About the ETU

The Electrical Trades Union of Australia ('the ETU') is the principal union for electrical and electrotechnology tradespeople and apprentices in Australia, representing well over sixty-thousand workers around the country.

The ETU welcomes the opportunity to make submissions on the **Lowering barriers to the adoption of international and overseas standards in regulation** and adoption of international standards inclusive of the review and editing of international standards to the Australian context particularly in relation to electrotechnology.

ETU members make up a critical pillar of the licensed electrical workforce responsible for the installation and compliance of electrical installations and infrastructure. Strong Australian Standards, including the adoption of International Standards that reflect the Australian context, our legislation and wiring systems are critical to maintain the safety and compliance of electrical installations, the generation facilities, transmission and distribution networks.

Acknowledgement

In the spirit of reconciliation, the ETU acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present and extend that respect to all First Nations peoples today.

Australian Standards

Standards Australia, with input from the ETU and other technical experts from across the electrotechnology industry, plays an essential role in the development of Australian Standards that meet our context and wiring systems. The governing document in electrotechnology is AS/NZS 3000 the wiring rules. This document has been developed over many years and is referenced in state and territory legislation. The wiring rules has been developed, reviewed and edited over many interactions relevant to Australian wiring systems and considering emerging technologies and international standards.

Standards Australia operates a transparent, consensus-based process involving industry experts, regulators, engineers, employer associations, unions and consumer groups. Regular reviews of standards ensure consistency with technological advancement, latest safety knowledge and regulations.

The Standards Australia assessment process of international standards provides a national reference point for regulators who often adopt reference to standards in legislation and facilitates safe technological adoption providing clear regulatory pathways for manufacturers and installers. For example:

- AS/NZS 4777.2 (Grid connection of energy systems via inverters) ensures that home solar systems interact safely with the grid. This standard has adopted international content and is relevant to the Australian context.

International standards are not just technical documents; they are instruments of geopolitical influence. As global rulemaking accelerates in critical sectors like AI, clean energy, and infrastructure, Australia must preserve its ability to contribute, shape, and selectively adopt global standards that align with our national interest. Weakening our domestic standards process risks weakening our global voice, and potentially our national security.

Recommendations

The ETU strongly supports a modernised and nationally consistent standards and regulatory framework that:

- Ensure affordability of Australian Standards to those that rely on them such as electrical workers. Standards are prohibitively expensive and amendments to standards and republishing after review dictate the need to repurchase the whole standard in many cases.

- Any Australian Standards that are required by regulation, building codes, or otherwise represent an enforceable outcome should be freely accessible to those trades/vocations required to apply them. Standards should be published in digital format, ensuring free and open public access.

- Maintaining expert oversight and validation Australia already has a strong rate of international standards adoption following an assessment of their appropriateness for local conditions, safety and quality requirements. This assessment is based on input from technical experts and affected stakeholders. That process should not be bypassed.

- Requires rigorous assessment before adopting international standards, including transparent stakeholder consultation and technical localisation for Australian conditions.

- Strengthening domestic harmonisation for national alignment of regulated standards across states and territories should be the priority. The biggest inefficiencies lie in internal fragmentation, not in whether a standard is international or local.

- Applying consistent rules to all standards. If other standards bodies (including overseas Standards Development Organisations) are to have their content adopted into regulation, their documents must meet the same transparency, consultation, and scrutiny as standards developed or adopted through Standards Australia committees.

Consultation Questions

1. Do the Guidelines help policymakers adopt suitable international, regional and overseas standards that meet their objectives? Why/why not?

The decision tree below suggests adopting a plethora of standards (right two boxes), and, in doing so, there would be no standard way of compliance and no clear delineation of compliance or safety.

