



ENGINEERS
AUSTRALIA

Jenness Gardner
Chief Executive Officer
Economic Regulatory Authority
PO Box 8469
PERTH BC
WA 6849

3 April 2018

Dear Ms Gardner,

Re: Business licensing reform inquiry, registration of engineers

I am writing with a submission to the Economic Regulatory Authority (ERA) inquiry into reform of state government business and occupational licensing.

This letter contains information on the need for a registration scheme to be introduced in Western Australia for professional engineers, and introduces the National Engineering Register (NER) as a co-regulatory mechanism to achieve the policy objectives of registration.

About Engineers Australia

Engineers Australia is the peak body for the engineering profession. We are a member-based professional association with over 100,000 individual members. Established in 1919, Engineers Australia is a not-for-profit organisation, constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

Benefits of registering engineers

Use of the title 'engineer' is unrestricted and is likely to remain so because it has become a generic term. In the absence of regulation for engineering, anyone can purport to provide engineering services without appropriate competencies and with disregard to standards.

Engineering services are vital to Western Australia's economic prosperity and social well-being. Despite this, engineering services are unregulated in WA and there is no uniform regulatory regime covering engineering practitioners in Australia. Instead, it is ad hoc and largely voluntary.

There are five key benefits of a registration system, with more detail provided at Appendix A:

1. Reduced risks to public health, safety and welfare
2. Legislative efficiency and cutting red tape
3. Industry and consumer information
4. Professional recognition
5. International mobility and trade in engineering services.

Essential elements of a statutory registration scheme

All registration systems have the same basic characteristics in that standards must be set, courses accredited, candidates examined or assessed, and a register maintained. Performance must be monitored and failures disciplined. A register has greater effect if supported by licensing arms of government.

Engineers Australia supports a co-regulatory model of registration involving statutory bodies and professional associations undertaking various roles. The co-regulatory model provides greater assurance of the competency of registered engineering practitioners and reduces the risk of physical and financial harm to consumers. This approach allows industry and the professional association to control the qualifications and competency standard applied to a practitioner, but allows government to oversee the assessment and monitoring system and standards applied to practitioners through the approval process.

A guiding principle of the voluntary registration model introduced by Engineers Australia (the NER), is to increase the professionalism of the broadest possible cohort of practising engineers. Under a co-regulatory approach, Engineers Australia believes that the legislation governing the delivery of engineering services in states and territories ought to:

- contain restrictions on who may deliver engineering services
- restrict the 'registered' title to those who are on a (national) engineering register
- register engineers in the broadest possible areas of engineering practice aligned with the areas of practice on the National Engineering Register and not by industry sector, with the onus on each registered engineering practitioner to only undertake work that he or she is competent to undertake
- base registration on a competency assessment by approved assessment entities
- include a mandatory continuing professional development regime for ongoing registration
- included a mandatory requirement to have the benefit of professional indemnity insurance.

The National Engineering Register

The National Engineering Register (NER) was introduced by Engineers Australia in 2015 and is recommended as the mechanism for introducing a co-regulatory model of registration for engineers.

The NER is the largest publicly searchable register in the country. It delivers a uniform national benchmark of professionalism in the broadest areas of engineering practice, both general and special, in both the private and public sectors. The NER covers each of the three occupational categories of professional engineer, engineering technologist and engineering associate. More detail on these categories is at Appendix B.

The Register is accessible to both members and non-members of Engineers Australia. It improves professional recognition and public trust of engineers in Australia because all registrants on the NER meet the standard of professionalism expected of any professional:

- a recognised qualification benchmarked to international education standards
- a minimum level of professional practice
- currency of continuing professional development
- the benefit of Professional Indemnity (PI) insurance
- a commitment to ethical practice
- an annual certificate of registration.

The annual registration certificate issued to registrants on the NER demonstrates their currency and continued commitment to the serious obligations of professional practice.

Next steps

Engineers Australia encourages all state and territory Governments to introduce a nationally-consistent co-regulatory scheme for the registration of engineers.

The Queensland Government has had a successful regulatory scheme for many years and the NER is recognised by Queensland as a mechanism for achieving registration.

In March 2018, Victoria introduced a Bill to Parliament for a co-regulatory scheme that is broadly consistent with the Queensland model, and the ACT Government has committed to moving towards registration in its current term.

