

**Submission
No 46**

PROFESSIONAL ENGINEERS REGISTRATION BILL 2019

Organisation: Institute of Public Works Engineering Australasia (NSW)

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NSW Legislative Assembly

Committee on Environment and Planning

Inquiry into the Professional Engineers Registration Bill

Parliament of New South

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Submitted by

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INTRODUCTION

The Institute of Public Works Engineering Australasia (IPWEA) is a not for profit, membership based, professional organisation representing engineers and others involved in the provision of public works and services predominantly in the local government sphere. The Institute conducts a National office and Divisions across all states and New Zealand.

This submission is authored by the NSW Division.

IPWEA NSW is a registered charity with the purpose of advancing the public works sector in Australia, particularly in NSW by:

- conducting and publishing research into improvements to the processes used in the industry
- working with government at all levels to ensure that the interests of the public works industry are represented in regard to the public decision-making process, and
- providing a forum for all people engaged in the public works to discuss best practice and enhancing the future of the industry

IPWEA NSW seeks through its mission to *enhance the quality of life of NSW Communities through excellence in public works and services.*

TERMS OF REFERENCE

That the Committee inquire into, the Professional Engineers Registration Bill 2019, including:

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

INTRODUCTION

The Institute of Public Works Engineering Australasia NSW Division, IPWEA (NSW) is the State's leading public infrastructure body who provides services and advocacy for those involved in the delivery of public works and engineering services to the community.

The construction industries, property developers, certifiers all rely on Engineers to set and implement the standards for future developments, design, construction and maintenance of our community infrastructure.

Local Government is a major public infrastructure manager in NSW. IPWEA NSW conducted a Local Government Skills Audit in May 2018 and found 29% of the Local Government Engineering workforce is not degree qualified.

There is wide spread industry support for Recognition of Engineers in NSW from key stakeholders.

The incident at the Opal Tower apartment block in December 2018 highlighted the need for registration of engineers, and that changes only affecting building certification is not adequate.

Recognition of Engineers, the retention of sector technical knowledge and addressing the sector skills shortage all remain a central focus for IPWEA (NSW). Our community rely on infrastructure of all forms, and a focus on only buildings is not appropriate.

Road safety for example is another area of the sector which needs registered Engineers. The Royal Australasian College of Surgeons, has been in the forefront of Road Safety advocacy through its Road Trauma Committee. The College contends that road trauma is a serious health problem reaching epidemic proportions. Thus, the College has been a major contributor to various road safety policies such as mandatory seat-belt wearing in the '70s and drink driving countermeasures and the compulsory wearing of helmets by pedal cyclists in the '80s and '90s. In recent times the College has focussed on the safety of young drivers and children, lobbying for improvements in the Graduated Licensing System and child restraint laws, Quad Bike safety and Alcohol-related trauma.

The increasing road toll on NSW roads has reached alarming levels. Each day, we are confronted with news of deaths due to road crashes as well as the horror of serious road injury sustained by survivors of road traffic collisions on NSW roads. Road collisions incur high economic cost which includes a heavy burden on the health, insurance, and legal systems. Likewise, they leave large unquantifiable costs to the families of those involved as well as on the local communities.

Each day, orthopaedic surgeons, neurosurgeons, general surgeons and trauma surgical colleagues provide care to 30 or more seriously injured road traffic victims in NSW. Some \$3.4 billion is paid each year by the taxpayers for the management of seriously injured road users on our roads. Much of this is largely preventable.

We believe that a huge part of the problem is the lack of well-qualified and trained road managers. Engineers play an important role in providing safe infrastructure for all road users. The level of human suffering caused by road crashes is immense and engineers are well placed to help reduce the number and severity of crashes, casualties and the impact on society. We can increase the number of qualified road managers through establishing a registration system that will ensure the continuous supply of qualified and trained road managers.

Under the current ad hoc and voluntary system, competency standards are not considered adequate. People purporting to have engineering expertise cannot be prevented from taking such responsibilities, even where there is evidence of misconduct or incompetence. The opportunity exists to replace this patchwork system of accreditation and develop a nationally consistent, state-based registration system for professional engineers that can provide one port of call for the certification of engineers working in local government and in the wider profession.

Moreover, with a registration system in place, we can be sure that all road managers working within the highway and transportation environment are properly equipped with the knowledge and capacity to perform the following:

- Crash analysis and remedial engineering measures
- Delivery of an effective road safety strategy
- Road safety audits on all new infrastructure
- Periodic road safety audits on existing infrastructure
- Continuing professional development in the area of crash investigation and prevention
- Ensuring major infrastructure structures such as bridges, walls, and stormwater systems adequately meet community and legal requirements

DETAILED RESPONSE TO TERMS OF REFERENCE

1. The most appropriate way to regulate professional engineers in the building and construction industry.

IPWEA NSW submits

- Recognise engineers as a profession, through a state and national registration scheme,

2. How engineers and other building industry professions are regulated and monitored, and proposals for reform under the Bill and consideration of alternate proposals.

IPWEA NSW submits

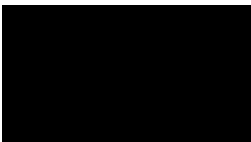
- Engineers are not currently regulated.
- Building Certifiers are accredited by the Building Professionals Board, the NSW Government Authority established to oversee building and subdivision certification.

- Architects are registered by the NSW Architects Registration Board, the NSW Government Statutory Authority.
- No changes to the current Bill. Alternative proposals are not to be considered.

3. Any Other related Matter.

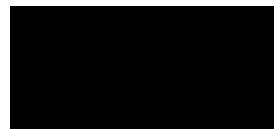
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- Queensland introduced registration scheme in 2002. Victoria has recently passed the Professional Engineers Registration Bill.
- A formal Professional Engineers Registration Scheme is important to meet the need for skills and capacity in order to build and maintain the state's public infrastructure.



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