STANDARDISATION GUIDE 003:

STANDARDS AND OTHER PUBLICATIONS

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Contents

1 PURPOSE

This Guide describes the documents that are the results of the standardisation process conducted by Standards Australia (SA). Its purpose is to assist the readers of Standards and other publications in the use and understanding of these documents.

Australian Standards are also developed by Accredited Standards Development Organisations (SDO)[1] and the Standards produced by these organisations broadly conform to the characteristics of Standards listed in this Guide.

2 INTRODUCTION

The process by which Australian Standards are developed by Standards Australia is set out in other Standardisation Guides in this series, with the core elements of the process being explained in SG-001: Preparing Standards. Accredited SDOs have analogous processes.

The public transparency and consensus building processes used in developing Standards are necessary because an Australian Standard (AS) or joint Australian/New Zealand Standard (AS/NZS) has a unique role and status. An AS or AS/NZS Standard is recognised by industry and users as being an authoritative document. It can potentially be relied upon to protect human health and safety, as an element in contracts, as a point of reference under statute law, as a benchmark of currently acceptable practice and for a range of other applications with similarly significant ramifications. Standards have wide legislative acceptance in the States, Territories and Commonwealth.

This Guide also deals with alternatives to Australian Standards for use where a technical document is required and traditional consensus standardisation may not deliver the optimal solution.

Standards Australia is not alone in recognising this need for a range of deliverables. The International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC) have developed a similar range of deliverables with levels of consensus different from those associated with an International Standard (see Section 6).

3 STANDARDS

3.1 What is a Standard?

ISO/IEC Guide 2 defines a Standard as a:

> *"document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context.*
>
> *Standards should be based on the consolidated results of science, technology and experience, and aimed at the promotion of optimum community benefits."*
>
> ISO/IEC Guide 2, Standardization and related activities — General vocabulary

Standards are published documents setting out specifications and procedures designed to ensure that products, services and systems are safe, reliable and consistently perform the way they were intended to. They establish a common language that defines quality and safety criteria. Standards are practical and set achievable goals. They are based on sound industrial, scientific and consumer experience and are regularly reviewed to ensure that they keep pace with advances in technology.

[1] SDOs are accredited by the Standards Australia's Standards Development and Accreditation Committee (SDAC), an independent board reporting to the Council of Standards Australia. For more information on accreditation and the SDOs see https://www.standards.org.au/standards-development/accreditation

Developing national consensus Standards is a structured and formal process. The committee members and their Nominating Organisations are intimately involved with the Standard under development and its contents, explore the potential consequences of those contents for themselves and provide reasoned feedback on any aspects of the contents that do not meet their needs and expectations. As well, there is often considerable negotiation between the stakeholders, including consideration of any Public Comments received, when striking a balance between competing factors in order to establish the requirements that go into an Australian Standard.

3.2 Purpose of Standards

Standards are developed for a number of purposes, including:

1. ***Voluntary or mandatory applications***—Standards that specify requirements to achieve at least the minimum objectives of safety, quality or performance of a product or service.
2. ***Regulatory compliance***—Standards that are used to specify minimum least-cost solutions to technical requirements expressing characteristics, performance and design criteria compatible with the function of legislation.
3. ***Contractual purpose***—Standards that serve as purchasing specifications or technical conditions of contract between two parties.
4. ***Guidance***—Standards that may be intended for educational purposes and which include recommendations, or administrative or project management procedures. In general, these Standards will not be adopted in either legislation or contract specifications.

On their own, Standards have no legal status and no requirement for compliance by manufacturers, consumers or the public, hence the term 'voluntary Standard'. However, a Standard may be cited ('called up') in legislation, or written into a commercial contract, when it becomes part of that legislation or contract (see Clause 3.12).

3.3 Types of Standards

There are three categories of Standards that are generally recognised by the Standards community—these are International, Regional and National.

3.3.1 International Standards

International Standards are publicly available Standards that have been developed and approved by an international SDO. ISO and IEC are the two main international standardising bodies. Other international bodies include the ITU (International Telecommunications Union) and the Codex Alimentarius Commission (set up by the Food and Agriculture Organization of the United Nations and the World Health Organization (WHO) to develop food Standards, guidelines and related texts such as codes of practice).

International Standards are used directly or are adopted by regional or national Standards bodies. ISO and IEC encourage national adoption of International Standards. There are also 'de facto' international Standards that, although they have not been developed by an international Standards organisation, have widespread acceptance. These may also be adopted by international, regional or national Standards bodies.

3.3.2 Regional Standards

Regional Standards are publicly available Standards that have been developed and/or adopted by a regional SDO; the most well-known of these are those that apply in the European Union (EU). These Standards are developed by the European Committee for Standardization (CEN) and the European Committee for Electrotechnical Standardization (CENELEC) and then adopted as national Standards by the member countries of the EU. EU Standards are sometimes adopted as national Standards in Australia (and New Zealand).

NOTE: A regional SDO is one whose membership is open to the relevant national body from each country within one geographical, political or economic area only.

3.3.3 National Standards

National Standards are publicly available Standards that have been developed, approved and/or adopted by a national Standards body or other accredited organisation.

3.4 Identification of Australian Standards

Australian Standards have two identifying trademarks used by both SA and accredited SDOs:

The Logo- 

is used on the front cover of the Standard, along with the corporate brand of the organisation developing the Standard (e.g. Standards Australia). The presence of the AS logo shows the equivalency of all Australian Standards irrespective of the organisation preparing them.

The Wordmark- **Australian Standard®** - is used on the title page or in text about Standards.

Joint Australia/New Zealand Standards have the trademark: **Australian/New Zealand Standard™** as well as the Standards Australia and Standards New Zealand company logos on the cover. (Accredited SDOs do not produce joint Standards.)

3.5 Functions of Standards

Standards may fulfil many functions including:

Product Standards—These specify characteristics (including dimensions), design, construction or composition of a product to ensure acceptable performance, reliability, durability, finish, or other characteristics necessary to ensure the product's suitability for the purpose envisaged by purchasers or users ('fitness for purpose'). A Product Standard can be either complete or not, according to whether it specifies all or only a part of the necessary requirements for the product.

