

**Submission
No 23**

PROFESSIONAL ENGINEERS REGISTRATION BILL 2019

Name: Gordon J Chirgwin

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Dear Committee Members,

I write to lodge a submission to your Inquiry into the proposed Engineer Registration Bill. I support engineer registration in NSW.

I am a Master of Engineering with over 45 years of experience in the fields of Civil and Structural Engineering, with additional expertise in structural materials, such as steel, concrete, timber and structural composites. I have been involved in the design, construction, maintenance, rehabilitation and capacity assessment of buildings, bridges and roads. My work has included the assessment of the capacity of severely deteriorated highway bridges, the training of bridge inspectors and the emergency rehabilitation of slopes supporting roads.

Registration of engineers in New South Wales is long overdue. Right now, anyone can call themselves an engineer in NSW which is not the case with any other related profession. Other professions have had licensing and registration regimes in place for many years to guarantee professional standards, protect the profession from unscrupulous and unqualified operators and protect the public. Examples of other professions where this is the case and where it has had an impact on public safety include: architects, builders, electricians, plumbers, doctors, nurses, and there are many others.

When you consider that engineers sit at the apex of the of engineering works – scoping, designing and overseeing the work of other trades and professionals, it underlines how absurd the current situation is. Building and construction are but two of the engineering fields related to public safety: electrical engineers ensure the safety and stability of our entire electrical supply system; radio and communications engineers ensure we have safe, reliable electronic communications which we all rely on in times of emergency; mining engineers ensure we have safe mining; our dam safety engineers ensure we do not have a major dam failure.

Introducing engineer registration is simply a matter of public-interest and closes a long-time regulatory gap which makes no sense and exposes the public to risks.

I understand why high-profile residential construction failures at Mascot and Opal towers have been the focus in the media, but these crises are indicative of a wider problem that goes well beyond the vertical building sector. Our major projects such as roads, bridges, rail, water & energy projects should not be exposed to unqualified people who can only call themselves engineers because there is no registration system.

There is plenty of evidence that a lack of engineering input is affecting project outcomes. This includes the problem of public safety, but it also blocks innovation and leads to major projects running overtime and over budget. There are several recent examples of public and worker safety being compromised, but there is also a litany of issues with cost overruns and delays attributable to poor scoping of engineering dependent/critical projects.

People deserve to know if they are employing a properly qualified and experienced engineer whether they're building a bridge, an apartment or a new energy generator. And the public deserve to know that the infrastructure and services they use are safe. I urge you to support the Engineer Registration Bill to give the public confidence and workers in the profession the respect they deserve.

Yours sincerely,

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