

Submit Comments

ENTERPRISE SINGAPORE CALLS FOR PUBLIC COMMENTS – 7 AUGUST 2020

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 and Technical References. 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

Members of the public are invited to comment on the following Singapore Standard documents:

Biomedical and Health – [biological evaluation of medical devices](#), [medical electrical equipment](#), [medical devices](#)

Building and Construction – [design of concrete structure](#), [geotechnical design](#), [computer-aided design](#), [construction cost information](#), [construction electronic measurement standards](#), [information exchange and documentation at handing/taking-over of buildings](#), [building project document control system](#),

Chemical – [pipeline service corridors](#)

Energy and Resources – [measurement of compressed air systems energy efficiency](#)

Food – [urban farms](#)

For more information on viewing the documents, [click here](#).

Closing date for comments: **8 September 2020** for standard on service corridors which had undergone an earlier round of public comment and **8 October 2020** for all the other documents.

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

B) Notification of Work Item Proposals

B.1 Proposal for New Work Items

New Work Items (NWIs) are approved proposals to develop new Singapore Standards or Technical References (pre-standards).

Members of the public are invited to comment on the scope of the new standards and contents that can be included into the following proposals:

Food – [agriculture practice](#), [animal husbandry practice](#), [aquaculture practice](#)

Manufacturing – [additive manufactured parts](#)

Trade and Connectivity – [asset management in the Singapore railway industry](#), [rapid transit system](#)

The NWIs are work-in-progress and the drafts are not available at this juncture.

Closing date for comments: **8 September 2020**.

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

B.2 Proposal for the Review of Singapore Standards

Published Singapore Standards are reviewed to determine if they should be updated, confirmed or withdrawn (if they no longer serve the industry's needs) or classified as mature standards (no foreseeable changes; to be reviewed only upon request).

Members of the public are invited to comment on the following standards to be reviewed:

Electrical and Electronic – [electric vehicle charging system](#)

Food – [food products that qualify for approved nutrition or health claims](#), [food safety management](#)

The reviews are ongoing and the new versions/drafts are not available at this juncture. Users can refer to the current standard to provide feedback. [Click here](#) to view or purchase the standard.

Closing date for comments: **8 September 2020**.

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 kay_chua@enterprisesg.gov.sg.

A) Notification of draft Singapore Standards for Publication

(I) Biomedical and Health

Revision

1. Biological evaluation of medical devices – Part 12: Sample preparation and reference materials (Revision of SS ISO 10993-12 : 2017) (Identical adoption of upcoming ISO 10993-12)

This standard specifies requirements and gives guidance on the procedures in the preparation of samples and the selection of reference materials for medical device testing primarily in biological test systems in accordance with one or more parts of ISO 10993.

It addresses the following:

- test sample selection;
- selection of representative portions from a medical device;
- test sample preparation;
- experimental controls;
- selection of, and requirements for, reference materials;
- preparation of extracts.

Amendments

IEC made changes to the following IEC 60601 series of standards and IEC 62366-1 which Singapore has adopted.

2. Medical electrical equipment

Part 1: General requirements for basic safety and essential performance (Identical adoption of upcoming IEC 60601-1 Amendment 2)

Part 1-2: General requirements for basic safety and essential performance – Collateral standard: Electromagnetic disturbances – Requirements and tests (Identical adoption of upcoming IEC 60601-1-2 Amendment 1)

Part 1-6: General requirements for basic safety and essential performance – Collateral standard: Usability (Identical adoption of upcoming IEC 60601-1-6 Amendment 2)

Part 1-8: General requirements for basic safety and essential performance – Collateral standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems (Identical adoption of upcoming IEC 60601-1-8 Amendment 2)

Part 1-9: General requirements for basic safety and essential performance – Collateral standard: Requirements for environmentally conscious design (Identical adoption of upcoming IEC 60601-1-9 Amendment 2)

Part 1-10: General requirements for basic safety and essential performance – Collateral standard: Requirements for the development of physiologic closed loop controllers (Identical adoption of upcoming IEC 60601-1-10 Amendment 2)

Part 1-11: General requirements for basic safety and essential performance – Collateral standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment (Identical adoption of upcoming IEC 60601-1-11 Amendment 1)

Part 1-12: General requirements for basic safety and essential performance – Collateral standard: Requirements for medical electrical equipment and medical electrical systems intended for use in the emergency medical services environment (Identical adoption of upcoming IEC 60601-1-12 Amendment 1)

3. **Medical devices – Part 1: Application of usability engineering to medical devices** (Identical adoption of upcoming IEC 62366-1 Amendment 1)

Users of the standards on medical electrical equipment and medical devices include medical device manufacturers, distributors and researchers.

(II) **Building and Construction**

Confirmation

It is proposed to confirm the following standards as their contents are still current and relevant to the stakeholders.