Some examples of Product Standards include those for:

- Consumer products such as toys, motorcycle helmets, electrical appliances and bottled water (these Standards often only cover the safety aspects of the products).
- Building materials and components such as cement, windows, doors, glass, pipes and plumbing products.
- Equipment such as electrical plugs and sockets, nuts and bolts.

Design Standards—Design Standards are a basic element of nearly all engineering and building projects. They are a means by which the essence of long experience and research in design is expressed in a concise and readily available form. Design Standards are largely concerned with safety and are normally written in mandatory language, making them suitable for adoption by reference in regulations.

Examples are Standards for steel structures, timber framed buildings, concrete structures, or boilers and other pressure vessels.

Code of Practice—also called 'Service Standards'. These Standards specify the practices or procedures for the design, manufacture, installation, maintenance or utilisation of equipment, structures or products.

Examples include laying floor coverings, use of chainsaws, laundry practice, and information security.

Safety Standards—provide guidance on safety in health, life and property matters.

Examples include safety in the design, construction and/or operation of plant and equipment (e.g. milling machinery, wood processing machinery), workplace health and safety (WH&S), and personal safety and health (e.g. swimming pool fencing and hand operated electric tools).

Test Methods—set out the steps to be followed to determine the properties of a product or component. Test Methods are used to establish conformity with a specification which may be found in a Product or Design Standard and are very important in Performance Based Standards.

Examples include testing of physical properties (e.g. resistance to forces or linear dimensions when considering safety) where acceptable test results are used in meeting requirements in other Standards, purchasing specifications, or in government regulations (e.g. bicycle helmets, pool fencing, WELS).

Management System Standards—also called 'Process Standards'; these specify requirements to be fulfilled by management systems or other processes.

Examples include ISO 9001 (Quality Management Systems) and ISO 14001 (Environmental Management Systems) as well as other systems in the WH&S, food safety and climate change areas.

There are additional types of Standards including Interoperability Standards (IT), Terminology Standards, and Standards on data to be provided.

3.6 Performance based and prescriptive Standards

Standards are often broadly classified as 'Performance Based' or 'Prescriptive'.

Performance Based Standards—have their requirements expressed in terms of performance, i.e. outcomes to be achieved. This approach leaves freedom for the development of innovative technical methods to meet the requirements of the Standard.

Performance Based Standards include the criteria, testing or other approved form of verification required to assess performance and to ensure consistency across the solutions developed to meet requirements.

For example, a requirement for a hypothetical wall plug suitable for hanging a mirror might state 'The wall fixing shall support a weight of 40kg when tested in accordance with the test method in Appendix A.' This leaves the manufacturer(s) the option of how they design the wall plug – nylon, brass, chemical and so on, as long as it supports the weight.

Prescriptive Standards—express requirements in precise, often quantitative, terms. This leaves little opportunity to depart from the specifications in the Standard.

Using the hypothetical wall plug example again, a Prescriptive Standard might state 'The 40kg wall fixing shall consist of a 2cm expansion case in accordance with Figure 1, together with a ¼in. Whitworth mild steel zinc plated nut and matching 3cm threaded hook in accordance with Figure 2'.

While Performance Based Standards allow a flexible approach, many users of the Standard have neither the time nor resources to develop their own solution to the performance requirements. Therefore, many Performance Based Standards are accompanied by a Prescriptive Standard (or part or section). This Standard is referred to as a 'deemed to satisfy' solution and users that meet the requirements of the Prescriptive Standard also meet the requirements of the Performance Based Standard.

For example, the Australian Standard for boilers and pressure vessels is a statement of required safety outcomes together with references to a US ASME Standard, a European Standard, and a prescriptive AS/NZS Standard as 'deemed to satisfy' solutions.

3.7 Components of Standards

3.7.1 Structure

A Standard usually consists of three divisions – preliminary, body and supplementary elements.

1. ***Preliminary elements***—including Title, History Block, Preface and Contents (always informative).
2. ***Body elements***—including:

a) **Foreword** (where present)—provides the background to and context of the Standard. It may include the principles behind the Standard and the reasons prompting its preparation. Often termed 'Introduction' in International Standards.

b) **Scope**—defines the subject of the document and the extent and limitations of the matter covered by the Standard or particular parts of it.

c) **Application** (where present)—covers the application of the Standard itself and not the subject. It is used where it is necessary to define the use of the Standard; for example, intended users, parts or sections that are to be used in different circumstances, or limitations in the use of the Standard.

d) **Referenced Documents** (where present)—see Clause 3.7.8.

e) **Definitions** (where present)—explains the meaning of terms that apply specifically to that Standard (these may be different to, or a restriction of, the commonly accepted meaning of the term).

f) **Requirements**—the main text of the Standard. The use of numbered clauses and lists (like the list used here) allows the unambiguous reference to a particular requirement, clause or item. For large or complex Standards the requirements may be divided into Sections, each Section dealing with a specific aspect of the subject.

3. ***Supplementary elements***—including Appendices and Bibliography (where present).

3.7.2 Numbering (Designation)

Each Standard (International, Regional, or National) is uniquely identified by a letter/number combination termed the 'designation'. The designation of an Australian Standard broadly follows the following rules:

- **Prefix**—letters identifying the primary publisher, publication type and additional publisher information (see Appendix A for more details).
- **Main number**—uniquely designates the Standard. It is usually sequential but in some cases the number may be specially assigned, particularly for Standards that are seen as significant or for those that are part of a related series. Most adoptions of International Standards (IS) carry the number of the IS.
- **Part numbers**—sequential, identifies the document as part of a series of related Standards with a common main number.
- **Interim**—Interim Standards will display "(Int)" in the designation directly after the Main/Part number.
- **Year**—year of publication of the Standard.
- **Suffix**—usually an amendment (Amd) or supplement (Sup) to the parent document, but can also indicate that a publication has been reconfirmed (Rec) or that a ruling (Rul) has been issued in relation to a particular Standard. The suffix also includes the year of publication of the amendment, supplement, reconfirmation notice or ruling.

The most common Prefixes likely to be encountered in Australia are listed in Appendix A.

