Enterprise Singapore

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ENTERPRISE SINGAPORE CALLS FOR PUBLIC COMMENTS ON SINGAPORE STANDARDS – 5 DECEMBER 2025

Under the National Standardisation Programme, the public comment period is an important stage of standards development. Members of the public are invited to provide feedback on draft Singapore Standards for publication and work item proposals for development and review of Singapore Standards, Technical References and Workshop Agreements. The establishment of Singapore Standards is done in accordance with the World Trade Organisation's requirements for the development of national standards.

A)   Notification of Draft Singapore Standards for Publication

Newly developed and revised Singapore Standards (SSs), and the outcomes of the reviews of existing SSs are available to the public to gather feedback on their contents and status prior to their completion.

Members of the public are invited to comment on the following Singapore Standard(s):

Building and Construction – air-conditioning and mechanical ventilation, construction computer-aided design (5 standards),

Chemical – bunkering (2 standards)

Electrical and Electronic – system interfaces for distribution management (2 standards)

Environment and Resources – assurance of environmental reports, performance-based climate resilience grants, energy audits (3 standards), measuring energy balance and calculating efficiency, measurement of energy savings of projects

Food – plant-based foods and food ingredients

Closing date for comments: **6 February 2026 (except for SS on air-conditioning and mechanical ventilation in buildings which closes on 6 January 2026)**

For more information on viewing the document(s), click here.

Please submit comments to: standards@enterprisesg.gov.sg.

B)   Notification of New Work Item Proposals

New Work Items (NWIs) are approved proposals to develop new Singapore Standards, or pre-standards like Technical References and Workshop Agreements. The NWIs are work-in-progress, and the drafts are not available at the public comment stage.

Members of the public are invited to comment on the scope of the following NWI(s):

Biomedical and Health – artificial intelligence

Closing date for comments: **6 January 2026**

Members of the public are invited to join as standards partners, co-opted members or resource members subject to the approval of relevant committees and working groups.

To comment or to join in the development of these standards, please write to standards@enterprisesg.gov.sg.

A) **Notification of Draft Singapore Standard for Publication**

(I) *Building and Construction*

Revision

1. **Code of practice for air-conditioning and mechanical ventilation in buildings** (SS 553:2016+A2:2021).

    This standard specifies requirements for the design, construction, installation, testing and commissioning, operation and maintenance of air-conditioning and mechanical ventilation systems in:

    − commercial, office and institutional buildings;
    − retail clinics located within commercial buildings.

    It does not cover hospitals, cleanrooms and laboratories.

    It also defines the basic requirements for mechanical ventilation and air-conditioning engineering practices such that an acceptable indoor thermal environment can be attained in an energy efficient manner while ensuring indoor air quality and equipment maintenance.

    The standard was released for public comment from 11 July 2025 to 12 September 2025 and changes had since been made to address the comments received. The main changes are as follows:

    − Reorganised clauses for greater clarity and better flow;
    − Defined 'breathing zone'; and
    − Updated the values in Table 15 for minimum duct insulation.

    This standard is intended to complement SS 554 'Code of practice for indoor air quality for airconditioned buildings'.

    Users of the standard include engineers, architects, building owners, consultants, manufacturers, suppliers, facility managers and relevant government agencies.

    Public comment period: 5 December 2025 to 6 January 2026

Confirmation with Amendment

2. **Code of practice for construction computer-aided design (CAD)**

    Part 1: Organisation and naming of CAD layers (CP 83-1:2004 (2020))

    This standard establishes the general principles of layer structure within construction computer-aided design (CAD) files. It covers the organisation and allocation of layers that are used in CAD files for construction projects and is intended to be used for communication and management purposes. This standard applies to all parties involved in preparing and using technical documentation on CAD systems.

    (Click here to download the amendment.)

    Part 2: CAD symbols (CP 83-2:2000 (2020))

    This standard establishes a unified system of 2D graphical symbols to represent entities of building components by recommending a common set of symbols to be used by all parties in the building industry in the preparation of drawings. It also facilitates common understanding

and interpretation of information in drawings by different users with the efficient exchange of information.

