

REPORT ON PROCEEDINGS BEFORE

**LEGISLATIVE ASSEMBLY COMMITTEE ON
ENVIRONMENT AND PLANNING**

**INQUIRY INTO PROFESSIONAL ENGINEERS REGISTRATION BILL
2019**

At Macquarie Room, Parliament House, Sydney, on Thursday 20 February 2020

The Committee met at 10:05

PRESENT

Mr Alex Greenwich (Chair)
Ms Yasmin Catley
Mr James Griffin
Mr Nathaniel Smith
Ms Felicity Wilson (Deputy Chair)

The CHAIR: The Committee on Environment and Planning is conducting an inquiry into the Professional Engineers Registration Bill 2019. This hearing is open to the public and will be broadcast on Parliament's website. Before we start, I acknowledge the Gadigal people, who are the traditional custodians of this land and I pay my respects to the elders of the Eora Nation, present and emerging, and extend that respect to other Aboriginal and Torres Strait Islander people who are present. Today we will be hearing from union representatives, the NSW Building Commissioner, Local Government NSW and other key stakeholders from the building sector. I now declare the hearing open.

LINDA SCOTT, President, Local Government NSW, affirmed and examined

The CHAIR: Good morning, Councillor Scott. Thank you for attending today's public hearing in the inquiry into the Professional Engineers Registration Bill 2019. Before we start, Councillor Scott, do you have any questions about the hearing process?

Ms SCOTT: I do not.

The CHAIR: Would you like to make a short opening statement before we begin with questions?

Ms SCOTT: I would, thank you. Thank you to the Committee for the opportunity to appear today to discuss the proposed Professional Engineers Registration Bill 2019. As the peak body for New South Wales local governments, we at Local Government NSW have called on successive state governments to address the deficiencies with regulation of the building and construction industry in New South Wales. For more than 20 years, Local Government NSW and councils have argued that New South Wales needs a regulatory framework that ensures the building and construction sector delivers well-built, safe and compliant buildings, structures and infrastructure to protect the public interest. This means having a system where all parties are responsible and accountable for their actions and the community and public interest is protected. It also needs a strong building regulator, which we have not had in New South Wales in previous years.

Local Government NSW supports proposals that will deliver an assurance of high-quality building and construction work and contribute to restoring public confidence in the health and safety of our buildings and infrastructure. For this reason, we support the Design and Building Practitioners Bill 2019 and have welcomed the Building Commissioner's program of reform, which was announced recently. Indeed, we held the second of our forums with him yesterday, with a number of council representatives. We are actively working with the Building Commissioner to address local government's longstanding concerns and to ensure we get better building standards and a stronger regulatory framework.

We support the principle of registration of professional engineers in New South Wales—bringing it into line with other States, such as Queensland and Victoria, and with registration schemes for other professionals, such as architects. We are also mindful about the potential impact on some of our member councils. The intent and plan of how a compulsory registration scheme for engineers in this state would be implemented, including transitional arrangements, will be a crucial piece of work. A key consideration for our members is, of course, the skills shortage faced by many councils in New South Wales. Research conducted by Local Government NSW in 2018 confirmed that engineering was the most common area of skill shortage reported in local government, with 52.7 per cent of New South Wales councils experiencing a shortage of engineers. This research and the diverse attributes and needs of councils across New South Wales are reinforced by the feedback we have received on the proposed mandatory registration of engineers from several of our member councils.

To address these challenges, we have already worked closely with the Institute of Public Works Engineering Australasia [IPWEA], the Association of Professional Engineers Australia and other industry partners to develop the NSW Local Government Workforce Strategy 2016-2020. The strategy identifies a series of actions designed to address the sector's greatest workforce challenges, of which skills shortages in professional areas, such as engineering, is one. We would also support the introduction of cadetships for civil engineering across government projects as a means of increasing the pool of young engineers in New South Wales. We believe that registration is a fundamentally important component and a step towards reforming the wider system, recognising competence and ensuring greater accountability and therefore greater public confidence. Of course, any scheme would need to align with the building reforms currently underway. A registration system for engineers should support and work with the Design and Building Practitioners Bill 2019 and further reforms being proposed by the NSW Building Commissioner.

In conclusion, I reiterate that New South Wales needs a regulatory framework to ensure the building and construction sectors deliver well-built, safe and compliant buildings and public infrastructure. This means having a system where all parties, including the engineers who design, build and maintain these buildings and public

infrastructure, are responsible and accountable for their actions and the community and public interest is protected. Local Government NSW supports the principle and concept of registration for engineers in New South Wales and we applaud that the merits of the Bill are subject to detailed evaluation and public consultation to fully examine and understand the impacts on stakeholders, including local government as employers of engineers. Thank you.

The CHAIR: Thank you, Councillor Scott. Your submission—and you touched on this in your opening remarks—supports the proposed Design and Building Practitioners Bill and also supports the registration of engineers. Do you see those two items as being complementary to each other?

Ms SCOTT: Yes, we think that they would work very well together because it means, as I indicated in my opening statement, that all parties would be held accountable. We need to ensure that the regulation provides a system of accountability for all parties in this. That is why we are also working so closely with the NSW Building Commissioner to ensure that his reforms will work and are going to be able to be implemented by local governments. We see this Bill as a step in the right direction and would complement the other legislation.

The CHAIR: Thank you. Your submission also stresses the need for a detailed consultation and a staged transition to a registration scheme for engineers broadly. Why is this crucial and what is the view of Local Government NSW in what that would involve?

Ms SCOTT: We would expect widespread consultation, particularly with local governments, in developing plans for implementation and transition should a compulsory professional engineers registration scheme proceed. Given the challenges particularly in rural and regional New South Wales, as major employers of engineers any scheme would need to be phased in and designed so that councils have a wide range of options to choose from, particularly with respect to attracting, retaining and sharing the employment of engineering professionals.

Ms FELICITY WILSON: Thank you, Councillor Scott, for being here and for all the work that Local Government NSW does. I am trying to get my head around the approach to the two bills that are before the House for consideration and trying to understand how they could work in a complementary sense or whether one would necessarily precede the other. You talked quite significantly about the skills shortage and in your submission as well—the 2018 research about 52.7 per cent of councils having a shortage of engineers. Do you also have any evidence of a shortage of other building professionals as well, or is it predominantly within the engineers space that you are seeing that shortage?

Ms SCOTT: Engineers, in our research, are the most common area of skill shortage. But there are other building professionals—planning professionals are also a category that is often an issue that comes up in the research that we conducted as another area of quite significant skill shortage. But that is why we worked with IPWEA on this workforce development strategy. It is why we have worked to ensure that we have undertaken, alongside IPWEA, a series of professional development activities as part of that strategy to address the skill shortage. It is also why, of course, we are advocating for the state government to have trainees in civil engineering to ensure that all of us are doing our own fair share about improving the entry of young professionals into the discipline so that there are more than enough engineers to go around and that skill shortage is addressed.

We would be very enthusiastic about working further with the state on future strategies. I note this strategy comes to an end this year. We would be very enthusiastic about working with the state on a future skills shortage strategy, particularly when it comes to workforce shortages in local government and in the building industry. Obviously, for example, councils each year receive growth targets from the state government. In order to see that development proceed we need the relevant skills distributed right across the state of New South Wales to ensure that happens. We have a serious interest in this issue. We know the state government does too and we would love to work enthusiastically with the state on a future strategy.

Ms FELICITY WILSON: As you have mentioned, the engineer skill shortage is more pronounced than other skills, if I may paraphrase what you have said. When you have spoken about the skill shortage as it relates to engineers in this Bill, the Professional Engineers Registration Bill, I took it to mean that you had some concern about this Bill being introduced and what that might do to the skills shortage; that it might exacerbate it, or create any additional concerns. Can you let me know what the connection is between the skills shortage and why you think it is so relevant to this piece of legislation?

Ms SCOTT: We are constantly advocating about a huge range of matters, including the skills shortage. This is an issue that is very important to local governments. It interacts with the registration of engineers in that registration would build public trust and confidence in engineers and that is why we support the Bill, but we want to highlight the importance of consulting with local government about the transitional arrangements to ensure that there is a staged approach, to ensure that local governments have engineers that are registered and can comply.

For example, we have previously supported a motion through this Parliament which called on the Parliament to consider having at least one engineer in every local government area in New South Wales.

Depending on the shape of the reform that occurs, we would like to have good conversations that consult local government about the implementation of this Bill. It does not in any way take away from the fact that we strongly support the need for this but we cannot continue in New South Wales to have a system where public confidence is not restored in the integrity of our building industry and the integrity of the buildings, be they public infrastructure, houses or commercial properties. It is bad for the whole state.

Ms FELICITY WILSON: I think members share your concern. You mentioned consultation about the transition period. Have you participated in consultation before this Bill was presented to the Parliament about those concerns?

Ms SCOTT: We have made a submission and we would like—

Ms FELICITY WILSON: Before the Bill was presented to the Parliament, were you consulted?

Ms SCOTT: It may have been that staff at Local Government NSW have been consulted and we have been holding conversations about this issue for many years with the IPWEA and a range of different members of Parliament. It is an issue that comes before our conference every year so we have been quite public about our policies about this issue. I think people know where Local Government NSW stands on this issue. I think our views are quite widely known and we have been working with a huge range of people for many years on this issue. As I said, we have, for decades, been putting in submissions on this issue. I will not list them all but I have a page at the back of my briefing notes listing the huge range of submissions we have put forward on this great issue. Really I would characterise us as having engaged with various governments of various political stripes and various oppositions of various political stripes for a long period on this issue.

Ms YASMIN CATLEY: Good morning, Councillor Scott. I just wanted to make the observation that today we are dealing with the Professional Engineers Registration Bill and in fact there is an inquiry in Newcastle as we speak dealing with building standards and building quality, which of course goes to the Design and Building Practitioners Bill you were referring to. But we are discussing the Professional Engineers Registration Bill, which is to actually establish registration and regulation of professional engineers right across the board—all engineers. On that note I was wondering if, Councillor Scott, you could actually walk us through the engineering needs of local government, broadly, not just in construction—because, as I say, that inquiry is being held in Newcastle today, for which I unfortunately cannot be there because this is very important.

The CHAIR: I might just jump in there to note that this inquiry is looking at both bills. We have a broad remit, not just specifically on the legislation which you have proposed, but on other elements, which would include aspects of the Design and Building Practitioners Bill and indeed a number of submissions include references to it.

Ms YASMIN CATLEY: I accept that and I understand that but I hope that we talk about engineers more broadly; that is all.

The CHAIR: Absolutely. I agree completely.

Ms YASMIN CATLEY: Nowhere is that more prominent than in local government, of course, because of all the civil works that are involved.

The CHAIR: Of course.

Ms YASMIN CATLEY: If you could tell us the types of engineers that cross your organisation, that would be great.

Ms SCOTT: We represent to the state's local governments. There are 128 of them in total. No one is the same and so it is a very diverse group of staff that we have. Local government in total in New South Wales employs about 55,000 people of which a significant percentage are engineers. We have councils, for example, that through their water utilities need engineers who are specialists in the management of water and water utilities. As you say, we have engineers in order to support the management of projects—for example, building new libraries—you know, civil engineers.

We have councils where a number of general managers are engineers because they have shown that leadership capability on top of their very good technical skills that are very important to local government. We have environmental engineers working with councils on their sustainability programs and to ensure that the management of their local land is done in a way that is very sustainable. I do not know, because we have not consulted councils specifically on this issue, but I would guess that there is an enormous diversity of the kinds of engineering professionals that you will see coming through our universities employed in local governments. We

are very proud to do that. They make a very significant and important contribution to the public good work that councils do.

Ms YASMIN CATLEY: You made the comment before that councils are generally very supportive of making sure that engineers are properly qualified and obviously a registration scheme would do that. What is it about this Bill that you see as inadequate—that does not meet that objective?

Ms SCOTT: We support this Bill. We think it should go forward. We think that it would serve to ensure that public confidence is in part restored in the building industry more generally and also that, as part of that, everybody is held accountable including engineers with a strong registration scheme. What we would like to see, though, is consultation about how the Bill, if adopted, is implemented and phased in over time to make sure that councils have an opportunity to ensure that their relevant circumstances would be able to match with the requirements of the Bill. But this is a Bill that we support. We think it should go forward.

Ms YASMIN CATLEY: I can only imagine how busy your organisation must be at the moment with the fires because local government of course will be a real backbone there.

Ms SCOTT: Yes.

Ms YASMIN CATLEY: And of course you have road engineers and bridge construction engineers: We know the whole breadth. If ever there is a time that we need to make sure that we are getting quality builds right across the board in every aspect of our communities, then it is now. I am pleased that you believe that a registration scheme would provide that surety.

Ms FELICITY WILSON: Can I ask a member to ask questions rather than make comments.

Mr NATHANIEL SMITH: I want to thank you for all the work you do in local government.

Ms SCOTT: Thanks.

Mr NATHANIEL SMITH: We have been at meetings in the past. As a former councillor I know your passion for local government. When did Local Government NSW first have the opportunity to provide any formal input into the Engineers Bill? Was there any formal consultation process?

Ms SCOTT: As I said, we have been engaging about this issue for literally decades. It is something about which we have worked very closely with professional organisations like IPWEA about. We welcome that we have an opportunity to present before the Committee today and to make a submission, but this is something that we have held really a very consistent position on over a number of years. As I detailed we have undertaken work to identify the skills shortages, to have a workforce development strategy on the skills shortages, to ensure that appropriate standards are in place for engineers and a range of other building professionals and we have held to date two sessions with the New South Wales Building Commissioner. This is a topic that we have been working on for decades with governments, oppositions and crossbenchers. It is something that we would like to see proceed.

Mr NATHANIEL SMITH: When did you first see a copy of this Bill?

Ms SCOTT: Again, our staff at Local Government NSW are in large part responsible for working out the submissions based on our policies so I could not tell you exactly when they first saw the Bill or had an opportunity for this specific Bill to have a voice on that, but it is something that I would hope people would know Local Government NSW's views about. We appreciate the opportunity to come before the Committee today as well to speak about this.

Mr JAMES GRIFFIN: Councillor Scott, it is good to see you. Just briefly, because I am conscious of time—and I appreciate if you do not have a view on this—but I know that it is early days for the Victorian model and the Queensland model has been in place for some time.

Ms SCOTT: Yes.

Mr JAMES GRIFFIN: Does Local Government NSW have a view on either of those approaches? I appreciate if you do not.

Ms SCOTT: I am not really probably in a position to make an assessment or comment about the structure of the specific merits of different schemes or co-regulatory models. It is not my area of expertise. I think it is important to fully understand the experiences of those who administer such schemes in other states before finalising legislation, but it is also very important that we move forward with this. We obviously have a range of very high profile buildings of concern, particularly in Sydney. We have a large number in the City of Sydney that have now been publicly listed and the community perception is—my sense is, as a councillor in the City of

Sydney—people would like to see action on this issue. It is important to consider the models. It is important to consider the details of the structure, but there should be a scheme in place.

Mr JAMES GRIFFIN: Understood. Thank you.

The CHAIR: I will ask one additional question. Your submission suggests that the co-regulatory scheme developed, to your credit, for fire safety practitioners is a possible model for the registration of engineers. What are the features or principles in that scheme that you feel would apply appropriately to the registration of engineers?

Ms SCOTT: I think it is a scheme that we have seen has proven to be successful and so, really, on the evidence it is something that we thought would be a good model to consider. Obviously, you know, the features of that stand for themselves but just really I think we are trying to use an evidence-based judgement about what would seem to be the implications of that particular designers scheme and how well it has worked.

Ms FELICITY WILSON: Thank you, Councillor Scott. I think we all understand the broad perspective that you have on this Bill, on registration in general and on improving standards within the industry. If I may get into one specific element of the Bill it is around the introduction of the board, specifically for professional engineers. I know one of the issues you raise in your submission was that you would not want to see an increase in bureaucracy and associated costs. From some of the other submissions we received some concerns about the introduction of a board, specific just to professional engineers.

I do not know if you could provide us with a view about whether you think a board would be necessary or appropriate, how that would work, for instance, once potentially the Design and Building Practitioners Bill is also in effect, which does not have a board structure, because Fair Trading already has those elements and oversight. Do you have a specific view on the introduction of a new board?

Ms SCOTT: Well, the view of our members is that the system in place at the moment is not sufficient. The view of our members is also that we would like to see evidence-based schemes proceeding to design this. I have personal experience with other registration boards that exist in a range of other professions—medical professions, allied healthcare professions, for example—and they are a very successful model. They work to successfully regulate professionals to uphold standards. Again, we are seeking to advocate for an evidence-based model that would work to ensure that public confidence is restored in the system. We know in a range of other professional accreditation bodies that something like a board has worked very well in those other professional groups.

Ms FELICITY WILSON: That is in professions where there are other levels of governance, for instance, Fair Trading. The Design and Building Practitioners Bill does not incorporate a board. Are you saying that you think it is important to introduce a board for the registration and accreditation of any of these professionals?

Ms SCOTT: I think it is a scheme that has had evidence for it working in other professions and so it deserves examination.

Ms FELICITY WILSON: Could I maybe ask you to go back to your members and come back to us on it because I do not think it gels with your very strong views that you expressed about bureaucracy and the financial impacts of hiring a board. I understand you are saying that it has worked in other industries. I would like to hear specifically how you think it would work for this one.

The CHAIR: Councillor Scott, we may draft a question on notice and send that your way to deal with in the appropriate mechanisms.

Ms SCOTT: Yes, no problem.

The CHAIR: I thank you very much for appearing before us. This is the first hearing I have chaired and you are the first witness. Thank you, Councillor Scott, for being such a good witness. As flagged, we may send you further questions in writing in addition to what the member for North Shore has proposed. Your replies will form part of your evidence and be made public. Would you be happy to provide a written reply to any further questions?

Ms SCOTT: Yes, certainly. Congratulations.

(The witness withdrew.)

DAVID CHANDLER, NSW Building Commissioner, sworn and examined

The CHAIR: I welcome our next witness, the NSW Building Commissioner. Before we commence, do you have any questions about the hearing process?

Mr CHANDLER: No, thank you, all good.

The CHAIR: Would you like to make a short opening statement before we begin questions?

Mr CHANDLER: Yes, thank you. There is a lot of movement across the nation to address the challenges that the construction industry faces. I think the general view is that we need to step into this carefully and understand the full landscape of issues that are in front of us. The Design and Building Practitioners Bill that is before you is the first step into that landscape. That is going to address what is the most urgent group of issues that are facing the customers of construction in New South Wales at the moment. They relate to high-rise residential buildings, class 2 buildings. Subsequently we will look to expand that out to a broader platform of buildings but I think it is a very good step-in point. That Bill provides for design to be performed by properly qualified and accredited professionals.

In my conversations with all of the professional groups—and I have had many of them since my appointment—I have outlined to them the fact that I believe we should raise the tide for the standard of all professional organisations within two years. I think we are seeing people come before us at times who do not know whether they are an advocate or a public interest group. I think the architects do that very well in terms of they come forward with their professional board and they come through with their member representation and they have a very coherent way of communicating policy issues and also membership issues. They do it very, very well indeed. Other organisations—certifiers, engineers and quantity surveyors; all of these people—have yet to rise to a level and understand that we should be achieving a level of consistent professionalism by all professional organisations.