3.7.3 Parts

While most Standards dealing with a specific topic are published as a single document, there are circumstances where it is appropriate to publish requirements over a series of documents. This may be appropriate for a number of reasons, including:

- Requirements for different aspects of the same subject;
- Test methods that are part of a series of methods or are attached to a main Standard; and/or

- Changing technical developments which have to be addressed after the Standard was first published.

An example of how the latter applies is as follows:

AS 2118.1:1999 Automatic fire sprinkler systems, Part 1: General requirements.

AS 2118.2:1995 Automatic fire sprinkler systems, Part 2: Wall wetting sprinklers (Drenchers).

AS 2118.3:1997 Automatic fire sprinkler systems, Part 3: Deluge.

AS 2118.4:1995 Automatic fire sprinkler systems, Part 4: Residential.

AS 2118.5:2008 Automatic fire sprinkler systems, Part 5: Home fire sprinkler systems.

Users wishing to comply with sprinkler requirements would need to use Part 1, the general requirements relating to all sprinkler systems, and then select the specific part(s) that apply to their situation.

3.7.4 Mandatory, normative and informative

Three terms that are consistently used with Standards are 'mandatory', 'normative' and 'informative'.

Mandatory is a term used to describe a provision of a Standard to which it is necessary to conform in order to be able to claim compliance with the Standard. Mandatory requirements can include actions to be taken, test requirements to be met, records to be kept, materials to be used, or dimensions and tolerances. If an individual or an organisation is seeking certification that a product or service complies with a Standard, all mandatory provisions of that Standard must be met. Similarly, in commercial contractual requirements (e.g. a house complies with the Building Code of Australia) specified mandatory provisions must be met.

Note that Guidance Standards (Clause 3.2) generally do not contain mandatory provisions and as such are unsuitable for certification or contracts.

NOTE: The term 'mandatory' can be restricted to those elements that are made compulsory by law or regulation, and the term 'exclusive requirement' used for requirements that must be met but in order to claim compliance with the Standard (see definition in ISO/IEC Guide 2, Standardization and related activities — General vocabulary). However, 'mandatory' is still in common usage.

Normative is a term used to describe an element of a Standard to which it is necessary to conform in order to be able to claim compliance with the Standard. It is similar to 'mandatory', but whereas mandatory applies to an individual requirement (e.g. a sentence, paragraph, clause or table), normative applies to a whole element (e.g. part, section, or appendix) which contains a number of mandatory (and possibly informative) statements.

Informative is a term used to describe an element (clause, note or appendix) of a Standard that gives additional information, recommendations and/or guidelines, i.e. is of a non-mandatory nature. Where a Standard contains both mandatory and informative elements, the informative material is usually aimed at explaining the mandatory requirements and helping the user to understand and comply with the Standard.

3.7.5 Normative elements

Normative is most commonly used in the context of a Normative Appendix. Such appendices are an integral part of the Standard and compliance with such an Appendix is required for compliance with the whole Standard. Normative Appendices are clearly marked as 'Normative' and are referenced from a mandatory clause (e.g. 'the product shall comply with the test method specified in Appendix A').

3.7.6 Informative elements

The most common informative element in a Standard is the Note which has been integrated into the text. These notes are usually set out in a different format from the main text, for example:

NOTE: 1. A note is indented and in a smaller font.

NOTE: 2. There may be several notes listed together, in which case each note is separately numbered.

Notes are always informative, i.e. they do not contain mandatory requirements, and are only used for giving additional information to assist the understanding or use of the document. Footnotes are rarely used in Standards, and when they are, it is usually to provide an informative reference to another publication.

Informative appendices may also be included to provide commentary or additional guidance on the use of the Standard. Informative appendices can only be referenced to the informative content of the Standard such as an advisory note.

3.7.7 Tables and figures

Nearly all Standards make use of tables and figures. These can be mandatory or informative, the former being cited in a mandatory clause, e.g. 'The dimensions of the sub-assembly shall be in accordance with Table 1 and the layout of the slots shall be in accordance with Figure 4.'

However, Standards may also contain informative tables and figures, the latter often being used to help visualise relations and concepts. Users should check carefully to make sure they are complying with any necessary mandatory figures and tables.

There are also many instances of notes to tables and figures. These can be either mandatory or informative, although you do not get a mandatory note to an informative table or figure. Again, users need to check carefully that they are complying with mandatory notes.

3.7.8 Referenced documents

Referenced documents are those documents, usually other Standards, but may also include special reference texts, that have been referenced in the main body of the Standard and in Appendices.

A referenced document can either be normative or informative. When a *normative reference* is made it is called up in a mandatory clause (e.g. 'the paint used shall comply with the requirements of AS 1234') and users must comply with the requirements of the referenced Standard. *Informative references* (e.g. 'further information on the methods of measuring slew can be found in AS 3456') may be called up from any element.

When referencing other Standards, committees are careful to ensure that the references are valid and relevant to the Standard being prepared. Specific clauses are not cited since they may change in subsequent editions of referenced documents. In selecting the referenced Standard, the committee will have taken account of only the edition in use at the time of publication of the Standard. The applicability of subsequent editions or amendments of referenced Standards is a matter for determination by the users of the Standard, employing their professional judgement.

References to other Standards can be dated or undated. Undated references can only be made:

a) If it is accepted that it will be possible to use all future changes of the referenced document for the purposes of the referring document; or

b) For informative references.

In all other cases dated references are used.

The term 'Related Documents' is also sometimes used. These documents are not called up in the Standard but have been listed to help users gain a better understanding of the subject matter. Related documents are often placed in an informative Appendix titled 'Bibliography'.

3.8 Drafting of Standards

3.8.1 General

The responsibility for the technical content of a Standard resides with the Technical Committee (TC). It is the final version of the Standard that is voted upon by the TC. No changes are made to the technical content of a document after this stage without further agreement of the TC and without consideration being given to the impacts of making technical changes at this stage, e.g. delaying the agreed publication date, having to repeat the public comment or committee ballot processes, etc.

When drafting Standards, committee members are careful to ensure that the content is up-to-date, relevant and reflects community expectations. For example, if there are several acceptable technical solutions and one of those solutions is not catered for in the Standard, it could have significant legal and financial implications for those using that solution. Alternatively, if the trade-off between factors such as cost and safety is biased one way or the other, the community will be placing its faith in something that either offers inadequate safety or is overpriced and economically inefficient.

