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The motto of the coat of arms for the state of New South Wales is “Orta recens quam pura nites”. It is written in Latin and means “newly risen, how brightly you shine”.

Contents

Membership _____	ii
Chair’s foreword _____	iii
Summary _____	iv
Findings and recommendations _____	vii
Chapter One – Framework and timing of building industry reform _____	1
A scheme to register engineers _____	1
Engineers should be registered _____	1
The Engineers Bill offers an appropriate way to register engineers _____	4
Reforms to the building sector _____	5
The residential building sector is a priority _____	5
Reviewing how the reforms are operating _____	8
Implementing the reforms _____	10
Chapter Two – Details of scheme under Engineers Bill _____	12
The model for registration _____	12
Co-regulation is the best way to register engineers _____	12
Changes to improve the scheme _____	17
Making sure the board has engineering expertise _____	17
Covering more areas of engineering _____	18
Making insurance mandatory _____	20
Preventing unnecessary investigations _____	21
Giving engineers information about proposed disciplinary action _____	22
Considering regulators' enforcement powers _____	23
Adding appeal processes _____	25
Appendix One – Terms of reference _____	27
Appendix Two – Conduct of inquiry _____	28
Appendix Three – Submissions _____	29
Appendix Four – Witnesses _____	31
Appendix Five – Extracts from minutes _____	33

Membership

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Chair's foreword

Recent cases of residential high-rise apartments with defects have exposed the problems within our building and construction industry. These incidents have serious consequences for owners who are left to foot the bill for costly repairs, with few options for redress.

The Professional Engineers Registration Bill, introduced by the Shadow Minister for Building Reform and Property, Yasmin Catley MP, aimed to address one part of the problem by requiring engineers to be registered in New South Wales. The Bill was referred to our committee in the context of broader reforms proposed by the Government to the regulation of the building industry.

In the time since our inquiry's hearings, the Government's wider reforms to the building and construction sector have passed Parliament. The *Design and Building Practitioner Act 2020* (DBP Act) contained welcome and long overdue reforms that should improve residential construction standards. Importantly, it also provided for the registration of engineers.

Under the reforms, only registered engineers will be able to work as a civil, structural, electrical, mechanical or fire safety engineer. To be registered, engineers will have to show that they are qualified and competent to work as a professional engineer. They will also have to undertake continuing professional development to keep their skills current.

While we welcome these changes, we think that the registration model will need to be looked at in detail when the reforms are reviewed.

The registration model proposed in the Professional Engineers Registration Bill was based on Queensland's system. The model adopted through the DBP Act is different in that the Secretary of the Department of Customer Service will manage the registration process, instead of a Board of Professional Engineers. We think that the board-run model should be looked at as we found that it was a cost-effective and efficient way to register engineers.

The areas of engineering covered by the framework will also need to be considered. We heard that geotechnical and hydraulic engineering are important disciplines in the building sector and should require registration. We have also made other recommendations that aim to improve investigation processes and provide procedural fairness for engineers.

We are pleased that the DBP Act reflects evidence we heard about the need for engineers to be insured as part of registration, and to include appeal avenues for decisions made by the regulator.

We congratulate the Government on its reforms to the building sector. The framework for effective regulation of the sector has been established. While we feel that elements of the registration scheme could be refined, it's clear that consumers will benefit from these changes.

Alex Greenwich MP
Chair

Summary

Engineers do work that is critical to the infrastructure of NSW. This work is diverse and occurs across a number of sectors, including residential construction, civil works, electricity networks and transport infrastructure. Given the significance of this work, it is necessary that the engineering profession be subject to appropriate regulation. We found that introducing a broad-based scheme to register professional engineers is an effective way to promote transparency, accountability and high standards in the industry.

Our report notes the passing of the *Design and Building Practitioners Act 2020* (DBP Act), and supports the NSW Government's commitment to reform in the residential building and construction sector. We also note that the Act will introduce a requirement for certain classes of engineers to be registered from 1 July 2021. We commend this step, and believe that it will improve standards in the engineering profession, as well the sectors engineers work in.

We also note that while this is a positive step towards reform in the industry, the legislated registration scheme could be improved. We have made a number of recommendations and findings that should be considered during the NSW Government's statutory review of the DBP Act. This includes incorporating elements of the Professional Engineers Registration Bill 2019 (Engineers Bill) that were supported by a range of stakeholders, and identified as important parts of a registration framework.

Prioritising reform in the building industry

The NSW Government is prioritising reform in the building and construction industry. We support this approach, and heard that it is an important step in addressing the significant risks in this sector. Stakeholders outlined the serious consequences of an unregulated building industry, including financial and physical harm.

The DBP Act will address some of these concerns by introducing new obligations on people working in the industry. Design plans for buildings will have to comply with the Building Code of Australia, with design and building professionals having to declare that the relevant documentation meets appropriate standards. Practitioners will have to build in accordance with the declared designs, and issue building compliance declarations once the building is complete to ensure it is consistent with the initial plans. A compliance and enforcement framework has been established to ensure the reforms are implemented and monitored. The reforms will initially apply to multi-unit residential buildings, and will be extended to other building types in the future.

In addition to these reforms, the DBP Act requires all design and building practitioners to be registered for the work they undertake. Professional engineers working in sectors beyond the building and construction industry will also have to be registered. In our view this appropriately recognises the importance of reforming the residential construction industry, as well as the outstanding need to register engineers more broadly.

Examining how engineers are registered in NSW

We support the NSW Government's introduction of a scheme to register engineers. However, we have made findings and recommendations which should be considered when examining

the scheme's effectiveness. This should be done when the statutory review of the scheme is undertaken by the Government.

We heard evidence on best-practice in this area, and note that some of the changes suggested to the Engineers Bill were included in the final version of the DBP Act, which was enacted after our hearings. This includes requiring engineers to be insured before they can be registered and undertake engineering work.

We consider that the framework proposed in the Engineers Bill is an effective way to register engineers. The Bill proposed a co-regulatory scheme, which we think is appropriate for NSW.

Co-regulation makes use of the expertise of industry bodies, by tasking them with assessing applicants' suitability for registration. A statutory body then administers and oversees the scheme. This scheme is modelled on the framework operating in Queensland, which received support from a range of stakeholders. The model proposed in the DBP Act is also co-regulatory, but doesn't establish a board to administer registration. Instead, this role will be performed by the Secretary of the Department of Customer Service, or their delegate.

We note that regulations will have to be made under the DBP Act to refine its operation and flesh out details. It is important that these regulations are released for consultation so that industry participants can identify any issues and provide useful feedback. However, we heard that given the extensive consultation that has already occurred, this process should be quick and targeted.

Improving the scheme to register engineers

We made various findings and recommendations that we believe would improve the scheme to register engineers.

We note that under the DBP Act, the Secretary will perform the roles that are undertaken by the board under the Engineers Bill. When looking at the effectiveness of the scheme, we believe that the Government should consider whether the staff who conduct registration have enough engineering expertise, and if community input would be of benefit in performing the role. The Government should also consider whether it would be more effective for a board to register engineers, as provided for under the Engineers Bill.

We heard that a broad-based registration scheme for engineers should cover geotechnical and hydraulic engineering. Currently, the DBP Act doesn't cover these engineering areas. However, the Act does provide that the areas of engineering that require professionals to be registered can be expanded by regulation over time. We consider that these two areas should be covered as a priority, as it could improve confidence in the building and construction sector.

We recommend that a broad-scale registration scheme should require engineers to show cause as to why the regulating authority shouldn't start an investigation. When reviewing the DBP Act, the Government should consider whether the show cause process should be mandatory. Currently, the Secretary may give notice to a practitioner to show cause why they shouldn't be subject to disciplinary action, and the practitioner can make a submission in response. We heard that making this process mandatory would ensure time and money is not wasted in unnecessary investigations.

The Act is a part of wide reforms to the building and construction sector. In our view when it examines the effectiveness of these reforms, the Government should consider what powers

regulators need to oversee the building sector, and the registration of those working in the sector, including engineers.

We support the inclusion of the administrative review mechanisms established by the DBP Act. Unlike the Engineers Bill, the Act provides that a person can apply to the NSW Civil and Administrative Tribunal for a review of decisions relating to registration. This will ensure procedural fairness is provided in these circumstances.

Findings and recommendations

Finding 1 _____	1
A broad-scale scheme to register engineers is needed in New South Wales.	
Finding 2 _____	4
The Professional Engineers Registration Bill 2019 provides an appropriate framework for registering engineers. However, there is scope to improve some of the scheme's details.	
Finding 3 _____	6
The NSW Government's building and construction reforms should prioritise reforms to the residential building sector, along with the registration of engineers working outside the building sector.	
Recommendation 1 _____	8
That when considering the statutory review of the <i>Design and Building Practitioners Act 2020</i> , the NSW Government should consider this report's findings and recommendations on the scheme to register engineers.	
Recommendation 2 _____	10
That the NSW Government releases details of regulations made under the <i>Design and Building Practitioners Act 2020</i> for quick and targeted consultation before they are made.	
Recommendation 3 _____	10
That the NSW Government consults with other jurisdictions on the implementation of registration of engineers, to ensure consistency with other states.	
Recommendation 4 _____	10
That the NSW Government consults with the local government sector on the implementation of registration of engineers.	
Finding 4 _____	12
The co-regulatory model is an appropriate way to register engineers.	
Finding 5 _____	17
The membership of a board that administers registration of engineers should be broadly consistent with the membership of the Queensland board.	
Recommendation 5 _____	18
That a broad-scale registration scheme should include geotechnical and hydraulic engineering.	
Finding 6 _____	20
Professional indemnity insurance should be a condition of registration under a broad-scale registration scheme.	

Recommendation 6 _____ 21

That a broad-scale registration scheme should require engineers to show cause why the regulating authority should not start an investigation, except if it would prejudice the investigation or put a complainant at risk of harassment or intimidation.

Recommendation 7 _____ 22

That the regulating authority in a broad-scale registration scheme should provide information about the reasons for proposed disciplinary action to engineers, so they can respond to a notice to show cause.

Recommendation 8 _____ 23

That the NSW Government considers what powers should be available to regulators who monitor the building sector, and license or register professionals in the sector.

Finding 7 _____ 25

The broad-scale registration scheme should include provision for administrative review of decisions made by the regulating authority, for example, to remove, cancel or suspend registration, or caution or reprimand engineers.

Chapter One – Framework and timing of building industry reform

A scheme to register engineers

Engineers should be registered

Summary

A scheme to register engineers is an effective way to improve transparency, accountability and overall standards within the profession.

Finding 1

A broad-scale scheme to register engineers is needed in New South Wales.