Decision tree for policymakers on standards adoption and development
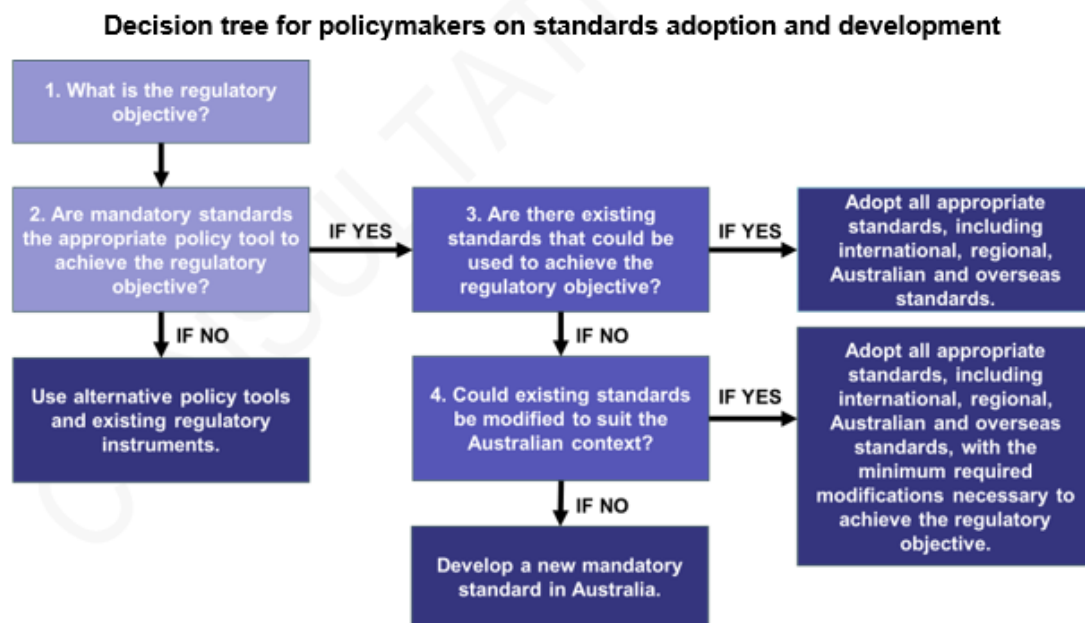
Overseas standards may be technically sound, but they are developed in different legal, environmental, and policy contexts. Automatically adopting them could mean ceding Australia's sovereign right to assess what works best for our economy, environment, and safety systems.

The proposed decision tree for policy makers on standards adoption and development is not responsive to the six principles for fit-for-purpose regulation set out in the Regulatory Policy, Practice and Performance Framework.[1] Among the principles identified in the Framework, fit-for-purpose regulation is targeted and risk-based, integrated in existing systems, evidence-based and data-driven. Automatic adoption of international, regional and overseas standards is not consistent with targeted and risk-based development of regulation especially in the regulation of high-risk work. The process by which Australian Standards are developed draws upon a wealth of evidence that is collected by state and federal regulators and allows for evaluation in detail of the effectiveness of the regulation and the nature of the risks to be managed by the regulation in an Australian context. The Best Practice

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[1]https://www.regulatoryreform.gov.au/sites/default/files/Regulatory-Policy-Practice-and-Performance-Framework.pdf

Handbook does not outline how international, regional and overseas standards should be assessed as 'appropriate' in the Australian context.

2. Do the Guidelines help governments harmonise mandatory standards across Australia? If not, how would you change the Guidelines to better harmonise mandatory standards?

Placing 'policy makers' from state and territory jurisdictions at the centre of the decision-making process in the adoption of international standards may undermine the stringent assessment and consensus-based decision making currently utilised by Standards Australia that involves industry experts, regulators, engineers, unions and employer associations. Further individual policy makers may come to decisions that are not aligned with other states and territories therefore undermining the harmonisation being sought.

The process should mandate harmonisation principles and establish a cross-jurisdictional body to harmonise the safety and compliance requirements of their jurisdictional frameworks.

3. What other principles or considerations should the Guidelines include?

When adopting standards or calling them up in legislation, we need to ensure the following principles are put in place to ensure safety is at the forefront:

A. Establish a Hierarchy of Standards

- Default to international standards (IEC/ISO) where necessary.

- National standards from other countries should only be considered if no relevant local or international standard exists and must be justified with evidence of suitability.

B. Have expert-led Technical Assessment

- All standards, international or national, must undergo rigorous technical assessment by subject matter experts and relevant stakeholders, including technical experts, regulators, unions, employer associations and consumer groups, to determine their fit for purpose in the Australian context.

C. Have a fit-for-purpose Evaluation

- Evaluate standards for alignment with Australia's safety thresholds, environmental conditions, and regulatory objectives.

- Modify standards only where necessary to meet these criteria.

D. Stakeholder Consultation

- Engage stakeholders, including technical experts and industry representatives, to identify unintended consequences and ensure standards meet community expectations.

4. What risks, challenges or unintended effects may come up when applying the Guidelines?

Standards Australia is rightly held to high expectations of transparency, consensus, and open public consultation. We support this approach. However, if overseas-developed standards are allowed into regulation without equivalent governance or review, it creates a two-tiered system that favours speed over scrutiny, and undermines trust in the regulatory process, and places quality and the safety of Australians at risk.

Not all international standards meet Australia's historically higher safety benchmarks. Rapid adoption without proper local assessment and review can lead to unintended consequences.