([Click here](#) to download the amendment.)

Part 3: Organising and naming of CAD files (CP 83-3:2001 (2020))

This standard establishes the general principles and formats for the naming of CAD files. By enhancing uniformity in the naming of CAD files for the construction industry in Singapore, it facilitates communication and management through representations of important attributes in filenames and/or other forms of documentation.

([Click here](#) to download the amendment.)

Part 4: CAD drafting conventions (CP 83-4:2001 (2020))

This standard provides a set of recommendations of drawing conventions to be used by all parties in the building industry in the preparation of drawings. It provides a set of common drafting conventions and facilitates common understanding and interpretation of information for the building industry.

([Click here](#) to download the amendment.)

Part 5: Colour and linetype (CP 83-5:2001 (2020))

This standard establishes the general principles and formats for usage of colour and linetype for CAD files.

([Click here](#) to download the amendment.)

The CAD standards have been reviewed and amended to align all five parts of CP 83 within a harmonised framework for CAD practices. The amendments consolidate and standardise naming, colour, and visual systems; refine directory and file management conventions, as well as enhance support for professional workflows and cross-disciplinary coordination.

Users of the standards include architects, designers, engineers, consultants, contractors and relevant government agencies.

(II) *Chemical*

Amendment

3. **Amendment No. 1 to SS 600 Code of practice for bunkering by bunker tankers using tank gauging** (SS 600:2022)

4. **Amendment No. 1 to SS 648-2 Code of practice for bunker mass flow metering – Part 2: Technical requirements and procedures** (SS 648-2:2024)

The amendments replaced the existing bunkering pre-delivery safety checklist in Annex D and Annex G of SS 600 and SS 648-2 respectively and referred users to the Maritime Port Authority's document, "Guidelines for preventing pollution during bunkering operations". In addition, the updated Annex G of SS 648-2 has been changed from an informative annex to a normative annex.

Users of the standard include bunker suppliers, tanker owners, shipowners, bunker surveyors, service providers, bunkering/shipping associations and relevant government agencies.

([Click here](#) to download Amendment No.1 to SS 600.)

([Click here](#) to download Amendment No. 1 to SS 648-2.)

(III)   Electrical and Electronic

New

5.   Application integration at electric utilities – System interfaces for distribution management

Part 3: Interface for network operations (Identical adoption of IEC 61968-3:2021)

This standard provides utilities with the means to supervise main substation topology (breaker and switch state), feeder topology and control equipment status through supervisory control and data acquisition (SCADA), Advanced metering infrastructure (AMI) and other data sources. It also provides the means for handling network connectivity and loading conditions. Finally, it makes it possible for utilities to locate customer telephone complaints and coordinate activities of field crews with respect to planned and unplanned outages.

Part 5: Distributed energy optimisation (Identical adoption of IEC 61968-5:2020)

This standard describes a set of functions that are needed for enterprise integration of distributed energy resource management system (DERMS) functions. These exchanges are most likely between a DERMS and a distribution management system (DMS).

Users of the standards on smart grids include energy management system equipment manufacturers and suppliers, contractors, system integrators and service providers, testing, inspection and certification (TIC) bodies, training providers, institutes of higher learning (IHLs) and relevant government agencies.

(IV)   Environment and Resources

New

6.   Environmental management – Guidelines on the assurance of environmental reports (Identical adoption of ISO 14016:2020)

This standard gives principles and guidelines for assuring the environmental information an organisation includes in its environmental reports.

This standard is applicable to assuring other types of reports in principle provided that special consideration is paid to identifying the competence needed by the assurance provider.