- 1.1 Engineers in NSW are not subject to registration. However, the *Design and Building Practitioners Act 2020* will require certain classes of engineers to be registered from 1 July 2021.
- 1.2 We consider that introducing a broad-scale scheme to register engineers is a necessary step in ensuring reliability and accountability, both within the profession, and the industries engineers work across.
- 1.3 Registration schemes are used to regulate many professions across a range of industries. Registration or licensing generally requires an individual to show that they have specified qualifications or experience before they can undertake certain kinds of work. Individuals will also have to take part in ongoing professional development, relevant to the profession or industry.
- 1.4 These schemes are widely used in the building industry. In NSW, this includes electricians, plumbers, architects and builders.¹ Similarly, engineers are or will soon be subject to registration in Queensland, Victoria and the Australian Capital Territory.
- 1.5 We heard that there is widespread support to register engineers. Many stakeholders spoke of long-term and sustained advocacy for an appropriate scheme.²
- 1.6 The peak professional association for engineers, Engineers Australia, described registration of engineers as a ‘vital policy objective for NSW’.³ Other peak bodies,

¹ Mr Gordon Brock, Director, NSW, Association of Professional Engineers Australia, Transcript of evidence, 21 February 2020, p1

² Mr Brock, Transcript of evidence, 21 February 2020, p1; Cr Linda Scott, President, Local Government NSW, Transcript of evidence, 20 February 2020, p3; Ms Francine Binns, Chief Executive Officer, Institute of Public Works Engineering Australasia, NSW Division, Transcript of evidence, 20 February 2020, p29; Mr Chris Knierim, Chief Executive Officer, Building Designers Association of Australia, Transcript of evidence, 20 February 2020, p37

³ Submission 43, Engineers Australia, p6

unions and academics told us about the benefits of introducing registration.

- 1.7 Stakeholders said that registration is a necessary part of an effective regulatory framework. The Association of Professional Engineers Australia described the lack of registration as a 'regulatory loophole in NSW which needs to be closed'.⁴
- 1.8 We heard that mandatory registration is key to improving transparency and accountability in the building and construction industry, and in other sectors. Registration ensures that those working as engineers are qualified and experienced, and that there is appropriate responsibility and oversight in place. This improves public confidence in the sector, and ensures high-standards.⁵
- 1.9 Stakeholders stressed the benefits of registration for consumers, noting that it would prioritise community safety and high quality infrastructure. We also heard that it would promote trust and transparency by ensuring professionals were suitable and qualified for the relevant project.⁶
- 1.10 We consistently heard that registration is an effective way to reduce the risks associated with complex infrastructure projects. Importantly, it was stated that without mandatory registration, unqualified engineers will keep practicing. This means a higher risk of unnecessary costs, public dissatisfaction, and most significantly, a major infrastructure failure that could cause harm.⁷ The case study below presents some engineers' perspectives on the risks of not having registration.

Case study 1: Risks across industries – engineers' view⁸

One engineer working in telecommunications said that he'd seen projects not delivered on time or on budget due to poor engineering practices.

A professional working in technical risk engineering stressed the potential for serious consequences arising from faults and errors.

An engineer managing civil infrastructure assets said that establishing a practitioner's qualifications is a necessary part of ensuring everyone who uses the asset is free from any risk of injury.

An electrical engineer working in the electric power industry emphasised the importance of careful and safe design to ensure the community is not at risk due to failing infrastructure.

An engineer working in passenger rolling stock procurement told us that there is a compelling case for registration to avoid personal injury and financial risks, and rebuild trust in the sector.

⁴ Mr Brock, Transcript of evidence, 21 February 2020, p1

⁵ Cr Scott, Transcript of evidence, 20 February 2020, pp1-2

⁶ Mr Knerim, Transcript of evidence, 20 February 2020, p32; Mr Daniel Papps, Manager of Industrial Rules, Governance and Compliance, United Services Union, Transcript of evidence, 20 February 2020, p12; Mr Brock, Transcript of evidence, 21 February 2020, p2

⁷ Mr Brock, Transcript of evidence, 21 February 2020, p2; Submission 43, Engineers Australia, pp7-8

⁸ Submission 2, Mr Dime Spasovski, p1; Submission 11, Dr Eric Dale, p1; Submission 28, Mr Stephen Clayton, p1; Submission 29, Mr Alex Cheng, p1; Submission 54, Mr Stephen van Dort, p1; Submission 4, Ms Cassandra Salas, p1

A chemical engineer said that registration would ensure all professionals are aware of their responsibilities. Given the risks of handling, storing and using chemicals, it's essential that anyone undertaking this work be qualified and competent.

- 1.11 Inquiry participants also stressed the range of work engineers undertake. Engineers are directly involved in developing vital public infrastructure projects like roads, bridges, water and sewerage utilities. This is in addition to their work in the residential construction industry. We heard that the diversity and significance of this work means it is critical that a broad class of engineers be registered and appropriately qualified.⁹ A case study showing engineers working in NSW is below.

Case study 2: Engineers working in NSW¹⁰

At the time of the 2016 census there were around 60,000 engineers working in NSW. Around 20,000 engineers would be covered by the Professional Engineers Registration Bill. This number is an estimate of professional engineers working without supervision in the following practice areas:

- civil
- structural
- mechanical
- electrical
- fire safety.

These practice areas would account for around half of all engineers working in NSW. Roughly a third of engineers working in these areas would be working under supervision, and wouldn't be captured by the Bill.

Around 5,5000 engineers in NSW are subject to the voluntary National Engineering Register.

- 1.12 We were told that registration is an effective way to ensure the industry's ongoing professional development and improvement. Registration means that appropriate bodies can establish what qualifications are needed to practice as an engineer, and require ongoing training and development. This means that standards in the industry can be raised, ensuring that all engineers are working competently at a suitable level.¹¹

⁹ Mr Brock, Transcript of evidence, 21 February 2020, p5; Ms Ellen Leverington, Legal/Industrial Officer, Unions NSW, Transcript of evidence, 20 February 2020, p14; Mr William Barton, Board Director, Institute of Public Works Engineering, NSW Division, Transcript of evidence, 20 February 2020, p26; Mr Peter Johnson, Fellow, The Warren Centre for Advanced Engineering, Transcript of evidence, 20 February 2020, p26

¹⁰ Submission 43, Engineers Australia, p15

¹¹ Submission 43, Engineers Australia, p7 and Professor Robin King, Hon. Sec. ATSE NSW Division, Australian Academy of Technology and Engineering - NSW Division, Transcript of evidence, 20 February 2020, p 27

The Engineers Bill offers an appropriate way to register engineers

Summary

The Professional Engineers Registration Bill 2019 contains the essential elements of an effective registration scheme.

Finding 2

The Professional Engineers Registration Bill 2019 provides an appropriate framework for registering engineers. However, there is scope to improve some of the scheme's details.

- 1.13 Stakeholders told us that the proposed framework in the Professional Engineers Registration Bill 2019 (the Engineers Bill) is an effective mechanism to register engineers. While the Engineers Bill's framework is broadly supported, we also heard that there is scope to improve some of its details. We examine these issues in the next chapter.
- 1.14 We heard that the Engineers Bill establishes the necessary elements of an effective registration scheme. Engineers Australia outlined what they considered to be essential parts of a registration framework, noting that schemes across different industries and disciplines have similar characteristics.¹²
- 1.15 They noted a successful framework must cover the registration process and establish a statutory body with the role to maintain a register, investigate complaints and take appropriate action. A scheme must also allow industry and assessment entities to decide education and training standards, and continuing professional development requirements.¹³
- 1.16 Representatives from other industries with registration schemes echoed this view. The Law Society and Australian Institute of Architects told us that the Engineers Bill largely sets up appropriate mechanisms to ensure professionals are adequately trained, regulated, and oversighted.¹⁴
- 1.17 We are satisfied that the Engineers Bill provides a framework that will allow these essential components to be implemented, and for the benefits of a registration scheme to be realised.
- 1.18 The Engineers Bill sets out how a person would apply for registration, and the required qualifications and competencies. It establishes the role and powers of the Board of Professional Engineers, including approving assessment entities and assessment schemes. It also provides a way to deal with complaints and investigations, and take disciplinary action. We heard that these elements are

¹² Submission 43, Engineers Australia, p10

¹³ Submission 43, Engineers Australia, p10

¹⁴ Mr Peter Rosier, Member of Property Law Committee, Law Society of NSW, Transcript of evidence, 20 February 2020, p18; Ms Kathlyn Loseby, President, NSW Chapter, Australian Institute of Architects, Transcript of evidence, 20 February 2020, p35

critical in a registration scheme that ensures transparency, accountability and consistency.

- 1.19 While other registration models have been proposed, it's clear that these alternatives are not as effective as the scheme in the Bill. For example, a voluntary industry led scheme was not supported by some inquiry participants.
- 1.20 Engineers Australia, who manage the voluntary National Engineering Register (NER), told us that schemes of this kind have a low participation rate. They noted that 5,248 NSW-based engineers are currently registered with the NER. This is compared to the estimated 60,137 engineers working in NSW. This equates to registration of 8.7% of the profession.¹⁵ Such low-participation rates would make it difficult to obtain the benefits of a mandatory, broad-scale registration scheme. For a scheme to effectively oversight and raise standards, a large portion of the profession must be subject to it.
- 1.21 We were told that voluntary registration schemes don't allow a sufficient and thorough understanding of what engineers are working in the system, their qualifications, and their recent professional development. This can result in inappropriately qualified engineers working on major infrastructure projects, and ultimately cause a risk to public safety.¹⁶
- 1.22 It was noted that any scheme introduced in NSW should be consistent with schemes in other Australian jurisdictions. We heard that the schemes operating in Queensland and planned in Victoria, which have a framework similar to that in the Engineers Bill, are efficient and effective.¹⁷
- 1.23 Compatibility with other registration schemes was described as 'imperative', and an appropriate way to recognise engineering as an international profession.¹⁸

Reforms to the building sector

The residential building sector is a priority

Summary

The NSW Government's focus on reforms to the building and construction sector is appropriate, and is being implemented through the *Design and Building Practitioners Act 2020*. However, the registration of engineers across a range of sectors is also an important reform.

¹⁵ Submission 43, Engineers Australia, p15; Mr Jonathan Russell, National Manager of Public Affairs, Engineers Australia, Transcript of evidence, 21 February 2020, p11

¹⁶ Mr Brock, Transcript of evidence, 21 February 2020, p1

¹⁷ Mr Brock, Transcript of evidence, 21 February 2020, p2; Mr Russell, Transcript of evidence, 21 February 2020, p8

¹⁸ Professor Mark Hoffman, Transcript of evidence, 21 February 2020, p14

Finding 3

The NSW Government's building and construction reforms should prioritise reforms to the residential building sector, along with the registration of engineers working outside the building sector.