I am using as a guideline at this stage the Professional Standards Council work and saying that that perhaps would provide a framework, but I have asked Bronwyn Weir to prepare for me a discussion paper that might be something that could be circulated to the industry in the context of this Bill to explore what everybody thinks. She has come up with five possible models. I am happy to leave with you a piece of the first cut of that. It is draft, but what we are suggesting is that we could come up with something that becomes a very wholesome conversation piece that says, "Here's how we move forward." The first challenge is that I think we are going to find is that I am not sure that any of the associations have fully understood what facing into the requirements of the new Bill is going to be—the requirement to declare designs and then, at the end of the project, to declare that the building has been built in accordance with those designs.

It is going to require all professions to stand up and say to their clients, "I simply can't be engaged anymore to do half the job. I have to do all the job and I cannot declare the drawings or the design until I have done the job." That is something that needs to apply to everyone, not just simply to one albeit I do identify that engineers have many fingers in that pie. In my discussions with engineers—and I have had lengthy discussions with the executive and Bronwyn Evans has been very helpful in that regard—I think she understands that in fact what we ought to be doing is looking at what would be the characteristics of a professional association, say, in two years from now and sit down and work out what that means.

From a customer's point of view in New South Wales, I think one of those features is going to be that they have an ethical standards platform that actually sees all the members customer-facing instead of self-facing. Quite often what I am seeing in some of the problems that I am being asked to look at at the moment is that engineers take a self-facing position as opposed to a customer-facing position. I think there is a framework to actually reset a customer-facing professional organisation as opposed to one that is just self-facing. I think that is one of the challenges that a professional association board will have to achieve.

The second area is that I think accreditation standards will have to be thought through again. I was disappointed in the Shergold Weir report that in fact the shortcomings of the education system were not really tapped into. There are exhibits where universities are lowering their entry standards to attract more overseas fee-paying students and I am also aware that in some instances as low as 29c in the dollar is all that is put back into the undergraduate education program out of a dollar for a student in undergraduate fees. The first thing that I would like to ask is that the Federal Government think about making universities report where undergraduate fees go. At the moment I do not think undergraduate students are getting value for money.

I say this to all professional associations: It is about time you stood up to the universities and told them that you want some decent money put into the undergraduate program. At the moment in the one that I am thinking

of 29c in the dollar is all that goes into that particular undergraduate program, which means that a student is putting 71c on their Higher Education Contribution Scheme debt and it is just a sham way, in my view, of funding other pieces of the operations. I think at least double that amount should be going into the undergraduate programs. That is a conversation that all of the professional bodies have avoided because they actually also get paid by universities to accredit these courses. The discussion paper we need to put out really needs to start asking some of those questions.

While I was at a recent engineers conference at The Warren Centre I received a broadcast for attending a fire conference in Brisbane run by a private conference organiser for profit and it was offering nine continuing professional development [CPD] points. My view is that we have really got to start to lay down the law and say, "Guys, turning up at a tea party is actually not going to get you CPD points." That is an issue.

The next thing then is governance. I think that if a professional organisation of the future is going to stand up, then it needs to be quite clear as to what its representation is from the public interest point of view and then what its representation is from the club. With engineers, they are made up of civil engineers, structural engineers, electrical engineers, mechanical engineers, acoustic engineers and multiple other engineers. They all want to approach me to be heard as part of the tribes of the engineering cluster. I am saying, "Guys, why don't you just all go away and come back under one tent so that we can actually have a conversation under one tent?" They all have slightly different agendas and it is all "Pick me", "Pick me", and I think it is time to say to engineers universally, "Come back as a very coherent organisation and present to us."

One of the immediate issues that the engineers will have to do, if the Design and Building Practitioners Bill passes, is to re-grip the challenge of multidisciplinary design integration. One of the problems that we have got as a result of the demise of design engagement in the last 20 years is that designers have been engaged for very small cameo pieces of work and they have not really been engaged to design across the multidisciplines. You may hear from Kathlyn Loseby this afternoon that in fact she has now recognised that one of the big issues that they will have to address is actually a skill set called multidisciplinary design. Engineers really have that problem. I am out in the field seeing that a structural engineer does a structural engineer design and there has been no coordination with the electrical design before the design turns up on the site. I think there are some real capability issues. Finally, I think there are some accountability problems.

The CHAIR: Could I ask you to make that your concluding point?

Mr CHANDLER: I will make that final point, if I could, and that is this: engineers do not like defrocking one of their number. I think we have to find over the next year or so, as we work out what a professional organisation looks like, they have to have some infrastructure that is able to say, "Some members are unacceptable to our organisation and they're out." What I am finding is that the whispers go on to say, "That one there is not very good and that one is not very good." I say, "Well, why don't you do something about it?" "Oh, no. That is for the Building Professionals Board to do." I do not think that the Building Professionals Board should do all the heavy lifting.

The CHAIR: Thank you very much, Mr Chandler. My first question is an extension from the points that you were just making. Obviously, the Professional Engineers Registration Bill seeks to achieve a broad registration scheme for engineers. In addition, the Parliament is dealing with the Design and Building Practitioners Bill. Obviously your remit is largely within that space and its interaction with other areas. Do you see that the broad registration of engineers is complementary to proposals under the Design and Building Practitioners Bill? Where is enforcement and compliance best placed? How would you see the two packages working together over time?

Mr CHANDLER: Firstly, what is being set up in New South Wales is, in fact, I think, the leading exhibit in the country. I do not think that anyone else is going to have a model like we have where we have this very clear bookends: design and as-builts. I think that will take a little bit of understanding by the engineers as to exactly what that means. I think that all professions could progressively rise to a level of professional recognition. I just do not think we should give the key to that box away without raising the standard. I am not against professional organisations being recognised. I think the Design and Building Practitioners Bill gives us a platform to say, "You can't design a project unless you are properly qualified, so there is no question that you are going to be able to play in the game unless you are qualified." There will be accountability for that because there will be a clear line of sight as a result of the Bill. I really think that we should start to work on a broader conversation that says: how do we raise the standard of all professions?

The CHAIR: A follow-on question from that is that a number of submissions have pointed out there are similar regulatory schemes to that proposed in the Professional Engineers Bill in Queensland, Victoria and the ACT and that there could be a greater public safety risk of unqualified or unskilled engineers being attracted to New South Wales. Do you feel that those concerns within the design and building industry are satisfied under the

Design and Building Practitioners Bill? How would you see a registration of engineers scheme interacting with that?

Mr CHANDLER: The distinction I make, first of all, is that our most pressing issue is to look at what are the risks to the unsophisticated purchasers in the marketplace. They are residential customers, both in the class 1 and class 2 building space. The other customers are sophisticated. When you start to talk about roads, bridges and power plants, you are dealing with sophisticated purchasers who understand that they need to get good quality people on the ground to do the work. We do not have any of that infrastructure falling down around us at all. What we have is a need to focus on this space (Class 2). I did pull the figures in just to remind me of the numbers, but New South Wales has an annual construction turnover of about \$70 billion a year and it represents 33 per cent of the nation's spend. Essentially, we are the elephant in the bed here. It behoves us to actually have a bit more forward outlook than simply permitting a recognition of an engineer or other organisation without raising the bar.

What is happening in Victoria, what is happening in Queensland in my view is fine. Those jurisdictions can do it whatever way they like. My view is that we should raise the bar. We currently employ 363,000 people in this industry in New South Wales. By 2030 I personally believe that we will have to retrain a third of that workforce and educate a third to replace those that are leaving. We have an industrial-scale issue and I am afraid we are going to need a more creative sets of collaborations between the professions to address that. These are the sort of conversations I think need to be headland. When we look into residential building work we are facing an annual year-on-year of about \$22 billion worth of work from about 2023-24 onwards. I think we have got to start to say: what does the pipeline look like? How are we going to service the pipeline and start the residential bit, which is the unsophisticated multiunit purchasers first and then start to look at the sophisticated purchasers second?

The CHAIR: It is your view that the enforcement and compliance of those concerns is best dealt with by the Design and Building Practitioners [DBP] Bill as a first step?

Mr CHANDLER: I believe that the way we are taking on that work, particularly when we start to look at things like the ratings tool to start to look at who the good players are and who the risky players are, initially that will focus on developers, builders and certifiers. Subsequently, as soon as we have got the Bill stood up, if that is what passes, then we would be able to then focus on designers and manufacturers because, as more and more work moves offsite, I believe our line of sight as a regulator has got to look more towards what is happening offsite. There are some very big pieces these days coming from offsite. I think these are landscape issues that need to be resolved with all of the professions but the priority has to be: get the setting right for unsophisticated residential purchasers.

Ms FELICITY WILSON: Thank you, Mr Chandler, for trying to put customers back in the forefront of the building industry and also for trying to raise the tide for standards. Earlier in your contribution you spoke a bit about the work that you sought advice from Bronwyn Weir on about models for registration, as I understood it. You were talking about the first step being conversation. In your submission as well you spoke about engaging with the sector. Will you talk to us a bit about consultation? I guess my concern is that the Professional Engineers Registration Bill does not seem to have had much consultation. You have talked about to what extent it will actually be embedded and accepted by the industry and lead to successful outcomes, whereas I understood there was significant consultation happening with the Design and Building Practitioners Bill.

Mr CHANDLER: Yes, look, it is the message that has come back to us from the whole of the industry, including the consumers. What they would like to do is to be involved at the beginning of the conversation on some of these headland pieces. A bill like this—I have asked Bronwyn to prepare at least a discussion paper of some of the options and I am happy to leave that with you here today—but that is not the discussion paper. It is just some thoughts on that, for now. I think this piece absolutely needs a quality discussion paper. It needs to describe what the industry is going to look like by the end of this decade and what we have to create—capabilities and standards—to achieve it. I think this one is screaming for that. There will be other pieces that we want to look forward. The clear message is: okay, let us start the journey with consultation.

Ms FELICITY WILSON: Are you suggesting that there is a risk associated with this Bill, the Professional Engineers Registration Bill, passing without consultation happening before it progresses through Parliament?

Mr CHANDLER: I think we may miss an opportunity to raise the tide. I just think: why give it away? I have read all the submissions that have come in. There are 155 submissions that came in for the *Building Stronger Foundations* discussion paper the Minister put out. There were 85 that came in in regard to the Bill. I have read all of these. These all start off with, "We should be heard because we have got 10,000 members", or 20,000 members, and none of them offer anything that says, "If you give us a seat at the table, this is how we will

make it different for customers." None of them start with that. They beat their chest and say, "We're the elephant in the room and let us have a seat at the table." I think we should not give a free seat away to anybody right now.

Ms FELICITY WILSON: Thank you. My other question is around some of the structure. You spoke earlier about the Building Professions Board and the example you used was that engineers should kick out poor performers and take that accountability on themselves. Obviously the Design and Building Practitioners Bill does not incorporate a board model. I think you said in your submission that this actually treats these practitioner groups differently to others. It is not warranted and not consistent with recent reforms of government. Can you talk us through how you would see a professional engineers board existing in the current environment in which we have the Building Professions Board, for instance?

Mr CHANDLER: If, for example, the engineers started discussions with the Professional Standards Councils, which they have already started by the way, as have a number of others who are working towards achieving that standard, we could have a discussion as to what the right model is. When I spoke to Bronwyn Evans, for example, one of the issues they have about making their members more accountable is their powers to call in evidence and make sure that they have got the data that they need to achieve accountability. What I would like to do, over the next two years when all the briefings that I have provided to crossbenchers and to the upper House committee, is say: let us not leap to a solution today. Let us just work this thing through such that by, say, 2022 we can put out a quality conversation and say, "This is what the regulator should look like going forward and here is how it would interface with professional bodies."

I think we must have some of that accountability part put back into the professional bodies because we only get to deal with these people after they have done their chaos, when the plans are gone and the people are not there. I think we have got to be starting to work out where is the crossover line that says that up to a point the professional associations will be accountable for managing the accountability of their members? Where does that new line settle in regard to things like the Building Professions Board?

Ms FELICITY WILSON: Obviously we are looking at the two bills here. You have expressed your support for the Design and Building Practitioners Bill. You might be aware that the Professional Engineers Registration Bill has actually been attached as an amendment to the Design and Building Practitioners Bill in the upper House here in Parliament. I think we have heard from a lot of people making submissions that they support the principles of both but the practical application of the two of them, do you think they can exist in tandem?

Mr CHANDLER: I would not support their early interlocutory engagement. I think that you have got a very attractive proposition coming forward to sort out the New South Wales construction industry. I can assure you it is now starting to be noticed as being the envy of the other jurisdictions. I can tell you are on a daily basis I am getting feedback saying, "Hey, I wish we were going in the direction you guys were going in." Frankly, I think that we should get one piece of work through, stood up, and sort out the finer detail around it and then, I think, as a general conversation with professions, which would include engineers, let us start to look at what's next. But trying to stitch them together right now is, in my view, not practical and may attract diversionary attention that really we should put onto the main game.

Mr NATHANIEL SMITH: Just to follow up on the question by the member for North Shore, do you believe that the DBP Bill should be given a chance to build confidence in the building community and do you think we should not rush into the Engineers Bill?

Mr CHANDLER: I do not want to get into lobbying for legislation. I am the Building Commissioner.

Mr NATHANIEL SMITH: No, no.

Mr CHANDLER: Okay. My job is to have a solid hand into policy, a solid hand into how the regulator will look in the future, and then to start to drive cultural change across industry. The cultural change across the industry is the biggest piece of work we have got to do. I believe that once we have got that Bill and I have got the powers that are being sought to accompany that Bill, the game will start to change dramatically in New South Wales. I think we should change the game and then have a look and see what is left to be done with the system.

Ms YASMIN CATLEY: Good morning again, Mr Chandler.

Mr CHANDLER: Again.

Ms YASMIN CATLEY: Good to see you, again.

Mr CHANDLER: We met with the constituent this morning from Swansea.

Ms YASMIN CATLEY: Yes, thank you. I am most grateful and they were as well. Mr Chandler, in your opening remarks you talked about the architects board and how successful that is. The Professional Engineers Registration Bill 2019, which is in the lower House being debated, goes very much towards a very similar model

in fact to what that professional organisation is doing. You have said that you think that that is a good standard. Do you think that that is the standard we should be setting for engineers as well—the same as the architects board?

Mr CHANDLER: I think it is a model. I think there are others. For example, there are the surveyors' processes to become a registered surveyor. I think that is a very robust model. But we are dealing with a range of professional bodies that have not started that journey. If we were to sit down today and have that conversation with architects, we would probably have a different set of things on our shopping list. Today on our shopping list there is a much more concentrated focus on customers. I am sure that the architects will work through that with us, but if I was sitting at the table, cutting, dealing and shuffling, and saying, "Am I going to recognise you right here, right now?" I would say, "No, what we are going to do is work out what we think you need to be in a couple of years from now and let's work on that." I think it is just premature.

Ms YASMIN CATLEY: Mr Chandler, a registration board does exactly that, does it not? It sets parameters and sets standards, just like the architects do in their board?

Mr CHANDLER: No, it does not, in my view. We could break into quite a length of detail but I do not believe that it is adequately describing the conditionality of accrediting programs and education. I do not think it has got any clarity about that. I do not think it has got any view about what is going to be the changing role of engineers, going forward, because the role of engineers is going to be dramatically redefined in this decade. I just think that we need to make sure that we have got a better line of sight to where we want to be before we put a boat in the water.

Ms YASMIN CATLEY: You have described an inadequacy in the industry. That is your view that you have stated here. So, should government not step in to ensure that the benchmark is stepped up? By putting in place a registration and licensing scheme are you not actually putting the boundaries in place to set that framework?

Mr CHANDLER: I think the Design and Building Practitioners Bill is the first step to that. The powers that will accompany that will be the second step to reinforce all that. I think we have got an opportunity over the next 18 months to sit down and work out where we want all professions to go. I just think this is a time not to give a free pass away just to say, "Well, because you have got it in Victoria and because you have got it in Queensland, you should have a right to have it here." I think reverence is something you should earn, I think it is something you should nurture, and it is something, then, the public should understand exactly what you are offering. At the moment they do not know what is being offered.

Ms YASMIN CATLEY: I think it is important that we remember that we are talking about engineers more broadly than just the narrow scope that you are proposing, which we talked about with the previous witness, Councillor Scott; water engineers, environment engineers—you know them all—right throughout the whole of the engineering scope. That is what this Bill looks at. Obviously it is broader than the narrow focus that you have proposed.

Mr CHANDLER: I accept that, and I have met with the engineers and discussed that broader aspect. The view that I have taken from them is that there is no pressing urgency to do that for engineering that is being done for sophisticated purchasers, both in the public and the private realm. They accept the fact that the most pressing piece is the bit that responds to the residential sector, right here, right now. So, I have had lengthy conversations. What is clear from the people I have spoken to in engineering is that they do understand the dissatisfaction with the quality of engineers that are being put through the pipe at the moment.

I think we really need to put a line in the sand to say, "We want smart engineers, not less smart engineers." I just think there is a currency here, that we should say—if we were negotiating an award here, we would sit down and say what is on the shopping list. There is nothing on the shopping list here. We are just giving it away. I think it is time to put some coins on the table and say—

Ms YASMIN CATLEY: I agree with you. This has been discussed for 18 years now. The Campbell review came out and made this proposal, so it has been a long time. I agree with you.

Mr CHANDLER: As you know, you have had 20 years of regulation—

The CHAIR: Point of order: this is not a time for a discussion. It is a question-and-answer situation. I will go to the member for Manly.

Mr JAMES GRIFFIN: Thank you for your time, Commissioner. You have mentioned the experiences in other states. Whilst Victoria is a more modern evolution, Queensland has been in place for some time. Are there learnings from that? If there is one takeaway, what do you think that is for New South Wales?

Mr CHANDLER: I think it is accountability and just simply raising the bar. I was the Deputy Chair of the Building the Education Revolution task force. I got to see hundreds of projects during my role. I was the technical side of that. So I visited a lot of sites in every single jurisdiction. I have to say that I thought Victoria was the weakest jurisdiction—that was my personal view—and I thought that Western Australia was, perhaps, from an engineering point of view, better than most. But it is highly variable across all of those disciplines that the member for Swansea has raised. I just think we have got to look at what is needed and service the need, as opposed to just simply say, "Come in." I want to see what the need is and let us get it sorted.

The CHAIR: I have a final question. Obviously, you are here in a building-and-design capacity. In addition to the issue of what is needed with regard to the registration of engineers, in terms of what is needed in the process and the consultation on that, how do you see that occurring and what would be the evolution of that process?

Mr CHANDLER: I will offer up this just as a starting piece: I have asked Bronwyn Weir to give us some conversation pieces to start, but I would hope that we could develop, first of all, a headland statement that says, "This is where we need to be across the board; here are some models that could be considered," and then look at each of them on their merit. But get to a point, though, that understands that, say, by 2022, any of the professional organisations in this state have got a clear line of responsibility as to what they should be doing and then what the regulator should be doing because, at the moment, throwing it all at the regulator after the bus crash is simply not a solution.

The CHAIR: Thank you very much for appearing before the Committee today. We may send you further questions in writing. Your replies will form part of evidence and may be made public. Would you be happy to provide a written reply to any further questions?

Mr CHANDLER: Perfectly happy, thank you.

(The witness withdrew.)

