demonstrate the ability to provide assessment outcomes within a satisfactory time period.

16. Would you be supportive of professional bodies developing a PSS for Pathway 3 to be available?

Membership of a Professional Standards Scheme (PSS) as a means to being registered in NSW is only suitable if it is available as one of several pathways. Current feedback from members, and Engineers Australia's experience operating a PSS from 1998 to 2016, indicate that a PSS may not be suitable for all those who require registration under the Design and Building Practitioners Act.

Engineers Australia is actively understanding the complexities of establishing a new PSS to determine if it is feasible and practical in the engineering context.

If one or more professional bodies do introduce a PSS to enable operation of Pathway 3, it is strongly recommended that Pathway 2 remain available.

17. Do you agree that Professional Engineers should be required to have 5 years of recent and relevant practical experience?

Generally, five years of recent and practical experience in the last 10 years is considered appropriate.

Engineers Australia's assessment experience shows that it takes approximately five years to develop the necessary professional maturity and would be uncomfortable with a lesser specification. This period relates to a standard career pathway which includes secondary school students going directly to university and then directly to a graduate engineering role. Setting this mark also minimises the risk of unrealistic expectations for those applying to be registered.

Please note that it is recognised that some people may not take the standard career path, and so exceptions to the above need to be accommodated.

Exception to the five-year rule

Under Pathway 2, some engineering bodies should be permitted to register engineers with less than five years of experience in specific, exceptional circumstances.

This situation could arise when an engineer is assessed and awarded status of Chartered Professional Engineer. Such a person has advanced skills and knowledge and is able to demonstrate attainment of additional competencies to those that apply to the benchmark standard of professionalism proposed in the Regulations.

Chartered status (CPEng) can be awarded in extremely rare circumstances to highly skilled and very competent engineers with less than five years of experience post-graduation. Because of the thorough and bespoke competency assessment, engineers with CPEng status and fewer than five years of experience should be considered to have met the five years of experience requirement.

In addition, there are some engineers, including mature aged, who may have attained valuable experience before graduating with their formal engineering qualification. On a case-by-case basis, some amount of the five years requirement could be met by pre-graduation experience. In such cases, it would need to be individually assessed. The usual circumstances for this are for students who do an engineering degree part-time or in blocks of study, integrated with significant work placements and operating under appropriate supervision as an engineer. Pre-graduation experience may also be relevant for people who undergo further education to articulate from engineering associate or technologist to professional engineer. These people are very likely to have relevant work experience that should be eligible for assessment and inclusion for the requirements of the regulations.

18. Do you support the proposed generic list of skills and knowledge requirements for all classes of engineering (excluding fire safety)? If not, please outline what you think the specific skills and knowledge for each class of engineer should be.

Engineers Australia supports the proposed generic list of skills and knowledge for all classes of engineering (excluding fire safety).

Compliance Declaration Scheme: practitioner requirements (page 38)

19. Do you support the proposal that all construction issued regulated designs must be lodged before any building work can commence? Why or why not?

This proposal has merit; however, it is suggested that this be further clarified. Construction issued regulated designs may be arranged in a staging manner for some major projects. For example, building works below ground may commence prior to the completion of all construction issued designs. This could be the case if designs in relation to below ground or directly above ground building works are completed for construction purposes. Another example is a mixed-use office tower, where the fit-out design may run in parallel with the base building construction.

A consequence of not having a staged process is that it could encourage noncompliance and people could submit inadequate designs. In practice, some practitioners who have limited time in which to provide their services may feel forced to produce poor for-construction issued drawings and instead utilise the variation process to finalise the task to the required level of detail. This would undermine the purpose of the proposal (of having fewer variations).

20. Do you support the Building Practitioner being primarily responsible for lodging regulated designs on the NSW Planning Portal? Why or why not? If not, who do you think should be responsible at the different lodgement points? Please explain your answer.

Yes, a central lodgement point is a good approach.

21. Do you support the matters covered in the Design Compliance Declaration? Why or why not?

Yes. The matters covered ensure that the Registered Design Practitioners check the design from multiple aspects to ensure compliance with the BCA. It also ensures the designs of all practitioners are integrated and there is a holistic or harmonised design. This will help to ensure that no essential elements are missed, or proposed designs or systems do not work effectively together.

