ENGINEERS
AUSTRALIA

5 September 2025

Alex Robson, Commissioner and Deputy Chair
Catherine de Fontenay, Commissioner
Productivity Commission

By website: www.pc.gov.au/inquiries/current/competition-analysis-2025

Re: Response to the Productivity Commission interim report on National Competition Analysis 2025

As Australia's national peak body for engineering, Engineers Australia is the voice and champion of our 140,000-plus members. Engineers Australia is a mission-based, not-for-profit professional association, constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community.

Engineering is at the core of Australia's prosperity. Over half of the nation's $1.7 trillion GDP is generated through six engineering-heavy segments of the economy: mining; professional and scientific services; construction; manufacturing; electricity, water and gas; and information, media and telecommunications.

The engineering profession is at the front line of the challenges and reform opportunities the Productivity Commission (PC) has identified in its National Competition Analysis 2025 interim report – in particular, the inconsistent application of codes, regulations and standards, and the challenge of unnecessary administrative friction across jurisdictions constraining productivity and national labour mobility through the inconsistent use of Automatic Mutual Recognition.

Further to our June submission, we provide recommendations and suggestions to your interim report on five specific areas:

1) Automatic Mutual Recognition
2) National standards
3) Access to mandated standards
4) Public procurement
5) Road user charges reform

1) Automatic Mutual Recognition – make engineering a case study

Engineers Australia supports the PC's recommendation 3 (The scheduled independent evaluation of Automatic Mutual Recognition) *"that the Australian Government (in consultation with State and Territory Governments) should instigate the agreed independent evaluation of the Automatic Mutual Recognition scheme."*

In our June submission, we urged the PC and the Government:

- To include engineering registration in the list of priority occupational reforms required to be completed by the states and territories to share in the $900 million National Productivity Fund (NPF)

- To undertake an analysis of the top 10 occupational professions and the harmonisation, or lack thereof, of automatic mutual recognition (AMR) to inform and reform improvements to AMR, and

- That the Treasurer, through the Council on Federal Financial Relations, task the Council, DEWR and Engineers Australia to develop by 1 March 2026, model engineering registration legislation that all states and territories could implement to better facilitate AMR.

Furthermore, we recommend that the PC and the Australian Government use engineering as a case study or test bed to uncover what it would take to achieve nationally consistent engineering registration and share learnings on how best to utilise and revitalise AMR potential.

Much like the push for nationally consistent licensing of electricians, Australia should have a nationally consistent approach to all engineers in the workforce.

The PC's own work indicates the removal of all regulatory barriers to interstate migration has the potential to increase GDP by up to $846 million per year, and in electrical trades, could be of the order of $51 million to $62 million per year.

According to Jobs and Skills Australia, the nation has 190,000 electricians. In comparison, there are more than 450,000 engineers in the workforce, with more than 240,000 working directly in engineering roles, many of whom work across jurisdictions.

The PC's interim report highlights attempts over the past decade to streamline occupational licensing, such as through the National Occupational Licensing Scheme (NOLS) and AMR. However, much has changed in the past 3-4 years, particularly in the engineering profession.

From a situation where for decades only Queensland had an engineering registration scheme, other states have since put in place their own 'unique' schemes – including their own approaches to defining areas of practice, applying competency assessment and CPD requirements, and implementing co-regulation.

In 2021, Victoria and NSW introduced engineering registration, followed in 2024 by the ACT and WA, and legislation is pending for SA.

This has seen almost universal national coverage - but without national consistency – and increasing complexity. For example:

- Queensland covers 19 areas of engineering compared with Victoria and ACT, which cover five, WA, which covers four (but only for work in the building sector), and NSW, which covers six (but only for Class 2, 3 and 9c buildings).
- An electrical engineer in Queensland, Victoria or the ACT designing a new solar or wind farm for a renewable energy zone needs to be registered, but not if they are in SA, WA, or NSW. In NSW, the only registration needed would be to design the construction team's temporary accommodation.
- A mechatronics or a biomedical engineer needs to be registered in Queensland, but in Victoria, they would need to register as either a mechanical engineer or an electrical engineer (or possibly both).
- There is limited licensing for engineers in Tasmania, applying to fire safety, building services and civil engineers in the building sector only. Their firms face hurdles competing for business and projects on the mainland that require services to be delivered by registered engineers.

Added to this, engineers also need to navigate additional regulatory requirements, particularly for those working in the building sector.

These examples highlight the complexity that could and should be simplified through AMR to ensure a "register once, practice anywhere" model – not just for engineers - but across many occupations that AMR is designed for.