(Short adjournment)

ELLEN MAY LEVERINGTON, Legal/Industrial Officer, Unions NSW, affirmed and examined

MARK FRANCIS MOREY, Secretary, Unions NSW, affirmed and examined

DANIEL JOHN PAPPS, Manager Industrial, Rules, Governance and Compliance, United Services Union, affirmed and examined

The CHAIR: Would any of you like to make a short opening statement before we begin the questioning?

Mr MOREY: I would. We appear on behalf of Unions NSW and thank the Committee for the opportunity to participate in the inquiry into the Professional Engineers Registration Bill. As outlined in our submission, Unions NSW supports the Bill and recognises it as a much-needed implementation in our construction and infrastructure sector. Unions NSW also endorses the Design and Building Practitioners Bill 2019 and we reiterate our position that, if implemented together, the two bills form a scheme under which professional engineers we can have appropriately regulated.

In our opinion, any scheme to regulate and register professional engineers needs to go further than the legislation presently before the Parliament. In addition to the requirements contained in the bills, baseline standards need to be established to preserve the interests of engineers and ensure the absolute independence from the financial interests of builders and construction companies. The current method of operation is compromised, not organised and at times poorly run. Unions NSW is aware there is presently a gap in the industry as the quality of building certifications sometimes goes without scrutiny in favour of concerns related to costs and time constraints.

Overall, Unions New South Wales supports the implementation of a registration scheme for professional engineers, noting it is an opportunity to improve work health and safety standards both during the construction phases and once buildings or infrastructure have been completed and in use by consumers. It will reduce the risk to investors who buy into new building schemes and are then burdened with unexpected costs associated with rectification and repair to design areas. It will maintain the integrity of the engineering profession in a manner not dissimilar to the schemes in place for lawyers, health practitioners and architects and also currently operating in Queensland and soon to operate in Victoria.

It will assist in rebuilding public confidence in the construction sector generally. It will reduce the likelihood of construction infrastructure projects from experiencing delay and going over budget and it will keep regulation consistent with the east coast states by increasing New South Wales' transparency of the certification process and more stringent regulation of engineers. Thank you, Chair.

The CHAIR: Would anyone else like to make an additional opening statement?

Mr PAPPS: Just a very short statement, Chair. Thank you Committee for allowing me to appear today. I am appearing on behalf of the United Services Union [USU]. We have over 30,000 members working in local government, clerical, admin and energy industries in New South Wales and parts of the Australian Capital Territory. We have many hundreds of members who specifically identify as engineering professionals or working directly in engineering, and many thousands more who work with or under the direction of engineers. With that context, we are strong supporters of the Professional Engineers Registration Bill.

We think it will drive better safety outcomes both for workers and the public at large. We think it is an appropriate recognition of the professional nature of the industry, not unlike doctors or lawyers, and we think it will drive consumer confidence and better economic outcomes for all communities across New South Wales. We think it addresses what is a glaring regulatory gap in New South Wales at the moment, given the other schemes in place in both Queensland and shortly in Victoria and the Australian Capital Territory.

The CHAIR: Thank you very much. My first question is to Mr Morey. In your opening remarks you talked about the establishment of baseline standards as an important part of the registration of engineers process. How would you see those standards consulted on and how would they best be implemented? Should it be the role of the board? Should there be a consultation process in the lead-up to the Bill? Should it be done through a regulatory process? What are your thoughts in terms of the establishment of those baseline standards?

Mr MOREY: We think both bills should go through together as the initial part of that. I think then there should be a regulatory board set up. The Law Society model is one model, there is a model that is currently operating in Queensland, and there should be consultation with the key players around what the regulations are and the expectations that are then placed on engineers. I think the Bill currently before Parliament captures the majority of that. Our position is now is the time to strike. Let us just get both bills through concurrently, get it in place and have a standard that is then consistent with Queensland and will also be consistent with Victoria when that scheme goes through as well.

The CHAIR: In terms of those baseline standards that you talked about being important, do you see those as standards that should be a part of the Bill or something that is established down the track?

Mr MOREY: I think if you are going to put the Bill through you should be putting the regulations through at the same time as well. I think there has been a fair bit of consultation. Professionals Australia is the main organisation along with the USU, who deal with engineers professionally. They have been discussing this for a long while; they think that the Bill captures what their intent is and they are happy with that. I know you are seeing the Construction, Forestry, Mining and Energy Union this afternoon; they will also have a significant opinion about that, but I believe they probably want it to go a bit further. But I will not speak on their behalf I do not think.

The CHAIR: The Professional Engineers Registration Bill leaves the make-up of the board to regulation. Does Unions NSW or any of the other parties have a view on what the make-up of that board should be or types of professions or qualifications that should be a part of that board?

Mr MOREY: Obviously you have got to have engineers on the board, but I think it is about thinking through who are those key players in the industry. I am always keen on those sorts of boards to have some sort of a consumer advocate on them as well because I think that it is important to hear from people who have been affected and putting that input in. But technically I think it is about sitting down and working out what are the actual things you want to regulate, who are the people best placed to do that regulation, and often I think the best way is to call for nominations from key bodies to put people on the board with the appropriate skills to monitor the scheme.

The CHAIR: Just going along that same line, in terms of your view on who the main stakeholders in the administration of any future registration scheme for engineers should be, who would you see as the key stakeholder components?

Mr MOREY: For us it would be Professionals Australia, who organise and have engineers as their members. I know there is a number of professional engineering bodies as well. I think you have probably got to have someone from the construction sector involved in that as well. I am not a complete authority on all of this but I think they would be the main areas you need to be looking at in relation to this.

The CHAIR: The Law Society and other submissions talk about the need for, as part of the registration scheme for engineers, compulsory professional indemnity insurance being a part of that process. Do you have a view on that?

Mr MOREY: I had not really thought about it broadly. If you are going to put a whole package together there should be a training aspect to it as well—pretty much like the continuing legal education points that lawyers do as well. I think the key for this is keeping people's qualifications current in what they are doing. I think the opportunity to have insurance is also a positive thing for people operating in this. So again, you have to have a scheme that is setting the benchmarks in which people are operating so they know if they go outside that, and they are going to have insurance, what rules or what regulations are they breaking in what they are actually doing.

The CHAIR: Does United Services Union have a view on professional indemnity insurance as a part of a registration scheme for engineers?

Mr PAPPS: I have not particularly turned my mind to that particular question. I would echo some of the comments that Mr Morey has made, but I would take that on notice.

The CHAIR: Perfect. The member for Manly?

Mr JAMES GRIFFIN: Thank you for being here today. I was interested to understand that you see both bills as a positive step forward. Do you think that the Design and Building Practitioners Bill really sets the foundations and reform for some of the requests that you have outlined and could set the basis for then the Professional Engineers Registration Bill to build upon instead of bringing them in and having them adopted concurrently as one? Do you think it sets the groundwork for what you have outlined?

Mr MOREY: We have said we are supportive of both bills. I think if you have got the bills there and you can do it, you should do it at the same time. Our concern with the registration is that in the next five years there is going to be substantial ongoing construction in New South Wales, both in residential and commercial. Particularly for residential, given the recent high-profile cases, we think that if it is there and it can be done and the parties can sensibly make legislation together—I know that is often a challenge—but if the parties could do it together I think now is the time to get it in. You will then have it in line with Queensland and Victoria. I think you have then got an east coast scheme, where most of the construction will be going in the next two to five years. I think it is a sensible way to go.

Mr JAMES GRIFFIN: Mr Papps, we heard earlier from Local Government NSW. It really emphasised the complexity of engineering in all its different forms. One of the challenges that it communicated was around skills and essentially with the shortage that it is facing at a local government level. Do you have a view on the registration and the schemes and how they may either benefit in bringing forward more skilled engineers or conversely impact that?

Mr PAPPS: Having read the submissions of Local Government NSW, I would echo the concerns about skills shortages. What I would say, however, is—and it is not dissimilar to what you see in the legal profession—these registration schemes can drive increased skills. I do not necessarily see them as locking people out of the profession and restricting access to skilled people in regions that desperately need them. I actually think schemes like this can actually drive the skills and ensure that people who are otherwise working in the industry anyway are keeping up to date through mandatory professional development and registration schemes. While the skill aspect is important to consider, I do not necessarily see either bill as representing a bar or putting a ceiling on attracting people into those key areas.

Mr MOREY: In fact, with the skills shortage that the local government association talk about, that is one of the reasons why you should have a registration scheme, because then it stops the cowboys coming in where there is a shortage of skilled engineers who are qualified in the industry. I agree, I do not see it as prohibiting people becoming engineers and doing their work. The flipside of that is it does stop the cowboys coming into the industry and just signing off on work because that is what they do. They sign off on work consistently because they know that if they do not sign off work they will not continue to get employment.

Ms YASMIN CATLEY: Mr Papps, do you think consumer confidence in engineers and other professionals in the building sector—roads, bridges, carparks, metro stations and the whole gamut that your members would absolutely be all over—is at an all-time low?

Mr PAPPS: I could only speak anecdotally but I think that is certainly the case, particularly if you look in the local government space where most of our members sit, where a lot of the construction work is done regionally by those councils. There is a concern that works are not being done to a particular standard. I think that that is reflected in some of the concerns about skills shortages we were talking about earlier. I think a scheme like this can help to drive that and also ensure that councils are confident that the people that they are employing who

hold themselves out to be engineers have the skills and qualifications necessary to be able to do the work up to an appropriate standard.

Ms YASMIN CATLEY: You would agree that a scheme that is proposed in the Professional Engineers Registration Bill 2019 would address consumer confidence?

Mr PAPPS: Yes.

Ms YASMIN CATLEY: Mr Morey, do you think that we should be ensuring that all engineers are registered and part of this scheme, conversely to what is being proposed in the Design Practitioners Bill of just class 2 engineers being registered?

Mr MOREY: We think all engineers should have a registration scheme. We agree with Professionals Australia. I think it is a key profession. It is a key in the design phase; it is also a key in the oversight phase and the signing-off phase. Obviously for the large commercial construction it is very important, but I think it is even more important for people who are purchasing units and homes, putting their own money into it, who end up going into buildings that are then—you have got to argue and fight to get things fixed if they are broken or not compliant when you get in. I think having that baseline for people—given that we have got housing prices going up and there is a significant construction boom going on in the residential area, people should be protected and this is one way of doing it.

Ms YASMIN CATLEY: Would you agree, then, that what we are currently doing does not meet the pub test?

Mr MOREY: Yes. Talking to different unions that are affiliated with us in construction and in professions as far as engineering, they say there are significant problems with the certification process as it currently stands—people who are not qualified signing off on work that should not be signed off on.

Ms YASMIN CATLEY: You have, to some extent, talked about there being continuity across the states. At the moment New South Wales does not have a scheme, yet the two neighbouring states do. Would you elaborate on how that affects your members, particularly in relation to safety in the workplace?

Mr MOREY: Ensuring that safety in the workplace is the way in which you construct things, the way in which projects are certified, that appropriate protections are in place is for us making sure that they are not just—I think we said in our submission that we would like to see it broadened to include industrial protections and ensuring that people are actually adhering to safety procedures and those sorts of things in the Bill. Anything that strengthens safety in the workplace is something that we certainly support. I think that these bills together are working towards improving safety with the frameworks that they are proposing in workplaces.

Ms YASMIN CATLEY: Mr Papps, I thank your members for the work they do in our local governments around the state. It is broad reaching, that is for sure. I have no doubt that at the moment they are working extremely hard after the fires and the floods. Do you also see this as being a critical component, looking at that environment, ensuring that we do have qualified people to be rebuilding our state?

Mr PAPPS: Certainly. If I could build on something Mr Morey just said, I think one of the risks of not having these registration schemes in place, particularly in light of the other jurisdictions, is New South Wales might end up being the landing spot for these unqualified or unscrupulous engineering professionals who are not able to practice in those other states. I think that particularly in the environment we are in now where lots of local councils are undergoing significant rebuilds following the bushfires it is important that we consider what types of people are doing that work. I think this kind of registration scheme will address that particular issue quite directly.

Ms YASMIN CATLEY: Have your members come back with any adverse findings thus far?

Mr PAPPS: I have not got any particular information on that at the moment.

Ms YASMIN CATLEY: Would you mind asking your membership and coming back to us to see whether we are seeing any undue behaviour?

Mr PAPPS: Certainly.

Mr NATHANIEL SMITH: Recently we had the NSW Building Commissioner argue that it would be premature to proceed with any regulation of engineers before the mechanisms to strengthen the regulation of the Design and Building Practitioners Bill 2019 have been tested. What is your view on that?

Mr MOREY: I have to disagree with him. As we have said, I think that the two bills together complement each other. I do not know why you would wait. If you can do it now and come to a landing, get them both put through and then it is a matter of putting the appropriate structures around to implement them. My concern is that if you put one through and the other one does not go through, we end up in another inquiry, it drags on and

we will be here in two years time having another meeting about whether or not we should actually do this. I think the parties should actually come together. Both bills are good bills. They complement each other. It is logical to do it now. Why would you wait however long you are going to wait? As a taxpayer, let us just get on with it, be sensible and get it done. That is my position, and it is the position of our affiliates who are in this area. I think it should be done now.

Ms LEVERINGTON: I would also add that the Professional Engineers Registration Bill is proposed to cover at least six different categories of engineering—civil, structural, fire safety, electrical, geotechnical and mechanical. The proposal to run both bills concurrently is going to give a really broad scheme that covers all of these different types of engineers who are building not just vertical buildings but bridges, roads and then fitting out various infrastructure that is required for things like fire safety, which is particularly important in the consumer stage. I will add that it is not far-fetched that in certain firms of engineers there will be different types of engineering that are being performed by various professionals in that organisation, so it does not actually make sense to introduce a scheme for one category of engineers that is not going to apply to a whole workplace. That is why we really encourage the parties to maybe collaborate on a scheme together for all engineers.

Mr NATHANIEL SMITH: Mr Papps, the submission of United Services Union talks about the Bill having major risks to workers and public safety, the high security risk in areas where councils deliver infrastructure projects. What evidence do you have to support that?

Mr PAPPS: I think it is a logical follow-through that if we have got people who are not qualified and not up-to-date in terms of standards signing off and overseeing work, that exposes members of ours and members of the public to risk. I could not point to any empirical data that we have got on hand but I think it follows as a logical proposition that by increasing the standards of the people who design and oversee and sign off on work, you are necessarily going to improve safety outcomes.

Mr NATHANIEL SMITH: There are no case studies or evidence that you can point to now?

Mr PAPPS: Not that I have on hand, no, but I am certain that I could get that information to you on notice if you like.

Mr MOREY: Just as an aside, yesterday I was having a discussion with the fire brigade union and the plumbers union. They were talking about new buildings that have been put in where the pipes for the fire hydrants, where you connect the hoses facing out, they are facing into the building because it has not been properly certified. The plumbers were talking about when they rig up the systems for the sprinklers, often the sprinklers go on the same systems that are running your toilets and your washing machines. If they are running, it takes away from the water pressure. That is the stuff that I am hearing from our members who are out there around the problems in these buildings when they are not properly certified.

Mr JAMES GRIFFIN: I thank all three of you. Having heard your evidence, I understand that there is alignment, good purpose and sense in supporting the legislation, this Bill. Do you support this Bill as a standalone piece or should it be seen as concurrent with the other Bill?

Mr MOREY: I do not think it is a matter of one or the other. There are two bills here together. They complement each other. We are supportive of both of them. We think they should just both go through together.

The CHAIR: One concern expressed about the Professional Engineers Registration Bill relates to gaps in compliance—for example, the board does not have the ability to make stop-work orders and there is a requirement for notice to be given of an investigation that could actually hamper an investigation. Would like to see those areas strengthened in the Bill, or are those functions best achieved through the adoption of the Design and Building Practitioners Bill?

Mr MOREY: If it is okay I will take that on notice. I am not across that detail, so I would like to talk to our affiliates and come back to you if that is all right with you.

The CHAIR: Of course. That sounds good.

Mr PAPPS: Yes.

Ms YASMIN CATLEY: The registration of professionals and, in particular, engineers, has been spoken of for 18 years. Do you think that it is important that we get this done now in this Parliament?

Mr MOREY: That has been our position and the position in our paper. They are both there. They are both good bills—they complement each other. The stars have aligned for some reason. Let us just do it.

Ms YASMIN CATLEY: Before you arrived this morning the NSW Building Commissioner suggested that we continue to consult and we continue to look at them into the future. Is it your strong view—both the union's and yours, Mr Morey—that we need to get this done now?

Mr MOREY: That is the position of us and our affiliates, yes.

The CHAIR: Thank you for appearing before the Committee today. As we have highlighted, we may have some further questions in addition to the questions that you have taken on notice. We will send those to you in writing. Your replies will form part of the evidence and may be made public. Would you be happy to provide a written reply to any further questions?

Mr MOREY: Yes.

Mr PAPPS: Yes.

Ms LEVERINGTON: Yes.

(The witnesses withdrew.)

PETER ROSIER, Member of Property Law Committee, Law Society of New South Wales, affirmed and examined

The CHAIR: Would you like to make a brief opening statement?

Mr ROSIER: Thank you, members of the Committee, for this opportunity to appear on behalf of the Law Society of New South Wales. The Law Society of New South Wales recognises the importance of this legislation and supports it. It supports its purposes and understands the basic reasons why it is being promoted. The society recognises the very important role that engineers play in society generally but, particularly, in the building and construction industry. Recent building failures, such as Mascot and Opal towers, have highlighted the need for a stricter process of ensuring that those who design buildings are well qualified to do so. So, for those reasons, we are very supportive of the legislation.

We do not see it as being a piece of legislation that needs, necessarily, to follow the other cognate legislation, if you like. We think that it can stand on its own and, were there no incidents, such as we have experienced at Mascot and Opal towers—and probably elsewhere too, if the truth be known—it really would not matter because the fact is that this is legislation that has been outstanding for a long time. In the Law Society of New South Wales' view, professionals should be regulated and it should be clear and transparent to the public that if they engage a person with the title of "engineer", just as if they engage a person with the title of "lawyer" or "conveyancer", they have some assurance that the person is qualified to do the job and has the skills and experience for that purpose.

Our emphasis in this legislation, because we are not engineers and we probably do not know anywhere near enough to comment, really, on some of the technical issues, we nonetheless feel that there are some issues about procedural fairness which flow from the complaints and investigation parts of the legislation—part 6, I think. We have made some comments in relation to that and I am very happy to answer any questions that the Committee may have in relation to that.

The CHAIR: Thank you. I will begin with that. You argue that clause 101, which enables the creation of regulations for administrative reviews of decisions, should be dealt with in the Bill rather than by regulations. Could you elaborate on that?

Mr ROSIER: Yes. Our position in relation to the whole of the investigation and complaints procedure in any legislation—not just this legislation, but in any legislation—is that it is a process by which somebody's livelihood may be taken from them. Whilst perhaps not entirely as serious for the party concerned as being convicted for some nasty criminal offence, nonetheless it is a very, very serious matter. Somebody who may have trained for a very long time and done a lot of work slips up, somehow or other, falls into the hands of the complaint handling procedure and, suddenly, is found to have breached the standard expected of her or him.

That person is entitled, in the Law Society of New South Wales' view, to have a clear, transparent and fair process for the complaint against them to be dealt with, whatever the nature of the complaint. Part of that process is that it is accepted that there should be a process by which professionals engage in the process—those with skills, those with experience—to examine whether or not the engineer concerned had departed from good practice, and make a determination.