5. Does the Best Practice Handbook encourage policymakers to use suitable international, regional, and overseas standards? Why/Why not?

Placing policymakers at the forefront of adoption of relevant standards undermines the requirements and process well established by Standards Australia that includes consensus-based process involving industry experts, regulators, engineers, employer associations, unions and consumer groups.

Regular reviews of standards ensure consistency with technological advancement, latest safety knowledge and regulations. If overseas-developed standards are allowed into regulation without equivalent governance or review, it creates a two-tiered system that favours speed over scrutiny, and undermines trust in the regulatory process, and places quality and the safety of Australians at risk.

6. Does the Handbook help policymakers harmonise mandatory standards across Australia? If not, how would you change the handbook to better harmonise mandatory standards?

Harmonisation would be best achieved by one process to access standards for suitability such as that process well established by Standards Australia. Having individual policymakers from states, territories and regulators being able to adopt standards seems to work contrary to the harmonisation being sought. Further individual policy makers may come to decisions that are not aligned with other states and territories therefore undermining the harmonisation being sought.

7. What other regulatory design questions or tools should the Handbook include?

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E. Templates for analysis (e.g. tool for assessing impact and risks of international standard adoption)

- Practitioner consultation protocols.

- Guidance on referencing mechanisms (e.g. link between legislation and evolving standards).

- Impact of assessments on training, liability and compliance costs.

8. What risks, challenges or unintended effects may come up when using the Handbook?

The Handbook could be selectively applied. For example, international standards on smart metering were introduced without full consideration of cybersecurity implications. This created downstream issues for utility providers and contractors.

There's also risk of exclusion of SMEs if consultation is limited to major industry players.

Ultimately there remains a risk of variance in the application of the handbook by jurisdictional policy makers who are ultimately advised by the processes and persons within their own jurisdiction and subject to the inertia of their existing frameworks.

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9. Which sectors listed in Box 2 benefit most from applying the Guidelines and Handbook across Australia? What are the benefits and costs of applying them in that sector?

Batteries, EV charging, gas, and hydrogen and Household electrical and consumer products have a high potential to acknowledge and adopt international standards for specific new technologies.

10. What other sectors should the Government consider for reform? For each sector suggested, give evidence of benefits and costs of reform.

Clean Energy: Differences between standards for PV installations and local electrical regulations can delay connections.

Standardisation of competition policy for electricity connection services. In essence, large customers/developers requiring an electrical supply connection from electrical distribution authority should be able to procure the design and construction services from suitably qualified contractors. In most Australian jurisdictions, the electricity supply authorities retain control over these aspects adding cost and delays to projects.

11. What can the Government learn from overseas approaches to adopting and developing mandatory standards?

- European Union: The EU's CE marking system includes conformity assessment procedures, offering a structured pathway to compliance.

- United Kingdom: The British Standards Institution (BSI) engages stakeholders in evaluating whether ISO/IEC standards are appropriate before referencing.

- New Zealand: In 2022, New Zealand amended its Building Act to allow free digital access to all referenced standards. This increased industry compliance by 19% in the first year.

Standards Australia assesses international standards for relevance and suitability in the Australian context. This process benefits industry, regulators, technological advancement and safety outcomes.

Standards Australia actively participates, through technical experts, in the International Electrotechnology Commission (IEC) and other international bodies to bring world leading international standards to Australia. This engagement ensures that Australian standards and/or international standards adapted or directly adopted bring the latest safety, technological advancement and efficiency in fields such as electric vehicles infrastructure, renewable energy and energy storage.

The assessment of international standards for the Australian context (our unique physical and regulatory environment) ensures that international standards are not used unsafely or inappropriately and consider how a standard should be adapted to suit our:

- Climatic conditions and bushfire risk

- Electrical safety regulatory regime

- High temperatures and UV exposure

The reform initiative aims to lower barriers to the adoption of international and overseas standards in regulation. It seeks to:

- Reduce compliance costs for businesses.

- Improve product availability and market access.

- Harmonise regulatory frameworks across jurisdictions.

However, the reforms also acknowledge that standards must be fit for purpose in the Australian context.

Deviations or modifications may be necessary to meet local safety thresholds, environmental conditions, and community expectations.

Automatic adoption of standards referencing other national or international standards in legislation without expert review risks undermining Australia's safety and regulatory integrity. A structured, expert-led approach is essential to uphold national safety thresholds and ensure standards are truly fit for purpose. The hierarchy of standards should prioritise international standards, with other countries' national standards considered only when no suitable international or national alternative exists.