

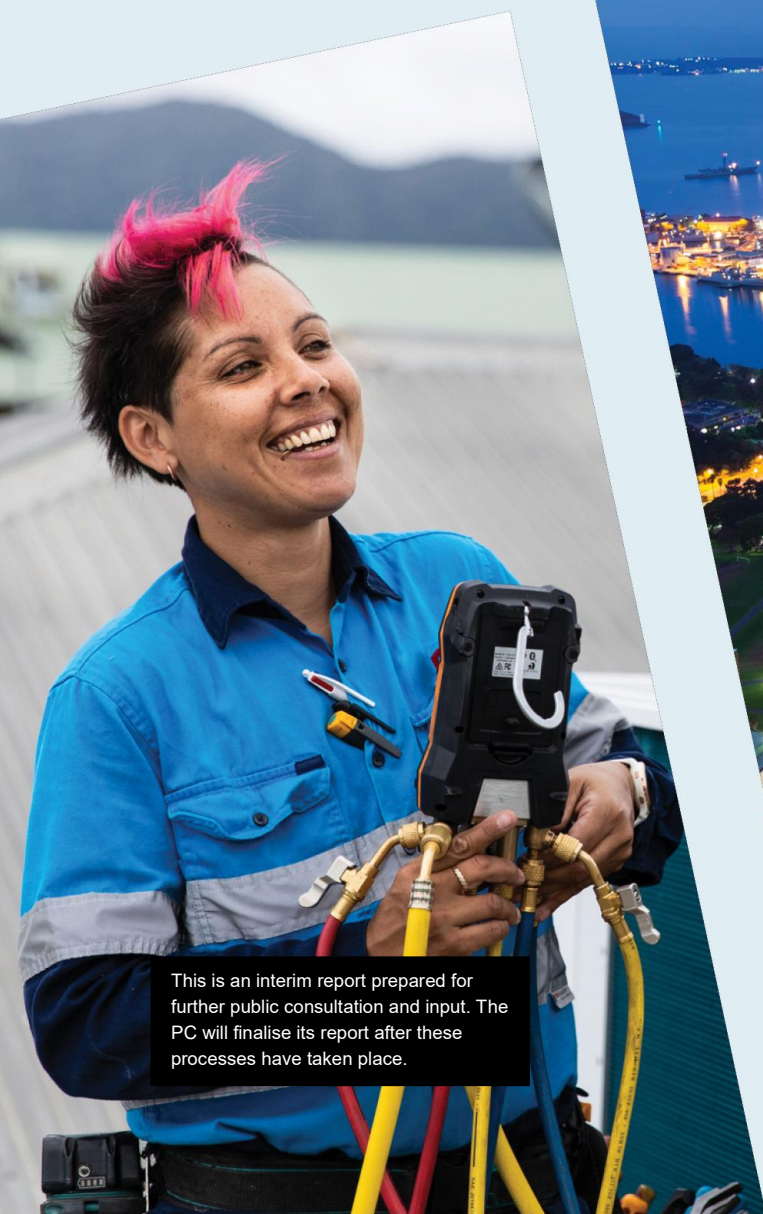


Australian Government
Productivity Commission

pc.gov.au

National Competition Policy analysis 2025

Interim report with appendices



This is an interim report prepared for further public consultation and input. The PC will finalise its report after these processes have taken place.



July 2025



The Productivity Commission acknowledges the Traditional Owners of Country throughout Australia and their continuing connection to land, waters and community. We pay our respects to their Cultures, Country and Elders past and present.

The Productivity Commission

The Productivity Commission (PC) is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long-term interest of the Australian community.

The PC's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by concern for the wellbeing of the community as a whole.

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Opportunity for comment

The Productivity Commission (PC) thanks all participants for their contribution to the study and now seeks additional input for the final report.

You are invited to examine the interim report and comment on it by written submission to the PC, preferably in electronic format by 5 September 2025.

Further information on how to provide a submission is included on the study website:
www.pc.gov.au/inquiries/current/competition-analysis-2025

The PC will prepare the final report after further submissions have been received, and it will hold further discussions with participants.

Commissioners

Alex Robson	Commissioner and Deputy Chair
Catherine de Fontenay	Commissioner

Request for advice

Dear Ms Wood

I am writing to request advice from the Productivity Commission (PC) to support continued pro-competitive reform under National Competition Policy (NCP).

As you know, in November 2024, the Commonwealth, state and territory treasurers agreed to a revitalised NCP, including a first tranche of priority reforms focused on easing cost-of-living pressures and reducing regulatory burden. This was supported by the Productivity Commission's work last year modelling the impacts of a revitalised NCP.

Treasurers are working through this year to develop other reforms that could be included under NCP. This includes the development of a national licence for electrical trades, as committed to in the 2025-26 Budget, and further work on adopting trusted overseas standards, already agreed as a priority reform in the NCP Federation Funding Agreement.

To support this work, I am requesting advice from the PC under s. 17 of the Productivity Commission Act in the form of analysis and modelling for the following set of reforms:

- an occupational licensing scheme for electrical trades and other occupations that provides for labour mobility nationally, with impacts identified by occupation, and recognising that as the scheme relates to high-risk occupations, it will address the need for high standards, while cutting red tape, delays and multiple fees for trades people
- adopting international and overseas standards in regulatory frameworks, and harmonising regulated standards across Australia, in priority sectors identified by governments and
- any other reform options identified as a priority by governments during the term of this study.

For each of these reforms, the PC should:

- detail implementation options (where relevant), and a recommended pathway to implement the reform and reasons for why this pathway is recommended relative to other implementation options
- provide an assessment of the economic and revenue impacts, including expected:
 - impacts on GDP, GSP, dynamic efficiency and other measures of economic progress and national prosperity
 - costs and benefits for Australian households, including
 - » estimated impacts on aggregate measures of incomes, prices and wages
 - » distributional impacts, where possible, including by age, gender, income and education, and any other relevant demographic classification (including impacts on First Nations Australians) and
 - » other impacts on consumers that may be difficult to quantify, such as improved quality of service or wellbeing, or greater choice.
 - impacts on relevant industries and sectors. To the extent possible, this should include estimated impacts on sectoral output, prices, productivity, employment and growth
 - net additional revenue accruing to the Commonwealth, state, territory and local governments.

The PC should provide an interim report, including initial modelling outcomes, to the Government by 31 July 2025 and a final report by 31 October 2025. The reports should include an explanation of the methodology and assumptions and sensitivity analysis showing how results change under different assumptions. In preparing these reports, the PC should undertake consultation, including with the Australian, state and territory governments.

Yours sincerely

The Hon Jim Chalmers MP
Treasurer

[Received 27 March 2025]

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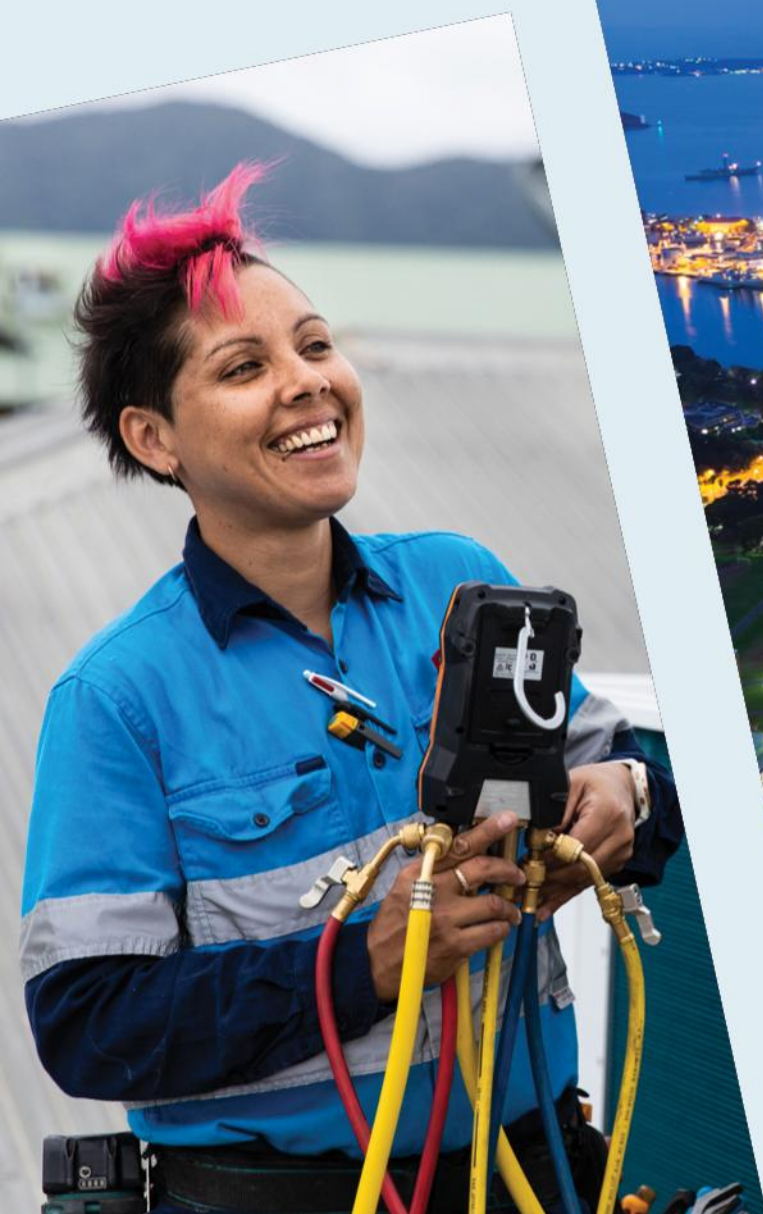
Acknowledgments

The Commissioners, Professor Alex Robson and Dr Catherine de Fontenay, express their appreciation to the staff who worked on the interim report – Assistant Commissioner Benjamin Mitra-Kahn, who leads the study, and other team members including Roland Allen, Shane Chisolm, Owen Gabbitas, Harriet Gray, George Steel and Daniel Viljoen. Our thanks are also extended to Athena Wicks for administrative and project support.

Disclosure of interests

The Productivity Commission Act 1998 specifies that where Commissioners have or acquire interests, pecuniary or otherwise, that could conflict with the proper performance of their functions they must disclose those interests. The Commissioners working on this report have no interests requiring disclosure.

National Competition Policy analysis



Key points

- * **Regulated standards and occupational licensing are two different ways that governments promote important public policy goals. But these regulations can also restrict trade, impose costs and impact competition.**
- * **The reforms the Productivity Commission (PC) has been asked to model have the potential to raise GDP by up to 0.24%.**
 - Aligning standards across Australia, and with international and overseas standards could be worth around \$1.9 billion to \$3.8 billion per year (0.1% to 0.2% of GDP).
 - Providing labour mobility for high-risk licensed occupations across Australia could be worth up to \$846 million per year (0.04% of GDP).
 - Part of this benefit would be to the electrical trades, which we estimate to have an upper bound benefit of \$51 million to \$62 million per year.
- * **Of the 7,519 current Australian Standards, 893 are referenced in legislation and of these only 21 (2%) are not aligned with an existing international standard.**
 - 76% of these mandated standards are bespoke Australian Standards without any equivalent international standard – 90% of these standards relate to three industries only.
 - Only 26% of these mandated standards are consistently implemented by the states, territories and Commonwealth.
 - Around 40% of all Australian Standards referenced in legislation are superseded, obsolete or withdrawn.
- * **Occupational licensing reform could promote labour mobility and improve productivity, as workers move to places where their skills are most needed and valued. Much has been gained through previous reform efforts, which created national licensing for health professions and automatic mutual recognition for many other occupations.**
 - Not all states have joined the automatic mutual recognition scheme (Queensland does not participate), and states and territories continue to exclude some professions.
- * **Other reforms to promote competition were canvassed in the 2024 National Competition Policy Study and remain potentially important for further consideration.**
 - High value reforms included: occupational licensing reforms to lower restrictions (being considered in the PC's current *Building a Skilled and Adaptable Workforce* inquiry); public procurement reform; data sharing; and road user charging.

About this study

In March 2025 the Productivity Commission (PC) was asked by the Treasurer for advice on two reform areas – occupational licensing and the adoption and harmonisation of international standards – associated with the national competition policy (NCP) reform program. This followed the agreement between Commonwealth and state and territory treasurers in November 2024 to ‘refreshed National Competition Policy principles that will shape an ongoing 10-year reform program’ (Chalmers and Saffioti 2024) and a first tranche of reforms which the PC had modelled (PC 2024).

To inform the development of the two additional reforms, the PC was asked for advice in the form of analysis and modelling, specifically for:

- an occupational licensing scheme that provides for labour mobility nationally
- adopting international and overseas standards in regulatory frameworks and harmonising regulated standards across Australia
- any other reform options identified as a priority during the study.

The request for advice asks the PC to detail implementation options and a preferred pathway to implement the reforms and provide an assessment of the economic and revenue impacts with an interim report in July 2025 and a final report in October 2025.

As part of this study the PC released a 'call for submissions' paper in May 2025 and received 102 public submissions and 7 brief comments.

Headline results

The PC was asked to model the economy wide and government revenue impacts of the proposed reforms. In this interim report we estimate the expected upper bound of benefits and we are seeking feedback on the data and assumptions we are making to establish that upper bound, as well as to inform the next stage of analysis.

For international standards our estimate of benefits is a range between \$1.9bn and \$3.8bn per year, or around 0.1% to 0.2% of GDP. This is mainly driven by the potential benefits from aligning a proportion of the 675 mandated but bespoke Australia-only standards with overseas standards and across states and territories.

For occupational licensing, the analysis is in two parts. The PC was asked for the impact of a national scheme for the electrical trades, and for other high-risk occupations. Considering a 2013 Treasury impact assessment of an electrical trade scheme and the current systems in place, the PC expects the upper bound of the benefits for the electrical trades to be between \$51m and \$62m per year. Across all high-risk occupations requiring a licence, including electrical trades, the PC expects the benefit of free labour mobility to have an upper bound around \$846 million per year or 0.04% of GDP.

In the final report we intend to model the distributional impacts of the reforms using a Computable General Equilibrium (CGE) model, as was done in the 2024 NCP report (PC 2024). This will involve using either the PC National model or the PC Regional model where inter-state friction is relevant for the analysis.

Standards

Standards touch on many aspects of everyday life. A standard is a published document setting specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform as intended (DIIS 2016a, p. 18). The associated conformity assessment judges whether a product, service, process, claim, system or person meets the requirements of a standard (ISO nd). These are desirable outcomes for the ongoing effective functioning of competitive markets. In some markets, businesses have sufficient incentives to ensure these outcomes are achieved and it will be readily apparent to consumers when they are not.

In many markets, however, it can be difficult to agree on interoperability standards with all parts of the supply chain, and difficult for businesses to either convey their conformity with standards or for consumers to know a standard has been met. In these situations, standards and their labelling become a useful means to enable socially acceptable market outcomes.

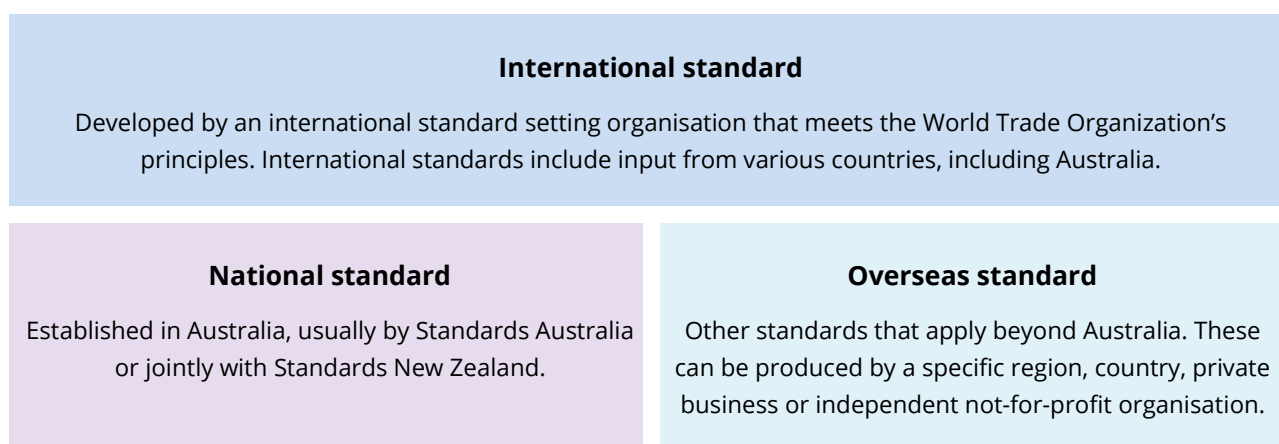
If you are reading this report on a computer monitor purchased in Australia, your monitor would have had to meet mandatory energy efficiency standards, including minimum energy performance standards set out in AS/NZS 5815.2:2013 and testing according to AS/NZS 5815.1:2012, and display a standard Energy Rating Label.¹ Standards can extend into quality, information, uniformity, professional conduct, interoperability (OECD 2011, p. 9), and into the testing of goods through conformity assessments (ISO nd).

Growing international integration of markets has increasingly led to a shift from domestic to international standard setting (Büthe and Mattli 2010, p. 440). This is because standards and conformity assessment play a key role in facilitating trade and improving market operations (PC 2006, p. 10) by:

- reducing *transaction costs* by addressing the information asymmetry between buyers and sellers
- improving the *compatibility* (interoperability) of interconnected goods or services where network effects may be present (e.g. mobile phones)
- reducing costs by delivering *economies of scale* through facilitating mass production of certain goods (e.g. appliances using batteries in standardised sizes), and
- diffusing *technology and innovation* by enabling all firms to access the technological knowledge contained in a standard.

Broadly, there are three types of voluntary standards: International, national and overseas standards (figure 1).²

Figure 1 – Three types of voluntary standards



On their own, standards are voluntary. Governments can however mandate standards through legislation. When developing legislation, government can reference an existing standard, develop its own standard, or task a body, such as Standards Australia, to develop a standard which the government mandates (PC 2006, p. 38). When governments mandate standards, they are free to adopt an international or overseas standard – indeed, Australian Government policy is to adopt an international standard, if one exists, unless it can be demonstrated that there is good reason not to do so (DIIS 2016b, p. 2). This places an onus of proof on policy makers to justify regulated standards that depart from a relevant international standard.

¹ Greenhouse and Energy Minimum Standards (Computer Monitors) Determination 2014 (Cth). Computer monitors are also regulated under state and territory electrical safety laws and by the Australian Communications and Media Authority.

² In addition to 'Australian standards', 'international standards' and 'overseas standards', the Australian Government's consultation on the use and recognition of standards in regulation refers to two other types of voluntary standards: 'regional standards' and 'industry standards' (Australian Government 2025, p. 4). In this report, the PC has included these two other types as 'overseas standards' to reflect the terms used in the letter commissioning this study.

When Australian standards are not aligned with international standards it can act as a trade barrier, and when standards are not aligned across Australia it acts as a barrier to interstate trade – which governments acknowledged in the *Intergovernmental Agreement on National Competition Policy* (Federal Financial Relations 2025, p. 27).

Mandated Australian Standards largely align with international standards

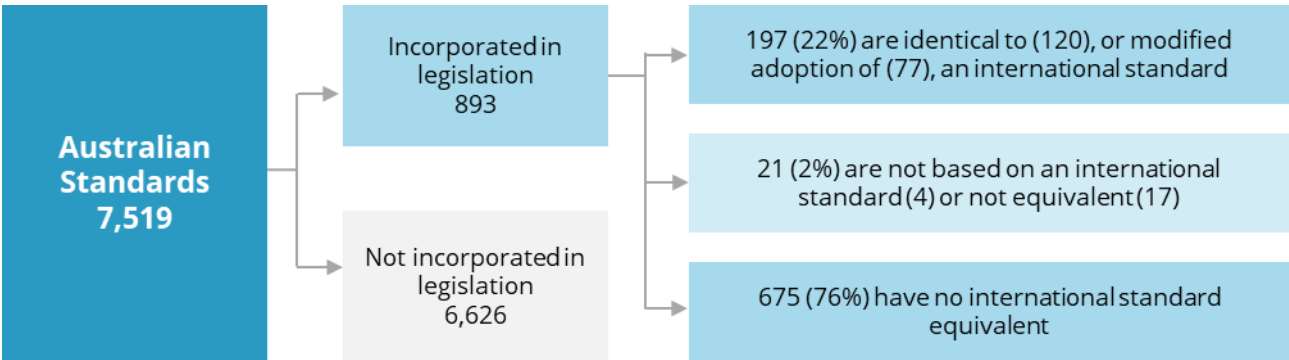
By and large, Australian Standards align with international standards, where an international standard exists. But there are many Australian Standards which have no international equivalent, and Australian legislation refers to many of these bespoke Australian Standards.

There were 7,519 current Australian Standards as of 10 July 2025.³ Some 893 were incorporated in legislation in at least one jurisdiction. Of these, only 21 (2%) were not aligned with an existing international standard, while 197 (22%) were identical to, or based closely on, an international standard – the difference in text generally being minor, for example technical modification for Australian electrical plugs (Standards Australia 2023, p. 118).

The majority (675 or 76%) had no equivalent international standard and were bespoke Australian Standards (figure 2). Where no international standard exists, it may be possible to reduce trade barriers by also permitting compliance, in the legislation, with appropriate overseas standards (regulated or voluntary). For example, the European Union (EU) and United States (US) have standards for bicycle helmets.

Figure 2 – Legislation incorporating Australian Standards^a

Commonwealth, state and territory legislation incorporating Australian Standards (current or pending revision) as at 10 July 2025



a. Includes joint Australian Standards e.g. Australian/New Zealand Standards (AS/NZS) or Australian/International Organization for Standardization standards (AS/ISO).

Source: PC estimates based on Standards Australia (personal communication, 14 July 2025).

Looking at all Australian Standards (voluntary and mandated), only 1% of the 7,519 standards were not aligned with a relevant international standard, about 44% were identical to, or modified adoptions of, an international standard, and about 55% had no international equivalent.

³ The figure of 7,519 consists of 5,946 Standards and 1,573 other publication types (e.g. Handbook or Technical Specification). These other publication types are sometimes incorporated in legislation. For simplicity, this report refers to all publication types as ‘standards’.

Standards incorporated in legislation stand out as using disproportionately more bespoke Australian Standards (76% compared with 55%).



Interim finding 1

Mandated standards largely align but there are many bespoke standards

An estimated 893 Australian Standards (current or pending revision) are incorporated in Commonwealth, state or territory legislation. Only 2% of these standards do not align with an existing international standard. A disproportionate amount (76%) are bespoke Australian standards with no international equivalent.

Legislation that does not incorporate a standard can also create a trade barrier

Rather than incorporating a voluntary standard, legislation can prescribe a standard developed by government. Such legislation can create a trade barrier through misalignment with existing international or overseas standards.

From 1995 to 2024, Australia made 846 regular notifications to the World Trade Organization (WTO) identifying proposed regulation where no international standard exists or the regulation is not the same as the international standard, and the regulation may have a significant effect on trade. These were mainly in relation to food safety standards and biosecurity, and, to a lesser extent, consumer goods, road vehicles, therapeutic goods, energy & water efficiency, industrial chemicals and communications (appendix B).

Potential benefits from harmonisation

There are three main ways in which harmonisation of standards – be it with international or overseas standards or across Australia – could produce net benefits:

- lower compliance costs incurred by businesses – for example, Treasury estimated that Australian Consumer Law (ACL) reforms would reduce business compliance costs by \$10m p.a. per mandatory safety standard or \$500m p.a. across all 50 standards (PC 2024, p. 18; Treasury 2024, p. 7)
- lower administrative costs for government – for example, from accepting another jurisdiction's conformity assessments and approvals, and
- increase the range of products available in Australia, because more products designed for overseas markets can be sold here. Greater range would imply:
 - a. consumer welfare gains from greater competition, lower prices and greater product diversity
 - b. productivity gains – for example, from earlier access by business to new technology or other production inputs, and
 - c. public welfare gains – for example, from earlier access to new or cheaper medical devices.