Ultimately, and it is a sad fact of life, tribunals and those who move the complaints handling procedures get things wrong from time to time. It should not be left to the whim of the government of the day to be able to withdraw the right to go to have a review, and that is our simple position. It is an essential part of the process, and it may be said it will be in the subordinate legislation, and that may well be true, but, as we know, it is possible to change subordinate legislation with consummate ease—or near consummate ease—and, as a consequence, we say it should be enshrined in legislation and the Parliament should have the final say as to whether or not there should be a right of review, and we would hope sincerely that it never gets to that.

The CHAIR: You also recommend that any registration scheme should require compulsory professional indemnity insurance for engineers. Could you provide further comment on that and why you feel that is so important?

Mr ROSIER: It is the underpinning of the professional standard of the organisation. We are all no doubt aware of the existence of the professional standards legislation and how that underpins the ability of professionals to carry out high-value work and do it confidently, knowing that if they happen to make a mistake there is a ceiling to the amount for which they will be liable, but there is an amount for which they will be liable if they have been proved to have departed from a proper standard. It gives comfort to those who engage them and it ensures that there is a remedy for somebody who suffers as a result.

A lack of professional indemnity insurance is, I would have thought, not something that would be remotely—it does not seem credible not to have a scheme of professional indemnity insurance when, for instance, certifiers have to have professional indemnity insurance and right now they are struggling to get it, largely because of the cladding issues but also because of things like the building problems we have experienced. So we think it is a very important concept.

The CHAIR: This question does not relate directly to your submission, but lawyers, unlike politicians or engineers currently, have a registration scheme. Could you provide us with information of how that registration scheme works and the role of the Law Society of New South Wales within that?

Mr ROSIER: I certainly can, Chair. A lawyer is admitted as an officer of the court by the Supreme Court of New South Wales and they have to conduct themselves in accordance with the rules. So when you are admitted as a solicitor, independent of your membership of the Law Society or any other professional body, it is your obligation to act in accordance with the dictates of the Supreme Court in the conduct of your practice. But, of course, there is legislation in the form of the Legal Profession Uniform Law now, which is staggeringly one of the longest pieces of legislation in the New South Wales statute books—which says something about lawyers, I suppose—and it sets out the sorts of obligations that lawyers have.

Subordinate to that, of course, are the solicitors general rules, and they set forth a code of conduct, if you like, in those areas of how a solicitor ought to practise in those areas where practise is conducted—for instance, litigation, conveyancing matters, not talking to the other solicitor's client and so on. So there is a series of rules and they are adhered to I think pretty strictly. If it becomes apparent, either by complaint or by some other cause, that a solicitor has departed from the general rules of conduct, the matter is referred always to the office of the Legal Services Commissioner—in this case, Mr McKenzie—and he then by and large, generally, delegates that to the Professional Standards Department at the Law Society.

The Law Society Professional Standards Department then considers whether or not there is merit in conducting an investigation, but then if it decides to it informs the solicitor and gives the solicitor a copy of the complaint or a detail of it if the complaint does not take a formal form, and the solicitor is given an opportunity to respond to that complaint. The matter then is determined by the Law Society's Professional Standards Committee. That committee consists of a number of members including lay members and that committee considers whether or not after the investigation has been conducted by the Professional Standards Department and on the basis of that investigation and report whether or not there are sufficient grounds to refer the solicitor to the NSW Civil and Administrative Tribunal to determine whether or not there has been misconduct on the part of a solicitor.

Of course, the other side of the coin, the civil side if you like, is that there are many and frequent negligence searches against solicitors. Solicitors have, since the collapse of HIH—at which time we held some \$104 million in a mutual fund against our liability for second and fourth level cover I think—we established our own law cover and it now protects the solicitors of New South Wales with a policy that is virtually a policy for life; it has cover for claims that come well after you have retired. So there are two streams: there is the disciplinary stream, which is extremely effective, and the stream for civil liability, which also ensures clients have ready access, which goes back to our point about professional indemnity insurance.

The CHAIR: Thank you. The member for Wollondilly?

Mr NATHANIEL SMITH: The New South Wales Government in its submission argues that using a board of government's framework would be inefficient. What is the Law Society's opinion on this and what alternative do you suggest?

Mr ROSIER: Just as you were getting to the nub of the question, I could not hear because of the drilling.

Mr NATHANIEL SMITH: I will ask it again, and I will go close to the microphone. The New South Wales Government in its submission argues that using a board of government's framework will be inefficient. What is the Law Society's opinion on this and what alternative terms can you suggest?

Mr ROSIER: A board of governance is the model in the Bill, I think.

Mr NATHANIEL SMITH: Yes.

Mr ROSIER: I do not think we have considered that really. The model adopted in the certifiers legislation is that the secretary effectively takes the role of what would be the board here. I think one of the things about a profession is that it really should be able to, at least at the first instance, be able to regulate itself for a number of reasons. One, a good profession has high standards. It believes its members should—any good profession, whether it is engineers, architects, lawyers, doctors—the belief is that the professionals are good at their job and they should be held to a high standard. As a result, I think most professionals would prefer to regulate themselves at the first instance and there should be an oversight.

The methodology and the certifying legislation is very much bureaucratic. For me, it just has the sense that—the poor old secretary, I do not know if he ever gets to bed if you read what his obligations are under the legislation. I appreciate that it will not be him who ultimately makes the decision, in all likelihood, but the fact of the matter is that I think that is unduly bureaucratic, and it is good to have people who know the industry, know the profession, know what the standards are, having a look at the issue in the first instance. It is not perfect. I do not think in our profession, for instance, that there are all that many people, given the number of services that are provided, who successfully complain about lawyers.

I am a costs assessor—I have been for 20 years—and we look at complaints about costs between solicitor and client, a lot. It is amazing but in a year there are about 1,200 complaints about lawyer-client costs out of what must be millions and millions of transactions. That is the sort of level you would find with engineers. You are going to find not all that many but the complaints that come need somebody who knows the business, who knows how you conduct the business. I would think—this is my view—if this legislation were to go through the board should, in fact, be in some way funded by the professional associations or by way of a levy on the engineers themselves. I do not think the public purse should be looked to at all for that funding.

That is a personal view. That is not the view of the society because we have not consulted on that. If you want a more formal view, then I am happy to take it away.

Ms YASMIN CATLEY: Thank you for being here today, Mr Rosier. If there were not a crisis in the building or construction industry, would you still think that there is a need for a register and regulated engineers scheme?

Mr ROSIER: I do. I am really quite surprised that we do not have one. I have always been surprised. I have been saying this for 47 years. Frankly, on a number of occasions I have come across difficulties with engineers. You say, "Well, how is this person an engineer? What qualifications do they have to call themselves an engineer?" There is not one. It is a bit like accountants: you just put your plate up and say, "Here I am. I am an engineer. Hi, do you want to build a bridge?" I think the public is entitled to know that if they go to someone who calls themselves an engineer, they can have some confidence that that person has the requisite skills and experience, that has been tested by some external process, to do the job. It is as simple as that.

Ms YASMIN CATLEY: Would you agree that it is a government role, just as it regulates lawyers and other professions, that it regulates engineers?

Mr ROSIER: Absolutely. We are all for small government but government has to play a role in our lives generally, and it is surprising that when government does not play a role there is usually a large kerfuffle because people say the government should have been involved earlier. I think we are seeing a bit of that now. I think it is entirely appropriate that there be this legislation—Mascot Towers, Opal Tower or not.

Ms YASMIN CATLEY: You talked earlier about the robustness of your own professional organisation. You said that it raises confidence in your profession. Would you see exactly the same happening with the registration of engineers?

Mr ROSIER: I would think so.

Ms YASMIN CATLEY: You also referred to the complaints mechanism. Thank you very much for your submission. I have read through that. Do you believe that the Bill, as it stands now, should not continue because of what you have raised, or should it continue, given that we have been waiting 18 years for some sort of registration scheme?

Mr ROSIER: If the legislation were to fail to pass because of the issues we have raised, I think it would be better to allow the legislation to go through and then allow time to tell just how right we have been in our submission, if you like. I think the Bill is flawed in a number of ways. I am concerned that section 62 implies that the board can get a report and then make a determination about disciplinary action that can be taken, but then it goes on to say, "Oh but if the board thinks there are grounds for the complaint, they can go on and make an investigation." But nowhere does it actually say what the powers of the board are in relation to disciplinary action.

I think it should be clearly stated that "disciplinary action" means X, Y, Z; "undertaking", promise never to do it again; "fine", "suspension", "cancellation" and so on, so that you can say that after the board has considered the complaint, these are the things it can do. That would be our submission but if the Bill were likely to fall over because you could not get changes to it, it would be a great shame. As I say, we support it.

Mr JAMES GRIFFIN: Thank you for your time. You have expertly outlined why the regulation of this very important industry is critical and you commented that, essentially, it can affect the livelihoods of people in many different forms. A registration scheme goes some part of the way but, to your comment earlier, the enforcement of issues and incidents that occur is a critical part of any bill that is passed. An observation that I have made this morning is the complementary nature of this Bill and the Design and Building Practitioners Bill 2019. I understand enforcement is critical. Do you have a comment on that?

Mr ROSIER: Oh yes, enforcement is critical. I have been appointed the New South Wales Law Society's representative on the expert panel—what Commissioner Chandler calls the "regulatory pillar". It sounds a bit like Lawrence of Arabia. It is clear from what Commissioner Chandler is saying, and it is clear from the approach he is taking towards the regulation, that ensuring that practices that are likely to cause loss and damage to consumers need to be punished. They need to be punished in a severe way when the damage is significant or in a less severe way where the damage is not so significant, but it is important to allow the party to never possibly commit the same error again. So, you need a range of things you can do to a practitioner, and a skilled organisation will recognise from the material that comes to them what the appropriate response to a particular departure from good conduct is. But you do need it.

Commissioner Chandler was saying the other day—I do not think I am speaking out of turn—that his approach is: once he gets his powers he will go to building sites and if he sees a wet area that is not designed, that has been done on the fly, he is going to go to the builder and say, "Stop, and come back to me with a design and I'll consider whether or not I'll use it." That is the sort of thing that stops the thing when it is there but you need somebody behind that to say to the builder or the engineer or the architect—whoever has certified the plans—"Look, you departed from good conduct here because you should have had a set of plans for these wet areas." There are a range of things you need to put in place in order to achieve the result. One of them is just being able to discipline members of a particular profession. Does that answer your question, by the way?

Mr JAMES GRIFFIN: It does, yes. My concern was around the potential lack of enforcement powers of this particular Bill, but you have made your point.

Mr ROSIER: I think enforcement is good and to state what the powers are of enforcement, including, if necessary in particular examples, stop work orders. Hopefully the complementary legislation, the certifier legislation and the certification legislation, as well as the building certifier legislation, will play a significant role in preventing mistakes such as we have seen. They are terrible, these mistakes. This is the problem. I have described them as catastrophic not because the building has fallen down but because the individuals who are involved are subjectively facing a catastrophic financial circumstance.

It is distressing, frankly, to see people whose whole livelihoods, whose whole lives, whose whole financial future is invested in a strata unit that suddenly becomes virtually unsaleable—and, if unsaleable, it has lost all value. Something really needs to be done and I see this as being part of that, and our society sees that as being part of that.

Ms FELICITY WILSON: The Building Commissioner, when he spoke with us earlier this morning, was talking about sophisticated and unsophisticated participants in the industry. He was comparing the Design and Building Practitioners Bill with the Professional Engineers Registration Bill. He was talking about class 2 buildings, residential high-rise in particular, being the area of greatest risk and greatest need for us to act at the moment—if I may paraphrase what he said to us earlier today. You were just speaking then about the types

of impacts on people. Would you agree, when looking from that risk perspective, that this is the segment of the market where there is the greatest risk and the greatest need to act at the moment—these unsophisticated participants?

Mr ROSIER: I think undoubtedly that is true. I think if government build a bridge, they are big enough and ugly enough to be able to say, "Look, this is substandard. Take it down and rebuild it." In fact, they are big enough and ugly enough to make sure that it does not go up like that in the first place. Unfortunately, we have had a number of people in the business who say—and it is the current fashion to enter into these design and construct contracts that basically say—that the architect will prepare a pretty picture and the layout of apartments but not actually tell the developer how it is going to be built. The developer goes to a builder and says to the builder, "How do we build this? I do not care how you build it, just so long as it looks like the picture when it is finished."

In the process, an enormous amount of damage has been done because money has to be saved by building it in the cheapest and easiest way possible. I fear it just has led to catastrophic loss in some cases, and it is important that something be done to assist those who have no way of knowing whether or not a beam was properly engineered in a car park. There is just absolutely no way of knowing. You have got to trust the people who built it, that they did it having regard to the skill and experience of an engineer or a designer of this sort of building was at the level of competence to do it safely. I came to the conclusion, and I made a submission early in the piece to Fair Trading—and this is me, not the Law Society—that the best way of handling this at this moment is to actually establish a fund along the lines of the Earthquake Commission fund in New Zealand.

The government would probably have to fund it at the outset but, from levies, they would be repaid. That deals with the consequential catastrophic loss suffered by individuals because you have got a fund big enough and large enough to be able to meet the sorts of costs that the poor people at Mascot Towers are having to meet. It is not because the builder did not do the wrong thing. It is because time has run out. Why we have a time limit, in one sense, on buildings that are supposed to last for 50 years about an element of the building that is so crucial to it standing there in 50 years time, I do not know. But we do.

Ms FELICITY WILSON: That would be similar to the mine remediation fund as well. The last question I have relates to one of the other things the Building Commissioner said earlier today. He was talking about the models by which you look at recognising skills, accreditation, governance and accountability—the different range of goals that the registration of a professional entity aims to undertake. He was saying that there are different means by which you could do that. There are a range of models that you could use. He has presented just to us; I would not expect you to have seen that. He did commission some work from Bronwyn Weir to look into some of those different models, which I think they will be discussing with industry over time. I am sure you will be able to have an overview of that.

I understand you were speaking a bit earlier about, for instance, the Law Society and the way in which you manage participants in your industry. I do not believe that the Law Society's registration or licensing of solicitors—is that an Act of Parliament? What is the model by which it exists, what is prescribed through statute and what is determined from within the body itself?

Mr ROSIER: Sorry. I did not deal with that when I was answering the question earlier. The process is you are admitted as a lawyer. You can then determine whether or not you want to be a barrister who voluntarily agrees, in general terms, to accept briefs from solicitors and act only if briefed by a solicitor—that has changed but generally that is still the case—or you can become a solicitor. If you become a solicitor you go on the roll of solicitors and 93 per cent of you will join the Law Society and become members of the Law Society. But whether you do or you do not, you are regulated by the Office of the Legal Services Commissioner.

You are admitted, you have to pay an annual practising certificate fee, and you have to show you have professional indemnity insurance and that you have done the requisite number of hours of compulsory professional development for the 12 months preceding the application for renewal of your practising certificate. If you do all that, you will get a tick and your practising certificate will be renewed. If you hold trust moneys you have to have an audit, by an auditor appointed by you, of your trust account to show that it complies. The report goes to the Trust Accounts Department of the Law Society whether you are a member or not and they examine the report and decide whether or not, if there are any qualifications, it requires any investigation.

Every so often, depending on the level of risk perceived by the Trust Accounts Department of the Law Society, the Law Society will send out a trust account inspector to look at your trust account quite randomly. That trust account inspector can report back any error that they see in the way you keep it. That is the general way in which you become a solicitor: You apply for your practising certificate, you show your qualifications, you show that you have done the requisite pre-admission training and then you get your certificate. And then, every year, you have to renew it in that way.

Ms FELICITY WILSON: What about poor performance? Who manages that accountability?

Mr ROSIER: It depends on how poor the performance is, really. If it is shockingly poor, it will be treated as a disciplinary matter. Then it has to be quite shockingly poor.

Ms FELICITY WILSON: Is it the Law Society that administers that?

Mr ROSIER: No, always the Office of the Legal Services Commissioner has the first bite at the cherry, if you like. He is not very well resourced and I think it is appreciated that he wants to look at particular and difficult cases that may have an overview—I cannot speak for him but this is my observation—that he thinks it is something he should look at rather than the Law Society. But otherwise he refers it to the professional standards department of the Law Society and they then take up the cudgels and decide whether they are going to investigate. And if they do and they come to the conclusion that there has been naughtiness, it goes off to the Professional Standards Committee, and if they find it has been sufficiently naughty, then it is likely that the NSW Civil and Administrative Tribunal will find professional misconduct or unsatisfactory professional conduct, then proceedings are commenced at NCAT for disciplinary action.

Ms FELICITY WILSON: NCAT is essentially the governing body that will revoke somebody's—

Mr ROSIER: Yes, it is NCAT.

Ms YASMIN CATLEY: That model that you outlined for us, obviously there are three different models that apply to very different industries, what elements of that are within the statute and what elements of those have been crafted by the Law Society for its practices over time through consultation? What is prescribed and what is determined internally within the industry?

Mr ROSIER: The processes are statutory. The application of the processes to individual cases is largely a matter of precedent and case law. So the application of a particular section in relation to a particular issue, for instance a solicitor puts his or her signature to a statutory declaration when the party making the declaration is not before the solicitor, that is a hanging offence. It has been said to be a hanging offence, so it would be very unlikely that if a solicitor appeared before NCAT with that, that they would not face suspension or cancellation.

Ms FELICITY WILSON: Is your understanding that this Bill would replace the role that NCAT plays with the board that is proposed?

Mr ROSIER: This is more your Building Professionals Board model.

Ms FELICITY WILSON: So you are talking about the Building Professionals Board instead of the new board that the Engineers Bill proposes?

Mr ROSIER: The Building Professionals Board, this is a similar sort of model to the Building Professionals Board model. I think as long as at the early stages the question as to whether or not there is a supportable complaint, a complaint that is based on good evidence, is best in the hands of the professionals, those who know. This Bill seems to me to imply heavily that there will be such oversight of complaints because an authorised officer with the extensive powers given by part 7, they have huge powers but they can call in aid somebody with expertise in order to conduct an investigation and make a report. I think that is important. I think the idea that you get a person with knowledge to assist an authorised officer is very important. At the same time our concern with that is the independence of the party who is brought in.

Ms YASMIN CATLEY: The current situation is that there is not an opportunity for enforcement or performance management and you quite rightly talked about how important it is to have a professional registration scheme for professional organisations. Do you therefore agree that it would benefit performance, enforcement and compliance by having a professional engineers registration scheme?

Mr ROSIER: Absolutely. The lacunae, if you like, that will become obvious if the scheme is not working as it is planned to, can be dealt with in subsequent legislation. If you just look at the way—

Ms YASMIN CATLEY: Or regulation.

Mr ROSIER: Or regulation. The way the legal professional legislation has developed over the years, there is an amendment every couple of years.

The CHAIR: Thank you Mr Rosier. We may send you further questions in writing. Your replies will form part of your evidence and be made public. Would you be happy to provide a written reply to any further questions?

Mr ROSIER: Of course, yes. Thank you very much for the opportunity to address you.

(The witness withdrew.)