7.   Mechanism for financing local adaptation to climate change – Performance-based climate resilience grants – Requirements and guidelines (Identical adoption of ISO 14093:2022)

This standard establishes an approach and methodology for a country-based mechanism to channel climate finance to subnational authorities to support climate change adaptation and to increase local resilience thereby contributing to the achievement of the goals of the 2015 Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC) and the UN Sustainable Development Goals (SDGs). The country-based mechanism uses performance-based climate resilience grants (PBCRGs) which ensure programming and verification of climate change expenditures at the local level, offering strong incentives for performance improvements in enhanced resilience.

This standard provides requirements and guidelines and is applicable to organisations such as national and subnational authorities, donors, companies, financial institutions and international organisations that are involved in implementing a country-based mechanism for channelling climate finance to subnational authorities to support climate change adaptation and resilience.

Users of the standards on environmental management include companies and certification bodies that are involved in corporate sustainability efforts ranging from setting targets, climate mitigation and action, climate adaption, financing and assurance of sustainability reports, IHLs and relevant government agencies.

8. **Energy audits**

   Part 1: General requirements with guidance for use (Identical adoption of ISO 50002-1:2025)

   This standard specifies the principles, requirements and common methodology for carrying out energy audits. It provides guidance on planning, conducting and reporting energy audits applicable to all types of facilities and energy systems.

   This standard replaces the identical adoption of ISO 50002:2014 and supports both standalone audits as well as those carried out in conjunction with energy management systems such as ISO 50001.

   Users of the standard include organisations of all sizes and sectors that wish to assess energy use, prioritise energy performance improvement actions (EPIAs), and integrate energy auditing into decarbonisation and net-zero strategies.

   Part 2: Guidance for conducting an energy audit using ISO 50002-1 in buildings (Identical adoption of ISO 50002-2:2025)

   This standard provides specific guidance for conducting energy audits in buildings. It applies to both new and existing buildings and offers a structured approach to evaluating building energy use, identifying inefficiencies and determining opportunities for improving energy performance, reducing operational costs, and enhancing occupant comfort.

   This standard is part of the ISO 50002 series and focuses on the unique characteristics of building audits, including building envelope performance, heating, ventilation, and air conditioning (HVAC) systems, lighting, controls, and the influence of occupant behaviour. It supports compliance with energy efficiency goals and can be used alongside ISO 50001 energy management systems.

   Users of the standard include organisations that own, operate, or manage buildings, as well as energy auditors, facility managers and consultants involved in conducting building-specific energy audits and identifying cost-effective energy performance improvement actions.

   Part 3: Guidance for conducting an energy audit using ISO 50002-1 in processes (Identical adoption of ISO 50002-3:2025)

   This standard provides guidance for conducting energy audits of industrial, commercial and institutional processes using the audit framework established in ISO 50002-1. It offers a structured approach to analysing process-related energy use, identifying inefficiencies and determining opportunities to improve energy performance in operations such as manufacturing, utilities, laboratories and data centres.

   This standard is part of the ISO 50002 series and can be used independently or together with ISO 50002-2 for building-related audits, as well as ISO 50001 for organisations operating an energy management system. It supports organisations in assessing process energy flows, developing energy performance indicators and identifying cost-effective energy performance improvement actions.

   Users of the standard include organisations with energy-intensive processes, including industrial facilities, utilities, data centres, healthcare institutions and other operations, as well as energy auditors and consultants involved in conducting process-specific energy audits.

   <u>**Mature standard**</u>

9. **Industrial furnaces and associated processing equipment – Method of measuring energy balance and calculating efficiency – Part 1: General methodology** (SS ISO 13579-1:2017) (Identical adoption of ISO 13579-1:2013)

   This standard specifies a general methodology for measuring energy balance and calculating the efficiency of the process involving industrial furnaces and associated processing equipment as designed by furnace manufacturers. This general methodology includes measurement methods, calculations (general calculation) and an energy balance evaluation report. This

standard is not applicable to any efficiencies related to the process itself outside of industrial furnaces and associated processing equipment.

It is proposed to classify SS ISO 13579-1:2017 as a mature standard as there are no foreseeable changes to the standard. Hence, it will not be reviewed until a request is put forth to do so.