The economic literature generally finds that aligning domestic and international standards (relative to having a bespoke national standard) promotes trade, though the magnitude of these effects vary (Blind and Jungmittag 2005; Schmidt and Steingress 2022, appendix B). With higher trade volumes, there is also evidence for increased product diversity (Shepherd 2007). This in turn lifts consumer welfare, in the economic sense, and national income. The PC aims to quantify these benefits and is seeking additional information to do so.

Using past Impact Analyses to estimate potential net benefits

The Commonwealth Office of Impact Analysis database includes 18 Impact Analyses from 2012 to 2025 that considered alignment of an Australian regulated standard with international or overseas standards. Quantitative estimates of the net benefit ranged from negative \$200 million to positive \$215 million annually (appendix B).

These assessments provide an indicator of the economic impact that harmonisation could have across a range of regulated standards. On average, the assessments found a net benefit of \$20 million per annum. The distribution is uneven, however, with just a few standards having a large positive or negative economic impact. If the outlying estimates are excluded from the sample, it reduces the average to \$10m annually.

To estimate the benefits from reform, we assume that legislation incorporating the estimated 21 current Australian Standards not aligned with existing international standards could appropriately be aligned. It follows that if we expect no more than \$10m–\$20m p.a. per standard there will be a total benefit of \$210m–\$420m per year.

There are several caveats to this simple analysis. Not all the legislation incorporating these standards will be amenable to greater alignment. If the standards are incorporated in state or territory legislation (which 15 are), as opposed to Commonwealth legislation, the benefits may also be proportional to the economic size of the jurisdiction – although it is also possible that trade restraints imposed by one jurisdiction impacts national supply (see box 1 for an example of this). Also, past Impact Analyses suggest the distributions are very uneven, so locating one high value standard would account for most of the benefits.

If the 675 mandated standards that are Australia-specific could be aligned to appropriate overseas standards from the relevant trading partners, there would be further benefits. Without undertaking a case-by-case review of all the legislation, it is not possible to say with certainty what percentage of this legislation is amenable to greater harmonisation.

Recent sector-specific reviews have not found extensive and pervasive misalignment with international or overseas standards (appendix B – e.g. the National Electrical Safety Taskforce found that approximately 85% of standards prescribed in state and territory legislation for electrical appliance benchmarking purposes were based on international standards (WA Department of Energy, Mines, Industry Regulation and Safety, sub. 47, p. 2)). Thus, we have assumed that a quarter of the 675 Australia-specific standards could be aligned with appropriate overseas standards. Applying this assumption means the total net benefit would be \$1.9bn to \$3.8bn annually.



Interim finding 2

Economic benefits from harmonising Australian regulated standards with international or overseas standards

If legislation can be expanded to permit compliance with international or overseas standards for all of the estimated 21 mandated current Australian Standards not aligned with an existing international standard along with a quarter (169) of the 675 mandated Australian Standards where no international standard exists, then applying the range of \$10m–\$20m p.a. suggests a total benefit of \$1.9bn–\$3.8bn p.a. (0.1–0.2% of GDP).

For the PC to model these benefits in a CGE model in the final report, it would be necessary to know what sector each standard applies to, and the likely magnitude of each standard reform.



Information request 1

The PC is seeking specific examples of Australian legislation where international or overseas standards could be adopted or recognised as equivalent, including any information or data on the expected costs and benefits of alignment.

Priority areas for review

There are five broad areas for review. These cover legislation:

1. incorporating the 21 Australian Standards not aligned with an existing international standard
2. incorporating the 675 Australian Standards for which there is no international standard
3. that does not incorporate an Australian Standard but which creates a trade barrier through misalignment with international or overseas standards
4. where there is inconsistency across Australian jurisdictions, and
5. incorporating out-of-date versions of voluntary standards.

Mandated Australian Standards not aligned with international standards

Despite the small number of internationally unaligned standards, these standards can create trade barriers when mandated. An example is the Australian Standards relating to life jackets (the AS 4758 series) which are not equivalent to the international standard (the ISO 12402 series). Commonwealth, state and territory marine safety laws incorporate the Australian Standards but take an inconsistent approach to also permitting compliance with the international standard.

All legislation incorporating these 21 standards should be reviewed, with a view to also permitting compliance with the international standard where appropriate.

Mandated Australian standards where no international standard exists

A potential focus area for the ongoing NCP reform agenda would be the 675 mandated current Australian Standards for which there is no international standard. If this Australian regulation is necessary, it may be possible to reduce trade barriers by also permitting compliance, in the legislation, with appropriate overseas standards of specific jurisdictions. For example, the NSW Small Business Commission referred to the need to recognise overseas assessments for the construction sector, providing the example of prefabricated and modular houses (sub. 18, p. 3). The Housing Industry Association cited the Singapore Product Listing Scheme which provides a list of recognised standards for fire safety products (sub. 78, p. 8). Alignment with overseas standards is also particularly relevant to new areas of regulation such as artificial intelligence where, as noted by Amazon, global standards are nascent and there is a risk of ending up with a patchwork of local, conflicting regulations (sub. 99, p. 5).

The submissions received by the PC that covered this NCP reform raised many potential sectors (appendix B) where Australian regulation could be more closely aligned across Australia or with international or overseas standards. As at 10 July 2025, of the 675 current Australian Standards incorporated in legislation with no international equivalent, 90% were in three sectors: manufacturing; professional, scientific and technical services; and construction.

Legislation not incorporating an Australian Standard which creates a trade barrier

Food safety standards and biosecurity, which together accounted for over 75% of Australia's notifications to the WTO, are examples of areas of regulation that usually do not incorporate a standard made by Standards Australia but where there may be value in reviewing alignment with existing international or overseas standards. The Australian Industry Group identified both of these sectors as priorities for reform (sub. 98, p. 9). In relation to food safety, the Infant Nutrition Council provided the example of Australia's new labelling requirements for infant formula which harm the competitiveness of Australian manufacturers in export markets by not aligning with the international Codex Alimentarius and regulatory frameworks in the EU, US and Hong Kong (sub. 38, p. 1). In relation to biosecurity, Shipping Australia referred to the high cost being borne by Australians from international trading vessels being turned away by state authorities despite meeting global biosecurity rules and receiving federal clearance to enter Australia (sub. 58, p. 2).

Other sectors covered by the WTO data were also identified in submissions. For example, the NSW Small Business Commission referred to medical cleaning products which are not commercially viable to manufacture in Australia due to the expense and time required to obtain new approvals from the Therapeutic Goods Administration, even when the product is identical to one already approved overseas (sub. 18, p. 3). Animal Medicines Australia referred to the significant adaptive costs to register an animal health product, with every unique Australian requirement increasing the time, cost and complexity to bring new products to farmers (sub. 20, p. 3).

Inconsistencies across states and territories

Participants said that the major barrier facing Australian business when it comes to standards is not alignment with international standards, but interstate alignment. For example, the Carpet Institute of Australia said that the 'greatest inefficiencies in the flooring sector stem from inconsistent standards and regulations across Australian states and territories' and urged the PC to prioritise 'national alignment of regulated standards as the first step in reform' (sub. 6, p. 2).

There may be good policy reasons why some standards are not relevant to all jurisdictions – for example, the National Construction Code includes specific performance requirements that are only applicable in alpine areas, which are probably not relevant in the Northern Territory. However, the implementation of standards across Australia, whether aligned with international standards or not, is a mess. The case of bicycle helmets, in box 1, is an illustration of how these issues overlap and create economic and consumer costs.

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.

The Australian Industry Group referred to Australia's two distinct electrical product safety frameworks that reference International Electrotechnical Commission standards (adopted as Australian Standards) but impose different compliance requirements for registration and certification (sub. 98, p. 8). The Business Council of Australia (sub. 53, p. 7) and IKEA (sub. 59, p. 1) provided examples of packaging requirements which diverge from overseas frameworks and are inconsistent across the states and territories, imposing unnecessary compliance costs and undermining the efficiency and scalability of recycling and waste reduction efforts. The Australian Logistics Council described the framework for freight vehicles as 'a patchwork of national guidelines, state regulations, and local government discretion' which creates operational inefficiencies, particularly at jurisdictional boundaries, in turn affecting ports, intermodal terminals, and rail hubs (sub. 28, p. 2).

Box 1 – Case study: bike helmets

The regulation of bicycle helmets in Australia provides a clear example of how alignment with overseas standards can reduce business compliance costs and demonstrates the flow-on benefits for consumers from harmonisation. It also shows what happens when states and territories are not aligned.

It is a legal requirement for cyclists to wear helmets but very few, if any, bicycle helmets are manufactured in Australia, so helmets are imported. Bicycle Industries Australia estimates that around 1.2 million helmets with an average retail price of \$55 are imported each year, suggesting Australians spend around \$66 million each year on new bicycle helmets.

There is no international standard for bicycle helmets, however the two most widely used overseas standards are the EU and US standards.

The Australian Competition and Consumer Commission estimated that alignment with the EU and US standards could save businesses \$14m per year in compliance costs (consisting of savings in testing and compliance-related administrative costs). There would also be benefits from increased choice.

But the benefits did not materialise quickly, due to implementation issues. The Australian Competition and Consumer Commission's review of the bicycle helmet standard under the ACL commenced in 2016, and only in 2024 was the standard revised to permit compliance with both EU and US standards. Once changed however, states and territories did not adopt this change consistently.

State and territory road safety authorities administer laws that govern which helmets can be used by cyclists (through 'use' laws). So even though the ACL standard was changed, EU and US standards were not permitted to be used until each jurisdiction updated their road rules. New South Wales updated theirs first, in June 2024, with other states and territories following since then, and some yet to be updated.

The net result is that eight years after realising the value of harmonisation, most Australians are yet to see benefits from this harmonisation as the bike helmet market is national and differences across jurisdictions matter for importers and large retailers.

Source: Bicycle Industries Australia (sub. 68, pp. 3–4 and personal communication, 14 July 2025).

Outdated mandated standards

There are many references in legislation to outdated Australian Standards. As at 10 July 2025, Australian Standards were incorporated 3,743 times in Commonwealth, state or territory legislation (sometimes the same standard is referenced by multiple jurisdictions or in more than one law in a jurisdiction). Of these, 1,403 (37%) are references to Australian Standards that are superseded, obsolete or withdrawn.

While the legislation may be drafted to address this by allowing compliance with the latest version of the specified standard (known as 'in force from time to time') or allowing compliance with an equivalent standard, a priority area for review should be for governments to update legislation to reference the appropriate version of standards. An example is the Australian mandatory standard for bunk beds which was introduced in 2003 and continues to reference the 1994 version of the voluntary Australian Standard even though it was updated in 2003 and again in 2010 (Standards Australia, sub. 76, p. 11).



Interim recommendation 1 Priority areas for reviews of standards

Australian, state and territory governments should:

- review all legislation mandating Australian Standards that are not aligned with international standards with a view to harmonising or removing references that are not required
- review 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
- identify other areas of legislation that do not incorporate an Australian Standard but create a trade barrier through misalignment with international or overseas standards such as food safety and biosecurity
- review legislation that is inconsistent across jurisdictions and agree to harmonise regulated standards across Australia, and
- update legislation to enable compliance with current versions of incorporated standards where appropriate.

The request for advice for this study asks for implementation options; in the final report the PC will provide further detail on standards for review, where possible.

Other reforms to standards

Access to mandated standards

In 2006, the PC recommended that a way be found to provide ready access to mandated standards – the law of the land – either cheaper or free.

Mindful of the fundamental principle of transparency and accessibility of legal requirements, the Australian Government and other governments (through their agencies) should fund free or low-cost access to Australian Standards made mandatory by way of regulation. (PC 2006, p. 130)

This continues to be an issue nearly 20 years later. The NCP program provides an opportunity to address this. It is unlikely that the benefits of harmonisation can be maximised if there is a barrier to businesses accessing harmonised standards.

The financial cost of accessing standards mandated in legislation was a common theme in submissions. For example, TAFE Directors Australia referred to the significant fees required to provide students with the access to standards they need for their training (sub. 22, p. 3). The NSW Small Business Commission provided the example of a small electrical engineering business needing to purchase hundreds of standards for a single infrastructure project, at a total cost that exceeded the project's profit margin (sub. 18, p. 4). The Australian Construction Industry Forum added that around 120 standards are referenced in the National Construction Code, and these standards often reference further standards, meaning that a business may need to access many hundreds of standards (sub. 44, attachment p. 9).

Standards written by private standard setting bodies are sold to recover development costs and generate a return on the intellectual property embodied in the standards. This is traditionally the argument as to why governments cannot 'give away' free access to standards.

Governments who mandate the use of standards should bear the fiscal cost of facilitating free (or low-cost) access to standards so that it is considered in any assessment of the costs and benefits of proceeding with a regulated standard (PC 2006, p. 129). As the PC previously argued:

Indirectly, therefore, the cost to the Government of subsidising access could perhaps, over time, be expected to reduce the number of regulatory references, by providing a further incentive to ensure standards are referenced only when clearly justified. (PC 2006, p. 128)

An initial review of the Standards Australia annual reports suggests that the cost to governments of this would be about \$7 million⁴ per year to provide free access to mandated standards, if the revenue they generate for Standards Australia is proportional to the number of standards.



Interim recommendation 2

Governments should fund access to standards in legislation

Governments should facilitate free (or low-cost) access to standards incorporated in legislation. The cost of providing this access should be considered in any assessment of the costs and benefits of proceeding with a regulated standard.

Occupational licensing

Occupational licensing places restrictions on those who can practice an occupation for the purposes of protecting worker safety and resolving safety and information asymmetry issues for consumers. About one in five occupations in Australia, representing approximately 16% of employment, require workers to have some formal license, registration or accreditation to provide some, or all, of the services associated with that occupation (table 1).

Table 1 – What proportion of Australian occupations require a licence
2021

	Number of occupations	Employment
Licence required	181 (18%)	1,883,220 (16%)
Licence may be required	148 (15%)	1,835,820 (15%)
Licence not required	685 (68%)	8,405,370 (69%)
Total	1,014 (100%)	12,124,410 (100%)

Source: PC estimates based on ABS Census 2021 and JSA (2025).

The potential downsides to occupational licensing requirements are that they may hinder productivity growth by restricting the labour pool and impeding the allocation of labour towards more productive firms. This reduction in productivity is experienced by the worker whose wage opportunities are diminished, within individual firms and between firms in an industry. The compliance costs of licensing requirements act as barriers to entry, and this lowers the competition from new market entrants (PC 2023, 2024).

⁴ As an indicator, if 1,263 (16%) of Standards Australia's catalogue of 7,991 voluntary standards ('available superseded' in addition to 'current' and 'pending revision') are incorporated in legislation, this could suggest a government subsidy of around \$7m p.a. would be required to provide free access to these mandated standards (i.e. 16% of the royalty and e-commerce revenue (\$45m) for 2023-24) (although noting this does not reflect different list prices, usage and curated subscriptions of standards).

The PC has been asked to look at the benefits of creating a national labour market through national licensing, or similar mechanisms, with a particular focus on high-risk professions. High risk can be defined by risks to workers and consumers.

High (real or perceived) risk of worker injuries or deaths is the metric against which we judge whether a profession is high risk for workers. This is often used as justification to exclude occupations from automatic mutual recognition (AMR).

The high risks to consumers generally arise in markets for credence goods (where consumers cannot directly judge the quality of a product or service without the assistance of an expert, such as dentistry), and licensing can mitigate this by acting as a signal of safety and quality.

Where these criteria overlap is what the PC would consider a high-risk profession. The PC's current inquiry into *Building a Skilled and Adaptable Workforce* is considering the issue of occupational licensing more broadly.

Approaches to licence interoperability

There are three ways of addressing different licensing schemes in different jurisdictions to allow for free labour mobility – mutual recognition, AMR and national licensing schemes.

Mutual recognition allows workers who have a licence from one jurisdiction to obtain a licence in another jurisdiction without needing to meet all the requirements to obtain the licence, even though these may differ across jurisdictions. This was established in Australia through the *Mutual Recognition Act 1992* (Cth) which set out the framework for the mutual recognition of occupational licences across jurisdictions.

AMR allows licensees from participating jurisdictions work in any jurisdiction by simply notifying the jurisdiction where they wish to work that they possess a license from another jurisdiction. This differs from just 'mutual recognition' as licensees do not need to pay a fee to obtain a new license or register with the new jurisdiction, they simply need to notify the relevant regulator. Previous PC reviews (2009, 2015) of mutual recognition arrangements have indicated that the mutual recognition of licences has been able to alleviate labour shortages and assist interstate labour mobility. In 2020, state and territory governments (except Queensland) established a system of AMR.

The ability to undertake disciplinary actions is contested in the AMR space. In their submission to the Mutual Recognition Amendment Bill 2021 (Cth) which introduced AMR, the Queensland Electrical Safety Commissioner (2021) raised concerns over the ability to undertake disciplinary actions against workers who worked in Queensland under AMR but held an interstate licence. This sentiment was echoed by the Electrical Trades Union of Australia (sub. 56. p. 11) in their submission to this study.

Not all licenced occupations are covered by either mutual recognition or AMR as states and territories often exempt high-risk occupations. A national licensing system is intended to overcome such exemptions, and differs from the current state-based licensing system in three key ways.

First, licences under a national licensing scheme are agnostic as to which jurisdiction license holders operate in. This is similar to the goal of AMR, which reduces, as much as possible, the compliance costs for workers to operate in different jurisdictions while maintaining state specific licensing.

Second, there are nationally agreed standards, instead of these being specific to jurisdictions. The difficulty of agreeing on standards is a real and ongoing issue – it was achieved for some health professions in 2010 as part of the National Registration and Accreditation Scheme, but was not achieved for the proposed National Occupational Licensing Scheme (which was abandoned in 2013). There are also risks that the agreed uniform standard is more restrictive than the current standard for some jurisdictions.

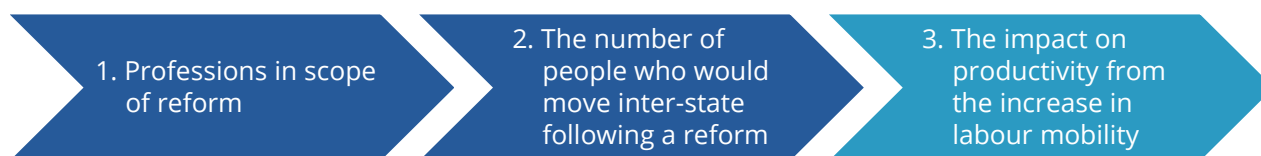
The third is that a national registration system would replace the state-based registration system. Not only is a state-based registration system more costly, but it also creates compliance issues as it can be difficult to consistently implement and communicate disciplinary actions. Energy Skills Australia (sub. 13 p. 5) stated the inconsistent enforcement of compliance requirements is a weakness of AMR and suggested that national licensing would allow for a unified approach to compliance enforcement. Safe Work Australia (sub. 9 p. 1) said that:

A national occupational licencing scheme for other types of skilled work is likely to improve [work health and safety compliance] across Australia by creating a consistent, nationally standardised system for assessing and verifying worker competency.

Estimating the economic benefits of reforms

To understand the benefit of this reform for electrical trades specifically, and to high-risk occupations generally – where there are risks to both workers and consumers – requires three pieces of data, as set out in figure 3.

Figure 3 – Data needed for modelling



The PC has analysed census data, and occupational licensing data, to map the professions that are in scope of this reform (appendix C) to produce data items that cover the first part of figure 2. There are empirical estimates based on the expected response of workers moving inter-state because of falling barriers to movement which can be used to account for item 2. For item 3, while the PC has previously investigated the effects of occupational licensing reform, the available data is only for a removal of all compliance costs arising from the legislative requirements faced by workers moving interstate, not just occupational licensing. Thus, the direct effect of occupational licensing on interstate labour mobility remains an assumption based in the literature.

The PC's *Review of Mutual Recognition Schemes* (2009, p. 73) modelled the effects of greater interstate labour mobility for licensed occupations in the context of a 10% shock to resource export prices, assuming labour was perfectly mobile which resulted in a GDP increase of 0.3%. The PC report on *Geographic Labour Mobility* (2014, p. 377) estimated the effect of an interstate border on labour mobility and found that needing to cross a state border reduced the movement of workers by 77%. Reforming occupational licensing would alleviate some of the cost of complying with state legislative requirements when moving interstate and thus would improve labour mobility by a proportion of this effect. However, the extent to which occupational licensing reform would reduce compliance costs for workers moving interstate is not clear.



Information request 2

The PC is seeking input and data on the potential impact on productivity from an increase in interstate labour mobility arising from occupational licensing reform.

The PC is also seeking data on the costs of complying with occupational licensing requirements when moving interstate, as compared with the cost of complying with other state regulatory requirements.

National CGE modelling – simple approach

Wage differentials between states give an indication as to the transaction costs which exist for workers who move between states. Without these transaction costs, it would be expected that in equilibrium, wage differentials between states would be purely a reflection of the differences in productivity between states. Thus, observed wage differentials between states are inflated by the effect of the transaction costs imposed by interstate borders, and removing this effect would yield the expected productivity gain of moving between states.

Using the results from PC (2014, p. 377), the decision for a worker to move between labour market regions was examined and push factors such as an increased wages, as well as pull factors such as transaction costs arising from crossing an interstate border, were considered among others. The effect of removing a state border was found to increase the number of people who moved labour market regions by 331%. A 1% increase in real wages in the destination labour market region was found to increase the number of people moving by 1.54%. This implies that removing an interstate border has the same effect on interstate labour mobility as a 215% wage premium. The average real wage premium for an interstate move is 3.8% (ABS 2021, 2024a, 2024b), which is 215% of what the wage premium would be if the compliance costs for an interstate move were the same as an intrastate move. This implies that if the entirety of this difference in compliance costs were removed, the resulting wage premium for an interstate move would be 1.8%.

To give a sense of the magnitude, applying a 1.8% productivity improvement to the 16% of workers who move interstate (or would in response to the reforms) in each of the occupations best suited to national licensing (covering 22% of all employees), would deliver a GDP increase of \$846 million per year or 0.04% of GDP. This is necessarily an overestimation as it assumes a removal of all the costs arising from complying with legislative requirements when moving interstate (effectively creating a single Australian labour market in terms of legislative alignment for licensed occupations), not just occupational licensing requirements. More data is needed on the proportion of the productivity improvement that could be attributed to occupational licensing reform.

If the productivity improvement is restricted to electricians only, this reform could be expected to increase GDP by \$51 million per year. This is roughly in line with the effect in the Decision Regulation Impact Statement produced as part of the process to establish the National Occupational Licensing Scheme (COAG National Licensing Steering Committee 2013, p. 90) for the previous national licensing solution for electrical trades, which estimated an ongoing benefit of \$62m per year. For the Decision RIS, it was assumed that the labour mobility effect of moving to national licensing would be 10% of the effect in PC (2009) but the RIS modelled the reform as benefiting all electricians. Our estimation considers a larger benefit as calculated from PC (2014) but only applies this to the subset of electricians who move or would move interstate. Both estimates build on research that was undertaken before the introduction of the AMR scheme and so changes in the current environment may have a much smaller impact than what is estimated, making these numbers an upper bound.

Regional CGE modelling

Another approach would be to consider the effects of improving interstate labour mobility as a decrease in the transaction costs between state labour markets in a regional CGE model. Extrapolating from estimates by the PC (2014, p. 377), the existence of an interstate border reduces labour mobility by 77%. Johnson and Kleiner (2020, p. 370) undertook similar analysis for the United States and found that labour mobility between states for occupations where all licensing requirements are state specific were 58% lower than for occupations which require the passing of a national exam (in addition to other state specific licensing requirements).

The reduction in compliance costs from harmonising occupational licensing systems across jurisdictions could be expected to mitigate a portion of this impact. Thus, the resulting increase to interstate labour mobility could be expected to increase GDP by a proportion of the 0.3% previously estimated by the PC (2009) in response to a similar shock to commodity prices.

