



# Proposal Form for Standards Development Projects

Version: 2.0  
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## GUIDANCE

### How do I use this form?

- Use the Tab key to move to the next field and Shift+Tab to go back to the previous field.
- Guidance has been provided within free text fields - delete this information before typing your input.
- Additional documents (such as Net Benefit case or details of program of work) can be attached to the completed proposal on submission.

### What information do I need to provide?

Section & Title	Requirement
1. Proponent Details	All proposals need to be submitted by an individual. Provide contact details to be used in any correspondence regarding the proposal.
2. Proposal Details	Specify the title, type, relevant sector(s) and type of work being proposed. If a program of work, further information can be provided in the appendix or attachments.
3. Summary and Demonstration of Net Benefit	Outline the need for, and Net Benefit impact of, the proposed work on the Australian community.
4. Harmonisation and Alignment	List existing related documents and alignment of proposed work to these.
5. Pathways for Standards Development	State the desired development pathway and who will fund the proposed work.
6. Requests for Standards Australia resourcing	Provide justification for requesting resource support from Standards Australia for this proposed work.
7. Stakeholder Support	Provide details of relevant stakeholders across interest groups, the consultation process undertaken and whether they support the proposal.
8. Risks and Dependencies	Highlight known risks and any dependencies that may impact successful completion of the proposed project/program.
9. Additional Information	Provide any additional information which may assist in consideration of the proposal.
10. Declaration	Confirm that all information within the proposal form is true and accurate.
Appendix A: Details of projects within a proposed program of work	Where appropriate, provide details of projects in order of priority for development where multiple projects or a program of work is being proposed.

### How do I submit a completed proposal?

1. Complete a pre-submission check to ensure that:
  - ✓ All sections of the form are complete.
  - ✓ The Net Benefit case is fully articulated and, where possible, quantified.
  - ✓ Full stakeholder consultation has been conducted with evidence provided.
  - ✓ The declaration is complete.
  - ✓ All supporting documentation is attached to the proposal.
2. Submit completed proposal along with all supporting documentation by email to [mail@standards.org.au](mailto:mail@standards.org.au)
3. If for any reason, you are unable to submit this form by email, please contact Standards Australia (1800 035 822).

**NOTE:** Standards Australia reserves the right to make public information relating to Standards development projects, including information contained within submitted proposal forms and the attached Net Benefit Case in part or in full.

## PROPOSAL FORM FOR STANDARDS DEVELOPMENT PROJECTS

Proposal Reference Number *Standards Australia to Complete*

### 1. Proponent Details

Your name	Phil Wilkinson
Position	Engineering Manager and Business Development
Name of employer	Australian Institute of Refrigeration Airconditioning and heating (AIRAH)
Name of nominating organisation	Australian Institute of Refrigeration Airconditioning and heating (AIRAH)
Address	Level 3 / 1 Elizabeth Street
Suburb	Melbourne
State	VIC
Postcode	3000
Phone number	03 8623 3010
Fax number	03 9614 8949
Mobile number	NA
Email address	phil@airah.org.au
Web address	www.airah.org.au

### 2. Proposal Details

Proposal title	<b>Proposal to revise AS/NZS 1677.1 and AS/NZS 1677.2</b>	
Proposal summary	This proposal relates to the revision of the AS/NZS 1677 series of standards on refrigeration systems. These standards underpin the Australian refrigeration industry and need to be reviewed and updated by Technical Committee ME-006 to reflect current national and applicable international practice with regards to the safe design and application of refrigeration systems.	
Project or program	Program	<i>If program, include details in Appendix A.</i>
Project type	Revision	
Product type	Standard	
Scale of proposed work	Medium	Subject to the consideration of the technical committee ME-006 the project may take the form of adoption of the relevant ISO standards with amendments as appropriate to Australian and New Zealand safety practices.
Sector	4 Building and Construction	Also relevant to mining and manufacturing and processing
Existing Standard or other SA product	AS 1677.1, AS 1677.2	
Application	Australia New Zealand	

<i>Performance-based or prescriptive</i>	Prescriptive	
<i>Relationship to legislation</i>	<i>Is/will this Standard be referenced in legislation?</i>	Yes
	<i>If yes, is this as a primary or secondary reference?</i>	Primary
<i>Details of legislation</i>	<p>Home Building Regulation 1997 (NSW)</p> <p>Building Services Corporation ACT 1989 (NSW)</p> <p>Australia and New Zealand refrigerant handling code of practice 2007 (secondary reference)</p> <p>Ozone Protection and Synthetic Greenhouse Gas Management Act (1989)</p> <p>Ozone Protection and Synthetic Greenhouse Gas Management Amendment Regulations 2007</p>	

### 3. Summary and Demonstration of Net Benefit

All Australian Standards developed by Standards Australia must demonstrate a Net Benefit, i.e. the Standard must have an overall positive benefit to the Australian community. All proposals for new work must describe a clear need for a Standards solution and the anticipated Net Benefit in the form of a Net Benefit case. Further guidance is available within the [SA Guide to Net Benefit](#).