4. **Eurocode 2: Design of concrete structures – Part 2: Concrete bridges – Design and detailing rules** (SS EN 1992-2 : 2012)
Singapore National Annex to Eurocode 2: Design of concrete structures – Part 2: Concrete bridges – Design and detailing rules (NA to SS EN 1992-2 : 2012)

This standard and its national annex give a basis for the design of bridges in plain, reinforced and prestressed concrete made with normal and light weight aggregates.

5. **Eurocode 7: Geotechnical design – Part 2: Ground investigation and testing** [(SS EN 1997-2 : 2010(2015))]
Singapore National Annex to Eurocode 7: Geotechnical design – Part 2: Ground investigation and testing [(NA to SS EN 1997-2 : 2010(2015))]

This standard and its national annex specify rules for the planning and reporting of ground investigations, the general requirements for a number of commonly used laboratory and field tests, as well as the interpretation of soil test results.

Users of the Eurocodes include consultants, contractors, developers, professional engineers, suppliers / manufacturers, tertiary institutions, testing bodies, accreditation bodies and relevant government agencies.

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

Part 1: Organisation and naming of CAD layers [CP 83 : Part 1 : 2004 (2015)]

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.

Part 2: CAD symbols [CP 83 : Part 2 : 2000 (2015)]

This standard recommends a common set of symbols to be used by all parties in the building industry in the preparation of drawings.

Part 3: Organising and naming CAD files [CP 83 : Part 3 : 2001 (2015)]

This standard establishes the general principles and formats for naming of construction computer-aided design (CAD) files.

Part 4: CAD drafting conventions [CP 83 : Part 4 : 2001 (2015)]

This standard recommends a set of drawing conventions to be used by all parties in the building industry in the preparation of drawings.

Part 5: Colour and linetype [CP 83 : Part 5 : 2001 (2015)+C1 : 2017]

This standard establishes the general principles and formats for usage of colour and linetype for construction computer-aided design (CAD) files.

Users of these standards include architects, professional engineers, consultants, contractors, developers and relevant regulatory/government agencies.

Mature standards

It is proposed to classify the following standards as mature standards as there are no foreseeable changes to these standards. Hence, they will not be reviewed until a request is put forth to do so.

7. Code of practice for classification of construction cost information [CP 80 : 1999 (2015)]

This standard comprises:

- an elemental classification;
- a work sections classification;
- a mapping dictionary for elements and work sections; and
- guidance notes for the elemental classification.

8. Code of practice for construction electronic measurement standards (CEMS)

Part 1: Standard method of measurement (SMM) for building works [CP 97 : Part 1 : 2002 (2015)]

This standard comprises:

- Guidance notes and general principles; and
- Measurement rules for items related to building works.

Part 2: Standard method of measurement (SMM) for mechanical and electric works [CP 97 : Part 2 : 2004 (2015)]

This standard comprises:

- Guidance notes and general principles; and
- Measurement rules for items related to mechanical and electrical works.

9. Code of practice for information exchange and documentation at handing/taking-over of buildings upon completion [SS 517 : 2005 (2015)]

This standard recommends best practices in respect of documentation in the handing and taking-over of completed buildings.

10. Code of practice for building project document control system [SS 527 : 2006 (2015)]

This standard establishes a master file template to support document management and workflow software for the developers / consultants / contractors and sub-contractors to use concurrently an integrated / interoperable project planning control extranet system.

Users of the above standards (items 7 to 10) include architects, professional engineers, consultants, contractors, developers, quantity surveyors and relevant regulatory/government agencies.

(III) Chemical

Revision

11. Code of practice for the design, construction and operation of pipeline service corridors (Revision of SS 512 : 2005)

This standard sets down the engineering and management system requirements in the design, construction and operation of pipeline service corridors in Singapore. This standard is applicable only for new pipelines/piperacks/pipetracks in existing or new pipeline service corridors.

The major changes in this revision include the new requirements on fire water line, separation distance between piperack and adjacent company boundary, separation distance between piperack and adjacent company boundary and patrolling of P&FM pipelines for class 1 and 2 locations. In addition, the previous Annexes A to E were removed to align with current industry practices and requirements.

The draft was released for public comment from 15 February 2019 to 16 April 2019. The Working group had since deliberated and addressed all comments received on the standard. The standard now contains new requirements on vibration limits and revised requirements on fire water system for piperack/pipetrack.

Potential users of the standard may include chemical and petrochemical companies, third party logistics companies and pipeline service corridor owners and operators, and relevant government agencies.

Closing date for comments: **8 September 2020**

(IV) Energy and Resources

New

12. Code of practice for long term measurement of compressed air systems energy efficiency

This standard aims to promote a systematic approach in measuring the energy efficiency of compressed air systems. The standard defines a set of instrumentation requirements, process parameters and performance indicators to support the benchmarking of energy performance for compressed air systems. Establishing a standardised measurement methodology will encourage the adoption and development of more energy efficient industrial equipment and systems in Singapore.