Engineers Australia believes that WA can benefit from joining Queensland, Victoria and the ACT in recognising the need for a registration scheme for engineers. The association is well positioned to support your review of licensing and consideration of a new scheme for the registration of engineers in particular.

I would welcome an opportunity to meet with you and your staff to go into this submission in greater detail. I hope that this is possible, and please contact me on (08) 6214 6309 or send an email to Skremerpickford@engineersaustralia.org.au.

Yours faithfully,



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There are five key benefits of a registration system.

1. Reducing risks to public health, safety and welfare

The greatest risk to consumers of engineering services in the current registration environment comes from engineering practitioners attempting to undertake work without adequate skills or competencies. Risks to the public resulting from the provision of engineering services by unqualified or incompetent persons have three elements:

- Health: through such things as contaminated drinking water, badly designed or 'sick' buildings (poor air-conditioning, rising damp, low natural light levels) and other environmental incidents.
- Safety: through the collapse of buildings and other structures or through the failure of hazardous services such as gas, electricity or mechanical works.
- Economic: involving financial costs such as design and construction costs, litigation expenses, lost production and rectification costs.

Requiring engineering practitioners who offer services that place public safety, health and welfare at risk to be registered can minimise these risks.

2. Legislative efficiency

The NER creates legislative efficiency. It is a means of ensuring that both a common standard for engineering practice is in place in all states and territories and that engineers do not have to comply with the different requirements currently applying in each jurisdiction. The NER simplifies compliance requirements and removes red tape and should be able to be used government as an alternative to government registers where areas of practice are restricted by legislation to particular practitioners and/or for certain special areas of practice.

The NER not only removes the current inconsistencies across jurisdictions but over time should reduce the risk of unqualified practitioners passing themselves off as current practising engineers and prevent those found guilty of misconduct from continuing to practise.

3. Industry and consumer information

Engineering services are purchased by governments, large and small business, and individual consumers. In the absence of a common standard for ordinary engineering practitioners, consumers are limited in terms of the extent they can measure the professionalism of an engineer they wish to engage.

The NER aids the market by providing advice to consumers on the competence and experience levels of engineering practitioners. This enables consumers to make more informed decisions and reduces the tendency for consumers to choose services based on price alone.

4. Professional recognition

Businesses and the community expect a certain set of standards and skills from engineering practitioners. As with other professionals, engineering practitioners have a high degree of responsibility and liability imposed on them by courts and regulators. The NER identifies those persons whose academic qualifications, cumulative and current experience, competencies and commitment to ethical conduct and continuing professional development are the standard expected of the ordinary skilled person exercising and professing to have that skill.

In addition, the NER signals that registrants, in the provision of engineering and engineering-related services, can maintain and have the benefit of professional indemnity (PI) insurance in the event that a professional services provider fails to discharge his/her duties properly.

5. Enhanced international mobility and trade in engineering services

Engineers Australia is uniquely placed with its membership requirements and processes to link the professionalism of the individual engineer to a registration framework. Engineers Australia is not only the trusted voice of the profession in Australia but is also responsible for most of the elements of a licensing regime for the profession, both nationally and internationally.

In many countries, engineering is seen as an essential profession whose practitioners should be recognised and registered. Standards of practice that are recognised by government have the potential to improve overseas trade and are essential for trading in accordance with the World Trade Organisation trade and services obligations, and under bilateral trade agreements.

Registration on the NER can provide a competitive edge for engineers seeking to work overseas.

Engineers Australia recognises three occupational categories within the engineering team.

Professional Engineer

Professional Engineers apply lifelong learning, critical perception and engineering judgement to the performance of engineering services. They challenge current thinking and conceptualise alternative approaches, often engaging in research and development of new engineering principles, technologies and materials.

Professional Engineers require at least the equivalent of the competencies in a four-year full-time bachelor degree in engineering.

Engineering Technologist

Engineering Technologists exercise ingenuity, originality and understanding in adapting and applying technologies, developing related new technologies or applying scientific knowledge within their specialised environment.

Engineering Technologists require at least the equivalent of the competencies in a three-year fulltime bachelor degree in engineering.

Engineering Associate

Engineering Associates apply detailed knowledge of standards and codes of practice to selecting, specifying, installing, commissioning, monitoring, maintaining, repairing and modifying complex assets such as structures, plant, equipment, components and systems.

Engineering Associates require at least the equivalent of the competencies in a two-year full-time associate degree in engineering or a two-year full time advanced diploma in engineering from a university or TAFE college.