- 1.24 We heard about the importance of reforming the building and construction sector. Stakeholders told us that the highest risks to consumers are in this sector, particularly multi-level residential construction.
- 1.25 While we acknowledge the importance of the work engineers do across a range of industries, we consider that it's important to address the risks in the residential construction industry.
- 1.26 In 2017, the Building Minister's Forum commissioned Professor Peter Shergold and Ms Bronwyn Weir to examine the effectiveness of compliance and enforcement in the industry.¹⁹
- 1.27 Their Building Confidence report identified a 'systemic failure' in documenting compliance with the Building Code of Australia (BCA), causing a 'discrepancy' between what is approved and what is built. The lack of documentation means that performance requirements aren't included in the design process, and instituted in the built environment.²⁰
- 1.28 There has been ongoing scrutiny of the industry in NSW after incidents involving building defects at the Opal Tower and Mascot Towers in 2018 and 2019. An independent investigation into the Opal Tower released a report in February 2019.²¹
- 1.29 The NSW Government outlined reforms in response to the Building Confidence and Opal Tower reports. This included passing the *Design and Building Practitioners Act 2020* (DBP Act) to address issues in the building and construction industry, with the residential building sector as a priority.
- 1.30 Stakeholders consistently supported the DBP Act, indicating that it appears to be an effective way to improve regulation and oversight of the residential construction industry.²²
- 1.31 We consider that the DBP Act will reduce risk to consumers by ensuring buildings are consistent with design plans that comply with BCA. This will resolve some of

¹⁹ Professor Peter Shergold AO and Ms Bronwyn Weir, [Building Confidence: improving the effectiveness of compliance and enforcement systems for the building and construction industry across Australia](#), February 2018, viewed 1 June 2020

²⁰ Submission 58, NSW Government, p7

²¹ Professors John Carter, Mark Hoffman and Stephen Foster, [Opal Tower Investigation: Final Report](#), February 2019, viewed 1 June 2020

²² Cr Scott, Transcript of evidence, 20 February 2020, p1; Mr Mark Morey, Secretary, Unions NSW, Transcript of evidence, 20 February 2020 p13; Mr Ashley Brinson, Executive Director, The Warren Centre for Advanced Engineering, Transcript of evidence, 20 February 2020, p27; Mr Ian Bassett, Director of Policy and Professional Development, Building Designers Association of Australia, Transcript of evidence, 20 February 2020, p36; Mr Russell, Transcript of evidence, 21 February 2020, p9

the issues raised in the Building Confidence report about the discrepancy between approved plans and what is built.

- 1.32 We heard that these are important and necessary reforms that will benefit the building and construction industry. Stakeholders said there is an increasing lack of trust in the industry, and urgent action is needed. We also heard about the significant risk to community safety in the sector, and the need to address this risk as quickly as possible.²³
- 1.33 The NSW Building Commissioner explained why these risks must be addressed first, noting that ‘unsophisticated residential purchasers’ experience significant harm and have limited recourse if construction defects are found.²⁴
- 1.34 This view was echoed by NSW Government representatives. We heard that as consumers have suffered the most significant harm in the residential construction sector, reform in this area must be a priority.²⁵
- 1.35 The Department of Customer Service told us that multi-storey, multi-unit residential construction is a particularly complex building type, which means that effective regulation is needed.²⁶
- 1.36 Several stakeholders observed that priority should be given to ‘this very real and present danger’.²⁷ Inquiry participants generally supported first addressing the financial and safety risks in the residential construction industry, and then implementing broader reforms.²⁸
- 1.37 The Government argued that the DBP Act provides a framework with strong compliance and enforcement, and appropriate penalties. It also improves consumer protection though a duty of care owed by design and building practitioners to owners.²⁹
- 1.38 The framework will initially only apply to multi-unit residential buildings. We heard that this is to ensure the scheme can be implemented effectively, dealing with high-risk residential construction first. Other classes of buildings will be subject to the scheme in the future.
- 1.39 The DBP Act requires design practitioners to prepare ‘regulated designs’ to ‘declare that the documentation demonstrates compliance with the performance requirements of the BCA’.³⁰ This includes design changes. This means that non-

²³ Cr Scott, Transcript of evidence, 20 February 2020, p2; Mr Knierim, Transcript of evidence, 20 February 2020, p32; Mr Peter Dunphy, Executive Director, Compliance and Dispute Resolution, Better Regulation Division, Department of Customer Service, Transcript of evidence, 21 February 2020, p18

²⁴ Mr David Chandler, NSW Building Commissioner, Transcript of evidence, 20 February 2020, p8

²⁵ Mr John Tansey, Executive Director, Policy & Strategy, Better Regulation Division, Department of Customer Service, Transcript of evidence, 21 February 2020, pp17-18

²⁶ Mr Tansey, Transcript of evidence, 21 February 2020, pp17-18

²⁷ Mr Russell, Transcript of evidence, 21 February 2020, p10

²⁸ Ms Rita Mallia, State President, Construction, Forestry and Energy Union, Transcript of evidence, 20 February 2020, p43; Ms Loseby, Transcript of evidence, 20 February 2020, p40

²⁹ Submission 58, NSW Government, p7

³⁰ Submission 58, NSW Government, p14

compliance can be identified early in the design process, and all design and building practitioners are responsible for changes that are made.

- 1.40 The DBP Act aims to ensure that declared designs are used in construction. Design and building practitioners will have to build in accordance with declared designs. Building compliance declarations will be issued to state that the final building is wholly compliant.³¹
- 1.41 We heard that the DBP Act's compliance and enforcement framework, that this will deter non-compliant conduct, and give the regulator power to implement and monitor the scheme.³²
- 1.42 The DBP Act also provides a registration framework for design and building practitioners, so that only qualified professionals can undertake specified roles. We discuss the registration of engineers under the Act below.

Reviewing how the reforms are operating

Summary

Introducing registration of engineers will improve accountability and standards across the profession. To ensure the scheme is operating effectively, the NSW Government should consider our findings and recommendations .

Recommendation 1

That when considering the statutory review of the *Design and Building Practitioners Act 2020*, the NSW Government should consider this report's findings and recommendations on the scheme to register engineers.

- 1.43 In addition to reforms to the residential building industry, the DBP Act provides for the registration of engineers. While the registration framework is not consistent with the Engineers Bill, we consider that it's an important and necessary reform.
- 1.44 In our view, broad-scale registration of engineers, including those working outside the building and construction industry, is an important policy objective.
- 1.45 We note that while there is significant risk in residential construction, risks and defects can occur outside this sector if outstanding issues aren't resolved. We heard that people's interaction with engineering services is extensive and includes the use of public transport, roads, water and electricity. Given this, the scope for significant harm as a result of an engineering issue extends well beyond residential construction.³³
- 1.46 The registration scheme established by the DBP Act will reduce these risks, including the emergence of issues as a result of unregulated or inappropriately

³¹ Submission 58, NSW Government, p15

³² Submission 58, NSW Government, p15

³³ Mr Johnson, Transcript of evidence, 20 February 2020, p27 and Submission 43, Engineers Australia, p8

qualified engineers.

- 1.47 While we support the DBP Act, we also note that there is scope to review some of its details. In the next chapter we make recommendations and findings based on stakeholders' views of the registration scheme set out in the Engineers Bill. We believe these suggestions should be considered by the Government during the statutory review of the Act. We note that some changes suggested by inquiry participants were included in the final version of the DBP Act, which was enacted after our hearings.
- 1.48 Under the DBP Act only registered professional engineers can undertake professional engineering work in a prescribed area of engineering. The following areas of engineering are covered by the DBP Act:
- structural engineering
 - civil engineering
 - mechanical engineering
 - fire safety engineering
 - electrical engineering
 - an area of engineering prescribed by the regulations.³⁴
- 1.49 Engineers must be adequately insured to undertake professional engineering work. They have to show that they are adequately insured as a condition of their registration.³⁵
- 1.50 Unlike the model proposed in the Engineers Bill, the Act doesn't establish a board. Instead, the Secretary of the Department of Customer Service will have the role of registering engineers, investigating complaints and approving assessment schemes. Requirements for registration including qualifications; skills, knowledge or experience; and registration or recognition by professional bodies, can be set out in regulations.³⁶
- 1.51 Under the DBP Act professional bodies recognised by the Secretary will assess engineering qualifications and competencies, and continuing professional development. For a professional body to be recognised, it must have adequate procedures to monitor assessments under its scheme, and a capacity to undertake timely, independent and authoritative assessments.³⁷
- 1.52 A person who is registered by a recognised professional body will be recognised as a professional engineer under the Act.
- 1.53 We support the introduction of this scheme. We consider that the broad benefits of registration will be realised through its implementation. This includes

³⁴ *Design and Building Practitioners Act 2020*, s 32. A person can also carry out professional engineering work under the direct supervision of a person who is appropriately authorised as a professional engineer.

³⁵ *Design and Building Practitioners Act 2020*, s 33

³⁶ *Design and Building Practitioners Act 2020*, ss 47, 50. A code of practice for engineers can also be prescribed by regulation.

³⁷ *Design and Building Practitioners Act 2020*, s 55

improving professional standards, increasing accountability and transparency, and ensuring engineers are appropriately qualified to do their work.

Implementing the reforms

Summary

Regulations will have to be made under the *Design and Building Practitioners Act 2020*. These regulations should be released for short and focused consultation with stakeholders. The NSW Government should consult with other states to ensure registration schemes for engineers are consistent. The local government sector should also be consulted on the implementation of registration.

Recommendation 2

That the NSW Government releases details of regulations made under the *Design and Building Practitioners Act 2020* for quick and targeted consultation before they are made.

Recommendation 3

That the NSW Government consults with other jurisdictions on the implementation of registration of engineers, to ensure consistency with other states.

Recommendation 4

That the NSW Government consults with the local government sector on the implementation of registration of engineers.

- 1.54 We heard that regulations will have to be made under the DBP Act, to refine the operation of the Act, and flesh out additional details.³⁸
- 1.55 The NSW Government intends to expand the various obligations relating to licenses and design plans to industries beyond residential construction. This will be done via the Act's regulation making power.³⁹ Additionally, the Act provides that various details, such as the requirements for registration, will be established by regulation.
- 1.56 Stakeholders told us that it's important for the details of these regulations to be released for public consultation. This would mean that industry participants can identify any issues and provide useful feedback.⁴⁰
- 1.57 However, we also heard that this consultation doesn't need to be overly lengthy, as there was extensive consultation on the drafting of the Act. Also, these issues have been examined in various reports, such as the Building Confidence report,

³⁸ Ms Loseby, Transcript of evidence, 20 February 2020, p36; Submission 58, NSW Government, p13; Mr Tansey, Transcript of evidence, 21 February 2020, p21

³⁹ Mr Tansey, Transcript of evidence, 21 February 2020, p18

⁴⁰ Mr Morey, Transcript of evidence, 20 February 2020, p12; Dr Bronwyn Evans, CEO, Engineers Australia, Transcript of evidence, 21 February 2020, p9

and been the subject of long-term advocacy.⁴¹

- 1.58 Given the previous industry consultation and the risks of failing to reform these areas, it's important that consultation be quick and targeted.
- 1.59 The NSW Government should also consult with other states to make sure that registration standards and requirements are in harmony with other states. We heard about the importance of nationally consistent professional standards throughout the inquiry.
- 1.60 The Building Confidence report recommended consistent registration requirements for building practitioners, noting it should lead to nationally recognised qualifications, greater labour mobility and a national market for insurance products.⁴²
- 1.61 We note that the Minister for Better Regulation and Innovation said that the engineering powers in the DBP Act were 'designed to align with existing schemes in Queensland and Victoria as much as possible, ensuring that all engineering schemes across the eastern seaboard will operate cohesively.'⁴³
- 1.62 In implementing the scheme, the Government will have to consider the needs of the local government sector as a major employer of engineers. Local Government NSW stressed the need for consultation to ensure the scheme doesn't limit diversity and access to engineering careers. This is particularly relevant as we heard that 52.7 per cent of councils have a shortage of engineers.⁴⁴

⁴¹ Cr Scott, Transcript of evidence, 20 February 2020, pp3-4; Ms Mallia, Transcript of evidence, 20 February 2020, p43; Mr Tansey, Transcript of evidence, 21 February 2020, p23; Submission 58, NSW Government, p13

⁴² Shergold and Weir, [Building Confidence](#), February 2018, p17, viewed 7 May 2020

⁴³ New South Wales, Legislative Assembly, *Parliamentary Debates*, 3 June 2020, p12 (Kevin Anderson, Minister for Better Regulation and Innovation)

⁴⁴ Submission 55, Local Government NSW, pp5-6

Chapter Two – Details of scheme under Engineers Bill

The model for registration

Co-regulation is the best way to register engineers

Summary

Registering engineers through a co-regulatory scheme would be cost-effective, efficient and would allow mutual recognition of registration between states.