Implementing reform

There are real benefits with a unified market for labour in Australia, which goes to the core of the Agreement on National Competition Policy. Given that most jurisdictions have signed up for AMR, the marginal difference between it and national licensing is not clear.

The Business Council of Australia (sub. 53 p. 3) said that despite the introduction of AMR, there remain barriers to interstate labour mobility:

Many occupations — including electricians and plumbers — are exempt from AMR in several states, and Queensland does not participate at all, undermining the scheme's national impact.

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. This patchwork limits the efficient deployment of skilled workers, particularly during shortages or emergency responses.

If jurisdictions exclude professions from AMR, then national licensing presents an opportunity to reap the benefits of a unified labour market. The *Intergovernmental Agreement on the Automatic Mutual Recognition of Occupational Registration* calls for a 'independent evaluation by a body such as the Australian Government Productivity Commission' into how AMR has been implemented (National Cabinet 2020, p. 5). The Australian Government should action this recommendation so that thorough consideration can be undertaken of the best policies to promote labour mobility nationally.



Interim recommendation 3

The scheduled independent evaluation of Automatic Mutual Recognition

The Australian Government (in consultation with State and Territory Governments) should instigate the agreed independent evaluation of the Automatic Mutual Recognition scheme.

In the meantime, state and territory governments should remove remaining exemptions to AMR (or join the scheme if they have not already done so).

In the electrical trade industry, there is already overlapping AMR through the provisions of the *Automatic Mutual Recognition Act* and the *East Coast Electricians Scheme* which provides workers with similar benefits to AMR, but only applies to electricians in New South Wales, Victoria, Queensland and the ACT, albeit with some exceptions in some jurisdictions. There may be an opportunity to leverage this combination to generate what would effectively be a national licence if each regulator was automatically notified when someone was registered in one jurisdiction, and the scope of the agreement was implemented consistently.

There appears to be potential models to explore here, without needing to overcome the administrative cost of creating a licensing scheme with unified requirements for the electrical trades.

Many of the benefits of harmonisation comes from standards being set at the level needed to effectively manage risks while not unnecessarily affecting labour mobility (or productivity). AMR avoids the need to standardise, which may reduce the overall benefits, but if standards are raised beyond what is necessary, a licensing scheme may create more costs than benefits.

Additional NCP reforms

The PC considered a range of other competition reforms in the 2024 study. Of the 26 competition reforms the PC was asked to analyse, the top 5 in terms of their impact on GDP were:

- occupational licensing reform to lower restrictions (\$5 to \$10 billion)
- tariff removal (\$3.4 to \$6.8 billion)
- reform to promote banking competition (\$3.5 to \$6.5 billion)
- modern methods of construction (\$2.9 to \$5.7 billion)
- restraint of trade clauses (\$2.6 to \$5.1 billion).

Tariffs, banking competition and restraint of trade clauses are all Australian Government reform not suitable for an intergovernmental process. Broader occupational licensing reform is being considered in the PC's current inquiry into *Building a skilled and adaptable workforce* (PC nd) and the Government is currently in the process of legislating for restraint of trade changes (Australian Government 2025a, pp. 24–25).

The next set of reforms the PC would highlight for inclusion in forward NCP reforms are public procurement reform, where governments could save up to \$4.7bn based on the 2024 study (which was assumed to be spent, but could be returned to households, making it a potentially significant reform with a relatively large impact on GDP). The second would be data sharing reforms across jurisdictions which were estimated to create benefits of up to \$1.6bn. The third is road user charging (box 2).

Box 2 – Road user charging reform

Road infrastructure should be funded through user charges (prices) that reflect the efficient cost of providing and maintaining that infrastructure. By giving drivers a clear signal about the cost of infrastructure, they would have an incentive to use it more efficiently. Moreover, there will be a signal to infrastructure providers where changes in road capacity are warranted. For these reasons, the PC has recommended road user charging (and wider road infrastructure reform) many times in the past.

There has been added impetus for reform related to the growth in use of electric vehicles.

The Commonwealth, state, territory and local governments spent around \$39 billion in 2022-23 on the maintenance, upgrade and expansion of Australia's road network (BITRE 2025, p. 50). Funding for road infrastructure through road taxes (broadly defined) is collected by all levels of government and totalled around \$31 billion in the same year (BITRE 2025, p. 50). Over the past couple of decades, public investment in road infrastructure has averaged around 30% of fuel taxes collected (PBO 2022, p. 4).

Fuel excise applies to all petrol and diesel vehicles as a charge of 50.8 cents per litre – it does not differentiate between these types of vehicles. There are various Commonwealth taxes and a different system of vehicle registration and transfer duty in each state and territory. Owners of fully electric vehicles do not pay fuel excise, and in some states, registration charges for these vehicles are reduced to reflect the net zero emissions nature of these vehicles.

A road user charge is also levied on heavy vehicles on public roads on a per litre of diesel used basis. There are also registration charges that depend on truck type, number of axles and type of trailer. The government provides a tax credit on the fuel excise to some industries – such as mining and agriculture – where they do not use public roads.

Box 2 – Road user charging reform

Some states have attempted to overcome the weaknesses in the system of road funding by introducing distance-based charges for zero and low emissions vehicles, but Victoria's was struck down by the High Court in 2023 as unconstitutional, while the NSW government announced its intention to introduce a road user charge on eligible electric vehicles from 2027 (NSW Treasury nd).

The decision of the High Court rules out state-based distance road user charges and means governments need to consider a national approach to road funding. This opens the opportunity to design a system that is less fragmented and better reflects the costs of providing and using road infrastructure.

Next steps

This is the interim report for this study, with a final report to be delivered to the Treasurer at the end of October 2025. The PC will continue to refine its measures for the potential impact of each reform, including road user charging, and produce modelled results. The goal is to provide advice on a preferred pathway to implement the reforms and an assessment of the economic and government revenue impacts.

We welcome feedback on our information requests and will continue to consult and engage on the issues, method and approach to the national competition policy reform program.

Appendices



A. Public consultations

This appendix outlines the consultation process undertaken and lists the organisations and individuals who participated in the study.

The PC received the letter of advice for this study on 27 March 2025. A call for submissions was released on 9 May 2025 inviting public submissions and brief comments. In total, 102 submissions (table A.1) and seven brief comments were received. The submissions and brief comments are available at: www.pc.gov.au/inquiries/current/competition-analysis-2025.

During the study, the PC held consultations with government, industry and international organisations (table A.2).

The PC would like to thank everyone who participated in this study.

Table A.1 – Submissions

Participants	Submission no.
Accord Australasia	46
Airconditioning and Mechanical Contractors Association of Australia	63
Alinta Energy	45
Amazon Australia	99
Animal Medicines Australia	20
Anthony Sullivan	2
Australian New Zealand (ANZ) Biochar Industry Group and ANZ Biochar Policy and Working Group	65, 72
Australasian BIM Advisory Board	43
Australasian Bioplastics Association	15
Australasian Corrosion Association Inc	14
Australasian Fire and Emergency Services Authorities Council (AFAC)	39
Australasian Injury Prevention Network	30
Australasian Veterinary Boards Council	90
Australian Chamber of Commerce and Industry	87
Australian Competition and Consumer Commission	101
Australian Construction Industry Forum	44
Australian Council of Trade Unions (ACTU)	51
Australian Forest Products Association	67
Australian Glass and Windows Association (AGWA)	42

Participants	Submission no.
Australian Industry Group	98
Australian Institute for Teaching and School Leadership Ltd (AITSL)	89
Australian Institute of Building Surveyors	55
Australian Institute of Refrigeration, Airconditioning and Heating (AIRAH)	24
Australian Logistics Council	28
Australian Organic Limited	73
Australian Refrigeration Council	23
Australian Retailers Association and National Retail Association	79
Australian Security Industry Association Ltd	91
Australian Small Business and Family Enterprise Ombudsman (ASBFEO)	102
Australian Steel Institute (ASI)	7
Australian Toy Association	82
Australian Travel Industry Association (ATIA)	70
Australian Veterinary Association	95
Autodesk	40
Bicycle Industries Australia	68
Bureau of Steel Manufacturers of Australia	27
Bus Industry Confederation	60
Business Council of Australia	53
Caravan Industry Association	12
Carpet Institute of Australia	6
Cement Concrete and Aggregates Australia and the Cement Industry Federation	61
Chamber of Commerce and Industry Western Australia	85
Chamber of Minerals and Energy WA	49
Commonwealth Scientific and Industrial Research (CSIRO)	62
Consult Australia	4
Consumer Action Law Centre	93
Department of Agriculture, Fisheries and Forestry	97
Department of Energy, Mines, Industry Regulation and Safety, WA	47
Design Matters National	84
Electrical Trades Union of Australia (ETU)	56, 75
Energy Skills Australia	13
Engineered Wood Products Association of Australasia (EWPA)	57
Engineers Australia	74
Fire Protection Association Australia	54

Participants	Submission no.
Gas Appliance Manufactures Association of Australia	77
Gas Energy Australia	52
Glenn Toole	66
Health Services Union	1
HERE Technologies	11
Heavy Vehicle Industry Australia	35
Housing Industry Association	78
IKEA	59
Infant Nutrition Council	38
Insulation Australia	41
John Culvenor	83
Jonathan Hare	10
Joint Accreditation System of Australia and New Zealand (JAS-ANZ)	81
Law Council of Australia	96
Lighting Council Australia	69
Mark Lyons	3
Master Builders	100
Master Electricians	88
National Association of Testing Authorities	37
National Automotive Leasing and Salary Packaging Association (NALSPA)	64
National Catholic Education Commission (NCEC)	25
National Electrical and Communications Association (NECA)	71
NSW Education Standards Authority	86
NSW Small Business Commission	18
Plastics Industry Pipe Association of Australia	16
Plumbing Industry Climate Action Centre	17
Plumbing Products Industry Group - PPI Group	50
Queensland College of Teachers	26
Rainwater Harvesting Australia	29
Refrigeration and Air Conditioning Contractors Association	8
Resources Safety and Health Queensland	92
Safe Work Australia	9
Safe Work NSW	94
SEEK	32
Settlement Service International Limited	36

Participants	Submission no.
Shipping Australia	58
Short Term Accommodation Association Australia (STAAA)	33
Standards Australia	76
Tafe Directors Australia	22
Teacher Registration Board of the Northern Territory	21
The Textile Institute Australia - Southern Australian Section	80
True Vault Pty Ltd	34
Victorian Automotive Chamber of Commerce (VACC)	19
Vinyl Council of Australia Pty Ltd	31
Water Services Association of Australia (WSAA)	48
Weld Australia	5

Table A.2 – Consultations

Participants
Amazon
Attorney General's Department, Regulatory Consumer and Business Services – SA
Australasian Teacher Regulatory Authorities
Australian Building Codes Board
Australian Council of Trade Unions
Australian Design Rules (ADR) Harmonisation Review
Australian Health Practitioner Regulation Agency
Australian Retailers Association
Australian Trade and Investment Commission (Austrade)
Bicycle Industries Australia
Building Commission NSW
Business Council of Australia
Coalition of Peaks
Costco
Department of Climate Change, Energy, Environment and Water (Cth)
Department of Energy, Mines, Industry Regulation and Safety – WA
Department of Finance (Cth)
Department of Foreign Affairs and Trade (Cth)
Department of Industry, Science and Resources (Cth)
Department of the Prime Minister and Cabinet – Office of Impact Analysis (Cth)

Participants

Department of the Prime Minister and Cabinet – Workplace Relations and Small Business (Cth)

Department of the Premier and Cabinet – SA

Department of the Premier and Cabinet – WA

Department of Treasury – NSW

Department of Treasury – QLD

Department of Treasury and Finance – NT

Department of Treasury and Finance – SA

Department of Treasury and Finance – TAS

Department of Treasury and Finance – VIC

Department of Treasury and Finance – WA

Electrical Regulatory Authorities Council

Energy Safe Victoria

Federal Chamber of Automotive Industries

Food Standards Australia New Zealand

International Organization for Standardization

Jobs and Skills Australia

Minerals Council of Australia

National Transport Commission

NSW Fair Trading

NSW Food Authority

Office of Industrial Relations – QLD

Office of the Technical Regulator – SA

Organisation for Economic Co-operation and Development (OECD)

Standards Australia

Treasury and Economic Development Directorate – ACT

World Trade Organization

B. Standards

Key points

- * **Aligning Australian regulation with international and overseas standards can reduce business compliance costs and facilitate competition through interstate and international trade. Australian Government policy is to adopt international standards where possible.**
- * **Data provided by Standards Australia indicates that, of the 7,519 current Australian Standards, 893 are referenced in legislation.**
 - Of these 893, only 21 (2%) do not align with an existing international standard. For the large majority (675 or 76%), no international standard exists – if this bespoke Australian regulation is necessary, it may be possible to reduce trade barriers by permitting compliance with appropriate overseas standards.
- * **The potential economic benefit from greater alignment of Australian regulation with international or overseas standards could be in the range of \$1.9 billion to \$3.8 billion per year (0.1-0.2% of GDP).**
 - The costs and benefits of harmonisation need to be considered on a case-by-case basis. In a sample of 18 Commonwealth impact analyses that considered harmonisation with international or overseas standards, quantitative net benefit estimates ranged from negative \$200m to positive \$215m p.a., with an average of \$20m p.a. or \$10m p.a. if 3 outlying estimates are excluded.
 - We have assumed that legislation can be expanded to permit compliance with international or overseas standards for all 21 of the current Australian Standards not aligned with an existing international standard along with a quarter (169) of the 675 Australian Standards where no international standard exists. Applying the range of \$10m-\$20m p.a. to these 190 standards suggests a total benefit of \$1.9bn-\$3.8bn annually.
- * **Australian governments have agreed to review legislative references to standards in priority areas to be identified by the Council on Federal Financial Relations.**
 - The review should include legislation referencing the estimated 21 current Australian Standards not aligned with an existing international standard and 675 where no international standard exists – 90% of these 675 standards are in three sectors: manufacturing; professional, scientific and technical services; and construction.
 - There may also be regulation that does not incorporate an Australian Standard but is not aligned with relevant international or overseas standards. Australia's World Trade Organization notifications suggest potential priorities include food safety standards and biosecurity.
 - Only 26% of the 893 current mandated Australian Standards are consistently implemented across Australian jurisdictions. In addition, there are 659 outdated mandated Australian Standards. The review should include these references to outdated standards, as well as regulated standards that are inconsistent across Australia, along with ways to fund free or low-cost access to standards incorporated in legislation.

The PC has been asked to provide analysis and modelling to understand the economic impact of ‘adopting international and overseas standards in regulatory frameworks, and harmonising regulated standards across Australia, in priority sectors identified by governments’.

B.1 What are standards?

Voluntary and mandated standards govern the everyday life of businesses and people. If you are reading this report on a computer monitor purchased in Australia, your monitor had to meet mandatory energy efficiency standards, including minimum energy performance standards (set out in AS/NZS 5815.2:2013) and testing (according to AS/NZS 5815.1:2012), and display an Energy Rating Label.⁵

This section provides an overview of some key concepts: standards and conformity assessments; international and overseas standards; regulated standards; and benefits and costs of alignment with international and overseas standards.

What are standards and conformity assessments?

A **standard** is a published document setting specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform as intended (DIIS 2016a, p. 18). Standards are a broad category which includes (OECD 2011, p. 9):

- quality standards that define product characteristics related to safety, performance or efficiency
- informational standards that set parameters for types of information to be communicated about a product, such as labelling standards
- uniformity standards designed to reduce possible product categories, for example by defining minimal size of a given fruit
- professional conduct and certification standards that define criteria for performance of professions, and
- interoperability standards designed to ensure that two or more related products or processes may fit and operate with each other.

Formal standards are generally established by consensus and approved by a recognised body. They are often developed with the input of a variety of stakeholders. In Australia, most voluntary standards are developed by Standards Australia under the Australian Standard® (AS) name or are joint Australian/New Zealand Standards (AS/NZS) developed by a joint committee with members representing both Australian and New Zealand stakeholders. These joint committees are managed by either Standards Australia or Standards New Zealand (Standards Australia 2023a, p. 12).

Conformity assessment judges whether a product, service, process, claim, system or person meets the requirements of a standard (ISO nd). In Australia, the National Association of Testing Authorities (NATA) is the primary body for accrediting conformity assessment bodies (NATA 2024). The Joint Accreditation System of Australia and New Zealand (JAS-ANZ) was established by a treaty between the Australian and New Zealand governments in 1991 as an independent body to provide internationally recognised accreditation services.

Together, standards and conformity assessment play a key role in supporting competitive markets by facilitating market exchange, including through (PC 2006b, p. 10):

- reducing *transaction costs* by addressing the information asymmetry between buyers and sellers

⁵ Greenhouse and Energy Minimum Standards (Computer Monitors) Determination 2014 (Cth). Computer monitors are also regulated under state and territory electrical safety laws and by the Australian Communications and Media Authority.

- improving the *compatibility* (interoperability) of interconnected goods or services where network effects may be present (e.g. mobile phones)
- reducing costs by delivering *economies of scale* through facilitating mass production of certain goods (e.g. appliances using batteries in standardised sizes), and
- diffusing *technology and innovation* by enabling all firms to access the technological knowledge contained in a standard.

In some markets, businesses will have sufficient incentives to ensure these outcomes are achieved, and it will be readily apparent to consumers when they are not. In many markets, however, standards help create a common benchmark which enables socially acceptable market outcomes, provided that the incentives of standard setting and conformity assessment bodies are aligned with social objectives (PC 2006b, p. 12). Overall, standards and conformity assessments can increase trade (including international or interstate trade where standards are aligned across countries or Australian jurisdictions) which will generally lead to economic growth and improved consumer welfare.

What are international and overseas standards?

Growing international integration of markets has increasingly led to a shift from domestic standards to standards for the international economy (Büthe and Mattli 2010, p. 440) including global private standards made by businesses and independent not-for-profit organisations (Liu 2009).

An **international standard** is a standard developed by an international standard setting organisation that meets the World Trade Organization's (WTO) six principles for international standards. These principles cover: transparency; openness; impartiality and consensus; effectiveness and relevance; coherence; and development (developing countries' participation) (WTO nd).

International standards provide an opportunity for countries, including Australia, to contribute to the development of the standard. For example, Standards Australia is appointed by the Australian Government as the Australian member of the International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) (DIIS 2018, p. 6). The Australian Department of Infrastructure, Transport, Regional Development, Communications, Sports and the Arts represents Australia in the International Telecommunications Union. The issue of Australian participation at international standard setting bodies as a possible barrier to international alignment is raised in section B.6.

In this report, **overseas standards** refer to other standards that apply beyond Australia but which are not international standards. These can be produced by a specific region (e.g. European Union), another country's standard setting body (e.g. Japan's Standards Association), private businesses (e.g. the GlobalGAP protocol developed by European supermarket chains) or independent not-for-profit organisations (e.g. Fairtrade International).⁶

What are regulated standards?

On their own, standards are voluntary. Governments can however mandate standards through legislation.⁷ When developing legislation, government can reference an existing standard, develop its own standard, or

⁶ In addition to 'Australian standards', 'international standards' and 'overseas standards', the Australian Government's consultation on the use and recognition of standards in regulation refers to two other types of voluntary standards: 'regional standards' and 'industry standards' (Australian Government 2025, p. 4). In this report, the PC has included these two other types as 'overseas standards' to reflect the terms used in the letter commissioning this study.

⁷ In this report, 'legislation' refers to Acts of Parliament and the subordinate legislation made under them (also referred to as 'delegated legislation').

task a body, such as Standards Australia, to develop a standard which the government mandates (figure B.1) (PC 2006b, p. 38).

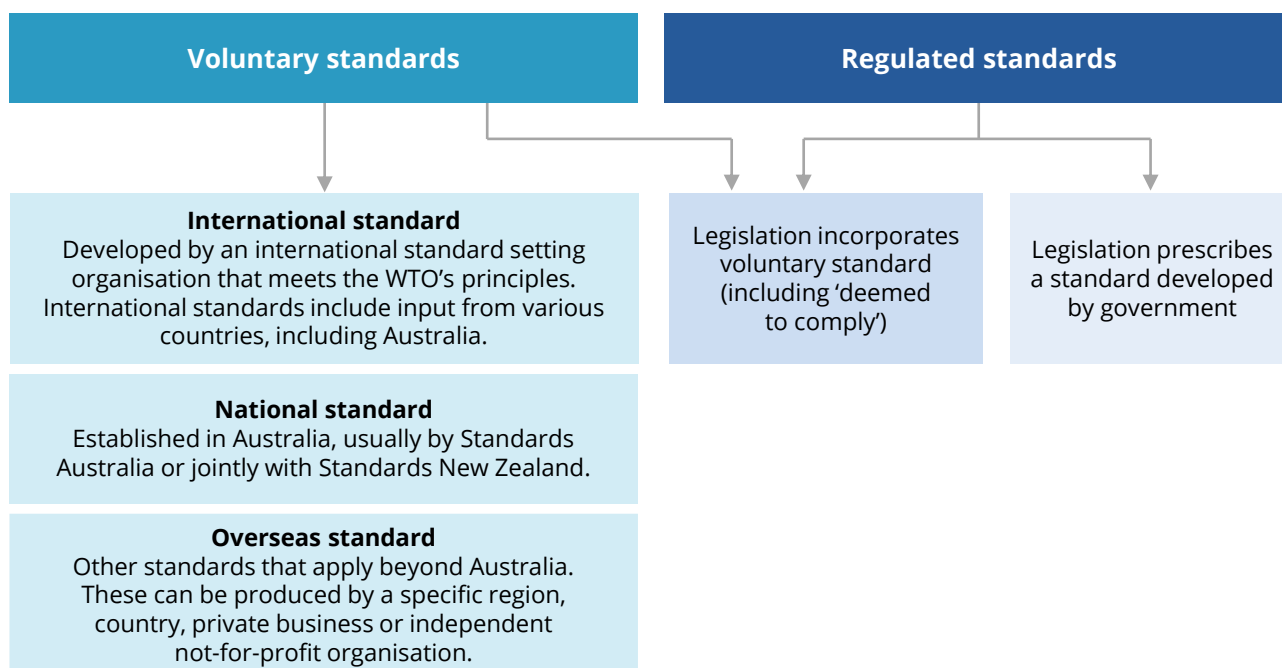
In contrast to voluntary standards which may establish industry best practice, regulated standards limit individual choice by only allowing products, services or systems that meet minimum specific requirements.

Generally, Commonwealth, state and territory policy makers are required to demonstrate a public policy problem necessitating intervention, and to examine a range of options, including non-regulatory options such as a voluntary standard, to address the problem (attachment B.1, table B.7).

Standards might also be relevant in other legal contexts. For example, a court may consider that conforming to a standard is relevant to meeting a legal duty (Safe Work Australia nd) or a standard may be referenced in a procurement process (e.g. Autodesk, sub. 40, p. 2), contract or as a condition of a government permit or other administrative decision. Australia might also be required under international law to comply with an international standard where the Australian Government becomes a signatory to a treaty or international instrument. For example, under the Universal Postal Convention, Australia must comply with standards covering the international exchange of letters and parcels, pricing and delivery (Joint Standing Committee on Treaties 2024, p. 5).

Figure B.1 – Terms used in this report

Distinction between international, national and overseas standards, and voluntary and regulated standards



Benefits of standards harmonisation

Harmonisation of standards across countries can expand international trade, particularly for relatively small economies (An and Maskus 2009; Lecraw 1984; Moenius 2004, p. 15; Schmidt and Steingress 2022, p. 13). Where Australian standards differ from other countries, businesses face additional compliance costs as products need to be modified (potentially produced on separate production lines or repackaged) and retested for sale in Australia. Businesses may need to undertake duplicative conformity assessments and approval processes which can add to compliance costs and delay products entering the Australian market. Bespoke

Australian standards similarly impact Australian exporters seeking to enter overseas markets and create barriers to cross-border trade in services and investment by firms in global subsidiaries.