22. Do you consider any other matters should be included in the Design Compliance Declaration?

Yes. If specialist advice was sought and had a practical influence in preparing the regulated design, confirmation by that specialist should be included to ensure it is properly interpreted and implemented in the design.

23. Do you support the proposed title block? Are there any other matters that should be included in the title block?

Yes, if a field is included for the registered design practitioner's signature.

24. Do you support the title block being available in a .dwg format?

Yes, though a .pdf format should also be made available for those who produce PDF drawings. In the long term, a format which can integrate with 3D models should also be considered.

25. Do you support the proposal that varied regulated designs be lodged within 1 day of the building work being commenced? Why or why not?

The 1-day turnaround is not practical. This is for two reasons:

- the regulation does not adequately define a variation or varied regulated design. Without a very clear definition, there could be many minor or immaterial variations lodged which could result in extra project costs with no real benefits, and discrepancies in the types of variations that are lodged by different practitioners. Conversely, without a clear definition some practitioners may choose to only declare very significant variations to the extent that the intent of the Regulation is not fulfilled. This is a significant issue to be resolved through stakeholder consultation in 2021.
- In some circumstances, the 1-day lodgement might not be realistic. For example, the design team may need to resolve a varied regulated design issue based on progressive investigations carried out during building work for the variation. In this case, the design may be varied a few times depending on findings on site.

26. Do you support the proposal that the Building Compliance Declaration, regulated designs and variation statements be lodged prior to the application for the Occupation Certificate? Why or why not?

Yes, because this enables the project team to ensure that all compliance requirements are met prior to occupation, and that they have been checked by the engineer before the application for OC is lodged. Failure to do this may result in an inability to complete the final compliance checks before the OC is issued. It is noted that works which are not completed before the OC is issued are often never completed properly.

27. Are there further matters that should be included in the Building Compliance Declaration? If so, what are they?

Yes. It is also important that the Registered Building Practitioner disclose their engagement details with each designer (not only the registered design practitioners who make the declarations). This is because the obligations would be very different for designers who provide peer review, Design and Construct design, or as-built design services.

It is also noted that it is not clear whether design practitioners need to be involved in inspections and commissioning before OC and check that their designs, for which they usually have special competence, have been properly constructed, installed and commissioned to assist with Building Compliance Declaration.

28. Are there further matters that should be included in the Principal Compliance Declaration? If so, what are they?

Yes. If there is any declaration of interest for the Principal Design Practitioner, then it should be reflected on the Principal Compliance Declaration. For example, one company may provide design services for multiple disciplines and, if someone from the company also takes up the Principal Design Practitioner role, then the person should declare any relevant interest for their obligation as the Principal Design Practitioner.

Insurance (page 51)

29. Do you support the approach proposed for insurance requirements for Design Practitioners and Professional Engineers? Why or why not?

Engineers Australia strongly recommends that the government investigate the effect of the insurance requirement from the Act on the industry before finalising the Regulations.

The intersection of the law's requirement for unlimited liability and the operation of a PSS needs to be clarified to ensure practical compliance is possible.

A core concern is the extended duty of care and uncapped liability. The insurance requirement could have a significant effect on many companies which may not be able to stay in the market. Feedback provided to Engineers Australia by members is that, in many cases, companies (especially small ones) do not have meaningful choice for their insurance products. The requirement to obtain a suitable insurance cover, alongside onerous contracts, are leading to a conflict between policy objectives implemented via the Regulations and commercial reality.

Unless resolved, there is a genuine concern within industry that the market for class 2 buildings (or mixed-use buildings with a class 2 part) will collapse due to an inability to operate with adequate affordable insurance.

Introduction of a PSS might help to lift standards of practitioners, but the existence of a PSS in the market is very unlikely to resolve the complex web of factors that have led to an insurance crisis in Australia. Also please refer to our response to question 16 and the suitability of a PSS generally.

It is strongly recommended that the NSW Government take a more active role in resolving the balance of liability and insurance.

Please also see our response to Question 31, below.