Finding 4

The co-regulatory model is an appropriate way to register engineers.

- 2.1 We consider that the Engineers Bill's co-regulatory scheme to register engineers is appropriate for NSW. Co-regulation is efficient and cost-effective, as it makes use of the expertise of industry bodies. Under a co-regulatory model a statutory body administers the scheme, and industry bodies assess applicants' suitability for registration based on their qualifications, competence and continuing professional development (CPD).
- 2.2 The Board of Professional Engineers (the board) would administer the Engineers Bill's scheme. Its role is to register professional engineers; investigate complaints about professional engineers; investigate the conduct of professional engineers in providing engineering services; and approve assessment schemes.⁴⁵
- 2.3 Professional industry bodies would seek the board's approval to run assessment schemes to assess a person's qualifications and competency in an area of engineering before they can be registered as an engineer.⁴⁶
- 2.4 The board would work with professional bodies and universities to develop a code of practice for professional conduct and practice. The code can be used as evidence of an engineer's professional conduct in disciplinary proceedings.⁴⁷
- 2.5 CPD requirements would be part of professional bodies' assessment schemes, and would be approved by the board. During the inquiry we heard there was support for similar CPD requirements to those in place in Queensland.⁴⁸

⁴⁵ Professional Engineers Registration Bill 2019, cl 37

⁴⁶ Professional Engineers Registration Bill 2019, Part 7. The board's role includes keeping the register of professional engineers. The register can be electronic and must include: the person's name and contact details, areas of engineering in which they are registered, details of their eligibility for registration as a professional engineer, and of any conditions that apply to their registration: Professional Engineers Registration Bill, Part 3, Division 2.

⁴⁷ Professional Engineers Registration Bill 2019, Part 4 and explanatory note. The code is approved by a regulation and tabled in Parliament by the Minister.

⁴⁸ Queensland requires 150 weighted hours over three years or 50 hours a year. This is consistent with Professionals Australia's scheme, Engineers Australia's National Engineering Register, and some international equivalents. In

2.6 Mr Jonathan Russell, National Manager of Public Affairs with Engineers Australia, described Queensland's scheme, which the Engineers Bill is modelled on:

... the board ... is obviously in control of things, and then they have assessment entities to conduct the assessments of the applicants to determine that they are ... appropriately qualified and experienced ... In Queensland the board identifies the assessment entities. ... Engineers Australia is one of those, together with the [Association of Professional Engineers Australia], and others, like the Civil Aviation Safety Authority. ... an individual would come to Engineers Australia. We would assess that they actually meet the minimum criteria that are set by the board and through legislation, and then give them a letter of assessment. We will either approve or deny that they are suitable. They then take that to the board as the regulator, and then the board ...—if they have additional criteria that are less to do with their competence as an engineer, then they might apply those. They then pay the fee, and then on they go.⁴⁹

2.7 Victoria is implementing co-regulatory scheme which 'leverages expertise from both the engineering profession and government'. Assessment entities will assess applicants' qualifications, experience and CPD in an area of engineering. The Business Licensing Authority⁵⁰ (BLA) will administer registration, assessing applicants' eligibility based on assessment entity reports on their qualifications and competencies.⁵¹

2.8 Key industry groups supported the co-regulation model.⁵² The Australian Institute of Architects told us that 'a joint approach by the NSW government and the engineering profession, with appropriate legislative support (co-regulation) is an essential step forward'.⁵³

2.9 However, the NSW Government argued that establishing a board to register engineers would be inefficient, as the government has the skills and systems to administer registration.⁵⁴

2.10 Under the DBP Act, the Secretary of the Department of Customer Service will have a role similar to that of the board under the Engineers Bill.

2.11 The Secretary will manage applications for registration and maintain the register. They will recognise professional bodies that have schemes to adequately assess professional engineers' qualifications and competencies in an area of engineering. A person who is registered or recognised by an approved

Queensland, engineers must renew with the board every year, and provide evidence of CPD and ongoing registration status to the assessment entity every three years: submission 38, Association of Professional Engineers Australia, p15.

⁴⁹ Mr Russell, Transcript of evidence, 21 February 2020, p8

⁵⁰ The BLA is an independent statutory body that licenses and registers businesses that need a license: Consumer Affairs Victoria, [Business Licensing Authority](#), viewed 14 May 2020

⁵¹ Consumer Affairs Victoria, [Professional Engineers Registration Act Q&As](#), pp6-7, viewed 14 May 2020

⁵² Submission 57, Australian Institute of Architects, p4; Submission 43, Engineers Australia, p10; Submission 38, Association of Professional Engineers Australia, pp11, 14

⁵³ Submission 57, Australian Institute of Architects, p3

⁵⁴ Submission 58, NSW Government, p10

professional body can be recognised as a registered practitioner.⁵⁵

- 2.12 Some of the Secretary's duties will be delegated to the Building Commissioner. Sixty new roles within the Commissioner's remit will implement and manage audit, registration and design lodgement roles under the Act.⁵⁶

Appropriate roles for the board and industry bodies

- 2.13 We heard that co-regulation allows for an effective sharing of roles between industry and the board. The Association of Professional Engineers Australia said that the system is efficient as it lets the board do what it's good at—looking at compliance and enforcement—and industry bodies to do what they're good at—assessing qualifications, education, skills, and competence.⁵⁷
- 2.14 Inquiry participants described other licensing/registration models that delegate complaint handling and enforcement to professional bodies, rather than a board (for example, the competent fire safety practitioner scheme). While these models may be appropriate in their particular context, we don't think they would be suitable for registering engineers.
- 2.15 The NSW Government argued that an industry led professional standards scheme is a pre-requisite for co-regulatory registration of engineers: 'until such a scheme is stood up, a coregulatory model cannot exist.'⁵⁸
- 2.16 However, Engineers Australia told us that professional standards schemes, like its National Engineering Register (NER), are not a substitute for statutory registration. It noted that engineers who want to avoid regulation can choose not to sign up with the NER, and that it doesn't offer a way to exclude incompetent or unqualified engineers.⁵⁹
- 2.17 Engineers Australia said that professional bodies shouldn't have a regulatory role as they don't have the resources and legal power to investigate breaches and enforce sanctions. Also, industry bodies could be seen to have a conflict of interest if they had a regulatory role.⁶⁰
- 2.18 Recent independent reviews of the building industry have supported a registration model that involves both government and industry. For example, the Opal Tower investigation report recommended the creation of an engineers' register 'managed by government in partnership with an appropriate professional

⁵⁵ *Design and Building Practitioners Act 2020*, ss 43; 54; 55. Professional bodies' schemes have to be consistent with national and international standards for recognising professional engineers, and have adequate CPD requirements and an effective audit program to ensure registration requirements are met.

⁵⁶ New South Wales, Legislative Assembly, *Parliamentary Debates*, 3 June 2020, p12 (Kevin Anderson, Minister for Better Regulation and Innovation). The Secretary can delegate any of their functions under the Act to a person employed in the Department, or a person authorised by the regulations: *Design and Building Practitioners Act 2020*, s 106.

⁵⁷ Mr Brock, Transcript of evidence, 21 February 2020, p2

⁵⁸ Correspondence from Minister for Better Regulation and Innovation, 17 February 2020, p3

⁵⁹ Submission 43, Engineers Australia, p15. Only 5,248 of around 60,197 engineers working in NSW are on the NER.

⁶⁰ Submission 43, Engineers Australia, pp14-15

body.⁶¹

- 2.19 The Building Confidence report also supported separate roles for industry and statutory bodies:

... Well-run industry accreditation can ensure that the competencies of practitioners are tailored to their area of work and can alleviate state or territory regulators from the detailed assessment of applications. If this approach is taken, the state or territory licensing body should have clear statutory responsibility for auditing performance and disciplining registered practitioners.⁶²

- 2.20 The DBP Act provides for registration to be managed by the Secretary, with professional bodies assessing applicants' qualifications, competency and CPD. Compliance and enforcement, including audit and investigations, is to be done by the Secretary. As noted above, these roles are intended to be delegated to the Building Commissioner.

Cost-effective way to manage registration

- 2.21 We heard that co-regulation is a cost-effective way to register engineers. The Association of Professional Engineers Australia noted that using industry bodies to assess a person's suitability for registration lowers costs, as the bodies compete to run assessment schemes. It also requires less resourcing for the board, which would mean lower registration fees.⁶³
- 2.22 We were told that the scheme can be self-funded. For example, the NSW Architects Registration Board is completely funded by registered architects.⁶⁴
- 2.23 Engineers Australia estimated the scheme's costs using Victorian and Queensland data. In terms of set up costs, Victoria's 2018-19 budget allocated \$5.9m to fund the scheme's creation over two years. As noted above, the scheme can be self-funded, or operate at a profit. Queensland's Board of Professional Engineers operated on a surplus of \$0.9m in 2018/19.⁶⁵
- 2.24 Costs for engineers who register with the scheme would include a one-off assessment fee. Engineers Australia charge less than \$600 for this fee as an assessment provider. Engineers registered in Queensland or Victoria wouldn't pay this, as their registration can be recognised across borders. Engineers would also pay a regular registration fee to the board – Queensland's annual registration fee is \$232.74. CPD costs are around \$500 for 50 hours annually with Engineers Australia.⁶⁶

⁶¹ Carter, Hoffman and Foster, [Opal Tower Investigation](#), p15, viewed 21 May 2020

⁶² Shergold and Weir, [Building Confidence](#), February 2018, pp17-18, viewed 7 May 2020

⁶³ Submission 38, Association of Professional Engineers Australia, pp11, 14

⁶⁴ Ms Loseby, Transcript of evidence, 20 February 2020, p34

⁶⁵ Submission 43, Engineers Australia, p12

⁶⁶ Submission 43, Engineers Australia, p12. CPD can include reading journals, work-based training, presentations and private study.