Users of the standard include industrial furnace manufacturers, process plant operators, energy auditors, and organisations involved in thermal processing and combustion systems.

Withdrawal

10. **General technical rules for measurement, calculation and verification of energy savings of projects** (SS ISO 17741:2016) (Identical adoption of SS ISO 17741:2016)

This standard is recommended for withdrawal as there is low industry demand and adoption.

Users can refer directly to ISO 17741:2016.

(V) *Food*

New

11. **Plant-based foods and food ingredients – Definitions and technical criteria for labelling and claims** (Identical adoption of ISO 8700:2025)

This standard specifies the definitions and technical criteria for labelling and claims of foods and food ingredients containing no animal-derived ingredients and limited conditional use of animal-derived ingredients.

This standard does not apply to:

− pre-harvest, any unprocessed edible part of a plant, such as fruits, vegetables, pulses and grains;
− animal welfare, testing, feed and pet food;
− packaging material for foods;
− methods of manufacturing and preparation;
− environmental and human safety.

Users of the standard include food manufacturers, food suppliers, food retailers, hotels, caterers, IHLs, food service providers (e.g. consultancy) and relevant government agencies.

Copies of the draft are available at:

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NOTE – The viewing period of the draft and standard will expire on the closing of the public comment period and will no longer be available after this date.

B) **Notification of New Work Item Proposals**

Biomedical and Health

1. **Information technology – Artificial intelligence (AI) – Bias in AI systems and AI aided decision making** (Identical adoption of ISO/IEC TR 24027:2021)

   This standard addresses bias in relation to AI systems, especially with regards to AI-aided decision-making. Measurement techniques and methods for assessing bias are described with the aim to address and treat bias-related vulnerabilities. All AI system lifecycle phases are in scope, including but not limited to data collection, training, continual learning, design, testing, evaluation and use.

   Users of the standard include healthcare organisations, digital health solution providers, TIC bodies, IHLs and relevant government agencies.

   Submit Comments

Frequently asked questions about public comment on Singapore Standards:

1. What is the public comment on Singapore Standards?

Singapore Standards are established based on an open system which is also in accordance with the requirements of the World Trade Organisation. These documents are issued as part of a consultation process before any standards are introduced or reviewed. The public comment period is an important stage in the development of Singapore Standards. This mechanism helps industry, companies and other stakeholders to be aware of forthcoming changes to Singapore Standards and provides them with an opportunity to influence, before their publication, the standards that have been developed by their industry and for their industry.

2. How does public comment on Singapore Standards benefit me?

This mechanism:

- ensures that your views are considered and gives you the opportunity to influence the content of the standards in your area of expertise and in your industry;
- enables you to be familiar with the content of the standards before they are published and you stand to gain a competitive advantage with this prior knowledge of the standards.

3. Why do I have to pay for the standards which are proposed for review or withdrawal?

These standards are available for *free viewing* at TOPPAN NEXT Pte. Ltd. and all Public Libraries. However, the normal price of the standard will be charged for those who wish to purchase a copy. At the stage where we propose to review or withdraw the standards, the standards are still current and in use. We seek comments for these standards so as to:

- provide an opportunity for the industry to provide inputs for the review of the standard that would make the standard suitable for the industry's use,
- provide feedback on the continued need for the standard so that it will not be withdrawn.

4. Why are comments only accepted through the public comment form provided by Enterprise Singapore?

The public comment form enables users to submit their comments in a standardised and structured manner. The Working Group (WG) that will be reviewing the comments will have a better understanding of what the commenter has proposed, the rationale for the changes and where these changes will be made in the standard. This will assist the WG in addressing the comments more effectively.

5. What happens after I have submitted my comments?

The comments will be channelled to the relevant WGs for consideration and you will be informed of the outcome of the committee's decision. You may be invited to meet the WG if clarification is required on your feedback.

6. Can I view drafts after the public comment period?

Drafts will not be available after the public comment period.

7. How do I request for the development of a new standard?

You can propose the development of a new standard here.