Minimum benchmark

Engineers Australia has, in previous submissions to the NSW Government, stated that for engineers, even within the building sector, their work, company sizes, and exposure to risk—and insurance requirements—are not homogenous. There therefore needs to be flexibility in the system.

As such, the proposal for design practitioners and professional engineers to determine the adequacy of their insurance is supported.

However, Engineers Australia has come to see that it may be beneficial to set a minimum benchmark for insurance coverage which is suitable for small businesses (note that a great many engineering design business consists of just one person, or perhaps up to five staff). Setting this minimum should not absolve a registered practitioner or engineer from performing a self-assessment to ensure the adequacy of their insurance under the Regulations.

30. Do you consider additional insurance requirements should be prescribed for Design Practitioners and Professional Engineers? If so, what?

Some design practitioners or professional engineers may not be well informed about the need for adequate PI Insurance and so may unknowingly accept an unacceptably low level of PI Insurance coverage.

As described at Question 29, it may be beneficial to set a minimum benchmark for insurance coverage which is suitable for small businesses (note that a great many engineering design business consists of just one person, or perhaps up to five staff). Setting this minimum would not absolve a registered practitioner or engineer from performing a self-assessment to ensure the adequacy of their insurance under the Regulations.

31. Do you support the proposed transitional arrangements that exempt Building Practitioners from being insured for issuing Building Compliance Declarations? Why or why not?

The proposed transitional arrangements that exempt Building Practitioners from being insured for issuing Building Compliance Declarations demonstrate that the NSW government recognises that the insurance market is increasingly unable to offer suitable coverage for practitioners.

To improve understanding of the insurance market as it pertains to designers, it is recommended that the NSW Government read and consider the analysis and recommendations provided by Consult Australia in its submission to this draft Regulation.

It is strongly recommended that Design Practitioners and Professional Engineers should also have a two-year transition period on insurance obligations, to ensure that the other changes to practice can embed to improve confidence and compliance. This accords with the transition period provided to building practitioners.

Continuing professional development (CPD) (page 54)

32. Do you support the proposed CPD requirements for Design and Building Practitioners? Why or why not?

The proposed CPD requirements for Design and Building Practitioners are supported. The amount of CPD required (3 hours) is not too onerous and the proposed CPD activities will assist in ensuring the registered Design and Building Practitioners have the knowledge necessary to competently undertake their responsibilities.

33. What types of training, education or topic areas would be relevant for the functions carried out by Design and Building Practitioners?

The types of training and topics should include knowledge of the NCC and any reference documents, relevant Acts and Regulations, how to properly complete Declarations, and training for effective site inspections and commissioning.

34. Do you support the proposed CPD requirements for engineers under pathway 1?

Many engineers will be required to be registered in more than one state which means that, ideally, CPD requirements for registration in all states would be consistent. QLD and VIC already effectively have a 50 hours per year CPD requirement, which is a quantum supported by Engineers Australia, and that would be preferable to the NSW proposal for 60 points annually.

The requirement for 40 points per year to be formal CPD has a high potential to be very expensive and therefore quite a financial imposition on business. Engineers Australia recommends reducing the formal CPD requirement to 20 points (about 10 hours) per year.

35. Do you support the mandatory CPD topic areas? Why/why not? Please make any suggestions for amendments and explain why they are necessary.

The proposed mandatory CPD topic areas are supported.

Penalty notice offences (page 57)

36. Do you support the proposed penalty notice offences and amounts proposed in Appendix 1? Why or why not?

No objection.

37. Do you think the proposed penalty notice offences and amounts are fair and reasonable?

No objection.

Fees (page 59)

38. Do you support the reasons for the proposed fees? Why or why not?

The ultimate beneficiary of the registration schemes is the NSW community which means that a sharing of costs between the NSW Government and practitioners is suitable.

39. What do you think NSW Fair Trading should consider in determining the fees?

The proposed registration schemes are structured in a way that is likely to lead to an individual needing to seek registration in multiple categories. This includes Professional Engineers who will also need to register as design practitioners.

To limit the financial burden of the regulations, it is recommended that an individual is only required to pay one fee no matter the number of categories they are registered for.