Transparency and consensus building associated with national standardisation helps avoid such problems. The requirement to show a Net Benefit when first proposing the development of a new Standard (or revision of an existing Standard) also assists in ensuring community expectations are met.

NOTE: Drafting of Standards is undertaken in accordance with SG-006: Rules for the Structure and Drafting or Australian Standards and SG-001: Preparing Standards.

3.8.2 Requirements and recommendations

Apart from Guidance Standards (Clause 3.2), Standards contain requirements. A requirement can be defined as 'an expression in a document conveying criteria to be fulfilled if compliance with the document is to be claimed and from which no deviation is permitted'. Requirements are mandatory and are expressed in unambiguous terms and use special language (Clause 3.8.3). Users need to be clear on what the specific requirements are when claiming compliance with the Standard.

Many Standards, including Guidance Standards, include recommendations. A recommendation can be defined as 'an expression in a document conveying that among several possibilities one is recommended as particularly suitable, without mentioning or excluding others, or that a certain course of action is preferred but not necessarily required, or that (in the negative form) a certain possibility or course of action is deprecated but not prohibited.

NOTE: See ISO/IEC Guide 2, Standardization and related activities — General vocabulary.

3.8.3 The use of Shall, Must and Should

In accordance with SG-006: Rules for the Structure and Drafting or Australian Standards, the word 'shall' is used to state that a requirement is strictly to be followed in order to conform to a Standard. Consequently, there can be no deviation from that requirement, other than where there is a specified tolerance.

In legislation and specifications it is common to use the word 'must' to express a requirement; however, the use of 'must' is avoided in Standards. Where Standards are adopted in legislation, the word 'shall' in the Standard is to be considered as equivalent to 'must' in the legislation.

The word 'should' (or 'may') introduces a suggestion or recommendation that is not a requirement. It is not necessary that such recommendations or suggestions be followed in order to comply with the Standard. Similarly, the antonyms 'should not' or 'may not' are only suggestions and are not required to be complied with.

3.9 Product status

The following is a list of the terms used to indicate the status of Australian Standards (AS), or joint Australian/New Zealand Standards (AS/NZS) and their supporting documents.

Current—indicates that the product is up-to-date and available.

Available Superseded—indicates that the product has been made available for a period of time although it has been formally superseded by another document. Its availability is maintained where it forms the basis for certification, is cited in legislation/regulations (notably the Building Code of Australia) or in other products, and its use should be restricted to where so referenced. Standards Australia takes no responsibility for the ongoing technical validity of such a document.

In the case of being used as the basis for certification, the Available Superseded publication must be available until the relevant certification of all organisations has lapsed.

Once the need for maintaining availability of an Available Superseded product has passed, the product status should be changed to Superseded.

NOTE: *Available Superseded publications cannot be reconfirmed.*

Obsolescent—indicates that the product is not recommended for new equipment or as a current practice, but is retained in order to provide for servicing of existing equipment or requirements.

Redesignated—indicates that a product has been given a new Standard reference number, e.g. AS 1234:2013 is redesignated AS ISO 9876:2014).

Superseded—indicates that the product has been withdrawn and replaced by another product. This may be a newer edition of the product with the same designation, or a different product such as an adoption of an International Standard or a brand-new product that covers the same technical field.

Withdrawn—indicates that the product is no longer relevant (however, withdrawn publications can still be purchased if required).

This status is used if the product is withdrawn and not replaced.

A product may be withdrawn if it:

- Is not up-to-date technically;
- Does not reflect current practice;
- Is not suitable for new and existing applications (products, systems or processes); and
- Is not compatible with current views and expectations regarding quality, safety and the environment.

3.10 Patents

A Standard does not confer a monopoly on one section of industry to the detriment of another that can provide an equally satisfactory article. Nonetheless, on exceptional occasions, technical reasons may justify inclusion in the Standard of items or services covered by patent rights. There is no objection in principle to this, provided that certain rules are adhered to.

The rules governing patented items in Standards are those adopted by ISO and IEC. The most important rule is that, before use of material known to be the subject of a patent is made a requirement of a Standard, it is to be ensured by means of a formal statement that the owner of the patent has agreed to make licences available to all who apply on reasonable and non-discriminatory terms.

3.11 International adoption

Standards Australia has a policy of adoption, wherever possible, of International Standards prepared by ISO and IEC, as Australian Standards (AS) or joint Australian/New Zealand Standards (AS/NZS). This policy has been implemented to reflect Government policy on compliance with the World Trade Organisation Agreement on Technical Barriers to Trade (i.e. the WTO TBT agreement).

Where an International Standard deals with the subject covered by a new project, such a Standard is considered and evaluated for adoption as a national Standard by the committee concerned. Where the committee decides not to adopt the International Standard, the committee has to provide reasons for the unsuitability of the International Standard for use in Australia and, where appropriate, New Zealand. Where the International Standard is adopted but national variations are incorporated, the committee is required to provide documented reasons for these variations.

3.12 Standards in legislation

Australian Standards (AS) or joint Australian/New Zealand Standards (AS/NZS) are often cited ('called up') in State and Commonwealth legislation. When this happens, these Standards become mandatory and can be subject to the scrutiny of the courts. Therefore, every attempt is made to ensure Standards

are written in a clear and concise manner, avoiding ambiguity and making it totally clear what has to be done to comply with the Standard (and hence the regulation or contract that calls up the Standard).

In some cases Standards are drafted specifically for legislative adoption. To accommodate the various purposes of a Standard, the contents are often arranged so that the requirements intended to be adopted in legislation are clearly separate from those which are not relevant for this purpose. A means of segregation is to place the requirements that are not to be adopted in legislation in a separate section or part.

4 DOCUMENTS SUPPORTING STANDARDS

4.1 Amendments

After a Standard has been published, new information may be presented to the committee or errors found in the published document. When this occurs it is usual to issue an amendment to the Standard.

Normally, amendments should not alter more than 10% of the original document and should not have more than two amendments issued for the one edition of document. If this is exceeded, a full revision of the document is recommended and a new edition is typically developed. Amendments are usually only issued in the first two years after the Standard's publication; any changes after this should be incorporated into a new edition.