(Luncheon adjournment)

FRANCINE MARIE BINNS, Chief Executive Officer, Institute of Public Works Engineering Australasia (NSW), affirmed and examined

WILLIAM GEORGE BARTON, Board Director, Institute of Public Works Engineering Australasia (NSW), affirmed and examined

ELIZABETH ANNE TAYLOR, Deputy Chair, International Engineering Alliance Governing Group, Australian Academy of Technology and Engineering – NSW Division, affirmed and examined

ROBIN WILLIAM KING, Hon. Sec. Australian Academy of Technology and Engineering – NSW Division, affirmed and examined

JONATHAN ASHLEY BRINSON, Executive Director, The Warren Centre for Advanced Engineering, sworn and examined

PETER FREDERICK JOHNSON, Fellow, The Warren Centre for Advanced Engineering, sworn and examined

The CHAIR: Good afternoon. Thank you all for joining us this afternoon. Would anyone like to make a brief opening address?

Professor KING: We would like to on behalf of the academy.

Mr BRINSON: Honourable members of the Committee, my name is Ashley Brinson. I am the Executive Director of The Warren Centre for Advanced Engineering at University of Sydney. I am a fellow of Engineers Australia, a fellow of the Institute of Chemical Engineers United Kingdom, and a professional engineer registered in the Commonwealth of Kentucky in America. Our centre commemorates Professor Warren, who gave the first engineering lecture on this continent in 1883. I also introduce my colleague Peter Johnson, our visiting fellow and technical leader on a project that we are currently undertaking on the professionalisation of fire safety engineering. Peter is a fellow of ARUP, a fellow of the Australian Academy of Technology and Engineering [ATSE], a fellow of the Institute of Engineers Australia, and has extensive international experience over 40 years in fire safety engineering.

The Warren Centre fully supports the Professional Engineers Registration Bill. We are currently undertaking original independent evidence-based research on fire safety and the essential need for greater professional definition for those engineers who design residential and commercial structures. We currently have new research on fire safety engineer regulation in the Australian states and territories, the education of fire safety engineers internationally, the design methods used, the role of fire safety engineers in both complex buildings and the complex commercial contracting systems that are used today and newly developed competencies for engineers.

We are presently developing research for education reform, new accreditation and registration recommended reforms and transition plans to go to a proposed future state for fire safety engineering in New South Wales and across Australia. Our research indicates that a culture of professionalisation in engineering is critical to future success. Over time greater professional identity will yield social, economic and safety improvements. Peter and I look forward to supporting the inquiry. Thank you.

Professor KING: Professor Elizabeth Taylor and I are both fellows of the Australian Academy of Technology and Engineering and both honorary fellows of Engineers Australia. ATSE is a non-profit and non-political learned academy of independent technological scientists and engineers elected by their peers. About half of the 800-plus academy fellows identify as professional engineers through their education and fields of practice. This practice is in industry, government, research and universities. ATSE believes that a strong Australia requires all its professional engineers to operate with high levels of engineering knowledge and practice. They will provide solutions to many complex, economic, environmental, human and social challenges.

Looking forward, these will be future-proof and innovative. They will include cross-disciplinary and multidisciplinary areas in fields such as medical equipment, intelligence manufacturing, cybersecurity and the internet of things, all of which have potential for great benefits but also potential harm. Their solutions will need to be increasingly robust and adaptive, commensurate with community demands. Australians need to be confident that work conducted by and supervised by professional engineers is up to scratch across all fields including in the building industry. ATSE therefore endorses initiatives to raise the standards of the profession in Australia through proven means such as professional engineers registration.

Adding New South Wales to the registration systems in Queensland and Victoria would make a substantial contribution to nationally uniform standards and expectations—standards that are already operating in many countries in which Australian engineers work and which Professor Taylor is actually a senior representative of the international body. The processes proposed in the Bill for managing entry, maintenance and removal of engineers on the proposed register are tried and tested. ATSE regards the provisions in this Bill as a good step forward to reliably raise the standard of professional engineering practice in New South Wales. We also recognise that other regulatory provisions will be necessary to meet some of the specific requirements for ensuring design and change and behaviour in the construction and building industry.

Mr BARTON: Good afternoon. My name is William Barton. I am a board director with the Institute of Public Works Engineering Australasia in the New South Wales division. I am joined by our CEO, Ms Francine Binns, this afternoon. Thank you for affording IPWEA (NSW) the opportunity to be here today. We are a charity with the ultimate purpose of enhancing the quality of life for New South Wales residents through excellence in public works and services. At this point I take the opportunity to acknowledge the tireless work done by our members and other public works professionals across the state in responding to the recent natural disasters.

To make our position clear, IPWEA (NSW) supports the Engineering Registration Bill. We take the view that the most appropriate way to regulate professional engineers in the building and construction industries is through a state and national registration scheme. Engineers are not currently regulated in New South Wales as they are in Queensland and Victoria and there are requirements for other occupations to be regulated in some manner in New South Wales—plumbers, for example. This gives rise to the situation where, for example, should a person wish to pursue an occupation changing washers and moving taps they must be regulated, but if, instead, to oversee the management of some part of a public road network which sees between 350 and 400 people killed and approximately 12,000 critically injured each year, there is no such requirement or minimum standard that they must meet. This Bill would address this and other similar shortfalls in community expectation.

The focus to date has understandably been on the residential building and construction industry and we understand the reasons for and accept the reasons for that given the events of the Opal and Mascot towers. This acute focus on residential tower buildings, however, poses significant concerns for the institute and raises substantial questions when we begin to consider things such as the movement of engineers through industry, the multifaceted nature particularly for regional engineering, and the attractive force of an unregulated market for engineers for those in Victoria at a time when that state is tightening their own standards. Again, this Bill would address this.

Furthermore, IPWEA (NSW) holds significant concerns with respect to the long-term supply of appropriately qualified engineers into the local government sector, the sector which provides the core critical infrastructure that every resident of this state relies upon each and every day. A registration scheme focused only on a limited number of disciplines in a multidisciplinary profession has the significant potential of creating a two-tier profession with the public works industry being relegated to the lesser tier and the New South Wales community being the ultimate loser.

The CHAIR: I begin with a question on that point—all my questions will be to all organisations. Obviously, if you had heard the evidence this morning, there was a lot of discussion not just about the purposes of the Bill, the broad registration of engineers, but a specific focus on the building and design industry. Following on from your points, do you see that both models that are being put forward, those outlined in the Bill that this inquiry is looking at, and then specifically the additional requirements in the Design and Building Practitioners Bill, that they would work in a complementary way with each other?

Mr BARTON: If I may, I am not as familiar with the latter Bill as the Professional Engineers Registration [PER] Bill. My understanding is that they certainly would not be in conflict with each other, that the specific requirements around registration of various professionals related to the building industry could be supplemented by the Professional Engineers Registration Bill. That is, it could point to the PER Bill as the benchmark for the registration of engineers.

The CHAIR: Any additional comments from anyone else?

Professor KING: I would also say, I have not studied and the academy has not considered the other Bill in any detail; however, we have observed I think in our submission that the range of engineers that is required in the building and construction area gets ever wider as the complexity and demands of construction and building grow, and therefore narrowing the scope of any such provision around this inevitably produces limitations. But, as I said at the end of my opening statement, we basically see the two bills as being somewhat complementary. We understand they are both aiming at slightly different outcomes.

Mr BRINSON: The Warren Centre supports the broad registration of engineers and points to the necessity for raising the general professionalisation of engineering as a benefit to society. We gave a three-page letter and then a 32-page report appended on comment for the Design and Building Practitioners Bill and those comments are here somewhere. Culture is at the core of all of this, I believe.

The CHAIR: On that point—again, to everybody, and this may seem like a very broad question—all of you have identified risks in not having a process of broad-scale registration of engineers. How do you feel that such a registration scheme would strengthen community trust in professional engineering services?

Mr BARTON: If I may begin, for us it is quite focused on continuing professional development. Our industries are filled with ageing engineers. These are engineers who have been in the industry for 30, 40 years. There has been a lot of change in that 30 or 40 years. That is not to say that they have not always kept up to date. But a registration scheme which puts a requirement on professionals to ensure that they remain abreast of the most recent advancements in road safety, crash investigation, design of bridges, for instance, would go a long way in restoring or ensuring public confidence in engineering as a profession. Similarly, the accountability aspect of it. There is nothing at present preventing somebody from claiming to be an engineer, when they are not, or continuing to claim to be an engineer when they have fallen short of that mark. They are the two primary things for us.

Mr JOHNSON: I can perhaps add, as Mr Brinson suggested, culture is at the core of this, but also competency. What registration schemes do is particularly set out the requirements for competency and I think the concerns have been out in the broad industry of people who do not have the required competency; for instance in our case, designing buildings and their fire safety without having the requisite qualifications or experience or ongoing continuing professional development. So competency I think is a key part of this and ensuring then that the practitioners who are out there are registered engineers with the required competency. Part of that comes to the whole question then of audit and enforcement to ensure that those who are practicing on an ongoing basis continue to be competent and understood to be competent in order to do the job properly.

The CHAIR: Professor Taylor?

Professor TAYLOR: I would like to come from the point of view that I was the inaugural chair of the Professional Engineers Act of Queensland and I ran that board, as chair, for 10 years. I have got a little bit of background in the area in terms of your question about how that increased the accountability of engineers in that state. Particularly in an area which we perhaps had not thought of but where a lot of engineers were captured by developers, we were able to make a significant improvement in public safety and in the capacity of the community to actually find out who was registered and therefore working appropriately in their interests, rather than the interests of those that were paying their bills.

The other part of that journey that I went on at that time was to really try to tease out the difference between engineers who were working within the building area and the Building Code of Australia [BCA], and working with trades people, with developers, with the whole very important group of people there, is that we want engineers to also be at the leading edge of innovations. The systems that are set up often in the building area are for those that can follow a defined design methodology. So the aspect that the Professional Engineers Registration Bill is able to tease out is where we are, as we do with lawyers, as we do with medical people, as we do with any other profession, how do we deal for that part of their work that is about innovation, that is about future proofing our communities and to keep them accountable, yet free to do that innovation?

And that is not necessarily something that happens within the BCA world. So, you need both, but it is important to understand that as our systems become far more complex, as has been said by everybody earlier, as our buildings are now sort of combinations of communication systems as well as physical artefacts, that we need to have people who we are keeping accountable in those terrains as well, and that is where the Professional Engineers Registration Bill sits.

The CHAIR: My next question goes to a specific aspect of the proposed legislation. I will start with Professor Taylor, given your experience in this space. The makeup of the board is something that is left in the Bill to regulations, in your view, and for other members as well, what is an appropriate makeup of the skills, qualifications and experience for a board that would oversee the registration process?

Professor TAYLOR: We had a community representative, we had—and you are dragging my memory a little bit here. What we were very keen to do was not be sitting there as five people trying to understand a constantly evolving discipline or profession because strength of engineering for the community is the fact that it is ever evolving. When I did engineering there was no such thing as biomedical engineering. So for five people to sit there and make structured statements about what is and is not in, that was why we moved to the idea of an assessment entity so that we could draw on the whole expertise of the profession, but at the same time have the types of people on the board who could represent the interests of all the different stakeholders.

So have enough engineering understanding to understand what the conversations were, have representation from the community, so that you are having the people who are also being impacted, and they can have a say. But the particular dynamics of the people on there would be something that would be—I cannot give a definitive answer here, but I can certainly give some ideas of what worked and what did not work for our board.

The CHAIR: That is extremely helpful.

Mr BRINSON: I would add that every few months I get a letter from the board of engineers in America, where I am registered, and inside is a list of actions that were taken against engineers who were registered or were not registered who broke regulations. I would add to what Professor Taylor stated that there needs to be some capability of due process and fairness, and awareness of those procedural aspects of due process on a board.

Professor TAYLOR: Just adding to that, of course, the Act gave us the right to prosecute under the law, which we did. We did have somebody who self represented all the way to the High Court. The whole mechanics of how you manage the budget in that situation is, of course, very interesting, and we can learn a lot from the way law does that.

The CHAIR: Mr Barton or Ms Binns, do you have any comment on a board?

Mr BARTON: From our perspective, we support what has already been said. In particular for us, the ultimate consumer having that voice and having that mechanism to be feeding in expectations and community expectations is something we would support.

The CHAIR: An item that has been addressed in a couple of submissions is the potential need for a requirement for professional indemnity insurance to be a part of the registration process. What would be the view of your various organisations on that? You are welcome to take it on notice if you would like to come back to us.

Ms BINNS: We will take it on notice.

Ms FELICITY WILSON: We have heard quite a bit so far today from the construction industry. I know that some of you—particularly the fire safety experts—will be involved in building and construction. I might just park the use of engineers as broad as anyone at the hearing can be within construction for a moment, because we do have this Design and Building Practitioners Bill, which we are also considering. I would just like to understand this. We have a high level of risk at the moment within the construction industry, particularly with class 2 buildings—residential high-rise buildings. I would like to understand from your perspectives where you see the risks within the different types of engineering. Mr Brinson, I think you must be a chemical engineer?

Mr BRINSON: I am a chemical engineer.

Ms FELICITY WILSON: In the other forms of engineering that are not within the construction industry, what types of risks are you seeing that we need to be aware of as legislators to prioritise registering broad engineers before addressing the construction sector reform, which is what the other Bill seeks to do?

Mr BRINSON: I will have a go at that. Across town right now the Committee for Economic Development of Australia and Parliamentary Secretary the Hon. Gabrielle Upton are leading a discussion with David Gonski and NSW Chief Scientist and Engineer Professor Hugh Durrant-Whyte. They are talking about innovation, research and development and the knowledge economy. When we look at those sectors of the economy that are highly innovative, some of those have risks, as was mentioned a few moments ago. The chemical industry and advanced biomedical engineering industry have risks.

The high-power industry—moving electricity with new zero-carbon solar powers across the continent—the aerospace industry and even cyber security and some of the highly information-intensive domains of engineering are all areas where the government should look at the expansion of the economy and the capabilities of Australia in the future and make sure that the reins of the horse are in the hands of competent, professional engineers. That is my view. I take that view not just because there is a registration system in the state where I lived in America a long time ago, but also because every province in Canada has a professional engineering registration scheme; Germany has a professional engineering registration scheme; Japan has a professional engineering registration scheme, and so does Singapore.

In the advanced economies of the world this is the way that they regulate engineering. If Victoria has a registration system and Queensland has a registration system, there might not be trust in economic development in New South Wales if New South Wales is left behind.

Professor TAYLOR: Could I add to that and go back to the culture statement that was made? Because we are talking about professionals who are often operating in organisations and as we want with our lawyers and as we want with our doctors, we want them to have a sense that their first priority is the health, welfare and safety of the community, rather than the sectional interests of their employer. If we have situations where there are

complex systems like roads or chemical plants being built, then having that opportunity to have within that system or organisation a role for a professional, as again you would expect your doctor or lawyer to have, is what the Bill is all about—giving that extra sense or level of capacity for those individuals to say, "No, within this complex arrangement I need to be considering my professional obligations to the community." At the moment we do not have that in engineering. Certainly, the professional organisations have tried to set that up, but without the force of law and the support of government, it is not as valuable.

Mr BARTON: The first priority—probably two aspects—is that with registration in Victoria and Queensland, anecdotally we are seeing engineers who cannot attain registration in those states coming into New South Wales. Our members are reporting an increase in applications from Victoria in particular. I would suggest that that would not be in the interest of New South Wales and our economy if we are starting to—how do I put this?

Ms FELICITY WILSON: Can I ask which field of engineering you are seeing that occurring in?

Mr BARTON: Local government, so predominantly civil engineering. That is not a good outcome for our communities. I suggest that there is a priority from that aspect to make sure that right across the eastern seaboard we are at least commensurate with the adjoining states and that those safeguards are in place to ensure that the right sort of engineer is in the right sort of role for our community's wellbeing. The second point is that while the attention has been on residential building towers, the risk profile is not that dissimilar for the other disciplines of engineering; it is just that with the residential towers that risk actually came to fruition. That risk profile is underpinned by an unregulated industry.

While that remains the case, there is a priority particularly for our public works engineers and our public infrastructure, where we have mums, dads and families travelling on roads that are being designed by people who do not necessarily have the capability to do that. That can have some long-lasting, expensive and traumatic consequences.

Professor KING: My understanding of the Opal Tower incident/accident and its investigation was that in some areas—in fact, in most areas—the design conducted by professional engineers was fine, as it happens. I know there are cases where that might not be the case. But the ultimate failure was because of the off-site manufacture of one of the slabs, for example, and not the specifications set by the engineers. I think the community is relatively lacking in understanding that you should never let an aeronautical engineer get anywhere near building or maintaining an aircraft, for example. That is not their job. An aeronautical engineer will work on the specification of an aircraft using the best scientific evidence for its performance etc.

But others will actually do the manufacturing and other mechanisms will be in place to ensure that the manufacturing, construction and maintenance is done by other people who are licenced. For example, licensed aircraft maintenance engineers will do that in Australia. The hierarchy and interconnection of the occupations and professions involved are quite complex and, of course, need to be as tight and as well managed, through good communication and documentation, as possible. I just want to make the point that in moving forward, I guess in the education of professional engineering, which is my particular speciality, we are ever stressing the importance of communication and cross occupational teamwork in the carrying out and implementation of engineering projects. Having professional engineers who are registered and understand these processes, some might believe, will, contribute to enhancing that.

Mr JOHNSON: I can add just one more thing. The risks in areas beyond what the building code look after, certainly infrastructure is a huge area, whether it is railways, roads, telecommunications, airports, all of those things that are beyond the control of the Building Code of Australia are areas in which there is a high demand for good engineering, the risks are very, very significant in terms of potential damage and life lost on-site and land use planning to do with industrial facilities. All of those are significant areas, certainly beyond the building code and what people might think of the building construction industry in which there are very significant risks and in which professional engineers play a very important role. The demands for the numbers of engineers in that field is really tight at the moment and difficult. We need to grow the numbers of engineers in that space to provide the engineering input into lots of those.

Ms BINNS: I will just going to pick up on a few points. The IPWEA works within the public works, engineering, services space. So when we have discussion we often talk about roads, we talk about water, sewerage and the infrastructure around that. When we want clean water in our communities or we want to make sure we do not have contamination through sewerage and things then we want to have trust and confidence knowing that when those things are looked after, when they are designed, when they are executed, that we have the confidence that they are done the right way. That builds into talking about the culture, trust and accountability and respect. We cannot have a good culture without ensuring that we have also those other foundations. That is why we support the Bill, to ensure we can have that trust knowing that these outcomes will be up to the quality they need to be.

Ms FELICITY WILSON: I asked you to put aside the building and construction industry for those comments. We have evidence that the building and construction industry should be considered noting the risks that you raised in other sectors. The key difference that has been put to us is that the participants in the types of infrastructure projects you might be referring to are highly sophisticated participants. If you are building roads or airports, even outside the scope of the building code of Australia, the participants on each side of that, the people delivering and the people contracting that work are highly sophisticated. Whereas the residential development, different high-rise and individuals are unsophisticated in understanding and engaging with contracts and understanding the way in which work is undertaken.

I know that Professor King referred to the Design and Building Practitioners Bill. I am not sure if The Warren Centre or Institute of Public Works Engineering Australasia had a chance to look at that piece of legislation as well. That is part of the consideration that we are looking at in this Committee. I wanted to know whether you had a view about whether the Design and Building Practitioners Bill, with those risks, would be best to take place first and then a broader registration of engineers to take place following that?