<i>Need for the proposed work</i>	<p>AS/NZS 1677.1 defines a system for classifying refrigerant substances and their risk to health and safety based on their toxicity and flammability. Environmental effects including Global Warming Potential (GWP) and Ozone Depletion Potential (ODP) are also listed. With new refrigerant substances coming on to the market and other substances being phased out due to legal restrictions this standard needs to be reviewed and updated to reflect current practice in the refrigeration industry.</p> <p>AS/NZS 1677.2 specifies requirements for the safety aspects of the design, installation and inspection of refrigeration systems including the maximum charge of refrigerant allowed, based on the safety classification of AS/NZS 1677.1. With new refrigerants and equipment coming onto the market this standards needs to be reviewed and updated to reflect current practice, both nationally and internationally.</p>
<i>Summary scope of proposed work</i>	<p><i>Scope of Standard(s)</i></p> <ul style="list-style-type: none"> <li>• These standards cover the classification of refrigerants and the essential safety aspects of refrigerant system design and installation. This proposal involves a technical review and update of these 1998 standards by Technical Committee ME-006 to reflect the changes in the refrigerant and refrigeration industries that have occurred since that time including: <ul style="list-style-type: none"> <li>• New legislation controlling some refrigerants.</li> <li>• New licensing system for refrigerant handling.</li> <li>• Revisions of regional and international standards.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Changes in industry practices.</li> </ul> <p><i>Exclusions</i></p> <ul style="list-style-type: none"> <li>• Refrigerated transport applications.</li> </ul>
<i>Alignment with national public policy</i>	<p>Refrigerants and refrigerant handling are controlled by Federal and State legislation as part of the effort to reduce ozone depletion and improve greenhouse gas management. The AS/NZS 1677 standards are key to the effective operation and success of these public policy initiatives.</p> <p>Industry organisations have suggested that these standards are so out of date/step with international practice that they may in fact act as a barrier to international trade and contravene the WTO World Trade Agreement, to which Australia is a signatory.</p>
<i>Net Benefit</i>	<p>The following impacts, costs and benefits associated with this proposal have been identified;</p> <ul style="list-style-type: none"> <li>• <i>Public Health and Safety</i></li> </ul> <p>AS/NZS 1677.2 is a system design standard that is primarily concerned with safety. Refrigerants are variously toxic and flammable in their characteristics and their application within refrigerating systems in buildings and processes needs to be controlled to protect the health and safety of workers and building occupants. These standards are approaching 12 years old and much has changed within the refrigeration industry since their publication including the revision of international standards ISO 817 and ISO 5149. The review of the AS/NZS 1677 standards by Technical Committee ME-006 has the potential to improve public health and safety outcomes by ensuring that the standards and practices specified therein are up to date and continue to be relevant to the refrigeration industry.</p> <ul style="list-style-type: none"> <li>• <i>Social and Community Impact</i></li> </ul> <p>Society and the Australian community expect that refrigeration systems are designed to be safe in operation. There is also an expectation that Australian Standards align with international best practice when it comes to safety issues. This technical review is one way of ensuring that these expectations are met. If the standards become irrelevant to the industry or sections of the industry, efforts to comply may be abandoned and system safety could be compromised.</p> <ul style="list-style-type: none"> <li>• <i>Environmental Impact</i></li> </ul> <p>Some refrigerant substances can have significant environmental impacts and these are addressed or listed in the refrigerant classification standard AS/NZS 1677.1-1998. There have been new synthetic refrigerants and blends developed since 1998 and these should be considered for inclusion in the classification standard so that an official assessment of their environmental performance is available to Australian users.</p> <ul style="list-style-type: none"> <li>• <i>Competition</i></li> </ul> <p>AS/NZS 1677 provides an independent and essential reference for refrigerant</p>

	<p>properties and sets the appropriate limits for refrigerant application. There may be some effect on Australian competition on the global market if the validity of these national standards fall behind regional and international best practice.</p> <ul style="list-style-type: none"> <li>• <i>Economic Impact</i></li> </ul> <p>Creating certainty within an industry by maintaining up to date and valid standards reduces industry compliance costs and improves the potential for future investments. Uncertain or out of date standards can have the opposite effect of increasing costs and reducing investment opportunities.</p>
<i>Market Failure</i>	No market failure identified
<i>Summary and conclusion</i>	Maintaining up to date and accurate standards, reflecting the needs of the industry and international best practice including aligning Australian standards with regional and international updates should act to improve refrigeration system safety and environmental outcomes while reducing compliance costs and providing certainty in an industry that has undergone significant changes over the past decade.

*Note: Where a more detailed Net Benefit case is required this may be attached separately.*

#### 4. Harmonisation and Alignment

<i>Related documentation</i>	ISO 817, ISO DIS 817 (2004), ISO 5149, ISO DIS 5149 parts 1 to 4, EN 378, ANSI/ASHRAE 15, ANSI/ASHRAE 34, BS 4435
<i>Alignment and avoidance of duplication</i>	Technical Committee ME-006 are best placed to review all of the regional and international standards to determine the appropriate changes that should be made to AS/NZS 1677 parts 1 and 2. If the draft revision to ISO 5149 achieves international acceptance the committee may consider the adoption of the new standard, with or without Australian/New Zealand amendments for the longer term.

#### 5. Pathway for Standards Development

<i>Preferred development pathway</i>	Standards Australia driven*	
<i>To be funded by</i>	Standards Australia*	

*\*Note: The Standards Australia driven pathway is only open for those proposals seeking prioritisation by SA for project resources.*

#### 6. Requests for Standards Australia resourcing (Leave blank if not applicable)

<i>Funding declaration</i>	Not aware of any direct or indirect funding available.
<i>Validation for SA resourcing</i>	<p>Prioritising the review of the AS/NZS 1677 standards would help to meet standards Australia goals by;</p> <p>Maintaining these standards validity, 12 years is too old.</p> <p>Improving international alignment, may be an outcome of the review</p>