Australian engineers need the ability to work around the country. In its August submission to the PC, Consult Australia notes that its membership, *"over 90 per cent (including sole traders and small businesses with only one office location), provide services in more than one jurisdiction and navigate the customs regulations in each jurisdiction. In some cases, the differentiation between jurisdictions is unnecessary, resulting in undue complexity, duplication, and inconsistency. Harmonisation of standards, alignment and interoperability are important factors to reduce the regulatory burden and costs of compliance for businesses, as well as reduce barriers to operating across jurisdictions."*

National support for the effective use of AMR was echoed in June submissions to the PC, including by:

Australian Chamber of Commerce and Industry (ACCI) – *"A modernised approach to Automatic Mutual Recognition (AMR) is essential to enhancing labour mobility and regulatory consistency. The Federal Government should prioritise Queensland's participation in the scheme before 2032, harmonise terminology across jurisdictions to support ease of navigation, and allocate appropriate funding and timelines for national implementation*." (Submission No.87 Page 6 to PC National Competition Policy Analysis 2025).

Business Council of Australia - "*Our members strongly support the AMR scheme and report many positive examples of cross-border work without compromising quality. However, inconsistent licence recognition remains a barrier — limiting workforce mobility, particularly for FIFO roles and major infrastructure projects like transmission lines. Exemptions, inconsistent licensing standards, and varying insurance and regulatory requirements across states create a fragmented and burdensome system. Employers must navigate multiple regimes, while workers face duplicated requirements, added costs, and delays — even when already qualified*." (Submission No. 53 Page 3 PC National Competition Policy Analysis 2025).

Also, we note the Queensland Productivity Commission's recent analysis as part of its review of its construction productivity review that *"on balance, publicly available information suggests that the benefits of Queensland's participation in AMR would outweigh the costs or risks. In the absence of further information, the weight of evidence appears to suggest that greater participation in AMR, at least in relation to the construction industry, is in the interest of Queensland workers, consumers and businesses." (QPC Interim Report Page 249).*

A range of submissions to the QPC also support the need for more effective AMR, for example:

The Real Estate Institute of Queensland (REIQ) noted, *"Mutual recognition of occupational licences should be strengthened across jurisdictions to improve labour mobility, particularly as large infrastructure and housing projects compete for the same talent pool. Therefore, we recommend the Queensland Government advocate for a nationally harmonised system to enable tradespeople to move between states with mutual recognition of licences. Making it easier for international and interstate tradespeople to relocate and work in Queensland is essential to alleviate labour constraints."*

The joint submission by the Air Conditioning and Mechanical Contractors' Association (ACMA), the National Fire Industry Association (NFIA) and the National Electrical and Communications Association (NECA) said *"The Queensland Government should proactively engage with national AMR framework to ensure that mechanisms are in place to verify the substantial equivalence of competencies for specialist construction trades, thereby facilitating skilled workforce mobility while safeguarding Queensland safety and quality standards"* (Recommendation 8, page 6).

Across Australia, you cannot practice as an architect, doctor, teacher or lawyer without appropriate qualifications and registration. However, currently, who can call themselves a professional engineer varies from state to state.

Therefore, noting the

- size, scale and criticality to national projects of the engineering workforce,
- range of steps by State and Territory Governments to create their own 'unique' engineering registration schemes, and
- gains to labour mobility and productivity

we urge the PC and Australian Government to expedite engineering registration as a case study to urgently progress, streamline and revitalise AMR for the engineer profession and occupational mobility more broadly.

2) National Standards

Engineers Australia supports the PC interim report recommendation 1 that the Australian Federal, State and Territory Governments should undertake a review of legislation mandating Australian standards.

In particular, "*undertake a review of legislation in the manufacturing, construction and professional, scientific and technical services sectors mandating Australian Standards where there is no international equivalent, with a view to harmonising with appropriate overseas standards, or removing references that are not required.*"

As your interim report notes, "*National alignment should be a priority. Of the 893 Australian Standards (current or pending revision) incorporated in Commonwealth, state or territory legislation, only 26% are applied consistently (220 are incorporated only in Commonwealth legislation, and 9 are incorporated by all states and territories). For the remaining 664 (74%), there is great variety in which jurisdictions reference and implement the standard.* "

In your report, Table B highlights the use of Australian Standards in Federal and State legislation.
In some regards, the list could be viewed as a regulatory-intensity index, which leads to questions such as why South Australia has 276 standards in legislation while NSW, with four times the population, has 217 standards in legislation.

Engineers Australia's view on the application of international and Australian standards echoes those of PC inquiry participants, *"that the major barrier facing Australian business when it comes to standards is not alignment with international standards, but interstate alignment."*

On 24 August 2025, the Federal Government announced its decision to pause and streamline the National Construction Code (NCC) with the aim of accelerating the construction of new housing.

Engineers Australia believes that the one-year pause, beyond the standard NCC update cycle, presents a strategic opportunity to rethink how the NCC operates, with a renewed focus on innovation, productivity and its consistent application by both state and local governments.

Inconsistencies create complexity for industry stakeholders operating across borders, increase compliance costs, and undermine the potential productivity gains that a unified code could deliver.