Promotes mutual recognition

- 2.25 Aligning our scheme with co-regulatory schemes in other states will make it easier to achieve mutual recognition and common standards. Professor Mark Hoffman told us that the NSW scheme must be similar to the schemes in Queensland and Victoria to allow mutual recognition of professional registration across states.⁶⁷
- 2.26 Stakeholders highlighted the importance of mutual recognition between states that register engineers. The Association of Professional Engineers Australia told us that engineering work is mobile and can be done remotely across states. They argued that state-based schemes should encourage mutual recognition so that 'labour mobility is not impeded by costly and time-consuming registration processes.'⁶⁸
- 2.27 Mutual recognition means that engineers who register in another state would be able to apply for registration in NSW, and work as a professional engineer if the board recognises their registration.⁶⁹ Engineers Australia said this would keep costs down for engineers who want to register in more than one state. Costs could be even lower if states with registration schemes cooperate to recognise registration in another state or territory.⁷⁰
- 2.28 We heard that consistency with co-regulatory schemes in Victorian and Queensland would promote common competency standards and consistency. The Australian Institute of Architects observed that consistent standards across states would also ensure consumer and business confidence in the work done by engineers both within and beyond NSW.⁷¹
- 2.29 We note that the regulations under the DBP Act may provide for people who are registered or recognised as practitioners in another state or territory, or the Commonwealth, to be recognised as a registered practitioner under the Act. Competency requirements for registration may also be provided for in the regulations.⁷²

⁶⁷ Submission 60, Professor Mark Hoffman, p3

⁶⁸ Submission 38, Association of Professional Engineers Australia, pp11-12

⁶⁹ *Mutual Recognition (New South Wales) Act 1992*, Sch1 cl 17: (1) The mutual recognition principle is that, subject to this Part, a person who is registered in the first State for an occupation is, by this Act, entitled after notifying the local registration authority of the second State for the equivalent occupation: (a) to be registered in the second State for the equivalent occupation; and (b) pending such registration, to carry on the equivalent occupation in the second State.

⁷⁰ Submission 43, Engineers Australia, p16

⁷¹ Submission 53, Building Designers Association of Australia, pp1-2; Submission 57, Australian Institute of Architects, p3

⁷² *Design and Building Practitioners Act 2020*, ss 47 and 54

Changes to improve the scheme

Making sure the board has engineering expertise

Summary

The membership of a board that administers registration of engineers should be similar to the membership of Queensland's board.

Finding 5

The membership of a board that administers registration of engineers should be broadly consistent with the membership of the Queensland board.

- 2.30 The scheme proposed under the Engineers Bill is based on the Queensland model for registering engineers. Membership that is similar to the Queensland board's would mean the board has engineering and building and construction expertise, and community representation.
- 2.31 Under the DBP Act the Secretary, and Building Commissioner by delegation, will perform the roles that are undertaken by the board under the Engineers Bill. In reviewing the DBP Act, the Government should consider whether the staff who conduct registration have enough engineering expertise, and whether some community input would be of benefit in performing this role. The Government should also consider whether it would be more effective for a board to register engineers, as provided for under the Engineers Bill.
- 2.32 We heard that the board under the Engineers Bill should have members with industry experience. The Institute of Professional Engineers Australia told us that it should reflect the industry, and have an independent chair appointed by the government, equal representation from assessment entities, an engineering consulting association's representative, a lawyer with building and construction experience, and a consumer representative.⁷³
- 2.33 Engineers Australia said the board must include professional engineers and that people from other professional backgrounds were important to ensure 'diversity of thought and a diverse skills base.'⁷⁴
- 2.34 We were told that the board should have both professional expertise and community input.⁷⁵ The former chair of Queensland's board said the board should have engineering understanding and representation from the community, 'so that you are having the people who are also being impacted, and they can have a say.'⁷⁶

⁷³ Mr Brock, Transcript of evidence, 21 February 2020, p5 and Submission 38, Association of Professional Engineers Australia, p13. The board's membership, the qualifications members must have, and the nomination process are to be set out in regulations. Some board members must be professional engineers: Professional Engineers Registration Bill 2019, cl 36

⁷⁴ Submission 43, Engineers Australia, p17

⁷⁵ Mr Morey, Transcript of evidence, 20 February 2020, p12

⁷⁶ Professor Elizabeth Taylor, Deputy Chair, International Engineering Alliance Governing Group, Australian Academy of Technology and Engineering – NSW Division, Transcript of evidence, 20 February 2020, p24-25

- 2.35 She commented that it was important to use the expertise of industry assessment bodies to keep up with changes in the profession, while ensuring the board can represent the interests of different stakeholders.⁷⁷
- 2.36 Queensland's board has seven members nominated by the minister:
- the academic head or representative of a school of engineering who is a registered professional engineer, or eligible for registration
 - a representative of the Queensland Division of Engineers Australia who is a registered professional engineer or eligible for registration
 - a registered professional engineer elected under the Act
 - a registered professional engineer who lives and works mainly in regional Queensland
 - a lawyer with at least 10 years' experience in building and construction law
 - a person with at least 10 years' experience as a contractor in the building and construction industry
 - a person who isn't a registered professional engineer, who the minister believes will represent community interests.⁷⁸
- 2.37 Victoria's BLA will register engineers from July 2021. Unlike the Queensland board, which only registers engineers, the BLA licenses a range of businesses that must be licensed to operate. BLA members must be legal practitioners with at least five years' experience – members with engineering expertise will be appointed when registration begins in Victoria.⁷⁹

Covering more areas of engineering

Summary

Geotechnical and hydraulic engineering should be added to the areas of engineering that a broad-scale registration scheme covers. These areas of engineering are important disciplines in the building sector.

Recommendation 5

That a broad-scale registration scheme should include geotechnical and hydraulic engineering.

- 2.38 We note that the areas of engineering covered by the scheme can be broadened over time due to the changing nature of work, and to include emerging areas of engineering. However we consider that hydraulic and geotechnical engineering should be covered by a scheme to register engineers. Adding these essential

⁷⁷ Professor Taylor, Transcript of evidence, 20 February 2020, p24-25

⁷⁸ *Professional Engineers Act 2002* (Qld), s82. The engineer elected under the Act isn't nominated by the Minister.

⁷⁹ The BLA licenses/registers conveyancers; estate agents; motor car traders; owners corporation managers; rooming house operators; second-hand dealers and pawnbrokers; and sex work service providers: Consumer Affairs Victoria, [Business Licensing Authority](#), and Consumer Affairs Victoria, [Professional Engineers Registration Act Q&As](#), p6, viewed 14 May 2020

categories of engineering is a priority, as it could improve confidence in the building and construction sector.

- 2.39 The Engineers Bill covers five areas of engineering: structural engineering; civil engineering; mechanical engineering; electrical engineering; and fire safety engineering.⁸⁰ The DBP Act covers the same engineering areas. The areas are consistent with Victoria's legislation. Queensland's board recognises 26 areas of engineering.⁸¹
- 2.40 Inquiry participants argued that the scheme should include hydraulic and geotechnical engineering. The Building Designers Association told us that 'the crucial sectors of engineering must be included, those being the geotechnical and hydraulic engineers.'⁸² Engineers Australia noted that adding these areas of engineering would mean all areas of practice identified in the Building Confidence report were included.⁸³
- 2.41 We heard evidence of incidents caused by failures in these areas, including the Lane Cove tunnel collapse, Mascot tower, and the Thredbo landslide.⁸⁴
- 2.42 We were told that other areas of engineering should be covered.⁸⁵ The Australian Academy of Technology and Engineering said that 'all areas of engineering have the potential to impact the community, either through safety incidents or unnecessary costs arising from poor practice and misconduct in design, construction and maintenance.' They argued that the areas of practice should be wider, as engineering products, systems and services are expanding into every part of modern society.⁸⁶
- 2.43 Engineers Australia told us that all engineering areas are complex and would benefit from registration. They noted that registering all areas would reduce the risk of loop holes that people could use to work without registration.⁸⁷
- 2.44 Professor Mark Hoffman said it would be better if the Engineers Bill covered all engineering disciplines, and wasn't limited to disciplines based on current perceptions of the industry.⁸⁸

⁸⁰ Professional Engineers Registration Bill 2019, cl 6, other types of engineering can be prescribed by regulations. Engineering technologists and associates who work under supervision aren't covered. Professional engineers need a four-year full-time honours bachelor degree in engineering. Engineering technologists need a three-year full-time bachelor degree in engineering. Engineering associates need a two-year full-time associate degree in engineering or a two-year full-time advanced diploma in engineering: submission 43, Engineers Australia, p18

⁸¹ Queensland Board of Professional Engineers, [Areas of engineering](#), viewed 7 May 2020

⁸² Mr Knierim, Transcript of evidence, 20 February 2020, p33

⁸³ Submission 43, Engineers Australia, p16-17 and Shergold and Weir, [Building Confidence](#), February 2018, pp15-16, viewed 7 May 2020

⁸⁴ Submission 60, Professor Mark Hoffman, pp2-3; Submission 38, Association of Professional Engineers Australia, pp7-8

⁸⁵ For example, fire safety engineers, transport engineers, telecommunications engineers, and biomedical engineers: submission 39, Warren Centre for Advanced Engineering, p2; submission 60, Professor Mark Hoffman, pp2-3; submission 36, Australian Academy of Technology and Engineering, pp1-2

⁸⁶ Submission 36, Australian Academy of Technology and Engineering, pp1-2

⁸⁷ Submission 43, Engineers Australia, p16-17

⁸⁸ Submission 60, Professor Mark Hoffman, pp2-3

- 2.45 We acknowledge that other areas of engineering would benefit from registration, and note that more areas can be added to the scheme over time. Queensland's scheme has grown to cover more areas of engineering, and Victoria's scheme will also be extended over time.⁸⁹

Making insurance mandatory

Summary

Engineers should have professional indemnity insurance to register as a professional engineer.

Finding 6

Professional indemnity insurance should be a condition of registration under a broad-scale registration scheme.

- 2.46 We support making insurance a condition of registration for professional engineers. We agree that insurance protects both consumers and engineers, and is an essential part of a professional registration scheme. Building trades, lawyers, architects and other professionals have to be insured as part of their registration, licensing or accreditation schemes.
- 2.47 We note that unlike the Engineers Bill, the DBP Act requires registered professional engineers to show that they are adequately insured, as a condition of registration.⁹⁰
- 2.48 We heard that insurance is a fundamental part of professional standards legislation. The NSW Government said that insurance is an important legal protection for professionals and consumers. The Government also noted the Building Confidence report's finding that compulsory professional indemnity and/or warranty insurance should be required to register building practitioners.⁹¹
- 2.49 The Law Society told us that professional indemnity insurance lets professionals do their work with confidence, as they know the maximum amount they would be liable for if they made a mistake. As Mr Peter Rosier noted, it 'gives comfort to those who engage them and it ensures that there is a remedy for somebody who suffers as a result.'⁹²
- 2.50 Professional indemnity insurance is vital for consumer protection. Building industry groups told us that they only employ engineers who have indemnity insurance to protect their clients. However many engineers aren't registered and

⁸⁹ Mr Brock, Transcript of evidence, 21 February 2020, p7 and Engage Victoria, [Professional Engineers Registration Scheme](#), viewed 25 May 2020

⁹⁰ *Design and Building Practitioners Act 2020*, s 33

⁹¹ Submission 58, NSW Government, p12 and Shergold and Weir, [Building Confidence](#), February 2018, pp17-18, viewed 7 May 2020

⁹² Mr Rosier, Transcript of evidence, 20 February 2020, p17

don't belong to an industry association with indemnity insurance, leaving consumers without protection.⁹³

- 2.51 We heard that registration could make it cheaper and easier to get insurance. The Association of Professional Engineers Australia said that registration reduces risk, and insurance premiums in Queensland are lower as a result of that state's scheme.⁹⁴ The CFMEU observed that insurance is costly and hard to obtain and that these issues could be addressed through registration.⁹⁵

Preventing unnecessary investigations

Summary

Requiring engineers to show cause why the regulating authority shouldn't start an investigation could prevent unnecessary investigations.