Furthermore, the Mutual Recognition Act should be applied in accordance with the National Cabinet's recent Intergovernmental Agreement on Automatic Mutual Recognition of Occupational Registrations.

Fees levied on registered Practitioners and Engineers should be set on a cost-recovery basis, shared with the NSW Government. Fees should be commensurate with those set for similar registrations in other Australian jurisdictions.

40. Are you interested in being involved in targeted stakeholder consultation on fees?

Yes, Engineers Australia is interested in being involved in stakeholder consultation on fees.

Proposed Design and Building Practitioners Regulation 2020

Please use this section to provide feedback on the proposed Regulation. Headings have been included to assist you in providing feedback on particular topics covered in the Regulation.

1. Part 2 – Regulated designs and types of work

Requirements for regulated designs and compliance declarations, building work and professional engineering work

- Section 5 only sets the form and content of regulated design for performance solution and fire resisting building elements. It is recommended that the format and basic elements of other regulated designs be prescribed.
- Section 6 states ‘a fire resisting regulated design must include a statement in the specification for the design explaining how a penetration to a building element will be managed to...’. It should be made clear who has the responsibility to provide this statement.
- Section 8 prescribes the requirement of integrating details from other aspects of building work and regulated designs for the work. Attention should be paid to the interfacing elements between two sets of designs, for example, a joint between façade and structural elements. It is recommended that capturing this in the scope of the declaration by way of a note on the drawing.
- Section 9 (1) (c): If the product is replaced during the construction stage, is a new declaration required? If it is, is the building practitioner responsible for making the declaration as part of their declarations associated with any other variation to the design during construction? Note that variations in relation to product replacement like this are very common during the construction phase.
- As described in response to Question 1 at the start of this submission, it is recommended that the Regulations do not restrict the scope of Part 3, Division 1, clauses 31-33 of the Design and Building Practitioners Act.
 - The Act was passed by the NSW Parliament with an understanding that those sections had an application that extended beyond the building sector to require engineers in any industry to be registered to practice.
 - The Regulations at clause 14 utilise clause 31(2)(b) of the Act to restrict the Act’s application to just engineering for the purposes of designing or constructing a class 2 building or a building that contains a class 2 part.
 - That is not in the best interests of the community, nor in the spirit for which the Act was passed by the NSW Parliament in 2020.
 - The Regulations should specify a date on which the restriction is removed. It could be done in phases, for example by specifying a date for the engineer registration provisions to extend to work on all classes of the NCC, and a subsequent date for the engineer registration provisions to extend to those who perform work in any other industry sector.

2. Part 3 – Requirements for designs and building work

Lodgement of designs and compliance declarations, requirements of principal design practitioners and building practitioners

- Section 16 (3) (a) provides for a written authorisation to be provided. Instructions on maintaining a record of this authorisation is recommended. It may also be worthwhile developing a recordkeeping requirement for all documents, as another schedule to the regulation.

- Section 17 (1) (a) & (b) imposes obligations regarding varied regulated designs. However, the term 'varied' should be defined to avoid misinterpretation.
- Section 18 (2) (b) needs to be further clarified. Would the OC be issued only when there is no non-compliance in the Building Compliance Declaration?
- Section 18 (3) (b) needs to be further clarified. What is an example of an additional detail from regulated design that does not cause related building work to be varied?
- Section 19: The clause is not clear about what to be included in this last Lodgement. The information that is provided in the Regulatory Impact Statement should be added to this Section.
- Section 20 (b): Does the Registered Principal Design Practitioner need to provide a Principal Compliance Declaration for each varied Regulated Design? If so, this Principal Compliance Declaration is not listed under Section 17 (1) of the Regulation. In the Act at Section 20(2)(d) it does require a Principal Compliance Declaration. This should be further clarified with the regulation.
- Sections 22 and 23: This written notice should also be given to all the Regulated Design Practitioners. For record keeping, we suggest this written notice be saved and listed as per the previous comment by inserting a recordkeeping schedule at the end of the regulation.
- Section 24 (2): as there should only be one registered building practitioner for each project (either the sole building practitioner or the principal contractor as per the Act at Section 7 (1)), the notice should be given by the Registered Building Practitioner to other Building Practitioners (rather than Registered Building Practitioners).