As noted by the NSW Small Business Commission, this can particularly impact Australian small businesses. For sectors integrated into global supply chains or with export potential, the divergence between local standards from international or overseas standards can limit the ability of small businesses to scale, delay the uptake of new technologies and reduce consumer choice. Small businesses have fewer resources to navigate these additional compliance burdens, which can impact their competitiveness both domestically and internationally (sub. 18, p. 3).

By aligning domestic standards with international or overseas standards, countries can reduce their country-specific adaptation costs. Lowering transaction costs, in turn, improves market accessibility and enables businesses to expand into new geographic areas. In Australia, this can increase the range of goods and services available, potentially leading to lower prices and improved quality. It can also enable innovation, for example through the sharing of knowledge or compatibility standards (Blind 2022). Where the good or service is an intermediate input used by businesses in the production of other goods and services, increased alignment with international or overseas standards can facilitate innovation and productivity through easier adoption of technologies, for example advanced safety technology in heavy vehicles (PC 2020, p. 232).

Barriers to the introduction of new products in Australia can also have a broader impact on public welfare, for example, the impact on people's lives and government health care costs where there is a delay in accessing cancer treatment drugs, or from harmful exhaust emissions through delays in adopting more stringent international standards for vehicle emissions (attachment B.3, table B.9).

There are costs too

There are situations where alignment of regulated standards with international or overseas standards can lead to net costs or is otherwise not appropriate. This includes where:

- the international or overseas standard does not address specific Australian risks or objectives – for example, Australia's climate is generally hotter than conditions used to develop safety-related construction and testing requirements for some electrical products in IEC standards (Standards Australia, personal communication, 11 July 2025), or
- the costs of change are too great – for example revising Australia's plug and voltage standard or changing the side of the road on which Australians drive (Byres 2017).

Mandating a standard in law may also create barriers to entry or innovation (OECD 2019, p. 35). For example, the literature highlights risks of standards harming competition by locking in an incumbent's technology where a patent is included in a standard (Lerner and Tirole 2015). If international standard setting bodies or conformity assessments are used by businesses or nations to inhibit competition, then mandating the international standard (if regulation is necessary) would not be in the public interest (e.g. Textile Institute Australia, sub. 80; Standards Australia, sub. 76, p. 12).

Other potential concerns with alignment of regulated standards with international or overseas standards include that Australian industry and consumers cannot engage in the development of overseas standards (Standards Australia 2024b), and that it exposes Australia to safety risks through variations in overseas conformity testing and potentially fake labels (e.g. CSIRO sub. 62, p. 6; Australian Forest Products Association, sub. 67, p. 2; and McIntosh (2024)).

B.2 Australian policy is to align with international standards where possible

Australian Government policy places an onus of proof on policy makers to justify regulated standards that depart from a relevant international standard. This section provides an overview of key components of Australia's standards and conformance infrastructure supporting standards harmonisation.

Policy development guidance

The Australian Government's principle is that 'if a system, service or product has been approved under a trusted International Standard or risk assessment, Australian regulators should not impose any additional requirements unless it can be demonstrated that there is a good reason to do so' (DIIS 2016b, p. 2).

To support good policy making, the Australian Government requires policy proposals to be accompanied by an Impact Analysis (PMC 2023a).⁸ The requirement for policy makers to undertake an Impact Analysis applies to the development of standards used for regulatory purposes, even if the standards in question are developed by Standards Australia or other third parties. If any of the policy options involve establishing or amending standards in areas where international standards already exist, policy makers are required to document whether (and why) the standards being proposed differ from the international standard. States and territories, in their guidance on regulation impact statements (RISs), take different approaches to international harmonisation (attachment B.1, table B.7).

Regulator-specific frameworks

Governments use legislative provisions and other tools to either require, or encourage, regulators to seek international alignment. Governments can:

- provide direction to a regulator – such as objects clauses, legal requirements and statements of expectations, and
- empower regulators to seek international alignment – such as permitting the incorporation in regulation of international or overseas standards 'as in force from time to time' (so that updates to the standard are automatically incorporated in the law⁹), the ability to accept overseas approvals, and the power to exchange information with overseas regulators.

For example, under the *Road Vehicle Standards Act 2018* (Cth):

- the objects clause includes to give effect to Australia's international obligations to harmonise road vehicle standards
- national road vehicle standards (Australian Design Rules (ADRs)) may incorporate other instruments as in force or existing from time to time, including the relevant international agreements, and
- an International Whole Vehicle Type Approval can be used to demonstrate compliance with the ADRs.¹⁰

⁸ See also the guidance on regulatory impact analysis for Ministers' meetings and national standard setting bodies (PMC 2023).

⁹ Delegated Commonwealth legislation (legislative instruments) cannot incorporate a voluntary standard 'as in force or existing from time to time' unless a contrary intention appears in the enabling legislation (*Legislation Act 2003* (Cth) s 14). Different approaches are taken across the states and territories (Pearce and Argument 2023, p. 510).

¹⁰ Road Vehicle Standards Rules 2019 (Cth).

Relationship between the Australian Government and standard setting bodies

The Australian Department of Industry, Science and Resources (DISR) manages the Australian Government's relationship with the four main Australian standards and conformance bodies: Standards Australia, NATA, JAS-ANZ and the National Measurement Institute. The Australian Government has had Memoranda of Understanding (MoUs) in place with Standards Australia and NATA since 1988 (DISR nd). The 2018 MoU with Standards Australia supports international harmonisation, including by providing that Standards Australia will:

- ensure compliance with the WTO *Agreement on Technical Barriers to Trade*, 1868 UNTS 120 (TBT Agreement)
- take into account Australia's undertakings in free trade agreements, and
- use accepted international standards except where there are compelling reasons to depart from this practice.

International obligations

As a member of the WTO, Australia has been required over the last three decades to ensure technical requirements do not create unnecessary obstacles to trade (DIIS 2016a, p. 6). These commitments are outlined across WTO Agreements, including the:

- TBT Agreement
- *Agreement on the Application of Sanitary and Phytosanitary Measures*, 1867 UNTS 493 (SPS Agreement), and
- *General Agreement on Trade in Services*, 1869 UNTS 183 (GATS).

The obligations apply to all Australian regulation including state and territory legislation.

The TBT Agreement states that technical regulations and conformity assessment procedures shall not be more trade-restrictive than necessary to fulfil a legitimate objective (which includes national security requirements, the prevention of deceptive practices, and the protection of human health or safety, animal or plant life or health, or the environment).¹¹ Where there is a relevant international standard, it must be used as a basis for technical regulation except where it would be an ineffective or inappropriate means to fulfill the legitimate objective. Members are also required to ensure that central government standardising bodies (including Standards Australia) follow the *Code of Good Practice for the Preparation, Adoption and Application of Standards* (Code of Good Practice) (WTO 2025a, p. 89).

The SPS Agreement similarly sets obligations around the imposition of regulations that seek to protect human, animal or plant health. SPS measures adopted by members must, like TBT measures, be no more trade restrictive than necessary, but also must be based on an analysis and assessment of objective and accurate scientific data.

The GATS requires measures relating to qualification requirements and procedures, technical standards and licensing requirements to be based on objective and transparent criteria and to be no more burdensome than necessary to ensure the quality of the service. Relevant international standards are to be considered in determining compliance with these obligations.

¹¹ TPT Agreement Annex 1 includes the following definition of 'technical regulation': 'Document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method'.

The WTO agreements also encourage members to participate in standard setting organisations and adopt the resulting standards, so that voluntary and regulated standards worldwide become more harmonised.

Australia has also entered into free trade agreements which can include requirements to reduce barriers to trade in goods and services, as well as investment (DFAT nd).

Policy reviews

There have been significant government-wide commitments to policy reviews to promote international harmonisation of regulated standards. In 2006, the PC reported on standard setting and laboratory accreditation in Australia, including facilitating trade through adopting international standards (PC 2006, p. 99). The 2014 *Industry Innovation and Competitiveness Agenda* included a review of Australian Government standards and risk assessment processes in each ministerial portfolio to assess whether unique Australian standards or risk assessments were needed (PMC 2014, p. 24). This formed part of the 2013 Deregulation Agenda's annual net reduction target of at least \$1 billion in red tape.

Australia's national competition reforms have also provided an umbrella through which the Commonwealth, states and territories have undertaken a broad review. The 1995 *Competition Principles Agreement* included a commitment by Australian governments to review competition restrictions in legislation (IC 1995). This was followed by the:

- 2006 *National Reform Agenda*, which included regulatory reform to address inconsistencies between domestic and international standards (PC 2006a), and
- 2016 *Intergovernmental Agreement on Competition and Productivity-enhancing Reforms*, which included a commitment to removing unnecessary regulatory barriers to competition. Priority areas included mandatory product and other standards (Appendix A, clause 4(g), see also (Harper 2015, p. 135)).

The PC, in its 5-year Productivity Inquiry, recommended that the Australian Government promote open and resilient trade in goods, including by:

increasingly accepting product standards adopted in other leading economies as 'deemed to comply', provided that a transparent review could be undertaken in cases where the Australian Government identified a significant safety risk. (PC 2023, p. 25)

Under the *National Competition Policy Federation Funding Agreement – Affordable Housing, Community Services and Other* (29 November 2024), the Commonwealth, states and territories have committed to 'lower barriers to the adoption of overseas standards in regulation'. This commitment covers two projects: establishing and applying guidelines for recognising and adopting voluntary standards (including international and overseas voluntary standards) in legislation; and recognising international and overseas standards under the mandatory product safety standards framework in the Australian Consumer Law (ACL).

B.3 Do regulated standards align with international or overseas standards?

The potential economic impact of this reform depends on the extent to which Australian regulated standards are currently aligned or not aligned with international or overseas standards. If Commonwealth, state, territory and local government legislation is already fully aligned with relevant international or overseas standards where appropriate, then there are no potential benefits – although there may be benefits from addressing related problems such as delays in updating the legislation to align with revisions, or businesses having to go through duplicative conformity assessments and approval processes.

Alignment of voluntary Australian Standards with international standards

The WTO Code of Good Practice requires Standards Australia to ensure that voluntary standards do not create unnecessary obstacles to international trade (para E). Where international standards exist, they must be used as a basis for voluntary standards unless it 'would be ineffective or inappropriate, for instance, because of an insufficient level of protection or fundamental climatic or geographical factors or fundamental technological problems' (para F).

Standards Australia's process for the development of an Australian Standard requires the relevant Technical Committee to search for, and review, any international standard (Standards Australia 2023c, p. 6).¹² An Australian Standard is classified as (Standards Australia 2023b, p. 118):

- 'identical' when it is identical in technical content to an international standard
- 'modified' when technical differences (generally minor) exist and are clearly identified – for example, technical modification of an international standard for Australian electrical plugs, and
- 'not equivalent' where the technical content or structure is not equivalent and any changes have not been clearly identified.¹³

If there is no corresponding international standard, the Australian Standard is classified as 'no international standard exists' (although other countries may have regulated standards or voluntary standards covering the same subject matter).

As at 10 July 2025, there were 7,519 Australian and Australian/New Zealand standards that were current or pending revision (table B.1). Of these, 44% were identical to, or modified adoptions of, international standards. Only a small number (1%) were not based on, or were not equivalent to, an existing international standard. Over half (55%) had no international equivalent.

Table B.1 – Australian Standards^a

Alignment of voluntary Australian and Australian/New Zealand Standards (current or pending revision) with international standards

	Number of standards (as at 10 July 2025)
Total stock	7,519
Identical to international standard	2,538 (34%)
Modified adoption of international standard	741 (10%)
Identical to, or modified adoption of, international standard	3,279 (44%)
Not based on existing international standard	18
Not equivalent to existing international standard	60
Not aligned with existing international standard	78 (1%)
No international standard exists	4,162 (55%)

a. The figure of 7,519 consists of 5,946 Standards and 1,573 other publication types (e.g. Handbook or Technical Specification). These other publication types are sometimes incorporated in legislation. For simplicity, this report refers to all publication types as 'standards'.

Source: PC estimates based on Standards Australia (personal communication, 14 July 2025).

¹² This process can also cover overseas standards which, in the absence of an international standard, are widely used internationally (Standards Australia 2023, p. 4).

¹³ Standards Australia's data also uses the term 'not based on international standard'.

The percentage of Australian Standards that were identical to, or modified adoptions of, international standards (44%) appears to be broadly similar to other WTO members including the European Union,¹⁴ New Zealand¹⁵ and Japan,¹⁶ although it is significantly lower than the Republic of Korea.¹⁷ The percentage of Australian Standards in alignment with international standards also appears to be increasing over time – in financial year 2023-24 over 70% of Standards Australia's new publications were identical to the international standard.¹⁸

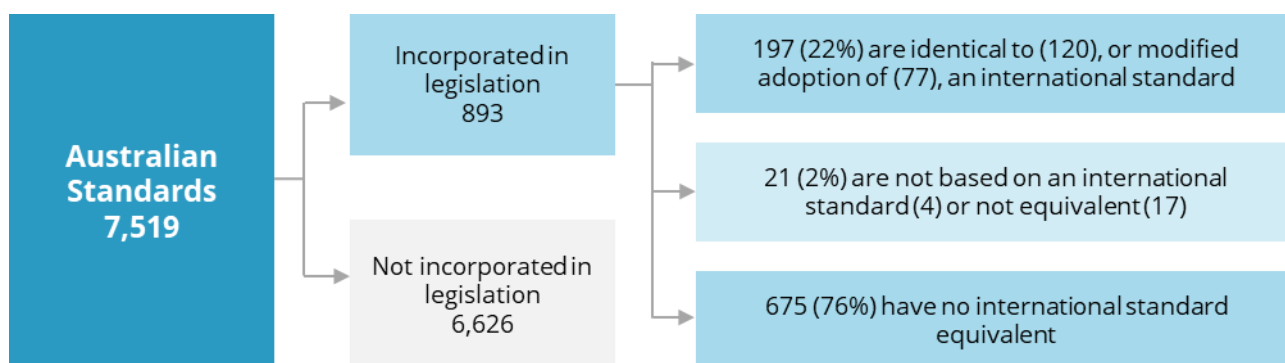
Alignment of mandated Australian Standards with international standards

Of the 7,519 Australian Standards, an estimated 893 (12%) were incorporated in legislation in at least one jurisdiction. Of these 893 Australian Standards, only 21 (2%) were not aligned with an existing international standard, while 197 (22%) were identical to, or based closely on, an international standard. The majority (675 or 76%) had no equivalent international standard (figure B.2).

Where there is an existing international standard, very few current Australian Standards incorporated in legislation are not aligned with the international standard (an estimated 21 Australian Standards) (figure B.2).

Figure B.2 – Legislation incorporating Australian Standards^a

Commonwealth, state and territory legislation incorporating Australian Standards (current or pending revision) as at 10 July 2025



a. Includes joint Australian Standards e.g. Australian/New Zealand Standards (AS/NZS) or Australian/International Organization for Standardization standards (AS/ISO).

Source: PC estimates based on Standards Australia (personal communication, 14 July 2025).

A potential area for review is the estimated 675 Australian Standards incorporated in legislation, for which there is no international standard. There are disproportionately more bespoke mandated standards than there are voluntary standards (76% compared with 55%). If this Australian regulation is necessary, it may be

¹⁴ In 2022, the European Committee for Standardization (CEN) and European Committee for Electrotechnical Standardization (CENELEC) catalogues contained 24,169 European standards, of which almost half (45% or 11,026) were identical to international standards (WTO 2023a, p. 105).

¹⁵ In 2021, about half of standards in New Zealand's catalogue were equivalent to international standards (WTO 2022, p. 57).

¹⁶ As at 31 March 2022, there were 10,918 Japanese Industrial Standards (JISs). The number corresponding to international standards was 6,341 (58%). The percentage of those JISs that were harmonised with international standards was 97% (WTO 2023b, p. 62).

¹⁷ As at 2020, 20,916 Korean Industrial Standards (KSs) had been adopted. Roughly 3% of KSs had been established without any reference to international standards (i.e. there were very few 'Korea-specific' standards) (WTO 2021, p. 95).

¹⁸ In 2023-24, Standards Australia issued 453 publications (Australian Standards, Amendments and Other), of which 331 were identical international adoptions (Standards Australia 2024, p. 4). Standards Australia also advised that, in practice, alignment with international standards is even higher as Technical Committees sometimes prefer to use international standards such as ISO standards without adopting these as Australian Standards (personal communication, 11 July 2025).

possible to reduce trade barriers by also permitting compliance, in the legislation, with appropriate overseas standards (regulated or voluntary) of specific jurisdictions. For example, although there is no international standard, the EU and US have standards for bicycle helmets.

There are several caveats to this analysis, including:

- The relevant legislation may already permit compliance with appropriate overseas standards in addition to referencing an Australian Standard.
- Standards Australia's data does not capture all references to Australian Standards in Commonwealth, state and territory legislation and should be treated as indicative rather than exhaustive.
- Figure B.2 does not cover legislation referring to Australian Standards that are out-of-date. The issue of out-of-date legislation is discussed in section B.5 (table B.5). Standards Australia's data identifies 1,552 Australian Standards incorporated in current legislation. Of these 1,552 Australian Standards, 893 (58%) are 'current' or 'pending revision' (and so are covered by figure B.2) and 659 (42%) are classified as 'available but superseded', 'obsolescent', 'superseded' or 'withdrawn'.
- Standards Australia updates its list of legislation to cover new Australian Standards being published or revised, and may not capture where legislation has been revised to incorporate or no longer incorporate an Australian Standard.
- Standards Australia's list of legislation does not cover legislation where the government agency has developed its own requirements rather than incorporating an Australian Standard (discussed below, in relation to WTO notification data).

The difficulty in identifying where legislation incorporates an Australian Standard is also due to Australian governments using inconsistent (and, at times, inaccurate) methods to cite Australian Standards in legislation, along with inconsistent digital formats for online databases. The Australian Government's consultation, as at the date of this interim report, on a Best Practice Handbook for the use and recognition of standards in regulation includes guidance on consistent referencing to standards (Finance 2025, p. 15).¹⁹ This guidance should also be followed by states and territories when mandating standards.



Interim finding 1

Mandated standards largely align but there are many bespoke standards

An estimated 893 Australian Standards (current or pending revision) are incorporated in Commonwealth, state or territory legislation. Only 2% of these standards do not align with an existing international standard. A disproportionate amount (76%) are bespoke Australian standards with no international equivalent.

Legislation that does not incorporate an Australian Standard can also create a trade barrier

Rather than incorporating a voluntary standard, legislation can prescribe a standard developed by government. Such legislation can create a barrier to trade through misalignment with existing international or overseas standards.

In principle, such legislation should be captured in Australia's notifications to the WTO under the TBT and SPS Agreements. Under these Agreements, members are required to notify other WTO members of proposed

¹⁹ See also guidance by the Commonwealth Office of Parliamentary Counsel e.g. Drafting Direction No. 2.2 (2023).

technical and SPS regulations where no international standard exists or the regulation is not the same as the international standard, and if the regulation may have a significant effect on trade of other members.

From 1995 to 2024, Australia made 846 regular notifications to the WTO. These were mainly in relation to food safety standards and biosecurity, and, to a lesser extent, consumer goods, road vehicles, therapeutic goods, energy & water efficiency, industrial chemicals and communications (attachment B.2, table B.8).

Food safety standards and biosecurity, which together account for over 75% of these notifications, are examples of areas of regulation that usually do not incorporate an Australian Standard but where there may be value in reviewing alignment with existing international or overseas standards.

There are significant limitations in using Australia's WTO notifications to assess the extent to which Australian legislation is aligned with international or overseas standards, including:

- The notifications do not cover Australian regulation of services that may impact trade (WTO 2025b).
- None of Australia's 846 TBT and SPS notifications appear to relate to state or territory-specific regulation.
- There appears to be inconsistent approaches to notifications by Commonwealth agencies.
- The notified regulations may not be inconsistent with existing international or overseas standards. For example, the TBT Agreement requires notification of technical regulation that may have a significant effect on trade even where no international standard exists.
- Some of the regulations notified will have been revoked or revised or are duplicate notifications.

B.4 The potential net benefits of greater harmonisation

To model the potential economic impact of this reform, the second step, after identifying the extent to which Australian regulated standards align with existing international or overseas standards, is to estimate the economic impact of greater alignment.

There are three main ways in which harmonisation of standards – be it with international or overseas standards or across Australia – could produce net benefits:

- lower compliance costs incurred by businesses – for example, Treasury estimated that ACL reforms would reduce business compliance costs by \$10m p.a. per mandatory safety standard or \$500m p.a. across all 50 standards (Treasury 2024, p. 7)
- lower administrative costs for government – for example, from accepting another jurisdiction's conformity assessments and approvals, and
- increase the range of products available in Australia, because more products designed for overseas markets can be sold here. Greater range would imply:
 - a. consumer welfare gains from greater competition, lower prices and greater product diversity
 - b. productivity gains – for example, from earlier access by business to new technology or other production inputs, and
 - c. public welfare gains – for example, from earlier access to new or cheaper medical devices.

This section uses Commonwealth Impact Analyses as an indicator of the potential economic impact that harmonisation could have across the broad spectrum of regulated standards covered by this NCP reform. In practice, however, such analyses tend to quantify the direct effects of cost savings for business and government, and do not include quantitative estimates of downstream economic impacts.

Using past Impact Analyses to estimate potential net benefits

The Commonwealth Office of Impact Analysis database includes 18 Impact Analyses from 2012 to 2025 that considered alignment of an Australian regulated standard with international or overseas standards (attachment B.3, table B.9).

This sample of Impact Analyses shows that the costs and benefits of harmonisation with international or overseas standards require a case-by-case assessment. In the sample, quantitative estimates of the net benefit from harmonisation ranged from negative \$200 million to positive \$215 million annually.

These assessments provide an indicator of the economic impact that harmonisation could have across a range of regulated standards. On average, the assessments found a net benefit of \$20 million per annum.

This average is affected by the Impact Analysis process and outlying estimates of net benefits.

- **Process:** The limited number of search results is due in part to the Impact Analysis process. The Australian Government Guide to Policy Impact Analysis (2023) requires policy proposals to be accompanied by Impact Analysis if the proposal would result in a more than minor change in behaviour or impact for people, businesses or community organisations (with exceptions). A Preliminary Assessment is required to determine if the impacts are more than minor. In practice, this means that proposals to align an existing regulation with an international standard commonly do not proceed to a published Impact Analysis where the reform reduces compliance costs without impacting safety or other government objectives.
- **Outliers:** The data also shows that the distribution of quantitative net benefit estimates is uneven with just a few standards (3) having a large positive or negative economic impact.

If the 3 outlying estimates are excluded from the sample of 18 Impact Analyses, it reduces the average to \$10m annually.

To estimate the benefits from this NCP reform, we assume that legislation incorporating the estimated 21 current Australian Standards not aligned with existing international standards could appropriately be aligned. It follows that if we expect no more than \$10m-\$20m per year per mandated standard there will be a total benefit of \$210m-\$420m per year.

If the 675 mandated standards that are Australia-specific could be aligned to appropriate overseas standards from the relevant trading partners, there would be further benefits. Without undertaking a case-by-case review of all the legislation, it is not possible to say with certainty what percentage of this legislation is amenable to greater harmonisation.

Recent sector-specific reviews, while identifying the need for reform, have not found extensive and pervasive misalignment with international or overseas standards – see e.g. (House of Representatives 2021, p. 88; Matthews et al. 2021, p. 5; Nous Group 2024, p. 52). The National Electrical Safety Taskforce also found that approximately 85% of standards prescribed in state and territory legislation for electrical appliance benchmarking purposes were based on international standards (WA Department of Energy, Mines, Industry Regulation and Safety, sub. 47, p. 2). In this interim report, we have assumed that a quarter of the 675 Australia-specific standards could be aligned with appropriate overseas standards. Applying this assumption means the total net benefit would be \$1.9bn to \$3.8bn annually (about 0.1-0.2% of GDP) (table B.2).