Mr BRINSON: The Warren Centre gave comments on the Design and Building Practitioners Bill and we said that it was a good step in the right direction but especially that high hazard industrial hardware design—chemical, power, aerospace—should be regulated. We noted that a Chinese engineer can come to Australia and practice in engineering, not in Queensland or Victoria but in New South Wales, but a New South Wales trained engineer could not go to China and build a high pressure steam line because there is a law that prevents that and it is registration of engineers in China. These were the comments that we added but otherwise it is a step in the right direction.

Mr JOHNSON: I would add perhaps while we have had a number of instances related to class two buildings, fires and other sorts of things are rare events. There is no guarantee that the next major event that occurs in Australia will be in the residential area, it may be in warehouses, it may be in retail, in other types of buildings where there is significant numbers of people involved. I think that is why I would certainly see the need for this to be broader than just residential buildings. We know there are residential buildings because we know there are significant risks, as we talked about, in a range of these things. We do not know where the next incident of any magnitude is going to be.

Mr BARTON: To the point of the high capability performance of those other industries, while we have some of the finest engineers in the world, I would wager, working in councils across New South Wales a recent survey, I think it was late 2018 from memory, of all councils, of which all but 19 responded, found that there approximately 30 per cent of engineering roles are being performed by non-engineers. Furthermore, only 16 per cent of those degree qualified engineers in engineering roles are actually chartered which I would suggest is the benchmark for a professional engineer. That has got a mixture of reasons why. I am sure one of which I would suspect is that we do not have a registration scheme and that causes issues for pathways for skill development for developing the necessary skills to service those communities.

The other point I would make is that this takes, to introduce such change, particularly for regional communities, a lot of time. If we were to move down the path of requiring, for instance, a registered engineer to be present in every council, for instance, that will rightly take time for those communities to adjust and develop strategies to get these people. With that in mind and the risk being there every day I would suggest that now is the time to act and not in the future.

Ms YASMIN CATLEY: Further to the deputy chair's question in relation to sophisticated consumers versus unsophisticated consumers, do you think that is a sensible and efficient way to regulate the entire sector?

Mr BARTON: If we are talking about sophisticated consumers I would suggest that when we talk about public works infrastructure—

The CHAIR: I think it was about practitioners, not consumers.

Mr BARTON: Can you repeat the question?

Ms YASMIN CATLEY: There was the proposition put forward that sophisticated consumers are in your area, in local government and the like, versus those who are unsophisticated. Is that a way for the state to be regulating for the ensure sector? We are separating the two, the class 2A, for instance. I think that is what the deputy chair was getting at in her question, and then the rest of the sector?

Mr BARTON: No, we would take the view that it is a risk-based rather than an assessment of the sophistication of the practitioners. I suppose that is unsurprising given that I am an engineer and that we are engineering—

Ms FELICITY WILSON: I was talking about consumers, not practitioners, if you are responding to something I asked.

Professor TAYLOR: Could I just tease that out a bit more. If we look at something like Opal Tower it was being built by sophisticated groups for sophisticated groups and it was the buyers themselves who did not have the knowledge. The owner, the developer, all of the players who actually built it in the first place were sophisticated.

If I look at my experience in Queensland; at the beginning when we first started most of the people we prosecuted came from New South Wales where, for example, houses of the public, a whole lot broke in two because the engineer had not done the soil analysis or said he had and had no training in the area. He said, "I am an engineer and I can do it", and signed off on it and we were able to prosecute him and remove him from the register.

That was an opportunity for unsophisticated buyers to get rid of an engineer who was causing enormous financial burdens onto an unsuspecting public. The Professional Engineers Act was able to cover that terrain of the inequality in understanding that you are considering and I absolutely agree it made a big difference. There was a cohort of them up in Cairns and we were able to break that little cohort. I am very proud of it.

Ms YASMIN CATLEY: Professor Taylor, further to your comments that you made earlier in relation to needing to be adaptive and innovative, there has been a lot of discussion today about the make-up of the board. I therefore ask what your view is on ensuring that that would be in regulation so that you could continually have that adaptive approach which you have talked about. I think you have talked about that as well, Mr Brinson. What is your view on that?

Professor TAYLOR: Beyond agreeing with you, I think that would be a good idea. It would be sensible to have that in regulation.

Mr BRINSON: I have read the submission from the Law Society of New South Wales. On 4 February, after submissions closed, we convened a conference at the University of Sydney with 24 keynote speakers and analysts. We had the Society of Construction Law Australia there. There is a group of lawyers that are very committed to engineering space. I am also a lawyer at the Supreme Court of New South Wales. There is a body of people there that could easily operate a board of professional engineers with capabilities that are both technically minded and due process/fair government minded. I think you would find a number of people very close to this address that could sit on a board of professional engineers.

Ms YASMIN CATLEY: Thank you very much for that. Mr Barton and Ms Binns, thank you both very much for all the work that local government would be doing in this time of fires. You started with that and I thank you very much for that. Closer to my neck of the woods it is also a time of floods. We are having raw sewage through our properties, unfortunately. How long have you been calling for registration for your sector?

Mr BARTON: I joined the board in 2014 and my recollection is that it was on the agenda then.

Ms YASMIN CATLEY: So it has been quite long held. Do you feel the consultation process in relation to the Professional Engineers Registration Bill has been appropriate?

Mr BARTON: I do not particularly have a view on whether it has been appropriate or not. It is the first one I have been involved in so I—

Ms YASMIN CATLEY: Oh, okay. That is because it is a first for New South Wales.

Mr BARTON: That is right.

Ms YASMIN CATLEY: You could talk further to Professor Taylor in relation to that. Would you think that it is appropriate for only some engineers in a firm or on a project to be registered while others are not?

Mr BARTON: No, I would not.

Ms YASMIN CATLEY: Do you think that this Bill fixes that problem?

Mr BARTON: I feel this Bill would fix that, yes.

Mr NATHANIEL SMITH: Thank you all for coming today. We have heard from many people giving their evidence at this hearing. One of the things that has come through throughout the day is that skill shortages are a problem throughout the industry. Would you agree that a full registration scheme should be done over a period of time in a transitional manner as opposed to just rushing it through all at once? That question is for everyone.

Mr BRINSON: I will comment. The Warren Centre, with Mr Peter Johnson's support, is reviewing how other jurisdictions have gone from a zero registration system to a full registration system. We are looking at the transition that happened in New York, in California, in one of the Canadian provinces—I think it was Ontario—Germany, Japan and Singapore. To the best of our abilities we are looking at going from zero to registration, how many years did it take and what was the grandfather period. I am aware that the registration system in the United States is slightly different but that there were engineers who were having a livelihood in "engineering" but did not have professional credentials or education and there was a kind of transition process. So we are examining that right now as a matter of our research on the project and we could report to you in some weeks.

Professor KING: If I could just comment on numbers and trends, wearing another hat I look after the national statistics for engineering education on behalf of the 35 universities that run engineering programs. The proportion of civil engineering graduates within a slightly growing proportion of domestically sourced graduates has been around about 30 per cent of the total and increases slightly year by year. That is three times the proportion in the United States, incidentally. So Australia still sees itself as a country "under construction" it seems to me in that sense.

But for ATSE, we have been also looking at the lower level of qualifications in the science, technology, engineering and maths disciplines and it has been very concerning to us to discover that between 2015 and 2018 the proportions of students going into trades, which is a much bigger number than universities, has actually declined—not steadily. I think it is about 25 per cent down from the 2015 figures. And the proportion that are doing higher-level diplomas and high diplomas in TAFE has roughly halved. Those higher-level positions are the technicians who understand more depth and more sophistication perhaps in some of the modern techniques and operate between the also increasingly sophisticated skills of tradespeople. It is of great concern to ATSE that those numbers seem to be dropping at a time when, not only in construction but in intelligent manufacturing—things like Industry 4.0, cyber and so on—we probably need to have more people.

There is another underlying question—which we certainly cannot deal with here—which is that the technologies curriculum in New South Wales schools is very under strength in terms of teachers. I notice you will be drawing some attention to that in due course, as indeed will the Warren Centre, leading the project—I should defer to. There is broad concern about skills trends and some very deep concerns there when they relate to dynamics within the school education sector. But I agree with you completely that you cannot change these things very rapidly but you can put in incentives and most particularly we can start to make work in these fields more attractive to people as long-term careers even within the gig economies that we have. I think there is a lot of rejuvenation work to be done in those spaces.

Professor TAYLOR: Could I answer from the point of view of actually implementing an Act from day one? Before 2001 the Act in Queensland allowed organisations rather than individuals to be members so it really was a significant shift in 2001. By using assessment entities we were able to then take on board anyone who had been chartered in those organisations to immediately become eligible for registration. Therefore the shift for the community of engineers was not that significant at the time and it had no impact on the capacity of the state to continue with its infrastructure development.

The other aspect of it was how supportive organisations were of that transition. By the time I left as chair in 2010 about a quarter of our members were from interstate, because anybody who wanted to work in Queensland had to be registered in Queensland. We were then finding—we were doing some analysis—that a number of engineers particularly from South Australia, New South Wales and Victoria were seeking registration because they could add that to their business card in their states. So the transition was not quite as difficult as had been anticipated.

Mr BARTON: If I may add to it, from our perspective we would certainly support transition. We are talking about some very remote, rural, small communities that would have to consider how to source that skill set. Having said that, the research I mentioned earlier also found that all councils that responded had a degree qualified engineer on staff. So that dispels the myth that I have heard that there are councils out there with zero engineers. I cannot speak for the 19 that did not respond but the ones that did respond all had qualified engineers. Yes, to a transition period, there will need to be one. But it may not quite be as significant as some may think, which I think is supported by Queensland's experience.

Ms BINNS: At the moment, based on the research that we have—some polls that we did—more than 93 per cent respondents actually supported an actual registration scheme. So there has been a lot of work in the past five to 10 years—discussions about this work. Already there has been some agitating in a positive way to have such a thing implemented.

Ms FELICITY WILSON: That is of your members?

Ms BINNS: It was actually a Galaxy poll that was done. It was actually through, I think it was Engineers Australia—I could stand corrected. I am not quite sure of the size of the survey.

Ms FELICITY WILSON: Maybe you could send us that information afterwards?

Ms BINNS: I could, absolutely.

Mr JAMES GRIFFIN: I think you have all outlined the critical importance that we all recognise around strengthening and retaining public confidence in engineering of all its shapes and sizes in which it comes. My question goes to—in the event that registration occurs, then the governance and enforcement of the industry, and maybe, Professor Taylor, your Queensland experience, or indeed, Mr Brinson, the international view that you commented on earlier around—in an ideal world or scenario, would it be—and all industries are sort of guilty of this—is it best to have policing done by engineers themselves or is there a different model in which ideally that could happen and take place if we are all trying to move towards a view that we want to retain and strengthen public confidence in the work that engineers do? Is there a position, given your Queensland view? In an ideal world, what would it look like?

Professor TAYLOR: In an ideal world, you would have self-regulation but we all know that the ideal world does not necessarily achieve what we are required to do. We certainly found that having the power of the courts behind us was something that added enormous value to what we were trying to achieve.

Mr BRINSON: We have undertaken a discussion recently and Dr David Lange, University of Queensland, was speaking about what the attributes of the profession are as being, one, a systematic body of knowledge; two, professional authority so that you have command over that area of domain; three, community sanctions, so that the community of professional engineers disciplines its own kind; four, a regulated code of ethics; and five, a professional culture. Those are worthy attributes to look for in the future for the state of New South Wales. I confirm Elizabeth's statement when she said that out-of-state engineers went to Queensland and got on the register of professional engineers at Queensland as a badge of honour to show their high status and capability. I have seen that myself internationally.

Organisations that are operating in high hazard areas would look at those engineers who have gone the extra step forward and placed greater responsibility in the hands of those people when higher risks are there. So, in my experience, maybe the mechanics that maintain the airplanes are not engineers or aerospace engineers, but an aerospace engineer with some qualifications would be monitoring areas of maintenance and ongoing reliability that are vital to society's safety. I think there are a lot of side benefits that are obvious.

The CHAIR: I just have an additional question in terms of a sort of co-regulatory model. Obviously, a board is not the be-all and end-all for enforcement of the conduct of any profession, whether engineers or otherwise. As a follow-on from the question of the member for Manly, how do you see what the appropriate enforcement and compliance responsibilities and investigative responsibilities of a board are generally, not specific to any profession, but in terms of a board that is tasked with the registration process. What powers does that board need to have to deal with compliance, monitoring and investigation?

Mr JOHNSON: I think they are as set out in the Bill, in essence. I think the regulatory power, if you like, of the board and through a Bill like this is essential. Clearly, the professional body in terms of the assessment of competence and the ongoing assessment of competence to ensure that those people maintain that competency is critical. But the audit, enforcement and powers that come through legislation and regulation I think need to be there for the recalcitrant practitioners who do not do the right thing.

I have been a registered fire safety engineer in three states for 20 years. Never once have I been subject to an audit by that state registration body. I have been by Engineers Australia for my competence, but in terms of my professional practice on projects, either questioning me about my professional competence or looking at my projects never happened. People out in the industry are very much aware of that and have taken advantage of that. Particularly, the known competent practitioners have been able to operate with almost complete freedom. So I think as you have got in the Bill, your audit and enforcement, the other provisions in there in terms of making sure that practitioners behave and operate in the way they are required to is an absolute essential thing for the regulation. We certainly commend that part of the Bill very strongly.

Professor TAYLOR: Could I suggest that having assessment entities was a form of co-regulation because the only people who could then become registered engineers in the state were those who were already registered by the organisation? So there was already a mechanism by which people could be taken off that registration within the organisation. We, as the board in Queensland, found that we were, therefore, getting the ones who were probably going to end up in court anyway, and then we had the power to do something about that. It was a nice model because certainly I have also done codes of ethics and disciplinary review—I actually have a law degree as well—so I was sort of in a good position then to try to work out absolutely to try and ensure that

we minimise the impact on the courts and maximise the use of the professional organisation systems. But at some stage in life you are better served by having the machinery of the courts behind you.

Mr BARTON: I can only support what has already been said. We supported it as it is in the Bill.

Mr BRINSON: I agree.

Ms YASMIN CATLEY: To the panel: do you think that it is acceptable to continue with the status quo that lets unqualified engineers continue to practise? How much longer do you think we should tolerate this?

Mr JOHNSON: I start by saying that if you could change tomorrow, we should change tomorrow. Part of the work that we have done in relation to fire safety engineering is to refer to some survey work that was done by Professor Brian Meacham out of the United States, who looked at fire safety engineering and fire safety design of buildings in seven countries, including Australia. What he found about most of those countries, including Australia, was that more than 50 per cent of fire safety designs in buildings are done by people who are not qualified. That is extremely unsatisfactory. We know out there, when people go and look at many of these buildings. Of course we know all about it through the cladding crisis. We have seen lots of unsatisfactory performance. It is a reflection of the fact that it is an unregulated area. We need to regulate engineering practice, particularly in areas like fire safety engineering.

Mr BRINSON: I agree.

Professor KING: I would like to see movement as rapidly as possible.

Professor TAYLOR: But the problem with engineering, of course, is always hindsight. Is it going to be a petroleum disaster in Botany Bay? Is it going to be a dam failure? Is it going to be—in which case we will be wondering why we had not regulated because the building is only one part of many complex systems that we engage with.

Mr BARTON: Can the status quo continue? No. In a similar point, we are seeing a tremendous infrastructure boom at the moment. All of that will need to be maintained at some stage moving forward. It is not just the building of it; it is maintaining it. It is ensuring that it is fit for use, that it is safe moving forward, and that the technologies that use that infrastructure are suitable as well. On that point in terms of time line, in rough terms over 40 per cent of our members are within five years of retiring. That is going to see tremendous pressure on non-professional engineers moving into those positions.

Mr JAMES GRIFFIN: With that in mind, would we be missing an opportunity then? I see the engineers left holding the can when, as you commented before, the multidisciplinary actions that have to go into building all manner of infrastructure, does this not present an opportunity to broaden the net and regulate and in part put a registration scheme on all people involved in the building, whether it is the creation of documentation—as you mentioned before with Opal, it was the slab issue? I am not sure that was the suggestion.

Ms YASMIN CATLEY: The design on the outside.

Ms FELICITY WILSON: Referring to the evidence presented.

Professor TAYLOR: I think if you make it too broad, then the expectations, you would not include everybody engaged in another profession in an Act. It is important it also be clear to a particular professional group as well, because they have different pressures on them.

Professor KING: If I could add, Chair, in the building design space you have architects, not engineers. We were musing over lunch, where are the other design professionals other than those two?

Professor TAYLOR: And one is regulated.

Professor KING: But the opportunity to make sure that all dimensions of design are covered, as proposed in the Professional Engineers Registration Bill, would seem to be to me a great opportunity.

The CHAIR: Thank you all very much for appearing before us today. We may send you some further questions in writing in addition to the questions that you have taken on notice and the requests for information that we have sought in this process. Your replies will form part of your evidence and will be made public. Would all of you be happy to provide written replies to any further questions?

Mr BRINSON: Yes.

Mr JOHNSON: Yes.

Professor KING: Yes.

(The witnesses withdrew.)

(Short adjournment)

CHRISTOPHER KNIERIM, Chief Executive Officer, Building Designers Association of Australia, affirmed and examined

IAN BASSETT, Director of Policy and Professional Development, Building Designers Association of Australia, sworn and examined

KATHLYN LOSEBY, President, NSW Chapter, Australian Institute of Architects, sworn and examined

The CHAIR: Does anyone have any questions about the hearing process?

Ms LOSEBY: No.

The CHAIR: Would either of your organisations like to make an introductory statement?

Mr KNIERIM: Yes, I would. Before I commence I would like to present the Committee members our accreditation manual, which is part of our voluntary registration scheme. I also give a copy of the opening statement. Good morning Mr Chairman and members of the Committee. My name is Chris Knierim, I am the CEO of the Building Designers Association of Australia, which is known nationally as the BDAA. The BDAA is a not-for-profit, peak industry association representing Australian designers involved in, or associated with, the built environment nationally. Our key role is to educate and raise awareness of designers within the industry, to represent our members and provide services to them, along with building and cultivating close working relationships with the key federal, state and territory stakeholders.

It is worth noting that our membership consists of people from varying professional backgrounds including builders, drafts people, architects and also engineers. The BDAA has always sought to ensure it has a fully functional and practical building certification system to help improve consumer protection, building work compliance and accountability for all practitioners involved in the system.

Registration and accreditation for building professionals is the right way forward for our industry. The BDAA has a proven and recognised accreditation scheme that has been successfully running for a period of 15 years. It has been in place on a voluntary basis to date—that is the copy that we have sent through today. The scheme we have in place assesses building designers from all states and territories. It is officially recognised by the NSW Department of Planning, Industry and Environment under the Low Rise Medium Density Housing Code complying development legislation.

The BDAA accreditation system includes a range of skills and minimum competency standards that form the accepted base requirements needed by our organisation to have members undertake building designs of a range of building types and sizes. Mandatory skills and competency standards are obtained through TAFE colleges and universities, with which we have in place partnerships and agreements—and I can provide those to you in writing after today's proceedings. The BDAA accreditation could be expanded to capture the registration and certification of all parties in the industry; being contractors, consultants, building designers and the like and make it a requirement that all practitioners involved in supervision or certification work become accredited. This accreditation will ensure that all certified practitioners are appropriately qualified, insured and ultimately accountable for their own work.