3. Part 4 – Registration of practitioners

Applications and conditions of registration and registration obligations

- Section 28 (1): It does not seem possible for this deemed-to-be-refused after 28 days is compatible with the deemed-registration scheme during transition.
- Section 28 (1): If applying for registration in a jurisdiction other than NSW, a person may be required to disclose that they have been refused registration in NSW, even if the reason for refusal was only the expiry of time allowed for the Secretary to approve the person's application. Allowing a longer time period, of say 90 days, would reduce the occurrence of this reason for refusal. Alternatively, the Secretary could be taken to have 'not made a decision' on the application within 28 days, rather than to have 'refused to grant registration'.
- Section 32: If the engineer ceases to hold recognition or registration under a recognised engineering body's recognition or registration scheme it is recommended that the engineer be able to gain registration under Pathway 1 with little or no further assessment. This should only be the case if the engineer leaves the recognised engineering body in good standing.
- Section 34 (c): It is recommended that guidance documents be developed to clarify what is meant by 'provide a compliance declaration in a partial manner.'

4. Part 5 – Recognition of professional bodies of engineers

Applications and requirements for recognition or registration scheme

- Section 39 (b): Professional bodies of engineers have no particular expertise in determining adequacy of insurance held by professional engineers. Professional bodies of engineers should only be responsible for ascertaining that the professional engineer

does hold insurance which has been assessed by the professional engineer as adequate for the engineer to comply with their insurance obligation.

- Section 44 (1) (c): Section 39 (b): Professional bodies of engineers have no particular expertise in determining adequacy of insurance held by professional engineers. Professional bodies of engineers should only be responsible for ascertaining that the professional engineer does hold insurance which has been assessed by the professional engineer as adequate for the engineer to comply with their insurance obligation. Professional engineering bodies should not be required to assess if the engineer's insurance quantum or risk coverage is adequate.
- Section 44 (1) (f): The professional engineering body should be responsible for disciplinary action only regarding the engineer's compliance with the body's recognised recognition or registration scheme. The body should not be responsible for disciplinary action regarding the engineer's compliance with their further obligations arising from their registration as a Professional Engineer under the Act.
- Section 45 (1) (a): The Regulations state that a CPD audit program must be conducted at least once per year. The audit program should allow for the recognised engineering body to conduct a sample audit of recognised or registered engineers such that each recognised or registered engineer is audited at least every 7 years (i.e. 15% of engineers are audited every year).

5. Part 6 – Insurance

Insurance for design and principal design practitioners, professional engineers, building practitioners and adequacy of cover

- Section 56: It is recommended that a defined end date for insurance cover is provided.
- Section 60 (a): If a registered professional engineer is registered with a professional body under a Professional Standards Scheme, is the capped liability associated with a PSS compatible with the ability for unlimited claims made by the owners' corporation under Act Section 38 (4)? It is recommended that any incongruence be resolved in the Regulations and guidance material provided for industry.
- Section 66: As the whole project team could now be sued for unlimited liability by the owners (Act Section 38 (4)), if the Registered Building Practitioner is only insured in relation to the doing of building work relating to the compliance declaration, what is the implication on Regulated Design Practitioners? Would owners then be forced to sue Regulated Design Practitioners disproportionately to their actual contribution to problem because Registered Building Practitioners may not have adequate cover for liability? What's the purpose of this exemption?
 - Please see response to questions 29-31 and associated recommendations.
- Section 70: It is not clear how this limit of indemnity could then sufficiently cover the unlimited liability outlined under Act Section 38 (4). It is recommended that any incongruence is removed via the Regulation and guidance material provided to industry.

6. Part 7 – Record keeping

Record keeping for design and principal design practitioners, professional engineers, building practitioners

- Section 73: How does a prescribed practitioner ensure they are meeting their record keeping obligations if they no longer work for an employer and they are not allowed to take records with them when they leave the employer? Also, under confidentiality agreements, some records which should be kept by the registered practitioner may be

held by the client, and the registered practitioner may not be able to ensure those records are maintained. It is recommended that further industry consultation is conducted in 2021 to resolve this matter, and amend the Regulations, or it could prove to be unworkable.