Table B.2 – Aligning legislation with international and overseas standards

Potential net benefit from expanding legislation incorporating Australian Standards to permit compliance with international or overseas standards

	Number of Australian Standards used to estimate net benefit	Estimated net benefit (RIS range \$10m-\$20m p.a.)
Australian Standards (current or pending revision) incorporated in legislation (10/7/25)	893	
Not aligned with international standard:	21	\$210m to \$420m p.a.
No international standard equivalent: 675 x 25% = 169 x \$10-20m p.a.	169	\$1.7bn to \$3.4bn p.a.
Total estimated net benefit	190	\$1.9bn to \$3.8bn p.a.

Source: PC estimates.

There are several caveats to this estimate, including:

- The Impact Analyses show the importance of a case-by-case assessment, and some alignment may be net-negative.
- The benefits will depend on the scope of the reform which could range from:
 - a specific legislative instrument e.g. Australia New Zealand Food Standards Code – Standard 1.6.1 – Microbiological limits in food
 - a code covering many standards e.g. Australia New Zealand Food Standards Code
 - a regulatory regime and changes needed to enable international or overseas alignment e.g. Food Standards Australia New Zealand's (FSANZ) functions and powers under the *Food Standards Australia New Zealand Act 1991* (Cth), or
 - the interaction of multiple regulatory regimes e.g. the intersection between FSANZ's legislation and state and territory food business laws.
- This analysis is based on Commonwealth Impact Analyses considering options for economy-wide regulation. Of the 21 standards, 15 are only incorporated in state or territory legislation and so the benefit may only be proportional to the economic size of the jurisdiction – although it is also possible that trade restraints imposed by one jurisdiction impact national supply (as was the case for bike helmets, box B.3).
- The quantitative estimates in the sample of Impact Analyses are often only a partial analysis. While there are negative quantitative estimates, many of these Impact Analyses recommend reform based on qualitative information.
- Not all of the legislation incorporating the 21 current Australian Standards not aligned with an existing international standard will be amenable to alignment with the international standard. Also, the Impact Analyses suggest the distributions are very uneven, so locating one high value standard would account for most of the benefits.
- The legislation incorporating the 675 current Australian Standards for which there is no international standard may already permit compliance with overseas standards. The actual proportion of legislation incorporating these 675 Australian Standards, which could benefit from permitting greater compliance with appropriate overseas standards may be significantly higher or lower than the quarter assumed for the purpose of this interim report. There is also a question as to what average Impact Analysis figure should be applied to this subset where it is assumed that greater alignment with an overseas standard is appropriate.

- The net benefit estimate is based on the estimated 893 unique Australian Standards (current/pending revision) incorporated in current legislation. There are in fact an estimated 2,340 references in current legislation to current/pending revision Australian Standards – some laws refer to multiple standards, and some standards are referred to in multiple laws. The net benefit estimate is based on the lower figure of 893 unique Australian Standards.
- The net benefit does not include out-of-date Australian Standards incorporated in current legislation.



Interim finding 2

Economic benefits from harmonising Australian regulated standards with international or overseas standards

If legislation can be expanded to permit compliance with international or overseas standards for all of the estimated 21 mandated current Australian Standards not aligned with an existing international standard along with a quarter (169) of the 675 mandated Australian Standards where no international standard exists, then applying the range of \$10m-\$20m p.a. suggests a total benefit of \$1.9bn-\$3.8bn p.a. (0.1-0.2% of GDP).

Estimating the net benefits of reform with economy-wide modelling

RISs (or similar analyses) often identify, and sometimes quantify, the expected effects of standard harmonisation. Some of these effects may reflect the impacts on the Australian economy. Where such analyses do not already do so, the economy-wide (downstream) effects of these shocks may be estimated through the use of Computable General Equilibrium (CGE) modelling.

One of the primary mechanisms through which standard harmonisation may affect the wider economy is that of reducing existing barriers to international trade. In theory, a unique national standard would impose additional costs on overseas firms that want to export to Australia (as these firms would have to adapt their product to be sold in Australia), and acts as a non-tariff barrier to importing goods from that country (Schmidt and Steingress 2022). Additional accreditation costs may increase the cost of goods imported into Australia. If this additional cost is sufficiently high, the imposition of an Australian standard may prevent trade from occurring where it would otherwise be profitable to do so. Reform would mean that complying with another country's standard would eliminate this barrier.

Australian exporters may face similar issues if they also need to comply with overseas standards that differ from those that they must comply with in Australia.

The empirical effects of standards harmonisation

A starting point for our approach is to draw from studies that have estimated the magnitude of the effects of standard harmonisation empirically.

Ideally, these empirical analyses would report the effects of standard harmonisation on fundamental economic outcomes (such as the price or quantity of the relevant good) that could be used to inform the size of the shock to the model.

The literature tends to estimate the effects of standards on the *value* of trade (the sum of all prices multiplied by their respective quantities). These estimates effectively represent the *outcome* of more fundamental drivers and are less amenable to being used as a shock to a CGE model. Nevertheless, they may be indicative of the general magnitude of such effects.

Empirical studies that aim to quantify the trade effects of harmonising standards generally tend to find that harmonising standards (relative to having a national standard) promotes trade, though the magnitude of these effects vary (table B.3). For example, Portugal-Perez et al. (2010) found a relatively large effect – for two of the three categories of electronics investigated, adopting international standards increased the total value of imports by over 1%. However, some studies found negligible (or even negative) effects – Temple & Urga (1997) found little difference between the adoption of national or international standards.

The numbers reported in these studies are not necessarily comparable with one another due to differences in the data used in their analyses and the products and standards involved. For example, Schmidt & Steingress (2022) investigated the effect of harmonising the standard of a *particular product*, and found that this increased the value of trade flows of that product by 0.59%. On the other hand, studies such as Blind and Jungmittag (2005a) investigated the effect of harmonising standards within a *broad industry of products* (such as mineral fuels), and found that a 1% harmonisation of standards led to a 0.36% increase in imports within that industry. These values, while informative, are not measuring the same underlying phenomena.

Table B.3 – Estimated effects of harmonising standards on trade

Economic literature modelling the impact of standards harmonisation on trade flows

	Countries	Scope of estimated effect	Result
Schmidt & Steingress (2022)	Trade between various countries	Effect of harmonising standards of a particular product on that product's trade flows (the total value of both imports and exports)	+0.59%
Shepherd (2007)	EU countries adopting ISO standards	Effect of a 10 percentage point increase in the proportion of EU standards that were harmonised in the categories of textiles, clothing and footwear on the variety of imports	+0.2%
Moenius (2004)	Bilateral trade – various countries	Depending on the type of controls used, the effect of harmonising 1% of standards within a broad industry of products on the total value of imports of that industry	-0.11% to +0.2%
Portugal-Perez et al. (2010)	EU countries importing from rest of world	The effect of a 1% increase in the proportion of standards harmonised of each of 3 categories of electronics on the total imported value of that category	+1.11%, +0.32% and +1.6%
Blind & Jungmittag (2005b)	German trade with the UK	Using 2 different model specifications, the effect of one additional international standard (relative to the counterfactual of that standard being a national one) within a broad industry group on the total value imports of that industry	-0.02% to +0.52%

	Countries	Scope of estimated effect	Result
Blind & Jungmittag (2005a)	Germany's trade to and from France	The effect of an additional 1% of international standards (relative to the counterfactual of these standards being national ones) within a broad industry group on the total value of imports to Germany from France of that industry	+0.36%
Temple & Urga (1997)	UK trade with the rest of the world	Using 4 different model specifications, the effect of one additional international standard (relative to the counterfactual of that standard being a national one) within a broad industry group on the total value of imports of that industry	-0.12% to +0.08%
Swann et al. (1996)	UK trade with the rest of the world	Using 2 different model specifications, the effect of one additional international standard (relative to the counterfactual of that standard being a national one) within a broad industry group on the total value of imports of that industry	-0.31% to +0.2%

Further care must be taken when applying these studies to the contemporary Australian context. As noted by Moenius (2004), smaller countries (like Australia) will tend to see more pronounced effects from harmonising standards than larger countries.

The impact of adopting international or overseas standards will also be greater where existing domestic standards are significantly different to the international or overseas standard; and where products overseas differ significantly from, or are more innovative than, existing domestic products.

Modelling approaches

One modelling approach would be to use the expected trade effects of the adoption of an international or overseas standard as a shock to a national (possibly global) CGE model (such as PC National or PC Global) to ascertain the economy-wide effects of standards reform (box B.1).

It is assumed that harmonising standards of a good reduces barriers to importing that good – lowering import prices and increasing the volume of imports. This will have a positive effect on the welfare of Australian consumers. The size of this effect is informed by the extent to which the current Australian standard is out of alignment with the international or overseas standard – the greater the difference between the national and international or overseas standard, the greater the assumed effect.

Box B.1 – A conceptual approach to modelling the trade impacts of standard harmonisation – example and application

The current Australian regulated standard for widgets differs substantially from the standard used by Country X. Thus, the expected reduction in compliance costs for exporters to Australia is likely to be high. Widgets are also produced domestically in Australia. Widgets are homogenous – domestic and imported widgets are perfect substitutes. The domestic price of widgets is equal to the imported price.

There are two scenarios considered: one in which Australia already imports widgets from Country X, and another in which Australia does not import widgets from Country X but would after standard harmonisation.

Scenario 1 – existing trade between Australia and Country X

It is assumed that harmonising standards will lead to a reduction in barriers faced by foreign exporters of widgets such that there will be a 4% reduction in the price of widgets (domestic and imported) and a 5% increase in the quantity of imported widgets.

Prior to harmonisation, 10 million widgets are imported annually from Country X. The price of widgets (both domestic and imported) is \$50. Thus, annual imports of widgets would increase to 10.5 million, and the price of widgets will fall to \$48.

This change will have a:

- XX% impact on the consumption of domestic widgets
- XX% impact on the rents and firm profits of Australian widget makers
- XX% impact on GDP
- XX% impact on net government revenues

Scenario 2 – no existing trade between Australia and Country X

The current domestic price of widgets is \$50. It is assumed that harmonising standards will lead to a reduction in barriers faced by foreign exporters of widgets such that there will be 1 million widgets imported, which lowers the price of widgets to \$48.

This change will have a:

- XX% impact on the consumption of domestic widgets
- XX% impact on rents and firm profits of Australian widget makers
- XX% impact on GDP
- XX% impact of net government revenues

For the PC to model these benefits in a CGE model in the final report, it would be necessary to know (or have reasonable estimates of):

- which standards are candidates for harmonisation
- the sectors or product categories these standards apply to
- what international or overseas standards could be adopted or recognised as equivalent (and in the case of an overseas standard, which country or countries apply this standard) – and the extent to which doing so would reduce costs for businesses, and
- information on prices and quantities in these sectors or product categories, for domestically produced and imported goods (and the countries of origin for these imports).

The PC is seeking this information for the final report.

Consumer welfare gain from product diversity

There are further benefits to consumers to the extent that adopting international or overseas standards leads to an introduction of new and innovative goods previously unavailable to Australian consumers. Shepherd (2007) estimated that a 10 percentage point increase in the proportion of EU standards that were harmonised is associated with a 0.2 percent increase in the variety of imports these countries received. In these instances, the benefits to consumer welfare may be understated – as the model assumes the range of goods is fixed (Broda and Weinstein 2006; Romer 1994). While difficult to quantify, this underestimation will be greater for goods where there has been significant product innovation in overseas markets. For most goods, it is likely that this effect is relatively small.



Information request 1

The PC is seeking specific examples of Australian legislation where international or overseas standards could be adopted or recognised as equivalent, including any information or data on the expected costs and benefits of alignment.

B.5 Priority areas for review

This section identifies five priority areas for review of Australian regulation. These areas cover legislation:

- incorporating the 21 Australian Standards not aligned with an existing international standard
- incorporating the 675 Australian Standards for which there is no international standard
- that does not incorporate an Australian Standard but which creates a trade barrier through misalignment with international or overseas standards
- where there is inconsistency across Australian jurisdictions, and
- incorporating out-of-date versions of voluntary standards.

Mandated Australian Standards not aligned with international standards

Of the 7,519 current Australian Standards, 893 were incorporated in legislation in at least one jurisdiction and, of these, 21 were not aligned with an existing international standard (section B.3). All legislation incorporating Australian Standards not aligned with international standards should be reviewed, with a view to also permitting compliance with the international standard where appropriate.

Despite the small number, these standards can create trade barriers when mandated. An example is the Australian Standards relating to life jackets (the AS 4758 series) which are not equivalent to the international standard (the ISO 12402 series). Commonwealth, state and territory marine safety laws incorporate the Australian Standards but take an inconsistent approach to also permitting compliance with the international standard.

There may be more than 21 mandated Australian Standards that are not aligned with international standards. Accord Australasia provided the example of *AS/NZ 2604 Sunscreen products – Evaluation and classification* incorporated in regulation by the Therapeutic Goods Administration (TGA). At the time this standard was made, it was classified as ‘no international standard exists’ but Accord submitted that it adopts only one of the two available ISO test methodologies for determining ‘broad spectrum’ (sub. 46, p. 8), so there may be further inconsistencies.

Mandated Australian Standards where no international standard exists

Of the 893 mandated current Australian Standards, 675 had no equivalent international standard (section B.3).

Of these 675 mandated standards, 605 (90%) were in just three sectors: manufacturing; professional, scientific and technical services; and construction (table B.4). If this bespoke Australian regulation is necessary, it may be possible to reduce trade barriers by also permitting compliance, in the legislation, with appropriate overseas standards of specific jurisdictions.

Table B.4 – Australian Standards in legislation by industry^a

Current Australian Standards incorporated in Commonwealth, state and territory legislation, categorised by Australian and New Zealand Standard Industrial Classification (ANZSIC) Code (as at 10 July 2025)

Standards Australia catalogue (current & pending revision) referenced in legislation						
ANZSIC classification	Identical	Modified	No international standard exists	Not based on international standard	Not equivalent	Total
Agriculture, Forestry and Fishing	0	2	1	0	0	3
Arts and Recreation Services	0	0	2	0	0	2
Construction	6	7	138	1	2	154
Education and Training	2	0	4	0	0	6
Electricity and Gas	1	6	17	0	1	25
Health Care and Social Assistance	1	0	5	0	0	6
Information Media and Telecommunications	2	0	1	0	0	3
Manufacturing	48	44	248	3	9	352
Mining	2	0	0	0	0	2
Professional, Scientific and Technical Services	54	18	219	0	5	296
Public Administration and Safety	1	0	2	0	0	3
Retail Trade	1	0	2	0	0	3
Transport, Postal and Warehousing	0	0	26	0	0	26
Water and Waste Services	2	0	10	0	0	12
Total	120	77	675	4	17	893

a. Includes joint Australian Standards e.g. Australian/New Zealand Standards (AS/NZS) or Australian/International Organization for Standardization standards (AS/ISO).

Source: PC estimates based on Standards Australia (personal communication, 14 July 2025).

Submissions to this study included examples of legislation where there could be greater recognition of overseas standards. For example, the NSW Small Business Commission referred to the need to recognise overseas assessments for the construction sector, providing the example of prefabricated and modular

houses (sub. 18, p. 3). The Housing Industry Association cited the Singapore Product Listing Scheme which provides a list of recognised standards for fire safety products (sub. 78, p. 8).

Alignment with overseas standards is also particularly relevant to new areas of regulation such as artificial intelligence where, as noted by Amazon, global standards are nascent and there is a risk of ending up with a patchwork of local, conflicting regulations (sub. 99, p. 5). The Business Council of Australia referred to the risks of Australia setting regulatory precedents ahead of global alignment, including before an international standard on age assurance is finalised (sub. 53, p. 7). Data and communication standards in turn impact innovation and productivity in other sectors (e.g. HERE Technologies, sub. 11, p. 3; Australian Logistics Council, sub. 28, p. 2; and Engineers Australia, sub. 74, p. 6).

Legislation not incorporating an Australian Standard which creates a trade barrier

Legislation that does not incorporate an Australian Standard can still create a barrier to trade through misalignment with existing international or overseas standards.

Proposed food safety and biosecurity laws, which usually do not incorporate an Australian Standard, accounted for 77% of Australia's 846 regular notifications under the TBT and SPS Agreements from 1995 to 2024. Consumer goods, road vehicles, therapeutic goods, energy & water efficiency, industrial chemicals and communications together accounted for 19% (section B.3 and attachment B.2, table B.8). In the WTO's 2025 Trade Policy Review for Australia, the Chairperson highlighted biosecurity measures as an area of interest (WTO 2025b):

... a number of Members noted biosecurity procedures or border measures were numerous, cumbersome, and time consuming. Australia was encouraged to examine these with a view to removing unnecessary restrictions and to align its measures with the SPS Agreement and associated international standards.

Participants in this study provided examples of where there could be greater alignment (box B.2).

Box B.2 – Examples of areas to review

Food safety standards and biosecurity were both identified by the Australian Industry Group as priorities for reform (sub. 98, p. 9).

Other submissions on **food standards** include:

- Infant Nutrition Council – which referred to Australia's new labelling requirement for infant formula which it considers harms the competitiveness of Australian manufacturers in export markets by not aligning with the international Codex Alimentarius and regulatory frameworks in the EU, US and Hong Kong (sub. 38, p. 1).
- Australian Retailers Association and National Retail Association – who raised concerns with inconsistent food labelling and advertising rules across states and territories (sub. 79, p. 6).
- Australian Organic – which referred to the need for a national mandated organics standard to streamline exports, saving an operator \$4,000 to \$9,000 per year in additional certification costs (sub. 73, p. 4).

In relation to **biosecurity**, Shipping Australia referred to the high cost being borne by Australians from international trading vessels being turned away by state authorities despite meeting global biosecurity rules and receiving federal clearance to enter Australia (sub. 58, p. 2).

Box B.2 – Examples of areas to review

Other sectors covered by the WTO data were identified in submissions, including:

- **Consumer goods** – e.g. IKEA referred to mandatory standards under the ACL covering toppling furniture and infant sleep products where bespoke Australian requirements have imposed significant costs, impacting price and availability for consumers (sub. 59, p. 3).
- **Road vehicles** – e.g. Heavy Vehicle Industry Australia noted the need for the regulatory environment to reflect Australia's larger heavy vehicle combinations but also referred to the impact of delays in updating the ADRs and conflicting jurisdictional requirements (sub. 35, p. 2). As of the date of this interim report, the Australian Government had initiated an independent review of alignment of the ADRs with international standards (DITRDCSA 2025).
- **Therapeutic goods** – e.g. the NSW Small Business Commission referred to medical cleaning products which are not commercially viable to manufacture in Australia due to the expense and time required to obtain new approvals from the TGA, even when the product is identical to one already approved overseas (sub. 18, p. 3). The Business Council of Australia noted significant reforms to improve international regulatory alignment but that businesses continue to report delays in TGA approval despite approval in other jurisdictions such as the EU (sub. 53, p. 8).
- **Chemicals** – e.g. Accord Australasia raised the lack of recognition of International Fragrance Association (IFRA) standards and related controls for risk management of fragrance ingredients (sub. 46, p. 5).

Although not appearing in the WTO notification data, other areas raised in submissions include:

- **Agricultural & veterinary products** – e.g. Animal Medicines Australia referred to the significant adaptive costs to register an animal health product, with every unique Australian requirement increasing the time, cost and complexity to bring new products to farmers (sub. 20, p. 3). A government-initiated independent review noted that many chemical reviews have taken more than a decade to complete, and certain chemicals remain under review after more than 15 to 25 years. Full implementation of the review's recommendations was estimated to reduce regulatory costs by \$200 million over 10 years, including \$5.5m p.a. from improving access to international registered products (Matthews et al. 2021, pp. 4, 5, 75).
- **Environment-related corporate reporting and emissions reduction** – e.g. the Australian Logistics Council referred to the need for consistent emissions reporting obligations (sub. 28, p. 3). The Chamber of Minerals and Energy of Western Australia referred to the need for standards for low-carbon hydrogen (and derivatives) to be aligned with standards of other countries (sub. 49, p. 2).

More broadly, NATA noted that, as a general principle, standards for goods and services that are the subject of international trade are where the focus should lie, in contrast to standards relating to purely domestic activities (sub. 37, p. 2). The Business Council of Australia also considered that Australia should prioritise the adoption of standards from jurisdictions with which Australia has a significant trade relationships and broadly comparable regulatory and safety frameworks (such as the arrangements with New Zealand) (sub. 53, p. 6).

Inconsistencies across states and territories

A priority area for review under the NCP reforms should be to ensure regulated standards are consistent across Australian jurisdictions. When regulated standards are not aligned across states and territories, it impacts competition by acting as a barrier to interstate and international trade – which governments

acknowledged in the *Intergovernmental Agreement on National Competition Policy* (Federal Financial Relations 2024, p. 27).

There may be good policy reasons why some standards are not relevant to all jurisdictions – for example, the National Construction Code includes specific performance requirements which are only applicable in alpine areas. However, inconsistency across Australian jurisdictions was highlighted by participants in this study as the major issue with standards.

Many submissions said that the major barrier facing Australian business when it comes to standards is not alignment with international standards, but interstate alignment. For example, the Carpet Institute of Australia said that the ‘greatest inefficiencies in the flooring sector stem from inconsistent standards and regulations across Australian states and territories’ and urged the PC to prioritise ‘national alignment of regulated standards as the first step in reform’ (sub. 6, p. 2). Standards Australia said (sub. 76, p. 7):

Regulatory fragmentation costs Australian businesses billions of dollars each year... Domestic harmonisation of regulated standards would address unnecessary costs by simplifying regulatory obligation requirements, by simplifying and facilitating market entry across the national market and through reducing inefficiencies in regulatory processes.

As set out in figure B.2 and table B.5, there are an estimated 2,340 references in Commonwealth, state or territory Acts or subordinate instruments to 893 unique Australian Standards (current or pending revision). These Australian Standards are not consistently implemented across jurisdictions. Out of the 893 Australian Standards, only 26% are applied on a national basis (220 are incorporated only in Commonwealth legislation, while 9 are incorporated by all states and territories). For the remaining 664 (74%), there is great variety in which jurisdictions reference and implement each standard.

Box B.3 – Case study: bike helmets

The regulation of bicycle helmets in Australia provides a clear example of how alignment with overseas standards can reduce business compliance costs and demonstrates the flow-on benefits for consumers from harmonisation. It also shows what happens when states and territories are not aligned.

It is a legal requirement for cyclists to wear helmets but very few, if any, bicycle helmets are manufactured in Australia, so helmets are imported. Bicycle Industries Australia estimates that around 1.2 million helmets with an average retail price of \$55 are imported each year, suggesting Australians spend around \$66 million each year on new bicycle helmets.

There is no international standard for bicycle helmets, however the two most widely used overseas standards are the EU and US standards.²⁰

The Australian Competition and Consumer Commission estimated that alignment with the EU and US standards could save businesses \$14m per year in compliance costs (consisting of savings in testing and compliance-related administrative costs). There would also be benefits from increased choice.

But the benefits did not materialise quickly, due to implementation issues. The Australian Competition and Consumer Commission’s review of the bicycle helmet standard under the ACL commenced in 2016,

²⁰ Bicycle Industries Australia did not support the adoption of the SNELL standard which it considered to be a lower quality standard (sub. 68, p. 4).

Box B.3 – Case study: bike helmets

and only in 2024 was the standard revised to permit compliance with both EU and US standards. Once changed however, states and territories did not adopt this change consistently.

State and territory road safety authorities administer laws that govern which helmets can be used by cyclists (through 'use' laws). So even though the ACL standard was changed, EU and US standards were not permitted to be used until each jurisdiction updated their road rules. New South Wales updated theirs first, in June 2024, with other states and territories following since then, and some yet to be updated.

The net result is that eight years after realising the value of harmonisation, most Australians are yet to see benefits from this harmonisation as the bike helmet market is national and differences across jurisdictions matter for importers and large retailers.

Source: Bicycle Industries Australia (sub. 68, pp. 3-4; and personal communication, 14 July 2025).