In addition, these practitioners would be required to meet continuing professional development requirements and carry appropriate professional indemnity insurance. This would provide for proportionate liability of all parties involved in the building process. Specifically, it is our belief that accreditation and registration of all practitioners would provide a number of benefits for the New South Wales Government, the building industry, and most importantly, consumers. All practitioners would be controlled by, and accountable to, the proposed building commissioner or regulator. Accreditation for all practitioners would ensure that we raise the finished quality of buildings and increase transparency within the industry.

The BDAA supports any measure that ensures all works are in compliance with the Building Code of Australia and/or Australian Standards. The BDAA also seeks cross-border recognition for every state and territory that uses the national building design training package, as its accreditation model for competency standards would mean that all building designer training throughout Australia would be consistent. The other benefits of the cross-border recognition of skills and competency is that it opens up the possibility that being registered or licensed in one state would be sufficient to work in any state where licensing is in place, and opening up the possibility of a common registration or licensing system across the country.

Let us be clear that, while the BDAA does support the registration of professional engineers, as it will deliver much-needed benefits to the New South Wales community, we do so with some qualifications regarding the Bill as it currently stands. Mandatory registration of building professionals reflects the expectations of the general public for protection for the community. It is imperative that we rebuild trust in the construction industry, and as the Committee would be aware, members of the BDAA are doing their bit by registering their interest in supporting the people and communities impacted by the horrific bushfire disaster. Furthermore, the implementation of a registration scheme for engineers will improve the ability for our own BDAA members to confidently source professional engineering services, safe in the knowledge that minimum levels of competence have been assessed and there will be no guesswork involved in that process.

A register of engineers that is modelled on the Queensland scheme is the preferred way forward but, again, with some necessary modifications. It is worth noting that Queensland has had statutory registration requirements since 1929, and Victoria passed its own Professional Engineers Registration Act in August 2019. It is time that New South Wales becomes a leader in this field and this Bill, provided it applies to engineers specific to the building and construction industry, provides for a much-needed step change. I also say that this Bill takes a sensible approach by promoting common standards across state borders, as evidenced by its reflection of the Queensland and Victorian systems.

In conclusion, the BDAA would like to ensure that the focus is on the engineering sector involved in the construction industry. This is absolutely fundamental. Clearly, engineers who have no involvement in, training in or understanding of the construction industry are not best served by the inclusion. Further, we would propose to the Committee that unlike the models accepted in other jurisdictions, the crucial sectors of engineering must be included, those being the geotechnical and hydraulic engineers. On behalf of the BDAA, we thank you for the invitation to appear as a witness in the inquiry and look forward to working with you.

The CHAIR: Thank you very much. Ms Loseby, would you like to make any introductory statements?

Ms LOSEBY: Yes, I would. Thank you for the opportunity for the Australian Institute of Architects to provide evidence to this inquiry. We have basically addressed the Professional Engineers Registration Bill. We think there are six main reasons why there should be a professional engineers Act. The first is consumer protection; the second is so there is a clear definition of what it means to be a registered professional engineer; the third is so that there are clear standards for comparison to measure other states or nations; the fourth is to recognise the commonality of engineering disciplines; the fifth is for appropriate governance; and the sixth is because it would be self-funded.

If I can break into those further, the first—consumer protection—is obvious.

The second is so that there is actually a clear definition of what it means to be a registered professional engineer. This means that not only consumers but also educators, students, graduates and employers would understand what the barriers to entry in education standards are; what an individual's registration number is; what the process is to become registered; what continual professional development is required every year; the importance of insurance; a code of conduct; a searchable register; an alternative pathway to registration; and a complaints and disciplinary process.

The third is so there is a clear standard for comparison to measure to other states and nations. In the first instance, for engineers wanting to work in other states, there would be mutual recognition and vice versa for other states' registered engineers to come here. Secondly, for engineers wanting to work overseas or overseas qualified engineers to work here, a regulation allows a clear understanding of what an acceptable level in New South Wales is and what the benchmark is to overseas.

Fourth—and importantly—it would recognise the commonality of engineering disciplines. Professional engineering is diverse and multi-disciplined, but there is a clear commonality across the disciplines that binds, rather than separates.

The Shergold Weir report made it clear that professional engineers within the construction area need to be regulated. I have heard the argument of separating the construction-associated professional engineers from the aeronautical, automotive, naval, robotic and civil engineers, just to name a few. Please do not allow this to happen. This does not allow for the cross-pollination of the multi-professional engineering disciplines. I will give a couple of examples of what happens in the construction industry, where professional engineers from outside construction have affected or are used within construction.

Maritime engineers are used to design fibre components in buildings; aeronautical engineers help to increase the performance, strength and lightness of structures in buildings; and robotic engineers design construction robots and robotic arms on large awnings. Those are just a few examples.

We can also look at how, within construction, construction professional engineers can use that knowledge outside of the construction field. Building integrated photovoltaics [PV] cells are used as panels on the exteriors of buildings. These are elements that you would not even know about that actually look like PV. They are used on the walls and on the roofs. They will soon be used to skin aeroplanes, trains, boats and civil structures. So you can see where there is that cross-pollination of multi-discipline information.

The fifth—in terms of appropriate governance—is being governed by a board with a specialised knowledge for professional engineering. This is not a generalised area where it will cover multiple sectors outside of engineering; it would be specific.

The sixth—finally—is being self-funded. Using the NSW Architects Registration Board as a model for comparison, there is no cost to the public purse; it is completely funded by the registered engineers or, for us, the registered architects.

In summary, the Institute of Architects recommends to this inquiry a standalone professional engineering Act. We recommend that the Professional Engineers Registration Bill is aligned to the Design and Building Practitioners Bill in the same way the existing Architects Act, the Competent Fire Safety Practitioner Co-Regulatory Accreditation Framework and the Building and Development Certifiers Act will be as well—they have to all be brought up. The development of the Professional Engineers Registration Bill could occur in the same time frame. The Institute looks forward to continuing to work with the New South Wales Government on these important issues. I thank you for this opportunity.

The CHAIR: Thank you very much. My question will be to you, Ms Loseby. What have been the benefits and strengths of a registration scheme for architects?

Ms LOSEBY: Multiple. Each state has its own registration of architects Act. Above that is the Architects Accreditation Council of Australia [AACA]. Each registration board pays the AACA—so the government does not pay for that at all—so that there is an understanding across all of Australia and some continuity between what is required for registration. That means that all the schools of architecture—we start at education—have a base understanding and a core competency to know what is expected. Every architecture school around Australia has a standard that has to be lifted. When it comes to graduates, what their expectation is to find within that competency standard as well and what the registration process is.

It means that although I am actually only registered in New South Wales, I have gone through the registration process, which means that if I want to go to another state, while at the moment it is not automatic, I just have to pay an extra whatever it is and I can be registered in that state, because we all have the same competency standard. Those same competencies are then used for our continuing professional development.

Having a registration board means that that registration board is made up of appropriate people on that board. Within the Act it defines who that is. But, basically, there are two members who are nominated from registered architects; there are—and this is my understanding, and I might be wrong—at least two from the public; a lawyer; and a chairman or president who is nominated by the Minister. I may not have that exactly right. But that process works.

The registration board keeps a register of everybody. We all have our own identified number. It is clearly available, so if I call myself an architect I must also identify myself constantly as number 6267, which means that anybody can look that up and know that. That gives confidence to the public. If the public are unhappy with my services they can make a complaint to the register and there is a due process that occurs. I think also the benefit of the Architects Registration Board is that under the Act they have a requirement to inform the public as to what architects do and what architecture is. That is also incredibly beneficial.

The CHAIR: Thank you very much. My next question is to both organisations. This has been touched on in both of your introductory statements and is in relation to the difficulties that people in your professions—so architects and building designers—as well as other professions like certifiers may currently deal with when trying to verify the qualifications of engineers. How do you go about that process currently?

Ms LOSEBY: It is a several step process. Number one, obviously, is to always make sure that they have professional indemnity insurance, public liability insurance and workers compensation. We always do checks by asking for references and seeing their work. It is a very small field so we can make sure—at my end of the scale, anyway—that we talk to various other individuals and make sure that a company is reputable. That is incredibly important. We would only deal with companies that have an established history and career. There is no registration scheme to look up. That means we are reliant on the company we go to and who they employ that those people are appropriately skilled.

Mr BASSETT: I think we support what has just been said. The fact that there is no registration for engineers at the moment means that you are reliant on the organisations they belong to—the Institute of Engineers, which has its own in-house accreditation program and scheme. I think most building designers would use people who have that registration or are a member of that organisation. That is not to say that there are not others out there, but certainly in my case we always select someone who is a member of the of the Institute of Engineers. But there are a lot out there who are not members of the Institute of Engineers, the same as in building design. On our side we have the Building Designers Association, we have our own accreditation program. There are building designers out there who do not belong to us and are not accredited. We are always moving towards accreditation and having a licensing program. To bring everyone under that scheme is paramount to the success of getting everything done correctly.

The CHAIR: A question for both organisations: as your professions would interact regularly with engineers in a variety of arrangements, would you support a requirement of professional indemnity insurance as part of the registration scheme for engineers?

Ms LOSEBY: Absolutely; it is a no-brainer. I would not dare to do any work with a professional that does not have PI insurance.

Mr BASSETT: In my practice, exactly the same. That is why we pick members of the Institute of Engineers because we know that they have indemnity insurance. The majority of designers would be in the same boat. Picking somebody that does not have that is just open to trouble with a big capital "T".

Mr KNIERIM: And they are opening up trouble to their own families. They are making their families liable to their actions, which is a really disappointing thing to undertake. Currently, without registration in New South Wales, it is what is happening with many people. Through our accreditation scheme, people who are accredited must have PI insurance as mandatory and they must do CPD.

Ms LOSEBY: It would be incompetent to employ an engineer that did not have PI insurance because it would not be protecting our client.

Mr BASSETT: The issue there, where it is loose at the moment, is there are many engineers out there who are not registered or belong to an association with their indemnity insurance et cetera; it is just too dangerous. The general consumer does not understand that. They go to the cheapest price recommended by their mate down the street: "Well he did a good job; mine has not fallen down yet". So they will go with them because of price but there is no guarantee and there is no support. If something goes wrong they are left out on a limb. The engineer will quickly disappear. So I think it is imperative that we do have that across the board.

The CHAIR: My next two-part question is for both organisations and to do with the interaction between the registration of engineers and the Design and Building Practitioners Bill. The first part is whether you see the two processes as complementary models and complementary elements particularly in the building industry, specifically within the residential space. The second element of the question is to do with how your professions and potentially engineers as well, what processes you see as appropriate for the registration under the Design and Building Practitioners Bill, which creates a registration process but does so by regulation. So what you would like to see in that space?

Ms LOSEBY: Basically, I listed all the things that I think are necessary as the minimum. First of all, barriers to entering in terms of education standards, absolutely important. That is what is used when we look across other states and other nations because these are very transportable careers—engineers will go everywhere—individual registration numbers and a clear process that is described. It is usually logbooks, it also involves work experience, it probably involves extra study, exams, interviews; continuing professional development. What is required and how many points? How many hours and what particular areas are necessary? Insurance—that is multiple-level PI, public liability and workers cover as well—a code of conduct is absolutely necessary; a searchable register so that the public can see; and alternative pathways of registration because there will always be engineers who may not have necessarily had a particular education at university but they have learnt the experience over time.

We do the same with the Architects Act so that there is not a barrier. It means that somebody can present through experience where they may have it. We have a lot of building designers that have become architects, for instance, or there is another program where they can do study to become a registered architect. A complaints and disciplinary process; and a clear standard of comparison so that when there is comparison between states it is understood but it is incredibly important across different countries. We have a lot of international architects. If I look in my office I would say probably three-quarters are from overseas, and the engineers that we deal with are similar. We need to know that there is a benchmark that a structural engineer from overseas is either the same or

not—if they are not, what is needed to get up to that level or maybe we need to get to their level. But it is really important to have that.

The CHAIR: The first part of the question, in terms of the interaction between a registration process for engineers and the provisions in the Design and Building Practitioners Bill, do you see those as complementary?

Ms LOSEBY: Yes I do. We do already have three others. We have the Architects Act, the Competent Fire Safety Practitioners Co-Regulatory Accreditation Framework and the Building and Development Certifiers Act. They all exist and they all need to be brought up to the same level. I know with the Architects Act and the Design and Building Professionals Act that there are now some differences between those two. It needs to be brought up to that. There is no reason why these two cannot happen at the same time.

The CHAIR: And that list that you provided at the beginning, is that in relation to a registration process for engineers or in terms of what the registration process is in the Design and Building Practitioners Bill, which is something that would be left open to regulation?

Ms LOSEBY: This I have all taken from the Architects Act but it is basically the same as what is in the Design and Building Practitioners Bill Act. I do believe that in the regulations there is still a lot that needs to be worked out.

Mr BASSETT: Adding to that, a clear registration process is very important, that everyone knows what you are registered to do and what your requirements are. CPD and PI are a given, an absolute given. At the moment, an engineer does not have to have any PI whatsoever. Continuing professional development and code of conduct are certainly important. I think indemnity insurance really, really comes into this completely. It gives protection to the consumer because at the moment an engineer does not have to have indemnity insurance whatsoever. That is fraught with danger in not having that protection. It comes back to consumer protection, nearly all of what we talked about is consumer protection. It is making sure that engineers are up to date, there is protection for the consumer because at the moment that just does not exist in the engineering world. We have seen some good examples of that recently, as we know.

Mr KNIERIM: I think the most important part is that the government plays an overseeing role in this. That is really important. If legislation comes in then it can create a penalty-based system on this to ensure that—when you have got a penalty base you start getting rid of these cowboys. The biggest problem we have in this industry at the moment is there are just so many people doing work and it is really crap—it is really, really bad. I am a builder as well as a designer and I can tell you from what I see out there—it is shocking. The sooner we can fix this the better it will be. It is paramount that everybody needs to be registered or licensed.

The CHAIR: To the first part of the question because we are, particularly in the context of both of your organisations, dealing with two packages: the registration of engineers and the provisions which would be under the Design and Building Practitioners Act. Do you support those as complementary processes?

Mr BASSETT: Most assuredly. They go hand in hand. One without the other does not work, because you can be an architect or a building designer designing a building and then you hand it over to an engineer who has no qualifications virtually whatsoever—no guarantee of anything, no indemnity insurances—and then they walk away, disappear and you are left holding the baby, so to speak. I think they do go hand in hand. They are different disciplines, we understand that, but they do interact so closely that they virtually become morphed together in one. I think one without the other is just not going to work.

Ms FELICITY WILSON: Ms Loseby, in your submission one of the references you made there was that all building practitioners need to be brought under a regulatory regime, then in your contribution today you identified that you would expect all engineers, not just building-related engineers, to also be brought under that regulatory regime and you explained why. Obviously the Bill that we are considering, the Professional Engineers Registration Bill, does not cover other building practitioners that are not engineers. How would you see that requirement that you identified being addressed?

Ms LOSEBY: Within the Design and Building Practitioners Bill? Yes. We have handed lists of all the other designers that should be included, there are many: Landscape architects, Building Code of Australia consultants, disability consultants and acoustic consultants—I could give you lists and lists and lists—all of those would be covered under the Design and Building Practitioners Bill. The ones that are more specific and are professions in their own right, like the engineers and like the architects, it makes sense to then have separate bodies. So these ones tend to be ones that are considered professions and there will be overseas implications to those as well.

Ms FELICITY WILSON: Mr Knierim, thank you for providing the accreditation manual, which I tried to quickly flip through while also listening to you. You said this is a voluntary accreditation scheme?

Mr KNIERIM: Correct.

Ms FELICITY WILSON: I do not have in your submission here any details about the breadth of your membership, but do you know what percentage of your membership opts into this voluntary accreditation scheme?

Mr KNIERIM: Yes, it is just under 50 per cent.

Ms FELICITY WILSON: Are your members all currently practising?

Mr KNIERIM: Yes.

Ms FELICITY WILSON: So about half of your membership are currently accredited?

Mr KNIERIM: Yes.

Ms FELICITY WILSON: And you would be comfortable with moving into an environment where 100 per cent of the industry would be required to be accredited and the other elements of registration?

Mr KNIERIM: Yes, that is what we have been pushing for over 15 years.

Ms FELICITY WILSON: It might be anecdotal or you might have some facts behind it, the 50 per cent that are not undertaking the accreditation, do you know why or do you have a view as to why they are not doing it?

Mr KNIERIM: It is not mandatory and a lot of those people are sole traders. Mr Bassett, being the head of policy, might be able to elaborate further.

Mr BASSETT: I think you hit the nail on the head: it is the fact that it is not required. We try and encourage our members certainly to be accredited under our program and it is about 50 per cent of our membership. Some are just waiting, some have been accredited and let it run, because for many, many years when it first started the government was going to register everybody. We were asked to propose putting people through the registration process and accreditation to prove our worth to do this and it just never happened for whatever reason. The other issue, of course, is that as an association we do not represent every building designer in New South Wales. It is not mandatory to belong to us and the ones that are not within our membership, they have no interest whatsoever because there is no mandatory requirement for registration.

We support registration absolutely and I think it is imperative that we have to do that because it comes under consumer protection. We can give examples of really, really dodgy overseas—and I will say overseas, I will not pick on countries—but a lot of work sent overseas that comes back here just does not comply with Australian standards whatsoever and the people have paid out money for these things and the councils reject them. Where do they go? What can they do? To bring in a registration program for everybody and a licensing program, it is imperative that we have this.

Mr KNIERIM: Adding to my colleague, Mr Bassett, I think that the important point is that because it is a voluntary process people are not taking it up. But we are finding the numbers are increasing quite substantially in the last couple of years because people see the benefit in it, because we have our own education sector and that education sector provides CPD training and courses for members across Australia—not only members, but non-members. We have an event in Melbourne coming up on 11 March about the bushfires. There are 121 people coming and they are all non-members. They are architects and designers.

Mr BASSETT: Can I add to that the requirement of registration and licensing is professional indemnity insurance. That is a key to it all. There is no consumer protection without that professional indemnity insurance. We promote that within our association. In fact, our membership requires you have professional indemnity insurance, but we only cover a proportion of building designers in New South Wales. Bringing in mandatory licensing and registration, to us it is a no-brainer, pure and simple.

Ms FELICITY WILSON: Your accreditation scheme here I believe does have a pathway for professionals that have not come through formal education, as Ms Loseby referred to with architects?

Mr BASSETT: Certainly. We look at a range of qualifications. There are qualifications you can have, but a lot of our members do not have a qualification; they have many, many years of experience. Our accreditation program looks at recognition of prior learning, basically, on-the-job training. We have criteria that they go through a process and we are able to say, "Yes, you are an accredited building designer." We have broken that into different levels, because in the building design world, no disrespect to the architects—don't get me wrong, I am one—a lot of building designers only do residential buildings. Some do go into higher levels of mid-range and commercial structures and then larger projects, so our accreditation program is based on those competency standards at different levels and I think that is important to understand.

Ms FELICITY WILSON: My final question is to both organisations. You both obviously work in the built environment. We have had different contributions and evidence today about the way in which the government should approach legislating and rolling out any of these types of schemes, and obviously there are two bills that we are considering. I wanted to talk to you about the implementation or the staging of this rollout. I think the architects mentioned in their submission as well that Victoria essentially has a staged rollout from 2021 where it is looking at different types of professional engineers initially and looking to expand it over time. Do you have a view about the best way in which to implement either or both of these pieces of legislation over time?