- Section 74 (2): for this Section, include all the written notices and authorisations and other documents a designer received during the declaration process.
- Generally, considerations around privacy should be addressed, such as what record can be shared.

7. Part 8 – Miscellaneous

Authorised and penalty notice officers, exchange of information, transitional arrangements for insurance for building practitioners and qualifications for fire system designers and work done under existing arrangements.

- As a general comment for record keeping and verification, a digital card may be piloted as a way to keep practitioner information, such as registration number, expiry date etc.
- Section 78: All the listed particulars are to be included in the register for each person, but will all those particulars be made available in a publicly searchable database? If so, some privacy issues may arise and it is recommended that the government consider those before finalising the Regulations.
- Section 82 (1): If a Registered Building Practitioner does not have the insurance requirement during the transitional period (1/7/21-30/6/23) what is the effect on design engineers, especially when they are required to 'contract out' proportionate liability in their contract? It could be a very large and disproportionate effect which needs to be avoided, or risk further exacerbating the precariousness of the commercial viability of designers.
- Sections 85-90: Regarding 'deemed registration', it is strongly recommended that the period for which an applicant can be deemed to be registered ends on 31 December 2021. As drafted, it seems that the transitional period for making an application ends on 31 December 2021, but that once deemed to be registered there is no end date to that deemed status. If this is not clarified, there is a risk that a person may make an application for a 5-year registration and is deemed to be so registered without proper assessment of their true eligibility and competence.

8. Schedule 1 – Classes of registration

Classes of registration for practitioners and scope of work

- Section 4 (3): Consider revising the definition of 'type of work' to 'the preparation of a regulated design without direct supervision by a registered practitioner, provision of a compliance declaration or carrying out of building work or professional engineering work without direct supervision by a registered practitioner.'
- Section 8 (2) (b): A Professional Engineer in the class of mechanical engineering would not normally be required to design drainage systems as described in section 8 but there is no objection to providing for that circumstance. It is noted that the code of practice for registered engineers forbids any engineer from working outside their area of competence. Also, clarification is required to determine if a person who holds registration as a Professional Engineer – Civil or Mechanical would also need to be registered as a Design Practitioner - Drainage Design to do the work. We suggest in the regulation this could be clarified further, e.g. a civil engineer who intends to prepare or

vary a drainage design, whether they should or shouldn't obtain additional registration as a design practitioner – drainage design.

- Sections 9 & 10: Reading the definition of 'area of electrical engineering' in the dictionary (page 77), it is likely that lighting design, ICT (such as security) and fire system (detection and alarm system) would fall under electrical engineering and electrical design (restricted). This should be clarified by a guidance note.
 - Please also see our response to Question 6, and the role of all three occupational categories of the engineering team
- Section 13 (a): A registered electrical engineer should also be permitted to design emergency lighting if the engineer is properly trained in emergency lighting design.
- Sections 16 & 18: A Design Practitioner - Mechanical Engineering also has smoke control under its description of works, so it is recommended that they are also eligible to be as a design practitioner - fire systems (mechanical smoke control).

9. **Schedule 2 – Qualifications, experience, knowledge and skills**

For building practitioners, design practitioners, principal design practitioners and professional engineers

- Section 11 (1): Qualifications for Façade engineering should be 'must be registered as a professional engineer in the class of professional engineer—structural engineering or professional engineer—civil engineering or professional engineer – mechanical engineer.'
- Section 12 (2): Since all Design Practitioner – fire safety engineering will be firstly registered as a professional engineer-fire safety engineering, there is no need to replicate the specific fire safety knowledge items (d), (e) and (f). That is because those three fire safety knowledge items are covered in Section 23 (1) (a) (v) for fire safety engineers. There is no objection to repeating it in both section 12 and 23, but if it is to remain in one place only it should be at section 23.
- Section 12 (3) (c) should be amended to read "to assess the holistic performance of a fire engineering design and determine whether all fire safety design solutions, including any performance solution, comply with the relevant Performance Requirements of the *Building Code of Australia*".
- Section 24 (1): Qualifications in structural engineering should not be allowed as complying qualifications for registration as a Professional Engineer – Civil Engineering. Only qualifications in civil engineering should be allowed.