Participants in this study raised many potential sectors where regulated standards could be more closely aligned across Australia (box B.4).

Box B.4 – Examples of areas to review

- **Electrical safety** – e.g. the Australian Industry Group referred to Australia's two distinct electrical product safety frameworks that reference IEC standards (adopted as Australian Standards) but impose different compliance requirements for registration and certification (sub. 98, p. 8). The Lighting Council Australia raised concerns about modifications by Standards Australia Technical Committees from international standards, and supported expanding the use of the IEC's certification scheme to reduce redundant Australian certification requirements (sub. 69, p. 3) (see also e.g. Glenn Toole, sub. 66, p. 2; and ACCC, sub. 101, p. 2). A 2024 review initiated by the Council on Federal Financial Relations recommended, among other things, an update of the electrical equipment safety system framework to achieve consistent certification requirements, a cross-government working group to enhance Australian representation at the IEC and ISO, guidelines for modifications that are routinely required when adopting international standards for consumer electrical products, and a nationally agreed pathway for market-wide recognition of appropriate overseas standards (Finance nd).
- **Packaging and waste reduction** – e.g. the Business Council of Australia (sub. 53, p. 7) and IKEA (sub. 59, p. 1) provided examples of packaging and waste reduction requirements which diverge from overseas frameworks and are inconsistent across the states and territories, imposing unnecessary compliance costs and undermining the efficiency and scalability of recycling and waste reduction efforts (see also Australian Retailers Association and National Retail Association, sub. 79, p. 4).
- **Transport** – e.g. the Australian Logistics Council described the framework for freight vehicles as 'a patchwork of national guidelines, state regulations, and local government discretion' which creates operational inefficiencies, particularly at jurisdictional boundaries, in turn affecting ports, intermodal terminals, and rail hubs (sub. 28, p. 2). Shipping Australia referred to the high costs, which are ultimately passed on to the end consumer, of conflicting jurisdictional requirements, and the need for a single set of shipping- and port-governance related laws in Australia (sub. 58, p. 2). The Australian

Box B.4 – Examples of areas to review

Retailers Association and National Retail Association proposed reforms to harmonise freight and supply chain regulation (sub. 79, p. 5).

- **Construction** – e.g. the Australian Institute of Building Surveyors referred to the role of the National Construction Code in supporting national consistency, and the impact of state and territory variations, including in relation to the energy efficiency of buildings and environmental impact of building work (sub. 55, p. 6). The Cement Concrete and Aggregates Australia and the Cement Industry Federation referred more broadly to the impact of differing approaches to environment-related regulation, and encouraged government funding of a review of relevant Australian Standards (sub. 61, p. 2).
- **Consumer products** – e.g. Bicycle Industries Australia referred to the impact of the Commonwealth excluding e-Bikes from road vehicle regulation, creating a fractured state-based approach to the e-Bike market (sub. 68, p. 5).

Participants suggested policy responses to support harmonisation of regulated standards across Australia ranging from a single law (e.g. the ACL) to model codes that are applied by each state and territory (e.g. Food Standards Code and National Construction Code) to liaison between regulators (e.g. Electrical Regulatory Authorities Council and Gas Technical Regulators Committee). Examples from other federated countries include Canada's *One Canadian Economy Act* SC 2025, c 2 which recognises provincial standards for goods and services as having met the federal standard.

Outdated mandated standards

A priority area for review under the NCP reforms should be to update legislation to reference the latest version of voluntary standards.

The Standards Australia data identifies Australian Standards incorporated in legislation that are no longer current or pending revision. As at 10 July 2025, there were an estimated 3,743 references to Australian Standards in Commonwealth, state or territory Acts or subordinate instruments (sometimes the same standard is referenced by multiple jurisdictions or in more than one law in a jurisdiction).²¹ Of these 3,743 references, 1,403 (37%) are to Australian Standards that are superseded, obsolete or withdrawn. Table B.5 breaks this down by jurisdiction.

²¹ For example, AS/NZS 4308:2008 on procedures for specimen collection and the detection and quantitation of drugs of abuse in urine is referenced in a range of laws including rail safety, civil aviation and detention centres.

Table B.5 – Australian Standards (current & non-current) in legislation^a

References to Australian Standards in Commonwealth, state and territory legislation, classified by jurisdiction (as at 10 July 2025)

	Total	Current		Non-current			
		Current	Pending revision	Available, superseded	Superseded	Obsolescent	Withdrawn
CTH	1,128	574	106	287	113	2	46
ACT	185	96	27	40	16	0	6
QLD	306	173	48	53	23	0	9
SA	433	276	39	53	43	1	21
NSW	611	217	80	230	71	1	12
NT	185	98	20	37	22	0	8
TAS	200	105	29	42	18	0	6
VIC	347	196	46	72	18	0	15
WA	348	168	42	88	32	4	14
Total	3,743	1,903	437	902	356	8	137
	3,743	2,340 (63%)		1,403 (37%)			

a. Includes joint Australian Standards e.g. Australian/New Zealand Standards (AS/NZS) or Australian/International Organization for Standardization standards (AS/ISO).

Source: PC estimates based on Standards Australia (personal communication, 14 July 2025).

These 3,743 references cover 1,552 unique Australian Standards. Of these 1,552 Australian Standards, 893 (58%) are 'current' or 'pending revision' and 659 (42%) are classified as 'available but superseded', 'obsolescent', 'superseded' or 'withdrawn'. Of these 659 out-of-date Australian Standards, 141 (21%) were (at the time of adoption) identical or modified adoptions of an international standard, 8 (1%) were not based on an existing international standard or were not equivalent, and 510 (77%) had no equivalent international standard.

There are caveats to this analysis, including:

- The legislation may already be drafted in such a way to address this problem (e.g. by incorporating the Australian Standard as in force from time to time).
- Standards Australia's list of legislation is updated to cover new Australian Standards being published or revised and may not capture where legislation has been revised to incorporate or no longer incorporate an Australian Standard.

To understand how these laws operate, it would be necessary to review, for many of the 659 out-of-date mandated Australian Standards, the wording of the relevant Interpretation Act, enabling Act, delegated legislation and any subsequent Australian Standard. Given this uncertainty, the PC has not included this subset of mandated Australian Standards in the net benefit analysis for this NCP reform.

A number of submissions raised concerns with outdated legislation. For example, Standards Australia referred to the Australian mandatory standard for bunk beds (Consumer Protection Notice No. 1 of 2003 (Cth)) which was introduced in 2003 and continues to reference the 1994 version of the voluntary Australian Standard (AS/NZS 4220:1994) even though it was updated in 2003 and again in 2010 (sub. 76, p. 11). Bicycle Industries Australia referred to the mandatory bicycle standard which has not been updated to incorporate revisions to the Australian Standard and is now operating from a 27-year-old standard (sub. 68,

p. 7). A further complication is where states and territories adopt different implementation dates for updated standards, creating significant inefficiencies and compliance burdens for business (e.g. Air Conditioning and Mechanical Contractors' Association of Australia sub. 63, p. 4).

As noted by the Australian Retailers Association, businesses can face an uneasy trade-off from outdated mandated standards. They can minimise their compliance risk by complying with the outdated standard or ensure the highest level of safety by applying the most current voluntary standard (ARA 2024, p. 1). Standards Australia has expedited the process for updating Australian Standards when international standards are revised by allowing its Technical Committees to agree to automatically approve an international standard (including revisions) unless objections are received from members (Standards Australia 2023c, p. 7). However, the trade barrier will remain if the legislation incorporating the Australian Standard is not also updated.

There were differing views in submissions as to whether this should be addressed by automatically incorporating, in legislation, revisions to referenced standards. For example:

- The Lighting Council Australia referred to the compliance difficulties created by Australia's electrical safety regulatory frameworks lagging behind updates to referenced standards, and proposed that Australia follow the EU's 'in-force from time to time' model (sub. 69, p. 4).
- The Australasian Injury Prevention Network considered that, where regulation gives an ambulatory operation to overseas standards, it is essential that regulators conduct regular reviews and that there is a safeguard mechanism to disallow the update if it introduces a lower safety threshold (sub. 30, p. 2).
- Standards Australia's briefing note, which was referred to in a number of submissions, did not support the automatic adoption of overseas standards as it considered this would: devalue the expert input of Standards Australia's committees; cede Australia's sovereign right to assess what works best for Australia; create a system that favours speed over scrutiny, and undermines trust in the regulatory process, and places quality and the safety of Australians at risk; and weaken Australia's global influence (e.g. Australasian Corrosion Association, sub. 14; and Australian New Zealand Biochar Industry Group, sub. 72).

Other options to address the issue of out-of-date mandated standards include setting performance requirements in regulation and listing the Australian Standard as 'deemed to comply' (e.g. National Construction Code) or allowing compliance with the specified standard or its equivalent.



Interim recommendation 1 **Priority areas for reviews of standards**

Australian, state and territory governments should:

- review all legislation mandating Australian Standards that are not aligned with international standards with a view to harmonising or removing references that are not required
- review 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
- identify other areas of legislation that do not incorporate an Australian Standard but create a trade barrier through misalignment with international or overseas standards such as food safety and biosecurity
- review legislation that is inconsistent across jurisdictions and agree to harmonise regulated standards across Australia, and
- update legislation to enable compliance with current versions of incorporated standards where appropriate.

The Australian Government's consultation, as at the date of this interim report, on the Competition Reform Guidelines and Best Practice Handbook for the use and recognition of standards in regulation also provides an opportunity for stakeholders to identify priority sectors for reform. The Council on Federal Financial Relations will work to identify and agree, by the end of 2025, priority areas for review of references to voluntary standards in legislation (Australian Government 2025, p. 6).

The request for advice for this study asks for implementation options. In the final report the PC will provide further detail on standards for review, where possible.

B.6 Other reforms to standards

Submissions raised other reforms related to standards, including:

- cost of accessing standards incorporated in regulation
- greater engagement in international standard setting bodies to support international standards that are appropriate for Australia, and
- incentives of standard setting bodies and regulators.

Access to mandated standards

A number of submissions raised the cost of accessing mandated standards as a barrier to compliance with the law, and deterrent to greater alignment of regulation with standards where regulation is necessary.

Standards Australia owns the copyright to its published standards. As a private not-for-profit body, Standards Australia requires payment for access to Australian Standards to cover its operating costs. Across the mandated Australian Standards, 80% have a list price of less than \$200 (Standards Australia, personal communication, 14 July 2025). Standards Australia, as Australia's national standards body, also has the right to sell ISO and IEC standards, with Standards Australia making payment to the international bodies (ISO 2015, p. 41).

Easy access to the law supports compliance with the law and is also fundamental to fairness (Administrative Review Council 1992, p. 58). This creates a tension where copyrighted standards or other material is incorporated in legislation. For example, the Australian Senate Committee for the Scrutiny of Delegated Legislation requires all documents incorporated by reference in legislative instruments to be available to the public free of charge. To address this requirement, Commonwealth agencies can make the mandated standard available for viewing at their office or by appointment (Senate 2024, p. 19). This is of little practical value for businesses and other stakeholders.

In 2006, the PC recommended that access to mandated standards be cheaper or free (PC 2023, p. 21).

Mindful of the fundamental principle of transparency and accessibility of legal requirements, the Australian Government and other governments (through their agencies) should fund free or low-cost access to Australian Standards made mandatory by way of regulation. (PC 2006b, p. 130)

The PC also noted:

Indirectly, therefore, the cost to the Government of subsidising access could perhaps, over time, be expected to reduce the number of regulatory references, by providing a further incentive to ensure standards are referenced only when clearly justified. (PC 2006b, p. 128)

The financial cost of accessing standards continues to be an issue nearly 20 years later, and was a common theme in submissions. For example, TAFE Directors Australia referred to the significant fees required to

provide students with the access to standards they need for their training (sub. 22, p. 3). The NSW Small Business Commission provided the example of a small electrical engineering business needing to purchase hundreds of standards for a single infrastructure project, at a total cost that exceeded the project's profit margin (sub. 18, p. 4). The Australian Construction Industry Forum added that around 120 standards are referenced in the National Construction Code, and these standards often reference further standards, meaning that a business may need to access many hundreds of standards (sub. 44, attachment p. 9). Master Electricians Australia referred to its contribution to the development of standards which it then has to pay to access (sub. 88, p. 9).

All National Standards Bodies in Europe are required to have a virtual read-only portal (Danish Standards nd). This followed a 2024 decision of the Court of Justice of the European Union requiring the European Commission to provide free access to certain CEN-CENELEC mandated standards.²² In 2023, Standards Australia also introduced a 'Reader Room' to provide read-only free access to certain Australian Standards although this requires registration, is only available for non-commercial purposes, and limits users to three access tokens over 12 months and access to a standard for a 24-hour period (Standards Australia nd). Participants in this study also raised concerns with digital-only versions, referring to industry practice for tradespeople to carry a printed, often annotated, copy of the relevant standard in their vehicle for regular site reference (e.g. National Electrical and Communications Association, sub. 71, p. 6).

The NCP reform program provides an opportunity for Australian governments to implement the PC's past recommendations on funding free or low-cost access to mandated Australian Standards. It is unlikely that the benefits of harmonisation can be maximised if there is a barrier to businesses accessing harmonised standards. Table B.6 provides an overview of Standards Australia's size of operation and revenue over the last decade. As an indicator, if 1,263 (16%) of Standards Australia's catalogue of 7,991 voluntary standards ('available superseded' in addition to 'current' and 'pending revision') are incorporated in legislation, this could suggest a government subsidy of around \$7 million p.a. would be required to provide free access to these mandated standards. This is 16% of the royalty and e-commerce revenue (\$45 million) for 2023-24, noting this does not reflect different list prices, usage and curated subscriptions of standards. As part of the NCP reform, Australian governments could also explore cost recovery options such as funding access to mandated standards as part of industry levies or registration or licensing fees.



Interim recommendation 2

Governments should fund access to standards in legislation

Governments should facilitate free (or low-cost) access to standards incorporated in legislation. The cost of providing this access should be considered in any assessment of the costs and benefits of proceeding with a regulated standard.

²² Case C-588/21 P, *Public.Resource.Org and Right to Know v Commission* ECLI:EU:C:2024:201.

Table B.6 – Standards Australia financial reports

Standards Australia's revenue (\$'000) and size of operation, financial years 2013-14 to 2023-24

FY year end 30/6	Operating revenue					Publications			
	Total revenue (operating & investment)	Royalty ^b	E-commerce ^b	Grant	Externally funded project	Recoveries and other income	Head-count	New ^a	Total
2024	63,656	39,805	5,228	4,762	3,235	707	292	453	NA
2023	62,613	39,783	3,378	3,142	2,282	521	318	396	NA
2022	60,380		41,236	2,327	923	453	259	406	NA
2021	61,203		38,443	1,626	352	558	237	484	NA
2020	54,966		35,617	2,686	1,470	536	174	372	6,750
2019	36,477		14,721	2,628	392	573	125	361	6,776
2018	32,539		5,962	2,627	852	508	105	264	6,464
2017	30,300		6,892	2,656	922	923	109	304	7,372
2016	23,633		4,656	2,655	871	284	NA	369	7,891
2015	22,808		4,855	2,654	701	137	NA	340	10,092
2014	21,225		4,305	2,677	1,742	240	NA	267	8,688

a. In the 2019-2024 Annual Reviews, 'new publications' did not include 'reconfirmed standards'. For consistency, this table excludes 'reconfirmed standards' from 'new publications' for 2014–2018. **b.** In the 2024 Annual Review, revenue for 2022-23 and 2023-24 from the sale of publications was separated into 'Royalties' and 'E-commerce revenue'.

Source: Standards Australia Annual Reviews 2013-14 to 2023-24.

Engagement in international standard setting bodies

Submissions raised the need for greater engagement in international standard setting bodies to support international standards that are appropriate for Australia.

In 2006, the PC made three recommendations to support Australia's participation in international standard setting bodies (PC 2006b, p. 95):

- The Australian Government should, in conjunction with Standards Australia, improve the effectiveness of Australia's participation in international standard setting fora by more thoroughly canvassing and then more clearly articulating the national interest objectives to be pursued. Australia's future participation must be focused on those international standardisation activities with the potential for the greatest net benefits for the Australian community.
- The Australian Government should, in consultation with Standards Australia, ensure the most appropriate expert representation in international standardisation activities and increase funding in order to address any financial barriers to such representation, where this is justified in terms of the expected net benefits to the Australian community.
- Standards Australia should facilitate more direct participation by Australian consumer bodies on the ISO Committee on Consumer Policy and its working groups.

Australian representation at international standard setting bodies continues to be raised as an issue. For example, the Bureau of Steel Manufacturers of Australia referred to the need to increase Australia's

participation in international standards development including the ISO and IEC (sub. 27, p. 3). Lighting Council Australia raised concerns with Australia's funding model of one delegate per meeting (sub. 69, p. 2). The Business Council of Australia stated that active participation in international standard setting bodies is needed to ensure local conditions are considered and to increase domestic awareness and adoption of those standards (sub. 53, p. 9).

As noted in section B.5, the recommendations arising from the 2024 electricity safety framework review include a cross-government working group to enhance Australian representation at the IEC and ISO (Finance nd). The NCP reform program provides an opportunity for governments to review and, if needed, improve international engagement in priority sectors to be identified by the Council on Federal Financial Relations for reform.

Incentives of standard setting bodies and regulators

As noted in section B.1, public and private interests can diverge if businesses use standards or conformity assessments to restrict trade by inhibiting competition. Some submissions raised concerns with the operation of Standards Australia's Technical Committees. For example, Lighting Council Australia submitted that, despite the current Standards Australia guidance, the justification provided by committees for national Australian variations is often weak and that undeclared conflicted national interests often advocate for Australian-specific standard variations (sub. 69, p. 3). Water Services Association of Australia suggested revisions to Standards Australia's processes to require a refusal to adopt an international standard to have a reasonable technical or cost/benefit analysis; and to streamline the process for stakeholder engagement (sub. 48, p. 5) (see also Glenn Toole, sub. 66, p. 2).

Significant issues have also been raised in consultations around the capacity of Commonwealth, state, territory and local regulators to identify when regulation is creating a trade barrier due to lack of alignment with international or overseas standards, particularly where states and territories adopt inconsistent approaches to safety regulation. This is reflected in the inconsistent approaches to Australia's WTO TBT and SPS notifications (section B.3). The NCP reforms provide an opportunity to identify measures to support international and national harmonisation, including, for example:

- referencing, across all Commonwealth, state and territory Impact Analyses guides, the *Guidelines for adopting voluntary standards in legislation*, to be agreed under this NCP reform, along with the objective of consistency across Australian jurisdictions
- reflecting the objective of international harmonisation in regulators' objectives (e.g. in legislation or statements of expectation) and ensuring regulators have the tools that are needed to support harmonisation (e.g. the ability to accept overseas approvals and to exchange information with overseas regulators) (section B.2)
- reflecting the WTO requirements in parliamentary guidance, particularly for committees that are responsible for scrutinising and disallowing tabled delegated legislation
- continuing to reflect the WTO requirements in memoranda of understanding with Australian standard setting and conformance assessment bodies, and
- reviewing international alignment as part of regular reporting by Standards Australia and a stocktake of Australia's regulation.

Attachment B.1 – Impact analysis guidance

Table B.7 – Impact analysis guidance

Policies to support alignment of Australian regulation with international and overseas standards

Jurisdiction	Policy impact analysis requirements
Commonwealth	<p>If any of the policy options involve establishing or amending standards in areas where international standards already exist, policy makers are required to document whether (and why) the standards being proposed differ from the international standard (PMC 2023a, p. 23).</p> <p>The guide on preliminary assessment also refers to Australia's obligations under the WTO Agreements and other treaties (PMC 2023c, p. 5).</p>
ACT	No requirements in relation to international standards or WTO notifications. A regulatory impact assessment is not required if the matter involves adoption of a national or international standard, or an intergovernmental agreement, where an assessment of the benefits and costs has already been done and is relevant to the ACT (ACT Government 2024, p. 5).
NSW	No requirements in relation to international standards or WTO notifications (NSW Government 2019).
NT	No requirements in relation to international standards or WTO notifications. Policy makers are required to document any relevant national standards, and if the proposed regulation differs from them, identify the implications and justify the variations (NT Government 2017, p. 25).
QLD	No requirements in relation to international standards or WTO notifications. The guideline provides examples of business impacts, including limiting the ability of businesses to access local, interstate and international markets or placing businesses at a competitive disadvantage with interstate and international competitors (see also Box 6 setting out the OECD competition checklist) (QLD Government 2025, p. 15).
SA	No requirements in relation to international standards or WTO notifications. Agencies must advise Cabinet if there is a regulatory proposal involving the adoption of an Australian or international protocol, standard, code or intergovernmental agreement, and there is a National Regulatory Impact Statement or other assessment of the costs and benefits which Cabinet Office has approved as adequate. In setting out policy options, policy makers must examine how the subject matter is regulated (or deregulated) in different jurisdictions both nationally and internationally and consider the successes or failures of those systems. Policy makers must also consider the impact of options on business, including the ability of business to access local, interstate or overseas markets (SA Government 2022).
TAS	No requirements in relation to international standards or WTO notifications. Exemptions include matters involving the adoption of international or Australian standards or codes of practice, where an assessment of the costs and benefits has already been made. Examples of restrictions on competition include where legislation restricts the entry of goods and services from interstate or overseas, giving a competitive advantage to local producers (TAS Government 2016).
VIC	No requirements in relation to international standards or WTO notifications. The guideline provides examples of competition impacts, including business impacts, including preventing or limiting the ability of businesses and individuals to enter and compete within particular markets (VIC Government 2024, p. 44).
WA	No requirements in relation to international standards or WTO notifications. Exemptions include regulatory proposals involving the adoption of an Australian or international protocol, standard, code or Intergovernmental Agreement where an adequate assessment of the costs and benefits (to WA) has already been made, and the assessment was made for, or is relevant to WA. The principles for evaluation of regulation include considering interstate or overseas trends that may currently or soon be impacting on Western Australia's regulatory environment (WA Government 2023).

Source: PC based on guidance published by Commonwealth, state and territory governments.

Attachment B.2 – WTO notifications

Table B.8 – Australia’s WTO notifications under the TBT and SPS Agreements
Regular notifications by Australia from 1995 to 2024 by area of regulation

Sector	Number of TBT & SPS regular notifications by Australia
Total	846
Food safety	362
Biosecurity	286
Consumer goods	38
Road vehicles	29
Therapeutic goods	25
Energy efficiency	25
Water efficiency	3
Industrial chemicals	22
Communications	19
Building product	6
Country of origin	5
Gene technology	3
Tobacco	2
Vapes	2
Trade measures	2
Asbestos	1
Boat emissions	1
Cyber security	1
Illegal logging	1
Organic standard	1
Renewable energy	1
Wine labelling	1
Not classified	10

Source: PC estimates based on WTO ePing data as at 28 May 2025.