Amendments have the designation 'Standard Number:Year Amendment Number: Year' (e.g. AS 1234:2013 Amd 1:2014), and are numbered consecutively and dated.

There are two types of amendments: correction and revised text.

Correction amendments, as their name implies, correct misprints or typographical mistakes in text or equations, incorrect figures in tables, wrong clause numbers or clauses lost in the editing/publication process. Correction amendments should not add new material or affect the application of the publication.

Technical changes to a publication will generally require a revised text amendment to be issued; or a full revision (i.e. new edition) if the changes are substantial.

Revised text amendments make minor changes to an existing publication, which have not previously been approved by the responsible committee. This would generally include changes to text to clarify the meaning, addition of new requirements and making changes to procedures defined in the Standard. Revised text amendments will affect the application of the Standard.

Revised text amendments are developed in accordance with the Standards development process described in SG-001: Preparing Standards.

NOTE: 1. Users of Standards should ensure that they check for any published amendments. Most amendments to Australian Standards can be downloaded at no cost from our distributors.

NOTE: 2. Publication of amendments involves the agreed changes being cut-in to the publication and referenced on the cover, Preface and control sheet of the publication, and being published as a stand-alone document.

4.2 Supplements

These are additional, separate documents that support and assist in the implementation of a Standard. There are two basic types of supplements: normative and informative.

- A ***normative*** supplement forms an integral part of a Standard (e.g. pre-calculated application tables, technical drawings, charts, coverage of new or unusual circumstances) and **does** require Public Comment and Ballot; or
- An ***informative*** supplement provides background information to the Standard (e.g. commentary providing background reference material to specific clauses in a Standard) and **does not** require Public Comment but does require Ballot.

The Supplement is normally either issued with the Standard or within 12 months of its publication. However, if the need for the Supplement only becomes evident later in the life of the Standard, a Supplement may still be issued. Supplements have the designation 'AS XXXX:Year Sup Supplement Number:Supplement Year', (e.g. AS 1234:2017 Sup 1:2017), are numbered consecutively and dated. All Supplements are developed by the same TC responsible for the development of the parent Standard and are developed in accordance with the Standards development process described in SG-001: Preparing Standards.

A common type of informative supplement is a Commentary, which provides background reference material to specific clauses in the Standard. Commentaries may also indicate the origins of particular requirements and explain the application of certain clauses as well as providing some general assistance with the use of the Standard. They often have their paragraph numbers aligning with the clause numbers in the Standard (i.e. Commentary on Clause 2.1 is provided by Paragraph C2.1).

Commentaries may make reference to the Standard; however the normative clauses in the Standard are not to make reference to a Commentary.

4.3 Rulings

Although individual committee members may reasonably express their own point of view on the background and intent of a Standard in which they have been involved, they do not have the authority to present an official Standards Australia interpretation of provisions in the Standard. Where, as a result of requests from users or stakeholders, there is uncertainty about the interpretation or application of a Standard or part thereof, Standards Australia may request the committee as a whole to provide a Ruling on a technical matter relating to a Standard. This can include a clarification of the meaning of a clause or the applicability of a Standard to a specific situation.

When a committee provides an interpretation on a matter relating to a particular Standard, the response must be agreed to by the committee before it is published as a Ruling. A Ruling is a publicly available document providing clarification on a technical matter relating to a Standard (including adopted ISO/IEC Standards), the official meaning of a Standard's requirements, or the applicability of a Standard to a specific practical situation. Rulings do not contain additional normative requirements since these are published as an amendment to the Standard. Amendments to Rulings are not permitted, instead a replacement Ruling is issued.

Rulings must undergo a Committee Ballot and are formally endorsed in writing by the relevant committee either by mail or at a committee meeting. In certain circumstances formal agreement on Rulings is also sought from the appropriate regulatory authority. Rulings can often be country specific, i.e. separate rulings may have to be issued for Australia and New Zealand when the subject is a joint AS/NZS Standard.

4.4 Reconfirmation Notice

The Reconfirmation of a Standards Australia publication may occur as a result of the periodic review of the publication, or as is required.

A 'Reconfirmation Notice' is published as a stand-alone document and confirms that a Standards Australia product has been formally reviewed by the relevant TC, (and other stakeholders where appropriate) and 'Reconfirmed' as being valid, i.e. technically correct and reflective of current practice.

A 'Reconfirmation Notice' is only issued where the Reconfirmation is supported by a majority of the Committee Members of the relevant TC with no substantiated valid technical objections.

The 'Reconfirmation Notice' will state that the publication has been reconfirmed. It will carry the designation of the original publication plus the word "Rec" and the reconfirmation year, e.g. "AS 1234:2002 Rec 2012".

NOTE: The designation and contents of the original publication remains unchanged.

5 LOWER CONSENSUS PUBLICATIONS

5.1 What is a lower consensus publication?

Developing national consensus Standards as set out in SG-001: Preparing Standards is a structured and potentially time consuming process. However, there are instances where a normative or informative technical document is required and traditional consensus standardisation may not deliver the optimal solution. A document supported by a lower level of consensus and transparency may meet the needs of stakeholders, provided that there are no misunderstandings and the document is clearly differentiated from an Australian Standard (AS).

Standards Australia issues publications with lower levels of consensus than Standards. These publications vary in their level of authority from the purely informative to being precursors of Standards in new fields where consensus standardisation has not previously been undertaken. For example, the document may only be explanatory in nature to assist readers in using an Australian Standard; and in such cases, the Standard will always be the principal point of reference and the supporting lower-consensus document will not introduce any additional measures. In the case of some documents, the content is simply public disclosure of information. Alternatively, a new hazard to health and safety has been identified and steps to deal with it need to be put in place as soon as possible; or a new technology may have emerged and there are significant benefits in industrial efficiency in having guidelines in place at an early stage.

The various products described below are tailored to the different needs of users who, for whatever reason, require documents that have been through a process that does not necessarily meet the requirements associated with a national Standard.

Table 1 (below) briefly summarises the transparency and consensus levels for the various Standards Australia products to assist in determining which is most appropriate.