Recommendation 6

That a broad-scale registration scheme should require engineers to show cause why the regulating authority should not start an investigation, except if it would prejudice the investigation or put a complainant at risk of harassment or intimidation.

- 2.52 We think that a show cause process before the regulating authority starts an investigation could save time and money involved in investigations that may not be needed. However this shouldn't apply if it could prejudice an investigation or put someone at risk of harm. The regulating authority should have the discretion not to notify an engineer if it could have serious consequences.
- 2.53 Under the Engineers Bill, a person who is aggrieved by a professional engineer's conduct in doing their work can complain to the board. The board can investigate a professional engineer's conduct if a complaint is made about them or; the board believes there may be grounds to suspend or cancel their registration or; it suspects they have committed an offence under the Act or regulations.⁹⁶
- 2.54 The board can ask a professional engineer to show cause why it shouldn't conduct an investigation, whether or not it has started one.⁹⁷
- 2.55 The Law Society argued that the show cause step should be mandatory, as it would 'save the time and expense involved in unwarranted investigations.' However it shouldn't be required if notifying an engineer could 'seriously

⁹³ Mr Knierim and Mr Bassett, Transcript of evidence, 20 February 2020, p35; Ms Loseby, Transcript of evidence, 20 February 2020, pp 34-35

⁹⁴ Mr Brock, Transcript of evidence, 21 February 2020, p3

⁹⁵ Ms Mallia, Transcript of evidence, 20 February 2020, pp41-42

⁹⁶ Professional Engineers Registration Bill 2019, Part 5 Division 2 and Division 3. Complaints can be rejected if they are frivolous, trivial or vexatious, misconceived or lack detail, or if the person hasn't given more information or verified their complaint. If a complaint is withdrawn, the board doesn't have to act on it but it can keep investigating a withdrawn complaint. The board can also investigate if it suspects that a person other than a professional engineer has committed an offence under the Act.

⁹⁷ Professional Engineers Registration Bill 2019, cl 53

prejudice the investigation or place a complainant or another person at risk of harassment or intimidation'.⁹⁸

- 2.56 The Law Society noted that this would mirror the requirement for the board to give notice to a person when it decides to start an investigation. This allows a person to make a submission about a complaint or other reasons for the investigation. The board doesn't have to give this notice if it believes it could seriously prejudice the investigation, or put the complainant or someone else at risk of harassment or intimidation.⁹⁹
- 2.57 In reviewing the DBP Act, the Government should consider whether the show cause process should be mandatory. Part 6 of the DBP Act outlines grounds and steps for disciplinary action against registered practitioners. The Secretary may give written notice to a practitioner to show cause why they shouldn't be subject to disciplinary action, and the practitioner can make a submission in response. The Secretary may inquire into or investigate matters relevant to the notice and any submissions made by the practitioner.¹⁰⁰
- 2.58 Part 8 of the DBP Act relates to enforcement. It states that the Secretary can investigate a registered practitioner (or former registered practitioner), or professional engineering work, regardless of whether a complaint has been made. There is no show cause provision under this Part.¹⁰¹

Giving engineers information about proposed disciplinary action

Summary

Engineers should be given information about the reasons for proposed disciplinary action against them, so they can make an informed response to the regulating authority.

Recommendation 7

That the regulating authority in a broad-scale registration scheme should provide information about the reasons for proposed disciplinary action to engineers, so they can respond to a notice to show cause.

- 2.59 We consider that procedural fairness is important when regulators propose to take action against engineers. As part of this engineers should have the opportunity to make an informed response if the regulating authority proposes to take action against them.
- 2.60 Under the Engineers Bill, the board must write a report as soon as an investigation is completed. After this, the board can consider disciplinary action.

⁹⁸ Submission 44, Law Society of NSW, p1

⁹⁹ Submission 44, Law Society of NSW, p1 and Professional Engineers Bill 2019 cl56. The notice has to state whether the board or an officer is handling the investigation; if the investigation relates to a complaint, the nature of the complaint; or if it is on the board's initiative, the grounds for the investigation.

¹⁰⁰ *Design and Building Practitioner Act 2020*, s 65. The Secretary may take immediate disciplinary action without taking these steps if they think it's in the public interest.

¹⁰¹ *Design and Building Practitioners Act 2020*, s 92. The Secretary can also investigate the preparation of regulated designs or carrying out of building work, or specialist work or the provision of compliance declarations, or other matters that may constitute a breach of the Act or regulations.

If the board decides to take action, it can give the engineer an opportunity to respond through a show cause notice under clause 63.¹⁰²

- 2.61 The Law Society argued that investigation reports relied on by the board should be given to engineers, so they can understand the basis for the board's decisions before responding to a show cause notice.¹⁰³
- 2.62 We agree that engineers should be able to make a fully informed response to the regulating authority when they may face disciplinary action. It's important that the regulator gives engineers enough information about the proposed disciplinary action, so they have a reasonable chance to respond.
- 2.63 As noted above, under the DBP Act the Secretary may give written notice to a registered practitioner to show cause why they shouldn't be subject to disciplinary action. The practitioner can make a submission about the matters in the notice, and the Secretary must consider their submission before deciding to take action.¹⁰⁴
- 2.64 If the Secretary decides to take disciplinary action, they must give the practitioner a written statement that includes the decision, when it takes effect, and the grounds for the decision.¹⁰⁵

Considering regulators' enforcement powers

Summary

The NSW Government should consider what powers regulators need to enforce regulation of the building sector.

Recommendation 8

That the NSW Government considers what powers should be available to regulators who monitor the building sector, and license or register professionals in the sector.

- 2.65 The DBP Act is part of reforms to regulate the building and construction sector, and professionals working in the sector. We recommend that when it reviews these reforms, the Government considers what powers regulators need to oversee the building sector, and the licensing/registration of those who work in the sector, including engineers.
- 2.66 The powers that authorised officers hold under the Engineers Bill are below. The powers are similar to authorised officers' information gathering and entry powers under the DBP Act.¹⁰⁶ They enable them to:

¹⁰² Professional Engineers Registration Bill 2019, cls 58, 60, 62 and 63. The report has to include findings about a complaint if the investigation arose from a complaint.

¹⁰³ Submission 44, Law Society of NSW, p2

¹⁰⁴ *Design and Building Practitioners Act 2020*, s 65

¹⁰⁵ *Design and Building Practitioners Act 2020*, s 66

¹⁰⁶ Professional Engineers Registration Bill 2019, Part 6 Divisions 2 and 3, and *Design and Building Practitioners Act 2020*, Part 7 Divisions 3 and 4.

- **Require information and records** from a person for an authorised purpose.
- **Require answers to questions** from a person who they suspect knows of matters about which information is reasonably required.
- **Record questions and answers to questions** if they have told the person being questioned that a record is being made.
- **Enter premises with or without a search warrant** at a reasonable hour in the day or when business is in progress or usually carried on.
- **Enter residential premises only with the occupier's permission or a search warrant.**
- **Apply for search warrants** from an issuing officer.¹⁰⁷
- **Require assistance** from owner or occupier of premises, or a person at premises, to assist exercise of functions relating to premises.
- **Do anything considered necessary** for authorised purpose on premises lawfully entered.¹⁰⁸

- 2.67 During our inquiry the NSW Government argued that these powers weren't enough for the board to enforce the Engineers Bill, and ensure compliance and quality work. The Government said the powers weren't consistent with regulators' powers similar occupational licensing schemes, and that stop work orders were needed if there is a risk of significant harm or loss to persons. The Government noted that the Building Confidence report recommended powers to evacuate, make all necessary orders and stop work.¹⁰⁹
- 2.68 The recommendations sought to give regulators powers to 'monitor buildings and building work so that, as necessary, they can take strong compliance and enforcement action.'¹¹⁰ It's relevant to note that the Engineers Bill focuses on registration of engineers, not on monitoring building work.
- 2.69 Under the DBP Act, the Secretary of Fair Trading has the power to issue stop work orders. The Secretary, and by delegation the Building Commissioner, also have stop work powers under the *Residential Apartment Buildings (Compliance and Enforcement Powers) Act 2020*.¹¹¹
- 2.70 We consider that when the Government reviews the operation of the DBP Act and Residential Apartment Buildings (Compliance and Enforcement Powers) Act, it should look at how the Secretary and Building Commissioner are using their powers to investigate engineers' professional conduct, and to oversee the

¹⁰⁷ The authorised officer must believe on reasonable grounds that a requirement under the Act is or has been breached at any premises; or there is a matter/thing connected to an offence under the Act at the premises: Professional Engineers Registration Bill 2019, cl 80.

¹⁰⁸ This can include: examine and inspect any thing; take and remove samples; take photographs or other recordings; direct a person to produce records for inspection; examine and inspect records; seize any thing connected with an offence under the Bill: Professional Engineers Registration Bill 2019, cl 82.

¹⁰⁹ Submission 58, NSW Government, p10

¹¹⁰ Shergold and Weir, [Building Confidence](#), February 2018, p21, viewed 7 May 2020

¹¹¹ *Design and Building Practitioners Act 2020*, s 89; *Residential Apartment Buildings (Compliance and Enforcement Powers) Bill 2020*, s 29. See also New South Wales, Legislative Assembly, *Parliamentary Debates*, 3 June 2020, p28 (Kevin Anderson, Minister for Better Regulation and Innovation).

building industry. The Government could also consider whether the use of powers by delegation is effective and transparent, and whether the Building Commissioner's role and powers should instead be clearly set out in the legislation.

- 2.71 We note the Building Confidence report's comment that 'where the same or similar powers are to be given to more than one regulator, it will be helpful to have a clearly identified lead regulator.'¹¹²

Adding appeal processes

Summary

Administrative review mechanisms should be included in the framework for a broad-scale registration scheme.

Finding 7

The broad-scale registration scheme should include provision for administrative review of decisions made by the regulating authority, for example, to remove, cancel or suspend registration, or caution or reprimand engineers.

- 2.72 It's important that the framework for a scheme to register engineers includes the decisions made by the regulating authority that can be appealed in the NSW Civil and Administrative Tribunal (NCAT).
- 2.73 We note that unlike the Engineers Act, the DBP Act provides that a person can apply to NCAT for administrative review of the following decisions made by the Secretary:
- refuse registration
 - suspend or cancel registration
 - refuse an application to vary registration
 - impose, or vary or revoke, a condition on registration, or on the suspension or cancellation of registration
 - vary registration
 - refuse an application for the cancellation or suspension of registration.¹¹³
- 2.74 Under the Engineers Bill when an investigation is finished the board can caution or reprimand an engineer; put a condition on their registration; or suspend or cancel their registration.¹¹⁴ The board can also start prosecution of an engineer for an offence.