Attachment B.3 – Commonwealth impact analyses

Table B.9 – Commonwealth Impact Analyses estimating net benefits from harmonising Australian regulation with international or overseas standards

Impact Analysis (date and title)	Quantitative net benefit estimate for reform and costs/benefits covered by estimate (not adjusted for inflation)	Other non-quantified costs/benefits identified in Impact Analysis
29 January 2025 Proposed Adoption of an Australian Sunscreen Exposure Model	<p>-\$32,442 p.a.</p> <p>(Recommended adoption of the Australian Sunscreen Exposure Model (ASEM) rather than the European Scientific Committee on Consumer Safety (SCCS) model. International alignment was estimated to reduce business compliance costs by \$375 p.a. but adoption of the Australian model was estimated to reduce business compliance costs by \$32,817 p.a.)</p> <p>Compliance costs would increase if SCCS model is adopted</p>	SCCS model is based on data from research conducted in countries outside Australia, the ASEM reflects Australian conditions and consumer practices
08 January 2025 Regulation of Safety Standards and Information Standards	<p>+\$10 million p.a. per regulated standard</p> <p>Compliance cost savings from aligning standards under the Australian Consumer Law with international and overseas standards</p>	<p>Extended product lines</p> <p>Reduced product prices</p> <p>Earlier introduction of products to market</p> <p>Safer products</p>
02 October 2024 Draft Code for the Land Transport of Dangerous Goods	<p>+\$180 million p.a.</p> <p>Compliance cost savings from aligning Emergency Information Panel requirements for intermediate bulk containers with international practice</p>	
11 September 2024 Anti-Money Laundering and Counter-Terrorism Financing Regime (AML-CTF) Reforms	<p>-\$200 million p.a.</p> <p>(But policy option recommended, including alignment with international standards set by the Financial Action Taskforce)</p> <p>Business burden (\$13.9 billion over 10 years), customer burden (\$209 million over 10 years) & government costs (\$1.0 billion over 10 years)</p> <p>Reduced community harm from crime (\$2.4 billion over 10 years) & benefit</p>	Anticipated benefits from reduced crime & avoiding negative impact on foreign investment in Australia from grey listing likely to be much higher

Impact Analysis (date and title)	Quantitative net benefit estimate for reform and costs/benefits covered by estimate (not adjusted for inflation)	Other non-quantified costs/benefits identified in Impact Analysis
02 May 2024 Improving Pedestrian Safety - Acoustic Vehicle Altering Systems for Quiet Road Transport Vehicles	<p>from not being 'grey listed' (\$10.7 billion over 10 years)</p> <p>+\$6 million p.a.</p> <p>(Policy option to require fitment of AVAS to light and heavy vehicles (consistent with UN regulation) but with later implementation timing: Net benefit of \$208.4m over 35 years)</p> <p>Implementation costs for vehicle manufacturers but most also supply vehicles to markets where AVAS is already mandated</p> <p>Consumers and road users benefit from reduced risk of collision, particularly blind & low vision community</p> <p>Government benefits from reduced road trauma</p>	
07 July 2023 Televisions, computer monitors and digital signage display - GEMS energy efficiency requirements	<p>+\$68 million p.a.</p> <p>(Adoption of EU 2023 regulations in 2025: Total NPV benefit of \$1,720 million & cost of \$355 million, 20 year period assumed for NCP study)</p> <p>Cost of electricity</p> <p>Regulatory costs for government and suppliers</p> <p>Price on GHG emissions</p> <p>Peak demand benefits</p> <p>Changes to the cost of products</p>	<p>Additional benefits not modelled:</p> <p>Indirect health benefits from the reduction of fossil fuel generation produced from program energy savings</p> <p>Macroeconomic effects where expenditure and investment options are available using the monetary value of energy savings</p> <p>Effects of reduced household energy consumption leading to lower energy bills and reduced financial stress</p> <p>Changes in wholesale electricity prices or investment in generation caused by changes in future electricity demand resulting from the policy improved electricity system reliability</p>
18 January 2023 Updating the ASIC Derivative Transaction Rules (Reporting) 2013	<p>- \$3.7 million p.a.</p> <p>Compliance cost</p>	<p>Benefits from harmonisation to international standards:</p> <p>Reduced cost and complexity for industry</p>

Impact Analysis (date and title)	Quantitative net benefit estimate for reform and costs/benefits covered by estimate (not adjusted for inflation)	Other non-quantified costs/benefits identified in Impact Analysis
		Improved data quality for the Australian regulators More comprehensive and fit-for-purpose trade details Improved inter-jurisdictional data handling
19 October 2022 Heavy Vehicle Emission Standards for Cleaner Air	+\$215 million p.a. (Net benefit of \$6,428 million by 2050, 30 year period assumed for NCP study) Health benefits Fuel savings Higher capital costs for heavy vehicle manufacturers Increases in operating costs for heavy vehicle operators and road managers	
02 June 2020 Review of the unwanted emission boundary core condition on 3.4 GHz spectrum licenses	\$0 Regulatory cost is zero	Licensees will not have to modify spectrum equipment to meet an Australian-specific condition Remove delays in deploying new technologies Depending on another review, potentially enables existing licensees to make use of existing equipment, cost savings \$30-\$75 million
13 March 2020 Standardised Measurement Approach to Bank Operational Risk	-\$1.09 million p.a. Compliance cost	Australia's capital framework aligns with Australia's international commitments
06 March 2018 Review of the Motor Vehicle Standards Act 1989	+\$49.2 million p.a. Compliance cost saving from international harmonisation (to the point of accepting International Whole of Vehicle Type Approvals) (Note that this Impact Analysis relates to reform of a legislative regime rather than specific regulated standards. However, there were only 3 unique Australian light vehicle standards remaining)	Total estimated reduction of regulatory burden from the full reform: \$69 million p.a., including from introduction of the Register of Approved Vehicles and consolidation of concessional schemes

Impact Analysis (date and title)	Quantitative net benefit estimate for reform and costs/benefits covered by estimate (not adjusted for inflation)	Other non-quantified costs/benefits identified in Impact Analysis
16 November 2017 Strengthening Airside Security at Major Australian Airports	-\$720,000 p.a. Compliance cost	Substantially reduced risk of an insider attack that currently has a risk adjusted cost of \$872 million over 10 years Full compliance with international aviation security requirements, allowing full participation in international markets Avoids reputational damage and maintains Australia's ability to access key economic markets, ensuring confidence in travel and trade
09 February 2017 Managing the risks associated with lead in the workplace	+\$2.1 million p.a. Health benefits from lowering lead levels in line with international standards Compliance costs	
22 July 2016 Extractive Industries Transparency Initiative	-\$120,000 p.a. Compliance cost	Demonstrating Australia's continual leadership with respect to transparency Keeping step with Australia's developed peers that are implementing the EITI, thereby allowing Australia to more credibly lobby other countries to implement the EITI Providing an opportunity for the extractive industry to demonstrate its contribution to the economy through an independently verified report Contributing to improving investment opportunities and level the playing field for Australian companies looking to invest overseas Strengthening relationships between industry and their stakeholders, and facilitating knowledge sharing with respect to existing payments Creating a very low probability of finding an instance of corruption or bribes, which, once mitigated, would

Impact Analysis (date and title)	Quantitative net benefit estimate for reform and costs/benefits covered by estimate (not adjusted for inflation)	Other non-quantified costs/benefits identified in Impact Analysis
22 January 2016 International Harmonisation of Medicine Ingredient Names	-\$130,000 p.a. Compliance cost	result in increased revenues for public expenditure Reduced risk of incorrect use of medicines Improved access to international medicines information Clarity for patients and healthcare providers Small reduction in barriers to trade for individual companies, however it is not expected to have a noticeable effect on the market overall
23 January 2015 Revised Accounting Standard for Financial Instruments – Regulation Impact Statement – Australian Accounting Standards Board	-\$1.9 million p.a. (Implementation costs: \$303 million, recurring: \$1.9 million p.a.) Compliance cost	Australian entities can continue to obtain the benefits of preparing financial statements that are in compliance with IFRS With ongoing efficiencies in the financial reporting process, many of those costs are expected to reduce over time
16 November 2012 Australian and New Zealand Sunscreen Standard AS/NZS 2604:2012 – Regulation Impact Statement – Department of Health and Ageing	+\$15 million to \$30 million p.a. (\$23 million p.a. used for NCP study) Australian health system savings from lower skin cancer rates	It will cost industry \$45,000-\$175,000 to develop a new sunscreen in line with the new standard – a similar cost to the previous standard It is likely that the price to consumers of a SPF 50+ sunscreen will be 15% to 30% higher than a typical SPF 30+ product However, the products will deliver significantly better protection from harmful UV radiation than those currently available in Australia.
26 March 2012 Amendments to Vehicle Standard (Australian Design Rule 4/05 – Seatbelts) 2006 – Regulation Impact Statement – Department of Infrastructure and Transport	+\$276,219 p.a. Assists manufacturers to supply to both the Australian and international markets Reduced road trauma resulting from unrestrained vehicle occupants.	

Impact Analysis (date and title)	Quantitative net benefit estimate for reform and costs/benefits covered by estimate (not adjusted for inflation)	Other non-quantified costs/benefits identified in Impact Analysis
Average quantitative net benefit estimate	+\$19.2 million p.a. per harmonised regulated standard (for simplicity, rounded up to \$20m)	
Average if outliers excluded Excludes 3 Impact Analyses where quantitative net benefit estimate is: - less than -\$100m p.a., or - more than +\$100m p.a.	+\$10.1 million p.a. per harmonised regulated standard (rounded down to \$10m)	

Source: PC estimates based on Impact Analyses and Reports published by the Office of Impact Analysis, Australian Government Department of the Prime Minister and Cabinet at <https://oia.pmc.gov.au/published-impact-analyses-and-reports>.

C. Occupational licensing

Key points

- * **The fractured nature of occupational licensing in Australia creates anti-competitive barriers to interstate labour mobility, which reduces productivity growth. Past reforms have alleviated this by creating national licensing for health professions and automatic mutual recognition for many other occupations.**
- * **Automatic mutual recognition retains existing state-based licensing requirements and thus can be quickly implemented for many occupations, although inconsistent application has hindered improvements to interstate labour mobility.**
 - Not all states have joined the automatic mutual recognition scheme (Queensland does not participate), and states and territories continue to exclude some professions.
- * **National licensing is best suited to occupations that are high-risk and provide credence goods as it can offer consumers a signal of quality for the services provided by occupations which are commonly exempt from mutual recognition schemes due to high risk.**
- * **The removal of all regulatory barriers to interstate migration has the potential to increase GDP by at most \$846 million per year. Improvements to occupational licensing could be expected to produce a proportion of this effect.**
 - Part of this effect would be to the electrical trades, which we estimate to have an upper bound benefit of \$51 million to \$62 million per year.

Occupational licensing places restrictions on those who may practise an occupation to protect worker safety and resolve information asymmetry issues for consumers. In Australia, occupational licensing is the responsibility of state and territory governments for many professions. The fractured nature of occupational licensing creates anti-competitive barriers to interstate labour mobility, which reduces productivity growth. There are two primary methods of alleviating this – mutual recognition and national licensing schemes.

Mutual recognition maintains jurisdictional regulators and licences but allows for these licences to be used to operate or gain a licence to operate in other jurisdictions. Mutual recognition schemes are relatively easy to implement and can be tailored to specific jurisdictional needs, although inconsistent application hinders their ability to improve interstate labour mobility.

National licensing schemes require harmonisation between state and territory standards and systems, which can be difficult to achieve but can circumvent some of the shortcomings of mutual recognition schemes.

C.1 About occupational licensing

Which occupations are affected?

About one in five occupations in Australia have some form of formal restrictions as to who may practice an occupation and what services they may perform (PC 2015, p. 5). These restrictions are variously referred to as licensing, registration or accreditation and are administered at different levels of government for different occupations. For example, electricians must obtain a licence with a state regulator (Energy Skills Australia, sub. 13 p. 1) whereas nurses must register with the national Nursing and Midwifery Board (AHPRA 2020). There are often differences in licensing regimes across jurisdictions. For many occupations, licensing may only be required in some jurisdictions or to perform some of the tasks associated with that occupation (table C.1).

Table C.1 – Occupations with licensing requirements in Australia^a

2021

	Number of occupations	Employment
Not required	685 (68%)	8,405,370 (69%)
May be required	148 (15%)	1,835,820 (15%)
Is required	181 (18%)	1,883,220 (16%)
Total	1,014 (100%)	12,124,410 (100%)

a. 'Is required' indicates that there are occupational licensing requirements for the occupation in all jurisdictions. 'May be required' indicates that there are occupational licensing requirements in only some jurisdictions, or that only some of the tasks usually performed by the occupation require licensing.

Source: PC estimates based on ABS Census 2021 and JSA (2025).

Licensing requirements are prevalent across many occupations and industries. Some of the largest occupations for which licensing is required are truck drivers, teachers, healthcare professionals and trades workers. In some jurisdictions licensing requirements also apply to occupations such as automotive mechanics, child care workers and security officers.

The role of occupational licensing

Occupational licensing aims to mitigate risks to both workers and consumers by requiring workers to prove that they can practice their occupation safely and to an expected level of quality. Licensing is only one possible intervention which governments may use to achieve these outcomes and occupations are often subject to a combination of regulatory requirements (PC 2023). These interventions are not costless and there may be benefits to occupational licensing reform that removes unnecessary licensing arrangements or expands pathways and reduces qualification requirements. While important, these reforms are not the focus of this report and are instead covered in the Productivity Commission's 'Building a skilled and adaptable workforce' inquiry (nd).

For decentralised licensing approaches such as Australia's, differences in the level of government responsible for administering licensing arrangements and a lack of recognition of licences between jurisdictions impose compliance costs on workers which can affect their ability to move between states and territories for work. The request for advice for this study asks the PC to look at 'an occupational licensing scheme for electrical trades and other occupations that provides for labour mobility nationally'. This appendix examines the various approaches to alleviating these compliance costs and promoting labour mobility nationally.

The lack of interstate licence recognition for some occupations only affects a small proportion of the labour force. Using estimates from the ABS Census of Population and Housing (2021), only 5% of workers had moved state in the past five years and only 2% had worked in a state other than their home state in the week preceding the census, although this is likely to have been reduced by COVID-19 restrictions which were in place in some states at the time. Workers may also be affected if they are able to provide service remotely in another jurisdiction.

C.2 What are the different approaches to licence interoperability?

There are two primary methods for alleviating the barriers that occupational licensing poses to interstate labour mobility in Australia – mutual recognition and national licensing. Mutual recognition schemes – automatic or non-automatic – rely on decentralised regulation and allow different regulatory systems to operate alongside one another, while national licensing requires some degree of harmonisation and consolidation of regulatory systems. There is no standard approach and both options have the potential for significant operational variation.

Mutual recognition

The Mutual Recognition Act 1992 established the framework for the mutual recognition of occupational licences across jurisdictions. Mutual recognition allows for workers possessing a licence from one jurisdiction to obtain a licence in another jurisdiction without having to meet all the requirements to obtain the licence, even though these may differ across jurisdictions. Mutual recognition applies to all licences where there is an equivalent required in another Australian jurisdiction. Through separate agreements, New Zealand licence holders are also able to have their licences mutually recognised in Australia and vice versa (CJR Forum 2014, p. 13).

There are concerns that mutual recognition of licences encourages ‘shopping and hopping’, which refers to workers acquiring licences in the jurisdiction where licensing requirements are lower and then working in jurisdictions with higher licensing requirements. By circumventing stringent licensing requirements, there is a risk of workers not being able to provide services to the level of safety and quality expected by the community in which they work. Previous PC research (2015) has found no compelling evidence that any jurisdiction had set standards at a low enough level that would cause community expectations of safety and quality to not be met. This research also suggested that concerns about shopping and hopping stem from issues with the Vocational Education and Training (VET) sector, rather than lax occupational licensing requirements. Differences in standards of assessment between different VET providers means that employers across jurisdictions may be unsure about the level of competence possessed by workers who received their qualifications in other jurisdictions.

Shopping and hopping is, in part, a desired effect of a mutual recognition scheme. The ability for workers to receive licences in less restrictive jurisdictions lowers the barriers to entry for occupations that are part of mutual recognition schemes without reducing standards to an unacceptable level. It also can promote regulatory competition, leading to regulators attempting to reduce licensing requirements or fees while still meeting the safety and quality expectations of their jurisdiction (PC 2015, p. 143).

Automatic mutual recognition

Automatic mutual recognition (AMR) allows for licensees from participating jurisdictions to work in any jurisdiction by simply notifying the jurisdiction where they wish to work that they possess a licence from another jurisdiction. This differs from previous mutual recognition arrangements as licensees do not need to

pay a fee to obtain a new licence or register with the new jurisdiction in addition to notifying the jurisdiction that they wish to practise in (box C.1). Thus, the compliance costs for occupations covered by AMR are significantly lower than those covered by mutual recognition.

In 2020, governments (except Queensland) established a system of AMR for mutually recognised licences, although it has not been extended to all mutually recognised licences yet.

Not all licensed occupations are covered by AMR and there are often exemptions for high-risk occupations. Exemptions are not uniform across states although commonly-exempt occupations include teachers and tradespeople such as specific categories of plumbers or electricians (Master Electricians Australia, sub. 88, p. 2; Plumbing Industry Climate Action Centre, sub. 17, p. 9; Queensland College of Teachers, sub. 26, p. 2; Teacher Registration Board of the Northern Territory, sub. 21, p. 4). There are often concerns over the quality of training provided by private VET providers (PC 2015, pp. 137–138) and there is potential for state regulators to exclude occupations from AMR on these grounds.

Differences in the scope of licensed work across jurisdictions often cause licences to be granted under mutual recognition with exemptions on some of the tasks able to be performed. These licences are in turn often exempt from AMR because of the difference in scope. Additionally, some occupations are only licensed in some jurisdictions and thus jurisdictions are often unable to grant licences to interstate workers for these occupations under mutual recognition, or allow interstate workers to operate under AMR. The Air Conditioning and Mechanical Contractor Association of Australia (sub. 63 p. 12) said that:

A prominent example is New South Wales, which introduced a distinct Medical Gas plumbing licence in 2023 and is now consulting on a dedicated Duct Installer class. Because other jurisdictions have yet to establish matching categories — or define equivalent scopes — each new class triggers a further exemption notice under AMR, shrinking the scheme’s practical coverage.

Box C.1 – The difference between automatic and non-automatic mutual recognition

Alex is a plumber who lives and works in Adelaide but would like to work temporarily in the Gold Coast, Queensland. Queensland does not participate in the AMR scheme, so Alex must apply for an equivalent licence in Queensland under mutual recognition. As part of their application, Alex must pay a licensing fee and provide their personal and business information, proof of identity and a copy of their South Australian plumbing licence to the Queensland Building and Construction Commission. After their application is reviewed, Alex may be issued with a Queensland plumbing licence which can be used to work as a plumber in Queensland.

Sam is a plumber who lives and works in Adelaide but would like to work temporarily in Tweed Heads, New South Wales. Since New South Wales participates in the AMR scheme, Sam can work as a plumber in New South Wales after submitting their proof of identity, address and licence to the relevant regulator via the online Service NSW platform. After they have submitted these documents, Sam is able to work as a plumber in New South Wales using their South Australian licence.

Source: DoF (nd).

East Coast Electricians scheme

Established in 2014, the East Coast Electricians scheme provides workers with similar benefits to AMR, but only applies to electricians in New South Wales, Victoria and Queensland and the Australian Capital Territory, albeit with some exceptions. Contractor electricians are generally exempt from the scheme except for some licence categories in New South Wales, and electricians from other states are unable to work in the Australian Capital Territory under this scheme (Building Commission NSW 2024). In all participating states, except Victoria, the scheme differs from the AMR scheme as there is no requirement to notify the local regulator to commence work (PC 2015).

National licensing

A national licensing system differs from the current state-based licensing system in three key ways.

First, licences under a national licensing scheme are agnostic as to which jurisdiction licence holders operate in. For example, as part of the National Registration and Accreditation Scheme (NRAS), optometrists must register with the Optometry Board of Australia in order to practise and, once they have done so, are able to practise in any jurisdiction in Australia (AHPRA 2020). This is similar to the goal of AMR, which reduces as much as possible the compliance costs for workers to operate in different jurisdictions while maintaining state-specific licensing.

The second is a nationally agreed upon set of standards, instead of standards being specific to jurisdictions. Deciding on nationally uniform standards has proved difficult during past national licensing attempts. Additionally, there is a risk that the agreed uniform standard is more restrictive than the current standard for some jurisdictions. This would counteract some of the benefits of increased labour mobility arising from national licensing by reducing competition from new entrants to the labour market and reducing the size of the labour pool, which would lead to reduced productivity growth.

Harmonising standards could improve compliance as there is often a lack of information for interstate workers who make use of the AMR scheme on the differences in state licensing requirements, including restrictions on the types of activities permitted by their licence. The Electrical Trades Union of Australia (sub. 56 p. 8) said:

The AMR scheme does nothing to bridge gaps in workers' understanding of the scope of the licence in different jurisdictions, leaving the worker at professional risk and introducing regulatory risks for the worker, principal contractor and end customer.

The third is a national registration system which would replace the state-based registration system. Not only is a state-based registration system more costly, but it also creates compliance issues as it can be difficult to consistently implement and communicate disciplinary actions. For example, there is a risk that if a worker holds a valid Victorian licence but also has a South Australian licence that has been revoked as a disciplinary measure, they would be able to apply for a licence under mutual recognition in New South Wales using their Victorian licence as the revocation of their South Australian licence may not be communicated to the registration board in New South Wales. As indicated by SafeWork NSW (sub. 94 p. 4), work health and safety regulators lack the ability to enforce or direct another regulator to enforce disciplinary actions against a licence holder who holds a licence issued in another jurisdiction. Energy Skills Australia (sub. 13 p. 5) stated the inconsistent enforcement of compliance requirements is a weakness of AMR and suggested that national licensing would allow for a unified approach to compliance enforcement. Safe Work Australia (sub. 9 p. 1) said:

A national occupational licensing scheme for other types of skilled work is likely to improve WHS [work health and safety] across Australia by creating a consistent, nationally standardised system for assessing and verifying worker competency.

In their submission to the consultation process for implementing AMR, the Queensland Electrical Safety Commissioner (2021) raised concerns over the ability to undertake disciplinary actions against workers who worked in Queensland under AMR but held an interstate licence. This sentiment was echoed by the Electrical Trades Union of Australia (sub. 56. p. 11) in their submission to this study.

There have been previous attempts at creating national licensing systems for specific occupations that would harmonise requirements across jurisdictions and allow workers to operate in any Australian jurisdiction with a single licence. In 2008 state and territory governments agreed to nationally license various health professions that were previously required to hold jurisdiction specific licences as part of the NRAS (COAG 2008). Licences under the NRAS are administered nationally and have the same requirements across jurisdictions to allow licence holders to operate across Australia. Over 90 registration boards for the professions included in the scheme were consolidated into 14 national boards (AHMAC 2018). Other health professions, such as paramedicine, have continued to be added to the scheme since its inception. Under the NRAS, some states operate as co-regulatory jurisdictions where state boards are responsible for handling complaints and reporting outcomes to the relevant national board, although the national board still sets the required standards, manages registration, and works with the relevant accreditation authority to set the requirements for approved programs of study (AHMAC 2018).

In 2009, state and territory governments agreed to license various occupations which included air conditioning and refrigeration mechanics, electricians, plumbers and gasfitters, property agents and drivers as part of the National Occupational Licensing Scheme (NOLS). NOLS was implemented using a national delegated agency model, whereby a single national body would develop policy and administer the licensing system by establishing procedures and determining licence types and eligibility requirements. All existing regulators were retained and were delegated to follow the nationally set procedures to process licensing applications. Record keeping, the administration of fees and the enforcement of conduct requirements remained the responsibility of local regulators (Tyson 2016) and this created confusion about the roles of various stakeholders and made consultation difficult. Jurisdictions also found agreeing on uniform standards for each occupation to be costly and ultimately unworkable. This approach was unsuccessful, and in 2013 states and territories decided to pursue alternate options (PC 2015, p. 35).

C.3 Are current arrangements affecting labour mobility?

Attempts have been made at overcoming the difference in licensing requirements, either through harmonising requirements as part of a national licensing system, or through jurisdictions recognising licences granted by other jurisdictions as part of a mutual recognition arrangement. The key aim from a productivity angle is to ease the barriers for licensed workers who operate or would like to operate interstate, thus increasing labour mobility.

Past reviews have found barriers to labour mobility (and gains from reform)

Despite attempts to improve interstate labour mobility through mutual recognition and national licensing, jurisdictional differences still present barriers to interstate labour mobility (box C.2).

Previous PC reviews (2009, 2015) of mutual recognition arrangements found that the mutual recognition of licences had helped to alleviate labour shortages and assist interstate labour mobility. In a submission to the 2009 review – which was conducted before the full implementation of the NRAS – the Western Australian Department of Health (2008) stated that previous mutual recognition arrangements had allowed for the

effective recruitment of radiologists, occupational therapists, pharmacists, physiotherapists, podiatrists and psychologists from other jurisdictions, and that this had been beneficial in alleviating labour shortages for these occupations.