Table 1—Standardisation process for various Standards Australia product types

PROCESS REQUIREMENTS (see Note 1)				
Product Type	**Transparency**	**Consensus**	**SDAC Approval**	**Comments**
Australian Standard (AS)	High – Public Comment (PC) is required	High – Ballot is required	Yes	See Note 3
Australian Interim Standard (AS (Int))	Medium – Peer Review only (PC not required)	High – Ballot is required	Yes	2 + 2 year life maximum
Australian Technical Specification (SA TS)	Medium – Peer Review only (PC is optional)	Low – Limited peer review	Info only	Used if full Standard cannot be prepared within time constraints
Australian Technical Report (SA TR)	Low – No PC required	Low – Informal endorsement[4] is required	Info only	May include publication of research data. See Note 4
Handbook (SA HB)	AS only: Medium – Peer Review only (PC not required)	Low – Limited peer review	Info only	If the topic is related to a TC the TC is to be part of the peer review group
Miscellaneous Publication (SA MP)	Low – No PC required	Low – Limited peer review	Info only	If the topic is related to a TC the TC is to be part of the peer review group
Ruling (Rul)	Low – No PC required	High – Ballot and Formal endorsement[4] are both required	Yes	To clarify intent or application of a Standard or sections of a Standard in specific instances
Reconfirmation Notice (Rec)[5]	Medium – Peer Review only (PC not required)	Medium – Formal endorsement[4] is required	Info only	See Notes 3 and 4

PROCESS REQUIREMENTS (see Note 1)				
Product Type	**Transparency**	**Consensus**	**SDAC Approval**	**Comments**
Supplement - Normative (Sup)	High – PC is required	High – Ballot is required	Yes	See Note 3
Supplement - Informative (Sup) (Includes commentaries)	Low – No PC required	High – Ballot is required	Yes	Issued with the parent Standard or within 12 months of its publication date
Correction Amendment	Low – No PC required	Medium – Formal endorsement[4] is required	Info only	See Note 2
Revised Text Amendment	High – PC is required	High – Ballot is required	Yes	See Note 2
Australian Standard Certified Reference Material (ASCRM)	N/A	N/A	N/A	Should always be accompanied by an SA TR to provide details of their source, preparation and chemical composition

NOTES:

1. *The processes indicated in the table show minimum levels only. Higher consensus and transparency levels may be required where warranted.*
2. *Amendments may be applied to a Standard, Interim Standard, Supplement, Technical Specification, Technical Report, Miscellaneous Publication and Handbook. Amendments should normally only be issued within 2 years of the initial publication of the product and should not have more than 2 amendments issued for the one document. Amendments to Rulings are not permitted, instead a replacement Ruling is issued.*
3. *Reconfirmation of a Standard or Supplement does not require Public Comment, does require formal endorsement (see below) and is sent to the Standards Development and Accreditation Committee (SDAC) for information only.*
4. *Formal endorsement means that the committee does not undertake a formal Committee Ballot process, but the endorsement with unanimous general agreement is documented, usually in the form of a 'letter of no objection' or minuted agreement at a committee meeting. Informal endorsement means general verbal discussion and direction without documentation.*

Standards Australia is not alone in recognising this need for a range of deliverables. ISO and IEC have developed a similar range of deliverables with levels of consensus different from those associated with an International Standard. The concept at the national and international levels is similar, but there are differences in detail resulting from the inherent differences between developing national and international consensus based Standards. See Section 6 for a comparison of national and international deliverables.

5.2 Interim Standard

An Interim Standard, which can be either an Australian Standard (AS) or a joint Australian/New Zealand Standard (AS/NZS), is a provisional Standard with a two-year life. It is prepared in a subject field where not all requirements have been finally determined or where national consensus is anticipated but has yet to be realised. An Interim Standard provides both a guide to the direction that future standardisation in the specified field may take and a mechanism to collect public feedback on the subject. Its designation follows the rules for 'full' Standards except that '(Int)' is included after the number.

Interim Standards may originate from a number of different sources. They may be used in a new area of technology where there may not be full agreement on final technical solutions or they may also be used at the ISO 'Draft International Standard' (DIS) or IEC 'Committee Draft for Vote' (CDV) stage when proceeding down the path of adoption of International Standards using a parallel process.

Developed using a formally constituted TC, an Interim Standard follows the same process as that used to develop a 'full' Standard (see SG-001: Preparing Standards) except that there is normally no Public Comment phase since the Interim Standard itself is publically available and therefore a vehicle for eliciting public feedback. Stakeholders and members of the public affected by the Standard are encouraged to submit comment during the period of currency. The development of an Interim Standard can take about half the development time that would be involved with a 'full' Standard.

During the life of an Interim Standard the responsible committee reviews any comments received on the document and must decide whether to withdraw it, to confirm it as a 'full' Standard, revise the text or extend its life for a second period of up to two-years. Where the committee takes no action the Interim Standard will be automatically withdrawn at the end of the initial two-year period.

5.3 Technical Specification

A Technical Specification (which is often referred to as an Australian Technical Specification, or ATS, to differentiate it from an International Technical Specification) is a normative document that has been subject to a limited form of transparency and does not have the support of the full consensus process normally associated with an Australian Standard.

The designation for a Technical Specification is SA TS nnnn:year where nnnn is a number that follows the rules for Standards (see Clause 3.7). A Technical Specification may be prepared in a field where the subject matter, or a related aspect such as the regulatory environment, is undergoing rapid change and where speed of delivery, rather than full consensus, is of paramount importance. In such cases, it would normally be expected that an Australian Standard would eventually be developed to supersede the Technical Specification.

Another possible application is where the required level of stakeholder consensus to support an Australian Standard may not be possible. While Handbooks (see Clause 5.5) normally meet this need, sometimes the national interest may be better served by providing the public with access to information which has achieved a certain degree of stakeholder agreement, in a document that has a lesser status than a Standard. A Technical Specification can fulfil this function; and while it may include normative language, it does not purport to be a Standard and the Title Page contains information to this effect.

The content of a Technical Specification is developed by a separate Working Group (WG) comprised of selected experts and/or interested parties, under the direction of a constituted TC which has sufficient understanding of the subject matter to oversee the process. A new project to develop a Technical Specification requires the same project approval process as does a Standard (see SG-001: Preparing Standards). A Technical Specification is subject to, at least, limited peer review with the option of going to full Public Comment if it is deemed to be warranted. Comments are considered by the WG.