10. **Schedule 3 – Continuing professional development**

CPD for prescribed practitioners and CPD for professional engineers

No further comments beyond what is provided against Questions 32-35.

11. **Schedule 4 – Code of practice**

Code for prescribed practitioners and code for professional engineers

- Section 3 (c) and 9 (c): the concept of "not unreasonably discriminate" requires guidance for practitioners to understand what it means.
- Engineers Australia supports the provision in clause 12(2)(b) which allows professional engineers to always work in the best interests of the community.

12. Schedule 5 – Penalty notice offences

13. Schedule 6 – Forms

Design Compliance Declaration

14. General feedback

Any other comments you would like to make on the proposed Regulation.

Proposed Continuing Professional Development Guidelines (CPD Guidelines)

Please use this section to provide feedback on the proposed CPD Guidelines. There are two Guidelines we are seeking feedback on:

1. CPD Guidelines for prescribed practitioners (design practitioners, principal design practitioners and building practitioners) and,
2. CPD Guidelines for professional engineers.

Questions have been included to assist you in providing feedback.

CPD Guideline for prescribed practitioners

1. **Do you consider that requiring practitioners to undertake three hours of CPD activity is appropriate? Why or why not?**

The amount of CPD required (3 hours) is not too onerous and the proposed CPD activities will assist in ensuring the registered Design and Building Practitioners have the knowledge necessary to competently undertake their responsibilities.

2. **Do you support that CPD activities must be from the approved platforms? If not, please explain why.**

Yes, CPD should be from approved platforms so that quality of CPD can be controlled and assured. Over time, more CPD delivery platforms could be approved.

3. **Do you support the guidelines prioritising technical CPD activity (i.e., improving knowledge and understanding of the National Construction Code and Building Code of Australia) over other CPD activities? If not, please explain why.**

Yes, it is technical CPD which is most essential to practitioners.

4. **The Department is working with industry to develop courses that would assist practitioners. What courses or topic areas should be developed and available on the Construct NSW Learning Management System? We are particularly interested in providing courses that cover gaps in current learning content.**

It is recommended that answers to this question be explored with the BREP Pillar group 3. Engineers Australia is contributing this group and determining the courses or topic areas to be developed.

5. **Are there any other general comments you would like to make on the Continuing Professional Development Guidelines for prescribed practitioners?**

No.

CPD Guidelines for professional engineers

- 1. Do you support the proposed CPD structure and allocation of points? Why/why not? Please make any suggestions for amendments and explain why they are necessary.**

Many engineers will be required to be registered in more than one state which means that, ideally, CPD requirements for registration in all states would be consistent. QLD and VIC already effectively have a 50 hours per year CPD requirement, which is a quantum supported by Engineers Australia, and that would be preferable to the NSW proposal for 60 points annually.

The requirement for 40 points per year to be formal CPD has a high potential to be very expensive and therefore quite a financial imposition on business. Engineers Australia recommends reducing the formal CPD requirement to 20 points (about 10 hours) per year.

- 2. Do you support the mandatory CPD topic areas? Why/why not? Please make any suggestions for amendments and explain why they are necessary.**

The proposed mandatory CPD topic areas are supported.

- 3. Are there any activities that should be included/not included as:**
 - a) Formal education and training activities?**
 - b) Informal education and training activities?**

It is recommended that answers to this question be explored with the BREP Pillar group 3. Engineers Australia is contributing this group and helping to determine the courses or topic areas to be developed.

- 4. Structured training courses available from Construct NSW Learning System and from the Australian Building Codes Board are proposed to count for 2 CPD points. Do you support this approach?**

Yes.

- 5. The Department is working with industry to develop courses that would assist professional engineers. What courses or topic areas should be developed and available on the Construct NSW Learning Management System? We are particularly interested in providing courses that cover gaps in current learning content.**

It is recommended that answers to this question be explored with the BREP Pillar group 3. Engineers Australia is contributing this group and helping to determine the courses or topic areas to be developed.

- 6. Are there any other general comments you would like to make on the Continuing Professional Development Guidelines for Professional Engineers?**

No general comments.