There are other barriers to labour mobility than occupational licensing. The PC's (2015) review of mutual recognition arrangements found that mutual recognition improved interstate labour mobility, but this could be hampered by other regulatory requirements that are not covered by mutual recognition schemes. For example, practitioners may be required to establish an office, set up a trust fund for receiving payment, or develop a complaints process when moving to a new jurisdiction. These 'manner of carrying on' requirements may include stipulations as to how, or in what environment, a service may be provided. This is in addition to licensing that restricts who can provide the service. In their submissions to the review, the Air Conditioning and Mechanical Contractors' Association (2015) and the Architects Accreditation Council of Australia (2015) were supportive of expanded mutual recognition to overcome differences in regulatory requirements between jurisdictions that prevent workers from relocating to respond to labour shortages. The Queensland Competition Authority (2013 p. 7) suggested that manner of carrying on requirements were likely to be a greater impediment to geographic labour mobility than occupational licensing requirements.

Despite the introduction of the AMR scheme, differences in other regulatory requirements continue to reduce interstate labour mobility. The Housing Industry Association (sub. 78. p. 6) indicated that these requirements limit the effectiveness of mutual recognition arrangements. The Air Conditioning and Mechanical Contractor Association of Australia (sub. 63 p. 15) said:

Even where AMR is nominally available, divergent CPD [continuing professional development] rules, insurance thresholds and title protection laws oblige engineers to secure and maintain separate registrations in each jurisdiction where they sign off on work.

Box C.2 – State borders and labour mobility

If there were no legislative differences between jurisdictions, it would be expected that the act of crossing a state or territory border would not impact the decision for a worker to move. The PC (2014) previously estimated that this is not the case – workers favour intrastate migration over interstate migration, even when other factors such as the transaction costs of the move, difference in economic and demographic characteristics and difference in amenities or quality of life are considered. The 2014 study econometrically modelled moves between regional labour markets as defined by ABS level four statistical areas and found that whether the source and destination region were in the same state had the largest single impact on the number of individuals who moved of any of the variables considered. Imposing an interstate border was found to reduce the number of people moving within the past five years by 77%. While occupational licensing does not represent the entirety of interstate legislative differences, this estimate gives an upper bound of the impact of jurisdictional differences in licensing regimes on interstate labour mobility.

Similar analysis for the United States found that moves between states for occupations where all licensing requirements are state specific were 58% lower than for occupations where some licensing requirements were administered federally, such as the requirement to pass a national exam (Johnson and Kleiner 2020, p. 370).

There remain issues with current arrangements despite benefits from reforms

The AMR scheme has allowed for the reduction of some barriers to interstate labour mobility by removing the requirement to apply for a new licence under mutual recognition, which may involve delays and the payment of additional fees. The Business Council of Australia (sub. 53 p. 3), Chamber of Commerce and Industry of Western Australia (sub. 85 p. 2), Housing Industry Association (sub. 78 p. 5) and Master Builders Australia (sub. 100 p. 7) indicated that the AMR scheme has improved interstate labour mobility. The exclusion of certain occupations and states from the AMR scheme, however, hampers its ability to fully realise the benefits of a unified labour market. In their submission to the consultation process for implementing AMR, the Minerals Council of Australia (2021) voiced concerns that there was potential for regulators to exempt occupations that may not pose sufficient risk to workers or consumers to warrant exemption, although they noted that the scheme did have some safeguards against this.

Participants in this study expressed the following views regarding the incomplete implementation of the current AMR scheme. The Business Council of Australia (sub. 53 p. 3) said that despite the introduction of AMR, there remain barriers to interstate labour mobility.

Many occupations — including electricians and plumbers — are exempt from AMR in several states, and Queensland does not participate at all, undermining the scheme's national impact.

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. This patchwork limits the efficient deployment of skilled workers, particularly during shortages or emergency responses.

The Australian Council of Trade Unions (sub. 51 p. 3) said:

Most states have specific AMR requirements. These requirements can include sub-occupations which are exempt from the scheme, rules differences state to state and other requirements. Additionally, due to the jurisdictional licence differences, not all states are participating in the AMR scheme. This has meant that a separate scheme, called Mutual Recognition, has needed to keep functioning in order to cover states and occupations not covered by AMR.

Participants also voiced concerns that the AMR scheme relied on workers retaining registration in their home jurisdiction, defined as the jurisdiction where the worker had their principal residence or place of work. The Electrical Trades Union of Australia (sub. 56 p. 7) said that:

[The current definition of home state] requires that a worker apply for registration of a licence in the new jurisdiction if their work in the new jurisdiction is not short-term and would result in a relocation of their principal place of residence or work to the new jurisdiction. For example, where a worker moves from NSW to Victoria for 6 months to work on a project, the principal residence of that worker may be taken to have changed, and the worker required to apply for registration and/or a license in Victoria to continue working in their trade.

This is of particular issue to worker who can provide their services remotely and in multiple states. Consult Australia (sub. 4 p. 3) said:

This definition [of home state] is too restrictive and does not allow sufficient flexibility in the current environment when it comes to professional engineering registration. If automatic deemed

registration worked effectively, the jurisdiction where the person lives or works would not be relevant so long as they hold a registration that can be recognised.

The services provided by professional engineers can be provided remotely ... There are many professional engineers providing services in Australia who hold a registration that is not for their 'home State'.

If the definition of home state were amended to allow workers to take part in the AMR scheme using a licence granted in a jurisdiction other than their home jurisdiction, 'it would allow individuals registered in any Australian jurisdiction to benefit' from the AMR scheme (Consult Australia, sub. 4 p. 4), even if they provide services remotely.

The Intergovernmental Agreement on the Automatic Mutual Recognition of Occupational Registration calls for a 'independent evaluation by a body such as the Australian Government Productivity Commission' (National Cabinet 2020, p. 5) – the Australian Government should refer this matter to the PC so that it can thoroughly consider the best policies to promote labour mobility nationally.



Interim recommendation 3

The Australian Government should commission the scheduled independent evaluation of Automatic Mutual Recognition

The Australian Government (in consultation with state and territory governments) should instigate the agreed independent evaluation of the Automatic Mutual Recognition scheme.

C.4 Quantitative impacts

An occupational licensing system that improves interstate labour mobility would be expected to increase productivity and thus raise GDP (box C.3), as well as reduce consumer prices by lowering the wage premiums for licensed occupations. The PC has previously modelled the impact of reform in this space, generally finding a small positive impact on GDP, and lowering of prices.

Box C.3 – Occupational licensing and productivity

Occupational licensing requirements hinder productivity growth, through restricting the labour pool and impeding the allocation of labour towards more productive firms. This reduction in productivity is experienced both within individual firms but also between firms in an industry. The compliance costs of licensing requirements act as barriers to entry which lower the competition from new market entrants. Skilled workers who are licensed in one jurisdiction may be disincentivised from seeking interstate employment, and this reduces the incentive for those already employed to innovate and improve their productivity to compete. The reduction in labour mobility also reduces productivity between firms as more productive firms have a reduced ability to attract highly productive workers from other jurisdictions (PC 2023, 2024).

While higher productivity firms are expected to grow at faster rates than lower productivity firms, barriers to competition such as licensing requirements can reduce the difference in growth rates between firms of different productivity levels. Bowman et al. (2024, pp. 26–27) find that high productivity firms can be

Box C.3 – Occupational licensing and productivity

expected to grow 10 percentage points faster than low productivity firms in industries with no occupational licensing, where high and low productivity is defined as one standard deviation above or below the industry mean. However, when occupational licensing stringency is increased by 10 percentage points, this difference in productivity growth reduces to 9 percentage points. The decrease in productivity growth across Australia arising from occupational licensing stringency is not insignificant and reducing occupational licensing requirements to the average level of the five least stringent OECD countries could have caused productivity growth (in the non-resource, non-financial sector) to slow only half as much it did during 2002–2016.

For industries with highly seasonal employment trends, such as tourism, increased labour mobility has the potential to provide benefits to overall output in addition to improvements to productivity arising from a more efficient allocation of labour. Delays in licensing approvals can make it difficult for workers to seek interstate employment in temporary seasonal positions, shrinking the available labour pool for these.

Previous modelling results

The Commission has previously investigated the effects of licensing reform on the wider economy. In the Commission's review of mutual recognition schemes (2009, p. 73), Computational General Equilibrium (CGE) modelling was used to estimate the effects of greater interstate labour mobility in the context of a 10% shock to resource export prices. Two scenarios were considered, one where labour in licensed occupations was completely immobile between jurisdictions and, one where all labour was perfectly mobile which resulted in a GDP increase of 0.3% as compared with the former scenario.

As part of the attempt at national licensing under the NOLS, a Decision Regulatory Impact Statement (RIS) was produced which estimated the benefits of moving to a national licensing system for electrical trades. This approach built on PC (2009) and assumed that national licensing would lead to 10% of the full labour mobility benefit estimated by the PC (2009). A cost benefit analysis which was undertaken as part of this RIS estimated the ongoing benefit at \$62 million per year with an annualised transition cost of \$31 million. CGE modelling was also conducted as part of this RIS and it was estimated that moving to a national licence for electricians would increase GDP by \$22 million (COAG National Licensing Steering Committee 2013).

In the PC's *5-year Productivity inquiry: advancing prosperity* (2023, p. 181) CGE modelling was used to estimate the effect of reducing licensing in the industries with the most restrictive licensing requirements. This approach built on European research by Bambalaite et al. (2020), which estimated that a 17 percentage point reduction in the stringency of occupational licensing requirements improved labour productivity by 1.6 percentage points for the average firm. Since the PC used a sectoral CGE model, a 0.8% increase in productivity was assumed for the affected industries, as not all occupations in these industries require a licence. The effect on real Gross Domestic Product (GDP) and real Gross National Income were estimated as increases of 0.3% and 0.4% respectively. The prices of the goods and services produced by the affected industries fell with more labour-intensive industries experiencing the greatest price reduction. The reduced prices induced greater consumption and output across the economy grew. The aggregate increase in household welfare was estimated at \$3.3 billion in 2018-19 dollars.

Most recently, as part of the PC's *National Competition Policy: modelling proposed reforms* (2024, pp. 133–135), reducing the stringency of licensing requirements was modelled using the Commission's national CGE model (Zhang 2025) similarly to the 2023 report, as well as the Victoria University regional CGE model

(Adams, Dixon and Horridge 2015). The same 0.8% increase in productivity for the five affected industries was assumed. A real GDP increase of 0.4% was estimated as well as a decrease in the Consumer Price Index of 0.2%. This differs from the 2023 estimate purely due to changes to the model rather than any differences in input assumptions. Revenues for the Australian Government were estimated to increase by \$1225 million but decrease by \$144 million for state and territory governments. The decrease in revenue is due to the nature of the national CGE model used and, when using the Victoria University model which has detailed data on state labour markets and a more granular occupations list, revenues increased across state and territory governments.

The PC's 2023 and 2024 modelling results may be more applicable to the reforms being considered in the Commission's 'Building a skilled and adaptable workforce' inquiry as they involve a reduction of licensing stringency and a removal of unnecessary licences, rather than an improvement to interstate labour mobility.

Modelling approach

The PC's report on geographic labour mobility (2014, p. 377) estimated the effect of an interstate border on labour mobility and found that needing to cross a state border reduced the movement of workers by 77%. Reforming occupational licensing would alleviate some of the cost of complying with state regulatory requirements when moving interstate and thus would improve labour mobility by a proportion of this effect. However, the extent to which occupational licensing reform would reduce compliance costs for workers moving interstate is not clear.



Information request 2

The PC is seeking input and data on the potential impact on productivity from an increase in interstate labour mobility arising from occupational licensing reform.

The PC is also seeking data on the costs of complying with occupational licensing requirements when moving interstate, as compared with the cost of complying with other state regulatory requirements.

National CGE modelling – simple approach

Wage differentials between states give an indication as to the transaction costs which exist for workers who move between states. Without these transaction costs, it would be expected that in equilibrium, wage differentials between states would be purely a reflection of the differences in productivity between states. Thus, observed wage differentials between states are inflated by the effect of the transaction costs imposed by interstate borders, and removing this effect would yield the expected productivity gain of moving between states.

Using the previous results from the PC (2014, p. 377), the decision for a worker to move labour market regions was examined and push factors such as an increased wages, as well as pull factors such as transaction costs arising from crossing an interstate border, were considered among others. The effect of removing a state border was found to increase the number of people who moved labour market regions by 331%. A 1% increase in real wages in the destination labour market region was found to increase the number of people moving by 1.54%. This implies that removing an interstate border has the same effect on interstate labour mobility as a 215% wage premium.

The average real wage premium for an interstate move is 3.8% (ABS 2021, 2024a, 2024b) which is greater than what the wage premium would be if it was purely a reflection of the productivity differences between

states. If the 215% wage premium resulting from the compliance costs of moving interstate were removed, the resulting wage premium for an interstate move would be 1.8%.

To give a sense of the magnitude, applying a 1.8% productivity improvement to the 16% of workers who have moved interstate (or would in response to the reforms) in each of the occupations best suited to national licensing (covering 22% of all employees), would deliver a GDP increase of \$846 million per year or 0.04% of GDP. This is necessarily an overestimation as it assumes a removal of all the costs arising from complying with regulatory requirements when moving interstate (effectively creating a single Australian labour market in terms of legislative alignment for licensed occupations), not just occupational licensing requirements. More data is needed on the proportion of the 1.8% productivity improvement that could be attributed to occupational licensing reform.

If the productivity improvement is restricted to electricians only, this reform could be expected to increase GDP by \$51 million per year. Electricians make up 1.6% of the workforce and 12% have moved or would move interstate in response to the reforms, experiencing a 4.4% wage premium on average. This is roughly in line with the effect in the Decision RIS produced as part of the process to establish the NOLS (COAG National Licensing Steering Committee 2013, p. 90) for the previous national licensing solution for electrical trades, which estimated an ongoing benefit of \$62 million per year. The Decision RIS assumed that the labour mobility effect of moving to national licensing would be 10% of the effect in the PC's previous research (2009) but modelled the reform as benefiting all electricians. Our estimation considers a larger benefit as calculated from PC (2014) but only applies this to the subset of electricians who move or would move interstate. Both estimates build on research that was undertaken before the introduction of the AMR scheme and so changes in the current environment may have a much smaller impact than what is estimated, making these numbers an upper bound.

Regional CGE modelling

Another approach would be to consider the effects of improving interstate labour mobility as a decrease in the transaction costs between state labour markets in a regional CGE model. Extrapolating from estimates by the PC (2014, p. 377), the existence of an interstate border reduces labour mobility by 77%.

Johnson and Kleiner (2020, p. 370) undertook similar analysis for the United States and found that moves between states for occupations where all licensing requirements are state specific were 58% lower than for occupations which require the passing of a national exam (in addition to other state specific licensing requirements).

The reduction in compliance costs from harmonising occupational licensing systems across jurisdictions could be expected to mitigate a portion of this impact. Thus, the resulting increase to interstate labour mobility could be expected to increase GDP by a proportion of the 0.3% previously estimated by the PC (2009) in response to a similar shock to commodity prices.

Additional considerations

Since some licensed occupations can provide services remotely, an increase in labour mobility would affect more workers than those who move interstate for work, as is considered in this modelling. Additionally, changes to administrative costs would not be captured. For national licensing to be preferable, the ongoing compliance and administrative cost savings must be greater than the initial costs of transition. An expansion of AMR to overcome the shortfalls of high-risk occupations commonly being exempt and a lack of communication of disciplinary actions could be expected to have much lower transitional costs but similar ongoing benefits and ongoing compliance costs, while having greater ongoing administrative costs.

C.5 The way forward

Priority occupations

Mutual recognition schemes aim to alleviate the barriers to interstate labour mobility imposed by the fractured nature of occupational licensing in Australia. Mutual recognition schemes fail where there is a high risk to safety as this is often used as justification for exemption from these schemes. A national licensing scheme can mitigate this through the creation of a nationally uniform set of standards and national registration which allows for uniformly applied disciplinary actions. For personal services which operate as credence goods where the quality of service can be difficult to verify before or even after a service has been provided (box C.4), consumers rely on occupational licensing as a signal of quality where markets fail to adequately resolve information asymmetries (PC 2023, p. 60). Thus, a national licensing scheme is likely most appropriate for occupations that have high risks to safety and also provide credence goods.

Box C.4 – Credence goods

Goods and services can be classified as belonging to three main categories: search, experience and credence.

Search goods are goods for which the benefit to the consumer from purchasing the good can be ascertained in the search process before it is purchased. For example, a dress can be tried on and the materials used in its construction can be found out by the consumer prior to purchase.

Experience goods are goods for which it is not possible to fully ascertain their quality before they are purchased, but once they have been purchased, the benefit they provide to the consumer is easily determined. For example, it is not possible to know the taste and texture of a particular can of tuna before it is purchased, but this information becomes apparent to the buyer once they consume it.

For credence goods, the benefit to the consumer is not revealed before or even after the purchase. Instead, an assessment of their quality requires additional and costly information. This information asymmetry can be resolved by government intervention such as licensing, which communicates to the consumer that a good provided will be of sufficient quality to meet the requirements of the licence.

Non-cosmetic surgery can be thought of as an example of a credence good, as a consumer is not able to determine its efficacy themselves and must rely on the advice of a licensed medical professional to know the benefit of the procedure.

Goods may have characteristics of all three categories and some qualities may be determined at different stages in the purchase process. Some goods, such as automotive repairs, may have qualities that are able to be determined through use, however they may only be revealed after a significant period has elapsed.

Source: Darby and Karni (1973, pp. 68–69).

Table C.2 shows examples of licensed occupations which can be classified as posing a high risk to workers or consumers. Occupation groups where over 5% of workers experienced a work related injury or illness in the 2021-22 financial year, as reported by the ABS (2023), were chosen as occupations with a high risk to workers. Occupation groups were used as examining occupations individually may underestimate risks to workers. An inherently risky occupation is likely to have licensing and other regulatory requirements specific to that occupation which would mitigate risk and thus the observed risk as determined by safety outcomes is

suppressed. This difficulty in assessing risk for individual occupations often leads to anecdotal evidence of risk being used as justification for an expansion of licensing regimes (Senate Red Tape Committee 2018).

Occupations that produce credence goods were defined as presenting a high risk to consumers; however, some occupations were excluded if the good they produce does not have the potential to cause severe harm to consumers if it is not of sufficient quality. For example, sports coaching can be considered a credence good as it may be difficult for a consumer to evaluate how much the coaching they received helped them improve or if an alternative form of coaching may have been more beneficial, but the consequence of receiving ineffectual coaching is only the opportunity cost of the coaching. Occupations that produce goods that have a mixture of credence and experience qualities were also only included if they had the potential to cause severe harm to consumers.

Table C.2 – Examples of high risk occupations subject to licensing requirements

	Low risk to consumers	High risk to consumers
High risk to workers	<ul style="list-style-type: none"> • Drivers (such as truck, bus, taxi) • Miners • Fire Fighters 	<ul style="list-style-type: none"> • Trades workers • Child care workers
Low risk to workers	<ul style="list-style-type: none"> • Engineers • Service managers • Architects 	<ul style="list-style-type: none"> • Teachers • Accountants • Solicitors

Licensed occupations that pose a high risk to consumers employ more people than licensed occupations that pose a high risk to workers (table C.3). There are more occupations in the high-risk-to-workers category, which may reflect these occupations generally being more specialised.

Table C.3 – Employment in high risk occupations^a

As a subset of licensed occupations

	Number of occupations	Employment
High risk to workers, High risk to consumers	69	959,230
High risk to workers, Low risk to consumers	70	653,030
Low risk to workers, High risk to consumers	45	1,109,090
Low risk to workers, Low risk to consumers	57	300,990
Total	241	3,022,340

a. Excluding healthcare professionals as they are already nationally licensed and religious ministers as licensing is unlikely to resolve any information issues

Source: PC estimates based on ABS Census 2021 and JSA (2025).

Further work is required to understand which occupations would be optimal for occupational licensing either through a national licensing model or through mutual recognition at a more granular level.

Moving to a national licensing scheme may initially increase the costs for workers operating in only one jurisdiction. Thus, national licensing may also be applicable for occupations with high compliance costs arising from many workers operating interjurisdictionally, although compliance costs to workers are already

very low for occupations covered by AMR, as under AMR there is generally only a requirement to give notice to the jurisdiction (Finance nd, p. 23).

Consider licensing more broadly

Broader licensing reforms such as those considered in the 'Building a skilled and adaptable workforce' (PC 2025) inquiry are likely to have greater impact than changes to AMR or a move to national licensing for certain occupations. Broader licensing reform including changes to the stringency of licensing requirements or the removal of unnecessary licences has the potential to increase economic output beyond the improvements to allocative efficiency gained by increasing interstate labour mobility.

Abbreviations

AACA	Architects Accreditation Council of Australia
ABS	Australian Bureau of Statistics
ACL	Australian Consumer Law
ACCC	Australian Competition and Consumer Commission
ADR	Australian Design Rules
AHMAC	Australian Health Ministers' Advisory Council
AHPRA	Australian Health Practitioner Regulation Agency
AMR	Automatic Mutual Recognition
ANZSIC	Australian and New Zealand Standard Industrial Classification
ARA	Australian Retailers Association
ASEM	Australian Sunscreen Exposure Model
ASIC	Australian Securities and Investment Commission
AVAS	Acoustic Vehicle Altering System
BITRE	Bureau of Infrastructure and Transport Research Economics
bn	billion
CEN	European Committee for Standardization
CENELEC	European Committee for Electrotechnical Standardization
CFFR	Council on Federal Financial Relations
CGE	Computable General Equilibrium Model
COAG	Council of Australian Governments
Code of Good Practice	WTO Code of Good Practice for the Preparation, Adoption and Application of Standards
CPD	Continuous Professional Development
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DFAT	Australian Government Department of Foreign Affairs and Trade
DIIS	Australian Government Department of Industry, Innovation and Science
DISR	Australian Government Department of Industry, Science and Resources
DITRDCSA	Australian Government Department of Infrastructure, Transport, Regional Development, Communications, Sports and the Arts
EITI	Extractive Industries Transparency Initiative
EU	European Union
FSANZ	Food Standards Australia New Zealand

FY	Financial year
GATS	WTO General Agreement on Trade in Services
GDP	Gross Domestic Product
GHG	Greenhouse gases
GlobalGAP	Global Good Agricultural Practices
HERE	Here Technologies
IEC	International Electrotechnical Commission
IFRA	International Fragrance Association
IFRS	International Financial Reporting Standards
ISO	International Organization for Standardization
JAS-ANZ	Joint Accreditation System of Australia and New Zealand
JIS	Japanese Industrial Standard
JSA	Job Safety Analysis
KS	Korean Industrial Standard
m	million
MCA	Minerals Council of Australia
MoU	Memorandum of Understanding
NATA	National Association of Testing Authorities
NCP	National Competition Policy
NPV	Net Present Value
NZS	New Zealand Standard
NOLS	National Occupational Licensing Scheme
NRAS	National Registration and Accreditation Scheme for Health Practitioners
OECD	Organisation for Economic Co-operation and Development
PBO	Parliamentary Budget Office
PC	Productivity Commission
QCA	Queensland Competition Authority
PMC	Australian Government Department of the Prime Minister and Cabinet
RIS	Regulation Impact Statement
SCCS	European Scientific Committee on Consumer Safety
SPF	Sun Protection Factor
SPS Agreement	WTO Agreement on the Application of Sanitary and Phytosanitary Measures
TAFE	Technical and Further Education
TBT Agreement	WTO Agreement on Technical Barriers to Trade
TGA	Therapeutic Goods Administration
TTMRA	Trans-Tasman Mutual Recognition Act

UK	United Kingdom
UN	United Nations
UNTS	United Nations Treaty Series
US	United States of America
VET	Vocational Education and Training
VURM	Victorian University Regional Model
WTO	World Trade Organization

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