At the end of the process, the supervising TC is asked to sign off on the final document to confirm that the appropriate process has been followed and that the required consultations and peer review have occurred. This may be done informally by a 'letter of no objection' and unanimity is not essential; however, if one or more members of the TC disagree with publishing the final document, a report has to be prepared for the Production Management Group (PMG)* justifying the decision to publish.

Where appropriate, it may be advisable for a Technical Specification to undergo a Committee Ballot to ensure that the content is endorsed by the main committee and relevant committee members.

*NOTE: *The PMG is an operational committee within Standards Australia who is responsible for the oversight of the development of Australian Standards and related documents.*

5.4 Technical Report

From time to time there will be cases where it is necessary to publish different sets of data. A Technical Report, (also referred to as an Australian Technical Report, or ATR), has always accompanied each Australian Standard Certified Reference Material (ASCRM) and contains information on the preparation of the reference material, including its chemical and physical properties. The Technical Report series has been expanded to include data lists on any subject. Such data may be the results of research, calculations, or empirical observations. Technical Reports do not contain requirements and do not generally contain explanatory details or information supplementary to a Standard.

The designation of a Technical Report is 'SA **TR nnnn:year**' where nnnn is a number referring to the ASCRM that is the subject of the report, or a sequential number that follows the rules for Standards (see Clause 3.4).

The content of a Technical Report is developed by a TC. Actual drafting may be performed by an individual or by a small WG, without the need for peer review or Public Comment. At the end of the process, the TC is asked to sign off on the final document, but this is done informally and unanimity is not essential. In the unlikely event of a negative vote, a simple majority vote in the committee is sufficient. The time frame for developing a Technical Report varies since it is generally a by-product of the development of another deliverable.

5.5 Handbook

The designation of a Handbook is 'SA **HB nnnn:year**' where nnnn is a sequential number. A Handbook is an informative document that may be used to support a Standard or a group of Standards already in place. It may either aid implementation or provide additional information to users of the Standard(s). In some circumstances a Handbook may be produced where there is no Standard, and no TC, but the content is considered to be in the public interest. One possibility is to publish a Handbook to gauge reaction and seek comments in a new field; and depending on the feedback, determine whether consensus standardisation activities are warranted. It should be noted that Handbooks represent the views of the author(s) and there could be other, equally valid, points of view on the subject.

The technical content of a Handbook is normally developed by a single author or by a selected group of experts, rather than by a constituted TC. In cases where consensus cannot be reached following the development of a draft Standard, the TC may elect to publish the document as a Handbook so that users gain the benefits of the committee's deliberations. In this case there are no requirements and the information is advisory only. A Handbook can also be developed in conjunction with an industry association which would take responsibility for the bulk of the drafting work.

Whichever approach is taken, a Handbook is subject to a peer review process. Peer reviewers are normally taken from appropriate committee(s) but could also include external technical experts. A new project to develop a Handbook is managed in accordance with SG-001: Preparing Standards. In some cases a simple commercial arrangement is used.

5.6 Miscellaneous Publication

The designation of a Miscellaneous Publication is 'SA **MP nnnn:year**' where nnnn is a sequential number. A Miscellaneous Publication is an informative document listing information of a different kind to that found in other Standards Australia's products. Some examples may include additional information collected in the process of developing a Standard or a list of products that have been approved for use under a certification scheme. In certain circumstances Miscellaneous Publications can report requirements used in certification schemes.

A Miscellaneous Publication is normally developed at the direction of a constituted TC. A new project to develop a Miscellaneous Publication requires the same approval process to a Standard (see SG-001:

Preparing Standards). Once the decision has been taken to develop the product, no further approval is required for the contents of the first or subsequent editions. Similarly, no Public Comment is required.

5.7 Standards Alert

A Standards Alert is an informative document issued by Standards Australia to provide clarification to address a specific matter that requires urgent notification to the industry involved with the subject matter, or to the public in general. The Standards Alert sets out the specific matter and the advice of the committee to address the matter.

A Standards Alert is normally based on uncontested factual information and is used where speed of delivery is of paramount importance. The Standards Alert will normally be withdrawn once the matter has been addressed in the relevant Standard(s).

The matter and the proposed information to be released are forwarded electronically to the relevant committee for review. The information is then updated as necessary based on committee comment. Only the views of those who respond within the given time frame are considered, and the Standards Alert can be released so long as, amongst those responses, no major stakeholder interest collectively maintains an objection.

5.8 Certified Reference Material

While not a publication, an Australian Standard Certified Reference Material (ASCRM) is important in a number of industries, particularly coal and minerals. ASCRMs are samples with a known composition that can be used as a 'standard' for chemical analysis.

ASCRMs are always accompanied by a Technical Report providing details of their source, preparation and chemical composition.

5.9 Rules for the designation of lower consensus publications

To help distinguish between Standards Australia and joint Standards Australia/Standards New Zealand lower consensus publications, i.e. Handbooks (HB), Miscellaneous Publications (MP), Technical Reports (TR), Technical Specifications (TS) and Rulings (Rul), the following designation rules apply:

- "SA" will be displayed in front of the HB, MP, TR, TS and Rul in the designation for publications where it is an Australian only document; and
- "SA/SNZ" will be displayed in front of the HB, MP, TR, TS and Rul in the designation for publications where it is a joint Australian/New Zealand document.

6 INTERNATIONAL EQUIVALENTS

In developing the range of Australian deliverables from the standardisation process, recognition was given to the equivalent international deliverables; however, for practical reasons, an exact alignment has not always been possible. Some international products, by their very nature, do not easily translate into the national environment—for instance agreements between international consortia.

Table 2 (below) is provided for the benefit of users who may be concerned about the correspondence between Australian and international documents, and also for committees considering the national adoption of international deliverables. However, Australia has the sovereign right to determine the content of Australian Standards and other deliverables; and there may be good reason to follow a different path to that suggested in Table 2, for example an International Technical Specification could be adopted as an Australian Standard if there is strong national support for its contents.