Addressing these jurisdictional carve-outs, opt-outs, and divergences is therefore critical to unlocking the full benefits of the NCC and driving national reform outcomes.

The pause to the NCC is an example of the natural tension that exists in the development and utilisation of codes, regulations, and standards – how to achieve consistent application, but remain contemporary by applying the most effective modern approaches to deliver safety, innovation, sustainability and productivity.

Engineers Australia stresses that these are not trade-offs. In many cases, new safety-focused designs and the use of modern and smart approaches to sustainability, circularity, and resilience help deliver more resilient public infrastructure and better-quality residential housing with lower asset lifecycle costs.

3) Access to mandated standards

Engineers Australia supports PC interim report recommendation 2 that Governments should facilitate free (or low-cost) access to standards incorporated in legislation, with *"the cost of providing this access" and "should be considered in any assessment of the costs and benefits of proceeding with a regulated standard."*

4) Public Procurement

Upfront cost vs. whole of life

We note the PC intend to undertake further work on public procurement.

Engineers Australia would welcome the opportunity to participate in future consultations, be it related to project governance, procurement models or practices. The interplay of these can inadvertently (i) limit the role of small business, (ii) constrain innovative and productivity enhancing design, or (iii) slow the uptake of climate adaptation, which builds resilience of the nation's capital stock.

Engineers Australia's 2025 submission to PC inquiry *"Pillar 5: Investing in cheaper, cleaner energy and the net zero transformation"* highlighted that importance of considering whole-of-life value into procurement decisions, rather than the lowest upfront cost. In our 2024 submission to the Climate Change Authority's Targets, Pathways and Progress Review, we identified that infrastructure needs adaptive design to remain functional, but such approaches may appear costly compared to current approaches.

This is because procurement processes and decision-making criteria often prioritise the lowest upfront cost, whereas adaptive design may involve higher initial costs but deliver lower lifecycle costs.

Transitioning from standard construction activities to approaches that prioritise lowering emissions, waste elimination, or secondary materials - for example a minimum amount of recycled or low-carbon materials in infrastructure - will lead to changes in project, process and product design.

Also, lifecycle analysis (LCA) and Environmental Product Declarations (EPD) are expected to become an increasing feature of procurement activities across value chains.

Governments should also consider their procurement process to improve accessibility for small and medium-sized businesses, and also gender equity and community considerations, such as Western Australia's Social Procurement Framework.

How to accommodate, mandate, utilise or incentivise a range of public policy goals through procurement practices provides opportunities and challenges to be carefully considered.

Engineers Australia would welcome the opportunity to participate in future consultation on procurement.

Chief Engineers in the Public Service.

With public infrastructure accounting for 15 per cent of total government expenditure (Infrastructure Partnerships Australia), improving how these projects are scoped, procured and overseen has a direct impact on fiscal stability and national capability.

Since the 1980s, the public sector engineering workforce has declined by 40 per cent, while engineering-related construction activity has grown by over 200 per cent in real terms.

Currently, limited in-house expertise contributes to poor cost control, delays and overreliance on consultants. The 2024 Strategic Review of the Infrastructure Investment Program identified $32.8 billion in cost pressures, including $14.2 billion from projects still in the planning stage.

As government investment in complex technical projects across Federal, State and Territory governments continues to grow, it is essential that decisions are guided by strong engineering advice and proper scrutiny.

Restoring internal engineering capability- such as a National Chief Engineer - would strengthen Australia's resilience by ensuring that the government engages in procurement more effectively.

Even a modest improvement, such as a 10 per cent reduction in project overruns, could generate billions in savings each year. This is a low-cost reform with high returns, freeing public funds for essential services and future infrastructure.

5) Road User Charging Reform

We note the PC and Australian Treasurers intend to undertake further work on the nation's $31 billion road user charges. Engineers Australia would welcome the opportunity to participate in future PC consultations on road user charges and transport.

With fuel excise revenue declining (fuel excise currently covers 30 per cent of road investment) —driven by improved fuel efficiency and the rise of electric vehicles— existing funding mechanisms are becoming unsustainable.

Engineers Australia's Transport Australia Society (TAs) has recently issued a Road Pricing and Investment discussion paper. TAs has sought stakeholder feedback on a three-layered road user model incorporating:

- Base Layer: Charges per kilometre travelled, scaled by vehicle weight.
- Emissions Layer: Additional charges based on vehicle emissions, with exemptions for electric vehicles.
- Congestion Layer: Time- and location-based charges to manage peak demand in urban areas.

The discussion paper notes the challenges of how to develop a pricing model which accommodates social equity and mobility factors, city versus regional aspects, and technical factors of road wear impacts by cars compared to trucks (such as the fourth power rule of axle weight loads).

We will seek to share further insights and advice following the conclusion of our stakeholder consultation.

On these and any other productivity considerations before the PC, we offer our expertise and support.

Yours sincerely,

Jenny Mitchell
General Manager - Policy & Advocacy