¹¹² Shergold and Weir, [Building Confidence](#), February 2018, p21, viewed 7 May 2020

¹¹³ *Design and Building Practitioners Act 2020*, s 63

¹¹⁴ Only in cases involving: unsatisfactory professional conduct; not complying with the Act; convicted of an offence against an Act of the state, Commonwealth or another state or territory related to the practice of engineering; breach a condition of registration; being affected by bankruptcy action; unfit to practice; registration in another state, territory or foreign country cancelled for disciplinary reasons; membership of an association of professional engineers, in Australia or a foreign country, cancelled for disciplinary reasons; the board having reasonable grounds

- 2.75 Regulations can be made under the Bill to provide for administrative review of the board's decisions. The Law Society argued that this should be dealt with in the Bill, not in subordinate legislation: 'decisions made under this legislation, particularly decisions to remove, cancel, suspend, caution, reprimand engineers ... must be appellable and the appeal mechanism must be established as part of the initial framework.'¹¹⁵
- 2.76 Mr Peter Rosier told us that given the serious consequences for a person's livelihood, the complaints and disciplinary process should be transparent and fair. He said that Parliament rather than the Government should decide on engineers' right of review.¹¹⁶
- 2.77 The NSW Government also said that it's unusual for a Bill not to list decisions that may be appealed to NCAT, and noted that 'these types of provisions are important for consistency and fairness.'¹¹⁷

to believe the engineer was registered because of a false or misleading representation or document: Professional Engineers Registration Bill 2019, cl 64.

¹¹⁵ Submission 44, Law Society of NSW, p2

¹¹⁶ Mr Rosier, Transcript of evidence, 20 February 2020, pp16-17

¹¹⁷ Submission 58, NSW Government, p11

Appendix One – Terms of reference

That the Legislative Assembly Committee on Environment and Planning conduct an inquiry into the Professional Engineers Registration Bill, including:

1. The most appropriate way to regulate professional engineers in the building and construction industry.
2. How engineers and other building industry professions are regulated and monitored, and proposals for reform under the Bill and consideration of alternate proposals.
3. Any other related matter.

Appendix Two – Conduct of inquiry

The Professional Engineers Registration Bill was introduced into the Legislative Assembly on 24 October 2019.

On 21 November 2019, during the second reading debate on the Bill, the Minister for Better Regulation and Innovation referred it to the Committee for inquiry.

On 5 December 2019, the Committee resolved to conduct the inquiry. The Committee called for submissions through a media release and wrote to key stakeholders inviting them to make a submission. Information about the inquiry was posted on the Legislative Assembly's Facebook page and Twitter feed.

Submissions to the inquiry closed on 30 January 2020. The Committee received 61 submissions from the community, unions and professional associations representing engineers, legal experts, research bodies, and government departments. A list of submissions is at Appendix Three, and submissions are available on the [Committee's webpage](#).

The Committee also received a number of form letters from engineers in New South Wales. The template for these letters can be found on the [Committee's webpage](#).

The Committee held two hearings at Parliament House on 20 and 21 February 2020, with witnesses representing professional engineering associations, unions, legal experts, research bodies, and the Department of Customer Service.

Appendix Four is a list of witnesses who appeared at the hearings. Transcripts of evidence taken at the hearings are on the [Committee's webpage](#).

The Professional Engineers Registration Bill lapsed in accordance with standing orders on 7 February 2020.

Appendix Three – Submissions

No.	Author
1	Ms Michelle Viola
2	Mr Dime Spasovski
3	Mr Jarrod Wynn
4	Ms Cassandra Salas
5	Mr Ismail Ersoy
6	Mr Bill Pearce
6a	Mr Bill Pearce
7	Name suppressed
8	Ms Monika Jacimovic
9	Mr Paul Lee
10	Mr Andrew Mitchell
11	Dr Eric Dale
12	Dr Wen Chen
13	Mr Luke Fayle
14	Mr Manivannann Karuppaiah
15	Dr Hugh Miller
16	Mr Steven Boldeman
17	Miles Ellis
18	Leon Petrohelos
19	Robert Smith
20	Anthony Buncombe
21	Adam Turville
22	Tony Martin
23	Gordon J Chirgwin
24	Name suppressed
25	Mr Ben Bates
26	Craig McLaren
27	Name suppressed
28	Stephen Clayton
29	Alex Cheng
30	Sisira Sanda
31	Rob Baxter

No.	Author
32	Alexander Stewart
33	United Services Union
34	Mr Alex Burjan
35	Construction Forestry Mining and Energy Union (NSW Branch)
36	Australian Academy of Technology and Engineering - NSW Division
37	Unions NSW
38	Association of Professional Engineers Australia (APEA)
39	The Warren Centre for Advanced Engineering
40	Confidential
41	Mrs Vanessa McCallum
42	Mr Stuart Tourle
43	Engineers Australia
44	The Law Society of NSW
45	Owners Corporation Network
46	Institute of Public Works Engineering Australasia (NSW)
47	Ms Yasmin Catley MP
48	Mr Bede Spannagle
49	Riverina Water County Council
50	Name suppressed
51	Association of Accredited Certifiers
52	John McPhail
53	Building Designers Association of Australia
54	Stephen van Dort
55	Local Government NSW
56	Mr Angus Coskerie
57	Australian Institute of Architects
58	NSW Government
59	Planning Institute of Australia
60	Professor Mark Hoffman
61	Insurance Council of Australia

Appendix Four – Witnesses

20 February 2020

Parliament House, Macquarie Room, Sydney, NSW

Witness	Position and Organisation
Cr Linda Scott	President, Local Government NSW
Mr David Chandler OAM	Building Commissioner
Mr Mark Morey	Secretary, Unions NSW
Ms Ellen Leverington	Legal/Industrial Officer, Unions NSW
Mr Peter Rosier	Member of Property Law Committee, Law Society of NSW
Mr Will Barton	Board Director, Institute of Public Works Engineering Australasia NSW Division
Ms Francine Binns	Chief Executive Officer, Institute of Public Works Engineering Australasia NSW Division
Professor Elizabeth Taylor AO, FTSE, HonFIEAust	Deputy Chair, International Engineering Alliance Governing Group, Australian Academy of Technology and Engineering - NSW Division
Professor Robin King FTSE, FRSN, HonFIEAust	Hon. Sec. ATSE NSW Division, Australian Academy of Technology and Engineering - NSW Division
Mr Ashley Brinson	Executive Director, The Warren Centre for Advanced Engineering
Mr Chris Knierim	Chief Executive Officer, Building Designers Association of Australia
Mr Ian Bassett	Director of Policy and Professional Development, Building Designers Association of Australia
Ms Kathlyn Loseby	President, NSW Chapter, Australian Institute of Architects
Ms Rita Mallia	State President, Construction Forestry Mining and Energy Union (NSW Branch)
Mr Peter Johnson	Fellow, The Warren Centre for Advanced Engineering
Mr Daniel Papps	Manager of Industrial, Rules, Governance and Compliance, United Services Union

21 February 2020**Parliament House, Macquarie Room, Sydney, NSW**

Witness	Position and Organisation
Mr Gordon Brock	Director, NSW, Association of Professional Engineers Australia (APEA)
Mr Jonathan Russell	National Manager of Public Affairs, Engineers Australia
Dr Bronwyn Evans	CEO, Engineers Australia
Professor Mark Hoffman	
Mr Bede Spannagle	President, Local Government Engineers Association, Association of Professional Engineers Australia (APEA)
Mr John Tansey	Executive Director, Policy & Strategy, Better Regulation Division, Department of Customer Service
Mr Peter Dunphy	Executive Director, Compliance and Dispute Resolution, Better Regulation Division, Department of Customer Service

Appendix Five – Extracts from minutes

MINUTES OF MEETING No 6

3:54 pm, 5 December 2019

Room 1254

Members present

Mr Greenwich (room 1254), Mr Chanthivong, Mr Griffin, Ms Wilson (by teleconference)

Apologies

Mr Smith

Officers in attendance

Dora Oravec, Madeleine Dowd, Jacqueline Isles, Ilana Chaffey

1. Confirmation of minutes

Resolved on the motion of Mr Chanthivong: That the minutes of the meeting of 20 November 2019 be confirmed.

2. Inquiry referral - Professional Engineers Registration Bill

2.1 Terms of reference and stakeholder list

The Committee noted the referral by the House of the Professional Engineers Registration Bill (Votes and Proceedings of the NSW Legislative Assembly no 39, Thursday 21 November 2019, entry no 9).

The Committee considered the circulated draft terms of reference and stakeholder list.

Resolved on the motion of Ms Wilson: That the Legislative Assembly Committee on Environment and Planning conduct an inquiry into the Professional Engineers Registration Bill, including:

1. The most appropriate way to regulate professional engineers in the building and construction industry.
2. How engineers and other building industry professions are regulated and monitored, and proposals for reform under the Bill and consideration of alternate proposals.
3. Any other related matter.

The Committee discussed the timeframe for the call for submissions.

Resolved on the motion of Ms Wilson: That the Committee call for submissions to be received by 30 January 2020 and write to the listed stakeholders, as well as the Minister for Better Regulation and Innovation and the Shadow Minister for Building Reform and Property seeking suggestions for additional stakeholders.

The Chair invited members to suggest additional stakeholders to committee staff.

2.2 Inquiry timelines

The Committee considered the circulated timeline for the Professional Engineers Registration Bill inquiry and agreed to hold public hearings in February.

The Chair advised that a media release announcing the new inquiry would be published on the Committee webpage, with links posted on the Parliament's Facebook and Twitter accounts.

The Committee agreed to meet in early February to approve publication of submissions and choose witnesses to appear at the hearings for the Professional Engineers Registration inquiry.

3. Next meeting

The meeting adjourned at 4:07 pm to a date to be determined.

MINUTES OF MEETING No 7

2:35 pm, 3 February 2020

Room 1254

Members present

Mr Greenwich, Mr Chanthivong (by telephone), Mr Griffin, Ms Wilson and Mr Smith

Officers in attendance

Clara Hawker, Dora Oravec, Madeleine Dowd, Jacqueline Isles, Ilana Chaffey

1. ***

2. Confirmation of minutes

Resolved on the motion of Mr Chanthivong: That the minutes of the meeting of 5 December 2019 be confirmed.

3. Inquiry into Professional Engineers Registration Bill

3.1 Form letters/template submissions

The Committee noted that the Association of Professional Engineers Australia had set up a template submission for its members.

Resolved on the motion of Mr Griffin, seconded Ms Wilson: That the Committee publish a sample of the Association of Professional Engineers Australia form letter.

3.2 Publishing submissions

The Committee considered submissions 1 to 58 together with the list of recommended publication orders.