It should be noted that the WTO Agreement on Technical Barriers to Trade (i.e. WTO TBT agreement) only makes recommendations in relation to the national adoption of International Standards. Other ISO and IEC deliverables are not accorded any special status under the WTO TBT agreement or related trade agreements to which Australia is party.

Table 2—Suggested correspondence of ISO/IEC and Standards Australia deliverables

ISO/IEC	Standards Australia	Comments
International Standard	Australian Standard	These are essentially equivalent
ISO/DIS or IEC/CDV	Interim Standard	Only if fully adopted in parallel with the International Standard, otherwise a Public Comment draft of a full Standard.
Technical Specification	Technical Specification	These are essentially equivalent
Publicly Available Specification (PAS)	Technical Specification	See Note 1 below
Technical Report	Technical Report	
	Handbook	
Guide	Handbook	See Note 2 below
No directly corresponding international deliverable	Supplement	
	Ruling	
	Reconfirmation Notice	
	Miscellaneous Publication	
	Standards Alert	
	ASCRM	
International Workshop Agreement (IWA) / Technical Trend Assessment (TTA)	No current equivalent	See Note 3 below

NOTES:

1. *A PAS is a document published by ISO or IEC to respond to an urgent market need, representing either consensus in an organisation external to ISO or IEC, or consensus of the experts within a WG.*
2. *A Guide is a document published by ISO or IEC giving advice or recommendations relating to international standardisation.*
3. *An IWA or TTA is a pre-standardisation document established as a broad consensus outcome of a forum of stakeholders convened to consider the subject being proposed. An IWA or TTA will normally be developed in a new subject area at an early stage of innovation when there is no applicable Standards committee, but a need for guidance regarding emerging directions, trends and practices.*

7 CONFORMITY ASSESSMENT

In many cases it is important for organisations to demonstrate that their products, services or organisational activities comply with the requirements of a specific Standard. Demonstration of compliance can be for self-improvement, marketing reasons or as a legislative requirement. While not strictly an output of the standardisation process, assessing conformance to a Standard ('certification') is an important process allied to standardisation.

There are two forms of certification, 'product certification' or 'system certification'. As implied, product certification refers to confirming that a specific product (e.g. a bicycle helmet, a brand of cement, or a type of water pipe) complies with the relevant Standard and is fit for purpose. System certification confirms that specific management activities within an organisation (e.g. quality management, WH&S,

environmental management) comply with the relevant Standard. System certification is also often used as an important tool to improve management and operational efficiency within an organisation.

Assessment of compliance is carried out by independent third parties—conformity assessment bodies (CABs). CABs (sometimes called 'certification bodies') must be accredited to carry out certification and they go through rigorous auditing to ensure they have the competence, credibility, independence and integrity to effectively carry out their certification activities.

The accreditor for certification bodies is the Commonwealth Government appointed body JAS-ANZ (Joint Accreditation System – Australia New Zealand). More details on accreditation and certification can be found on the JAS-ANZ website http://www.jas-anz.com.au/.

Standards used for conformity assessment are couched in mandatory terms to ensure there is no ambiguity in requirements, and it is only these mandatory requirements that are assessed. If a Standard that will be used for certification is being developed, it is usual to have a representative of CABs on the TC drafting the Standard.

For more information and to see the Conformity Assessment policy, refer to SG-006: Rules for the structure and drafting of Australian Standards.

APPENDIX A – Publisher Prefixes

This list includes Publisher Prefixes likely to be encountered in Australia:

Prefix	Publisher or Description
AS	Australian Standard
AS IEC	Australian adoption of an IEC Standard (and similarly AS/NZS IEC)
AS ISO	Australian adoption of an ISO Standard (and similarly AS/NZS ISO)
AS ISO/IEC	Australian adoption of a joint ISO/IEC Standard (and similarly AS/NZS ISO/IEC)
AS/NZS	Joint Australian/New Zealand Standard
EN	European Union Standard
IEC	International Electrotechnical Commission
ISO	International Organization for Standardization
ISO/IEC	Joint ISO and IEC Standard
AFSL	Australian Forestry Standard Limited
CA	Communications Alliance
CISPR	International Special Committee on Radio Interference
PGA	Pharmacy Guild of Australia
RISSB	Rail Industry Safety and Standards Board
FRDC	Fisheries Research and Development Corporation

NOTE: This list is not intended to be exhaustive but to indicate some of the Primary Publishers at the time this Guide was developed.

DOCUMENT HISTORY

To follow details the history of this document:

Date	Author	Amendment Details
02/08/09		v1.0 - First release of Guide which is a consolidation of content from multiple Guides.
03/02/10	Policies & Procedures Officer	v1.1 - Clarify drafting responsibility and SDC approval steps & re-issued.
19/07/10	Policies & Procedures Officer	v1.2 - Added a link in section 7 to the Conformity Assessment policy in SG-006 & re-issued.
09/06/11	Policies & Procedures Officer	v1.3 - Fix broken hyperlinks, minor amendments & re-issued.
21/02/12	Process & Procedures Officer	v1.4 - Update all hyperlinks after new corporate website released & re-issued.
05/04/12	Process & Procedures Officer	v1.5 - Minor amendment to 3.5 re: the use of Shall, Must & Should to reflect current practice & re-issued.
16/01/13	Process & Procedures Coordinator	v1.6 - Reconfirmed/updated Document History & re-issued.
21/01/13	Process & Procedures Coordinator	v1.7 - Included 'Reconfirmation Notice' as a publication type, minor amendments & re-issued.
05/11/14	Process & Procedures Coordinator	v1.8 - Reconfirm/amend all product types, update designation references & minor amendments to clarify Accredited SDOs & ABSDO requirements.
29/01/16	Process & Procedures Coordinator	v1.9 - Update SDC references to SDAC & update ABSDO references.
22/03/19	Process & Procedures Coordinator	v1.10 - Clause 3.9 amended to clarify SA's definition of Available Superseded, Superseded and Withdrawn product statuses. Minor editorial changes throughout.
12/07/19	Process & Procedures Coordinator	v1.11 - Replaced references to "SAI Global" with "our distributors" & updated "deemed to comply" with "deemed to satisfy" in Clause 3.6.

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