Ms LOSEBY: I would say that obviously construction is the one that really needs it first, so the emphasis on construction first and then the rollout. But could I actually make a comment from previous?

Ms FELICITY WILSON: Yes, sorry.

Ms LOSEBY: That is that I think it is really important in terms of having a regulator that is separate from a membership organisation delivering CPD. When there is an Act and there is a board and the regulator defines what the CPD is and approves the CPD every year, their role is not to deliver that CPD all the time. It should be delivered elsewhere. You don't want them generating their income from it so that there is actually a separation of duties between the two. I think having a professional engineers Act would allow that separation to occur, which is really important.

Ms FELICITY WILSON: But construction should come first?

Ms LOSEBY: Construction should come first.

Mr BASSETT: Yes, most entirely. Most certainly.

Mr KNIERIM: Based on that, ultimately the government would be the overseeing power. Industry cannot set the rules and impose penalties themselves. I think that is really important.

Ms YASMIN CATLEY: Ms Loseby, you talked a lot about the benefits of your scheme for professional architects and how that improved professionalism and quality in New South Wales. Conversely, could you tell us how you think a lack of such a scheme could damage the profession?

Ms LOSEBY: Absolutely. Part of the registration board—again I talk about the AACA, which is national—always does reviews. They are in a review at the moment of the competency standards. Having that facility means that they have gone and looked at the educators, they have looked at practice, they have looked at the legal environment and they are doing a thorough review. Through that we are expecting that there will be certain deficiencies within both studying—where the educational level is—and, at the practitioner level, what has changed over the last 10 years, for instance. What do we need to do to improve? Having that facility to do that means that it is a good way to reflect and improve. Without that it is just looking at what industry would do. If you are just relying on industry, then we are always driven by what we can afford to do. That means that things don't necessarily have that impartiality with it.

Ms YASMIN CATLEY: You also referred to consistency within the states, within professional standards. You are of the view that that is critically important as well. Are we missing out at the moment in New South Wales, not having our engineers registered, such as the northern and southern states do?

Ms LOSEBY: Absolutely, definitely. There is a real fear there, is there not? Because if you have to be registered to work in Queensland or Victoria, does that mean that an engineer who is not registered and is not capable of being registered could work in New South Wales? The answer is yes.

Ms YASMIN CATLEY: Mr Bassett, do you agree that the sector is in crisis right now?

Mr BASSETT: I would not necessarily say "in crisis" but there are certainly general problems within the industry, and I think the important thing is that there is no accountability. I think that is probably the best word. In a lot of instances accountability just is not there.

Ms YASMIN CATLEY: Do you think that lack of accountability contributes to the lack of consumer confidence?

Mr BASSETT: Most certainly.

Ms YASMIN CATLEY: Would you agree that consumers think that engineers are registered; they do not know that they are not?

Mr BASSETT: I agree with that. I think they would expect engineers to be registered. They are professionals. It is the same with architects and, I would say, building designers as well—they just expect us to

be registered and I think there is a real shock when they find out you are not. That usually comes when there is a problem.

Ms YASMIN CATLEY: You said in your opening statement—or Mr Knierim did—that you support the Professional Engineers Registration Bill. On that basis can you tell me what is missing from the Bill in terms of not meeting the overall goal of registering engineers?

Mr KNIERIM: For me at the moment, personally, what I see in the industry is a total lack of accountability. Consumer confidence is down. I have spoken to the Insurance Council of Australia to see what its point of view is—how we are going to build confidence in the insurance sector to gain backing back in the industry because without the insurance the building industry is going to collapse.

Ms YASMIN CATLEY: Mr Knierim, I know that you have said that and I accept that. I want to know what your organisation thinks is missing from the Professional Engineers Registration Bill, which is currently before the Legislative Assembly and which we are discussing today.

Mr KNIERIM: The concern is that we believe hydraulic and geotechnical should be a part and included.

Ms YASMIN CATLEY: You do not believe that will be covered where it says "others", which will be in the regulation?

Mr KNIERIM: The only concern for me is that when it says "others" it is pretty open and I am trying to be a bit more specific.

Ms YASMIN CATLEY: Sure. The witnesses that appeared immediately before you—the panel of engineers—talked to us about being innovative and adaptive and that it is important to have capacity to be able to change regulation, which can happen much quicker than legislative change. I accept your point—thank you very much—but I do think that the Bill—

The CHAIR: This is a time for questions and answers—

Ms YASMIN CATLEY: I simply wanted to explain; that is all.

The CHAIR: Ms Catley, we did provide you with the opportunity to appear before the Committee to provide your opinion on the Bill. You opted to substitute in as a Committee member, which means, as a result, you are only permitted to ask questions and seek information, not provide an opinion. I ask you to respect that because it will save us all time and frustration.

Ms YASMIN CATLEY: I do, but it was not my opinion—I was giving the opinion of witnesses who appeared before the Committee earlier today.

The CHAIR: My view is that if it was not your opinion it was getting close.

Ms YASMIN CATLEY: It was not my opinion. My opinion is much stronger than that.

Mr NATHANIEL SMITH: I asked this question of the engineers earlier. The Committee has heard evidence from a lot of witnesses today. Would you agree that introducing a full registration scheme across the whole building industry should be done over a period of time in a transitional manner, rather than simply being done all at once where you could see issues where they might not provide compliance or monitoring or enforcement mechanisms? If we rush to push something else, should it not be done over a period of time? Speaking as someone who has worked in the building industry, it is better not to rush these things until we concentrate first on, obviously, construction of dwellings and high-rise buildings, which has been an issue, and then we move on to further things.

Mr KNIERIM: I do think it is important that we set time frames because when people say, "possibly not rushed", how long are we talking about as a non-rushing period? Is it five years? Is it one year? Is it two years? I believe that we should be setting some sort of grandfather clause where those people who are already accredited or registered or so forth within their associations, who have already had their works assessed and audited, they could, therefore, go through but they would, obviously, be reassessed prior to going through. I believe that a 12-month period, 12 to 18 months, would be enough to be able to see all the people applying for registration within the industry. That could be enough.

Mr BASSETT: If I could add to that, I think the issue we have is that there are buildings at the moment that are going to fall down, and I think we have to stop those. There is not much we can do about some of that in retrospect—I will be honest—but we cannot keep multiplying those mistakes. The sooner we can bring in registration and accountability, the better. Yes, I can see that some of the engineering professions or disciplines could be stretched out a bit. If you take an acoustic engineer, for argument's sake.

The biggest problem we have at the moment is that buildings are falling down and we have to stop that. I think the sooner we can bring that in, the better. At the end of the day, I think we have to look at what is critical at the moment, and I think the critical thing—and the public perception—is that buildings are falling down, and we have to do something about that. As an acoustic engineer, it is not quite as important or critical at the moment to get something done; it can be done over a period of time. I think the problem you might have is that bringing everybody in, and all at the one time, is just a massive—we have done our homework on it, and thinking: you are talking about a couple of hundred thousand practitioners. That is a massive number to get done in a hurry, but I think you have to pick the ones that are particularly important to the structure. The structure itself is the critical part. What the structure looks like—it is important and I am sure Kathlyn would agree with that—but the fact is it has got to stand up, it has got to stay up, and I think that is the critical part at the moment, and that is what we need to get in place as soon as we possibly can.

Some of the other things here can be stretched out, but not too far. Certainly there has to be a lead-in time. You cannot say: next Monday you must be licensed or you must be registered. There has to be a lead-in time, but I think we need to pick on the—in our submission we mentioned geotechnical engineering. It was not in the list. Those things are very, very important. Some of the others, yes, you could move out a little bit, to a degree—sound engineers or acoustic engineers—but I think the main thing about public perception is: my building is not going to fall down. It is as simple as that. Yes, I can hear the trams go by or the trains go by, but the building is not going to fall down. I think that is the paramount thing.

Mr KNIERIM: Could I add to that? The consumers are the ones that are, basically, being left out in the end. They are the people we have to look after. If we do not look after them, the construction industry is going to start to come down and down, and in the New South Wales economy it is one of the main forms of our income and monetary value. So we need to make sure the construction industry is a strong industry, that we eliminate the cowboys, that registration is imposed and anyone who is practising within the industry must be registered or licensed and accountable for their actions. I think until that really does happen, we are going to continue to see issues like we have had.

The concern is the longer it takes, the more buildings are going to be affected. So the sooner we can bring something in—whether it is the Building Commissioner policing buildings and stopping occupation certificates because of false or inadequate documentation—there has got to be some mandatory action now, not in two years' time. Let's not stretch this out. We have to get this through. However we have got to do it, we have to work to get insurances onside and the consumer. Without the insurance supporting us, we do not have a construction industry. Without the consumer buying, we do not have a construction industry. The biggest problem we are going to have now is that the youth of today who are doing apprenticeships or considering doing apprenticeships are looking at our industry as a farce and going, "Why would I want to be in a construction industry that is failing? Why would I want to be involved in that?" So what we will do is we will go and do some other career. That means we are going to have a gap in our construction industry in the coming years because we have got a shortfall of qualified trades.

Ms LOSEBY: Could I make a comment please? I think we need to break it down. The construction industry is huge. I do agree that it is appropriate to start off with the residential classes of buildings and any mixed use that is within that residential—test it out, see what the issues are going to be. There will be issues. That will give an opportunity to see what is appropriate before we move into the other classes. But I disagree wholeheartedly with my friends here—I am sorry—in that absolutely every professional involved in construction must be regulated from the beginning.

If we look at an acoustic consultant, they are incredibly important. A lot of our buildings in the inner city where we have got planes flying over them, we have made them so acoustically tight that the impact then is on the thermal impact within the building. So we have really closed windows and we end up with these wet building syndromes because people cannot get the moisture out—terrible problems. The problem is that unless you have every single component of the design professionals regulated and registered we are not all on the same equal standing, they are not all at the same level. Building is incredibly complex. It is really important to be across all of it, see what is happening and coordinate it all because one impacts on to the other.

Mr BASSETT: I do not disagree, do not get me wrong.

The CHAIR: We will finish on that point that you agree. Thank you for appearing before us today. We may send some further questions in writing to both of your organisations. Your replies will form part of your evidence. Would you be happy to provide a written reply to any further questions?

Ms LOSEBY: Yes.

Mr KNIERIM: No problem at all.

Mr BASSETT: Yes.

(The witnesses withdrew.)

RITA MALLIA, President, Construction Forestry Mining and Energy Union (NSW Branch), affirmed and examined

The CHAIR: Before we start, do you have any questions about the hearing process?

Ms MALLIA: No, that is fine, I have appeared before these committees before.

The CHAIR: Before we begin with questions, would you like to make a short introductory statement?

Ms MALLIA: Not particularly. Firstly, I want to give apologies for Darren Greenfield, our State Secretary, who was scheduled to be here. I have been listening to the evidence just as I have been waiting for my turn and I would have to concur with what has been said. There is a really important and urgent issue here that needs to be addressed by the government. We do, as representatives of workers on construction sites, want to see action to ensure their safety on the job but also more broadly to ensure that consumers have confidence in the industry and confidence in what they are purchasing and confidence that their homes and their investments are built for purpose and in the way they purchased them. We would like some action.

I heard questions around the timing of all of this. I think we first gave our submission in the middle of last year, October; we have been talking about this issue for a very long time. We think it is about time the government does act. I understand there are some logistical issues but ultimately with a government resourced as ours and you have got buildings that are affected and consumers that are significantly affected really we cannot sit on our hands. We need to do something about ensuring proper quality and proper standards. It is about ultimately having confidence in the system and I do not think there is anyone in the construction industry that wants to work in an industry that produces a poor quality product and leaves people out of pocket or uninsured.

I would say that most of the things that were said before me we would completely agree with. I am not an engineer, I am a lawyer. From day one I have had to be registered, I have had to do professional development, I have had to keep my skills up and I do not see why that should not apply to engineers and others in construction. I probably do not kill anybody if I give them the wrong advice. I might cost them some money but you can actually kill somebody on these construction sites if someone who is not qualified properly and trained does not do the right thing.

The CHAIR: Some of the issues raised in the discussion around the registration of engineers generally, not just specific to the building industry, have been around enforcement and compliance in terms of the powers of a board to engage in things like stop work orders and not have to give notice of an investigation should it be urgent, a requirement for professional indemnity for engineers; would these be items that the Construction Forestry Mining and Energy Union would support and what other enforcement powers do you think are important for a registration?

Ms MALLIA: Firstly, I agree with the speaker before me: it has to be an independent body. You cannot have industry regulating itself. We have seen elements of that in the construction industry in the past and unless there is an independent statutory body that oversees this self-regulation tends to fail. That agency should have inspectors, a bit like Safe Work. Being proactive needs to be part of it and one of our criticisms in safety is that it is a bit more defensive or after something has actually happened. You do need to have inspectors or clerks of works, or whoever it is, going out there and inspecting things and not warning people. I think one of the frustrations we have is that sometimes inspectors get a bit cosy with developers. Not in a corrupt way but they get the personalities, they get to know the people. You ring somebody up, "Is everything okay"?

Inspectors should come out on to the job, people should not know they are turning up and they should deal with the issues and if work has to stop they should be in a position to be able to stop that work and ensure that whatever rectification has to happen happens. We are supportive of a robust body. I have not got my head around whether there is going to be a separate engineers one and a separate design one. I would have thought you would have a commission or a body that would do all of those things and do them well and do them independently.

The CHAIR: In terms of professional indemnity insurance, do you have a view of the importance of that as a requirement?

Ms MALLIA: That is very important. At the end of the day that is all consumers have to rely on if something goes terribly wrong. It is harder and harder to get insurance. We are seeing it now with companies whose employees are exposed to silica dust. Insurance is expensive and none of that is going to be addressed

without getting people who are registered to a proper standard where the insurance industry would be prepared to underwrite the insurance policies. I think that will be crucial.

The CHAIR: Obviously, I understand that you expressed the urgency of getting this done but you would want those elements to be properly recognised in legislation and the approach that government takes?

Ms MALLIA: I think it has to be holistic. I think one of the frustrations we expressed the last time we appeared about the previous Bill, or the Bill about designers, is we have this piecemeal approach. We have this Bill, we have that Bill and we cannot really quite understand, given other states are doing this, why this cannot be done in a holistic way. It is certainty for the industry, it is certainty for workers and we do not have things blow out or forgotten along the way. We think it has to be done properly. There is no point putting something in or having something that does not make any sense or fails at the first post. This is crucial and needs to be done in the short-term rather than the long-term.

Ms YASMIN CATLEY: Would you agree that the sector is in crisis at the moment?

Ms MALLIA: There is definitely big issues around building quality product. To think that the buildings are going to fall down and obviously there are problems. There are cladding problems. I think crisis is not a bad way of describing it.

Ms YASMIN CATLEY: Are you surprised that engineers are not registered?

Ms MALLIA: I was, I must say. I thought that people who have been to university and have these important roles on projects, as there is an engineering aspect to so much of what construction is about, whether it is making sure the formwork is designed right or the concrete is designed right. There are so many engineering aspects. I was surprised to know that they are not registered and yet mums and dads have to be licensed to put up a garage in their back yard, that is odd to me.

Ms YASMIN CATLEY: The Professional Engineers Registration Bill 2019, which is in the lower House at the moment, covers engineers generally, not just those in the construction industry. Do you think that is a good approach, to have that holistic approach?

Ms MALLIA: I just think that accreditation is really important. The thing is professional development of those people is overseen. And, as we have seen, unless you make it mandatory half of them will not want to take it up. I do not see why anybody who is in this professional role should not be accredited, should not be required to keep up their skills and be accountable when things go wrong.

Ms YASMIN CATLEY: Do you think this Bill goes some way to addressing the crisis that we are in at the moment in the construction industry?

Ms MALLIA: We welcome the registration for people in the industry. It exposes those who are not doing the right thing. Those who cannot qualify to be registered will not be, so therefore they will not be working in the industry. That is a good thing.

Ms YASMIN CATLEY: And it should happen sooner rather than later?

Ms MALLIA: Yes, I think it should happen. We have been talking about this for a very long time.

Ms YASMIN CATLEY: Do you think that it is appropriate for only some engineers in one firm or in one project to be registered while others are not?

Ms MALLIA: I just think that is a recipe for disaster. It is confusing. I am sure engineers, like building workers, shift from doing commercial construction on a building site to civil construction on roadworks. The industry is very fluid. Different parts of the industry will boom when other parts of the industry will not be in boom, and it would be crazy to have some people in and some people out of the tent. You should have consistency.

Ms YASMIN CATLEY: Is it your view that this Bill will fix that problem.

Ms MALLIA: I am not entirely sure that it will, but it is certainly a step in the right direction.

The CHAIR: Local Government NSW this morning raised the importance of good consultation with its sector as well as the importance of making sure there is a proper transitional program. Obviously, as the member for Swansea has said, this Bill deals with the registration of all engineers, of whom there are somewhere around 60,000 operating and up to 100,000 in New South Wales. Do you have a view on the process of adopting such a scheme? You said you are surprised we do not have it, so we are starting from scratch. Is there any view on the adoption of and transition into it?

Ms MALLIA: Obviously, it cannot be done overnight, but given other states already have models, I would have thought you would look at Victoria and Queensland to see what works. We are not really recreating

the wheel; we have some models that could be implemented. Sure, you have to consult with stakeholders and people need to be comfortable, but they have been given enough time to make arrangements to get themselves accredited or uplift their qualifications. I do not think that is insurmountable. The New South Wales Government is the largest and well resourced. Yes, you will have some sort of transition period and, as the previous speaker said, give priority to the sectors in the industry that are more problematic and where we have seen the most evidence of problems in more recent times. But it should not be a barrier to pull some levers and spread that out. Like I say, it has happened in other states and we can learn from those experiences.

Ms FELICITY WILSON: When you said give priority to the sectors of greatest concern, are you suggesting we should prioritise the building and construction industry?

Ms MALLIA: Yes, I would say that would be a good start.

Ms YASMIN CATLEY: We have had some evidence from witnesses that suggested that, in both Queensland and Victoria where they are registered, those who are unregistered and live in those states are coming to New South Wales. Have you seen any of that in your sector or have you been advised of any of that going on in your sector?

Ms MALLIA: Not particularly, but I know that people are concerned about that. It is like when other trades are not accredited and people cannot find work in some states, they do find their way into jurisdictions where that mandatory requirement is not necessary. I would say that there is concern about it, but I have not dealt with it directly.

Ms YASMIN CATLEY: How much longer should we put up with the fact that we can allow anyone to call themselves an engineer in this state?

Ms MALLIA: I think you need a proper accreditation process and then they would not just call themselves engineers. They have to be held to the standards required.

Ms YASMIN CATLEY: How much longer should we put up with that?

Ms MALLIA: I would say you should try to solve this problem as soon as possible.

The CHAIR: Thank you very much for appearing before us this afternoon, we appreciate it. We may send some further questions in writing. Your replies will form part of your evidence and be made public. Would you be happy to provide a written reply to any further questions?

Ms MALLIA: Very happy to.

The CHAIR: Thank you very much, we really appreciate your time.

(The witness withdrew.)

The Committee adjourned at 15:48.