Resolved on the motion of Mr Greenwich, seconded Ms Wilson, in globo:

- That the Committee publish submissions numbered 1 to 6a, 8 to 23, 25, 28 to 39, 42 to 49 and 51 to 55, and 57 to 58 in full.
- That the Committee publish submission numbers 7, 24 and 27 with the authors' names suppressed.
- That the Committee publish submission number 26 with paragraph 4 on page 1 redacted.
- That the Committee publish number 41 with the attached document redacted.
- That the Committee publish number 56 with the attached documents redacted.
- That submission numbers 40 and 50 remain confidential to the Committee and not be published.

3.3 Selecting witnesses

The Chair referred members to the list of suggested witnesses, circulated at the meeting. Discussion ensued.

Resolved on the motion of Ms Wilson: That the Committee invite the listed witnesses to give evidence at public hearings to be held on Thursday 20 February and Friday 21 February.

4. ***

5. ***

6. Next meeting

The meeting adjourned at 3.02 pm to reconvene on Thursday 20 February.

MINUTES OF MEETING No 8

2 00 pm, 6 February 2020

Room 1254

Members present

Mr Greenwich, Mr Chanthivong, Mr Griffin and Mr Smith

Officers in attendance

Clara Hawker, Dora Oravec, Madeleine Dowd, Jacqueline Isles, Ilana Chaffey

Also in attendance: Ms Tammie Nardone, Office of Mr Alex Greenwich

1. Apologies

Ms Wilson

2. Confirmation of minutes

Resolved on the motion of Mr Chanthivong, seconded Mr Smith: That the minutes of the meeting of 3 February 2020 be confirmed.

3. Inquiry into Professional Engineers Registration Bill

Questions for NSW Government

The Chair proposed writing to the Minister for Better Regulation and Innovation to seek further detail on the Government's position on issues relevant to the inquiry.

Resolved on the motion of Mr Chanthivong, seconded Mr Griffin: That the Committee write to the Minister for Better Regulation and Innovation to seek further detail on the Government's position on the following issues:

- the broad scale registration of engineers
- a coregulatory model of registration for engineers that would interact with the Design and Building Practitioners Bill and other relevant legislation
- different models for the registration of engineers.

4. General business

The Chair requested the secretariat to invite the Australian Constructors Association to make a submission to the inquiry into the Professional Engineers Registration Bill.

5. Next meeting

The meeting adjourned at 2.02 pm until Thursday 20 February in the Macquarie Room.

MINUTES OF MEETING No 9

9:55 am, 20 February 2020

Macquarie Room

Members present

Mr Greenwich, Ms Wilson, Mr Griffin, Mr Smith and Ms Catley (substituting for Mr Chanthivong)

Officers in attendance

Clara Hawker, Dora Oravec, Madeleine Dowd, Jacqueline Isles, Ilana Chaffey

1. Deliberative meeting

1.1 Substitute member

The Chair noted the receipt of correspondence from Mr Chanthivong advising that he is unable to attend the meetings on 20 and 21 February. Mr Chanthivong nominated Ms Yasmin Catley to substitute for him at today's meeting (under standing order 273A(2)).

1.2 Confirmation of minutes

Resolved on the motion of Mr Griffin, seconded Mr Smith: That the minutes of the meeting of 6 February 2020 be confirmed.

1.3 Publishing submissions

Resolved on the motion of Ms Wilson, seconded Mr Griffin, in globo:

- That the Committee publish submissions numbered 59 to 61 to the inquiry into the Professional Engineers Registration Bill in full.
- That the Committee publish submission number 50 to the inquiry into the Professional Engineers Registration Bill with the author's name suppressed.
- ***.

1.4 Answers to questions - NSW Government

The Committee noted the receipt of answers to questions from the Minister for Better Regulation and Innovation, circulated on 17 February.

Resolved on the motion of Ms Wilson, seconded Mr Griffin: That the Committee publish answers to questions from the Minister for Better Regulation and Innovation.

1.5 Media orders

Resolved on the motion of Mr Griffin, seconded Mr Smith: That the Committee authorises the audio-visual recording, photography and broadcasting of the public hearing on 20 February 2020, in accordance with the Legislative Assembly's guidelines for the coverage of proceedings for parliamentary committees administered by the Legislative Assembly.

1.6 Answers to questions taken on notice

Resolved on the motion of Ms Wilson, seconded Mr Griffin: That witnesses be requested to return answers to questions taken on notice and supplementary questions within one week of the date on which the questions are forwarded to the witnesses.

The meeting concluded at 10.06am.

2. Public hearing: Inquiry into Professional Engineers Registration Bill

Witnesses and the public were admitted. The Chair opened the public hearing at 10:06 am and made a short opening statement.

Cr Linda Scott, President, Local Government NSW was affirmed and examined.

Mr David Chandler OAM, Building Commissioner, was sworn and examined.

Mr Mark Morey, Secretary, Unions NSW was affirmed and examined.

Ms Ellen Leverington, Legal/Industrial Officer, Unions NSW was affirmed and examined.

Mr Daniel Papps, Manager of Industrial, Rules, Governance and Compliance, United Services Union was affirmed and examined.

Mr Peter Rosier, Member, Property Law Committee, Law Society of NSW was affirmed and examined.

Mr Will Barton, Board Director, Institute of Public Works Engineering Australasia NSW Division was affirmed and examined.

Ms Francine Binns, Chief Executive Officer, Institute of Public Works Engineering Australasia NSW Division was affirmed and examined.

Professor Elizabeth Taylor, Deputy Chair, International Engineering Alliance Governing Group, Australian Academy of Technology and Engineering - NSW Division was affirmed and examined.

Professor Robin King, Hon. Sec. ATSW NSW Division, Australian Academy of Technology and Engineering - NSW Division was affirmed and examined.

Mr Ashley Brinson, Executive Director, The Warren Centre for Advanced Engineering, was sworn and examined.

Mr Peter Johnson, Fellow, The Warren Centre for Advanced Engineering, was sworn and examined.

Mr Chris Knierim, Chief Executive Officer, Building Designers Association of Australia was affirmed and examined.

Mr Ian Bassett, Director of Policy and Professional Development, Building Designers Association of Australia was sworn and examined.

Ms Kathlyn Loseby, President, NSW Chapter, Australian Institute of Architects, was sworn and examined.

Ms Rita Mallia, CFMEU State President, Construction Forestry Mining and Energy Union (NSW Branch) was affirmed and examined.

The Committee questioned the witnesses. Evidence concluded and the witnesses withdrew.

The public hearing concluded at 3.48pm.

3. Deliberative meeting

3.1 Publication orders

Resolved on the motion of Ms Wilson, seconded Mr Smith: That the corrected transcript of public evidence given today be authorised for publication and uploaded on the Committee's website.

3.2 Acceptance of tendered documents

Resolved on the motion of Ms Wilson, seconded Mr Griffin: That the Committee accept the following documents:

- *Examples of occupational registration/licensing regimes in NSW and various schemes for registration of engineers in Aust* - NSW Building Commissioner
- *Accreditation of building designers: accreditation manual* - Building Designers Association of Australia.

4. ***

5. Next meeting

The meeting adjourned at 3.51pm until 9.55am on 21 February in the Macquarie Room.

MINUTES OF MEETING No 10

9:56 am, 21 February 2020

Macquarie Room

Members present

Mr Greenwich, Ms Wilson, Mr Griffin, Mr Smith and Ms Catley (substituting for Mr Chanthivong)

Officers in attendance

Clara Hawker, Dora Oravec, Madeleine Dowd, Jacqueline Isles, Ilana Chaffey

1. Deliberative meeting

1.1 Substitute member

Ms Catley substituting for Mr Chanthivong at today's meeting (under standing order 273A(2)).

1.2 Confirmation of minutes

Resolved on the motion of Ms Catley, seconded Ms Wilson: That the minutes of the meeting of 20 February 2020 be confirmed.

1.3 Media orders

Resolved on the motion of Ms Wilson, seconded Mr Griffin: That the Committee authorises the audio-visual recording, photography and broadcasting of the public hearing on 21 February 2020, in accordance with the Legislative Assembly's guidelines for the coverage of proceedings for parliamentary committees administered by the Legislative Assembly.

1.4 Answers to questions taken on notice

Resolved on the motion of Ms Wilson, seconded Mr Griffin: That witnesses be requested to return answers to questions taken on notice and supplementary questions within one week of the date on which the questions are forwarded to the witnesses.

The meeting concluded at 9:59am.

2. Public hearing: Inquiry into Professional Engineers Registration Bill

Witnesses and the public were admitted. The Chair opened the public hearing at 10:01 am and made a short opening statement.

Mr Gordon Brock, Director, NSW, Association of Professional Engineers Australia (APEA), was affirmed and examined.

Mr Bede Spannagle, President, Local Government Engineers Association, Association of Professional Engineers Australia (APEA), was affirmed and examined.

Mr Jonathan Russell, National Manager of Public Affairs, Engineers Australia, was sworn and examined.

Dr Bronwyn Evans, CEO, Engineers Australia, was affirmed and examined.

Professor Mark Hoffman was sworn and examined.

Mr John Tansey, Executive Director, Policy & Strategy, Better Regulation Division, NSW Government, was affirmed and examined.

Mr Peter Dunphy, Executive Director, Compliance and Dispute Resolution, Better Regulation Division, NSW Government, was affirmed and examined.

The Committee questioned the witnesses. Evidence concluded and the witnesses withdrew.

The public hearing concluded at 12:49 pm.

3. Deliberative meeting

3.1 Publication orders

Resolved on the motion of Ms Wilson: That the corrected transcript of public evidence given today be authorised for publication and uploaded on the Committee's website.

3.2 ***

4. ***

5. Next meeting

The meeting adjourned at 1:15pm until a date to be determined.

UNCONFIRMED MINUTES OF MEETING No 12

11.33am, 13 July 2020

Room 1254 and videoconference

Members present

Mr Greenwich (room 1254), Ms Wilson, Mr Griffin, Mr Smith and Mr Chanthivong (via videoconference)

Officers in attendance

Clara Hawker, Dora Oravec, Madeleine Dowd, Jacqueline Isles, Ilana Chaffey (room 1254)

1. Confirmation of minutes

Resolved on the motion of Mr Smith, seconded Mr Chanthivong: That the minutes of the meeting of 30 April 2020 be confirmed.

2. Inquiry into Professional Engineers Registration Bill 2019

2.1 Answers to questions on notice

Resolved on the motion of Ms Wilson: That the Committee publishes answers to questions on notice received from:

- Engineers Australia
- Unions NSW
- Institute of Public Works Engineers Australia
- Local Government NSW
- United Services Union.

2.2 Consideration of Chair's draft report

The Chair spoke to the previously circulated draft report.

The Committee agreed to consider the report *in globo*.

Discussion ensued.

Resolved on the motion of Ms Wilson: That the draft report be adopted *in globo*.

Resolved on the motion of Ms Wilson:

1. That the draft report be the report of the Committee and that it be signed by the Chair and presented to the House.
2. That the Chair and Committee staff be permitted to correct stylistic, typographical and grammatical errors.
3. That, once tabled, the report be posted on the Committee's webpage.

3. ***

4. Next meeting

The meeting adjourned at 11.51am until a date to be determined.