Potential users of the standard may include industrial facilities with compressed air systems, local consultants, energy services companies, contractors, designers of equipment and systems, and facilities management companies.

(V) **Food**

New

13. Clean and green standard for urban farms (agriculture)

This standard specifies requirements for urban farms to establish a clean and green urban agriculture production system, and for certification bodies to assess the established clean and green production system. It covers farming techniques, practices, and management of a production system to grow farm products that can be labelled as clean and green.

Key performance indicators are included for farms to monitor their resource consumption and waste management, together with specifications for a quality, safe and clean product. This standard is applicable to urban farms that produce terrestrial vascular plants as crops meant for consumption such as vegetables, fruits, herbs, sprouts and condiments.

Potential users of the standard may include urban farmers, testing, inspection and certification bodies, companies, institutes of higher learning, training providers and government agencies.

Copies of the drafts and standards are available at:

Viewing from Singapore Standards eShop

Login to Singapore Standards eShop at: www.singaporestandardseshop.sg

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

B) Notification of Work Item Proposals

B.1 Proposed New Work Items

(I) **Food**

1. Good agriculture practice

This standard specifies requirements for the certification of vegetable farms that have implemented farm management systems for the production of safe and high quality vegetables, while minimising impact to the environment and upholding workers' health and safety through good agriculture practices.

It covers a quality management system and best practices in the following four areas of vegetable farming:

- food safety;
- worker health, safety and welfare;
- environmental management;
- produce quality.

The standard covers all phases of farm operations, including pre-production, production, harvesting and post-harvesting prior to transportation.

2. Good animal husbandry practice

This standard specifies requirements for the certification of layer poultry farms that have implemented good farm management systems and biosecurity measures for the production of high quality and safe produce, while minimising impact to the environment and upholding the welfare of animals through good animal husbandry practices.

It covers a quality management system and best practices in the following four areas of farm production:

- food safety;
- worker health, safety and welfare;
- environmental sustainability and produce quality aspects; and
- animal welfare.

The standard covers all phases of farm operations, including pre-production, production, collection, sorting and depopulation prior to transportation.

3. Good aquaculture practice

This standard specifies requirements for the certification of food fish farms that have implemented socially responsible farm management systems for the production of high quality and safe produce, while minimising impact to the environment and upholding the welfare of animals through good aquaculture practices.

It covers quality management system and best practices in the following four areas of fish farm production:

- food safety;
- animal health and welfare;
- environmental integrity and socio-economic aspects;
- produce quality.

The standard covers all phases of farm operations, including pre-production, production, harvesting and post-harvesting prior to transportation for both land-based and coastal food fish farms.

This standard supersedes the proposal for the development of a new guideline on aquaculture practices and management of offshore finfish farms which was previously announced. With this new development, this standard will be developed instead to cover both land-based and coastal food fish farms.

The above standards will be relevant to testing, inspection and certification bodies, farmers, farm suppliers, buyers of farm produce (e.g. importers, exporters and retailers), training providers, institutes of higher learning and government agencies.

(II) Manufacturing

4. Design guidelines for additive manufactured parts

This standard specifies the features of material extrusion, laser-based powder bed fusion of metals (PBF-LB/M) and directed energy deposition (DED) and provides detailed process-specific design recommendations. Examples of ranges of values to work with have also been included. In addition, design guidelines for military applications are provided.

This standard also helps designers minimise risk of manufacturing failure by considering the constraints at the design stage. Specific design solutions and process-specific or material-specific data are not supported.

Potential users of this standard include maintenance, repair and overhaul providers, design engineers, and developers of AM design guidelines and design guideline systems for military applications.

(III) Trade and Connectivity

5. Technical Reference – Terminology on asset management in the Singapore railway industry

The standard sets out the definitions of terms used in works related to asset management within the Singapore railway industry. The standard covers all asset management related works in the railway system such as asset planning, design, procurement, operation, maintenance, performance monitoring, modification and renewal, decommissioning and replacement. The standard does not cover terminology specific to individual assets, e.g. terminology and abbreviations for the permanent way.

6. Technical Reference – Specification of key performance indicators for asset management in the Singapore railway industry

The standard specifies asset management related performance indicators within the Singapore railway industry. It covers the performance of asset management, maintenance of railway assets as well as the methods of computation of these indicators where possible. The standard is applicable only to physical assets to which an asset management system is applied.

7. Technical Reference – Safety performance and benchmarking system for the rapid transit system

The standard sets out the definitions of leading and lagging indicators for safety performance in the rapid transit system, which cover employee, contractor, and passenger safety. The intention is to allow for an objective, effective and efficient evaluation of safety performance in the Singapore railway industry.

Potential users of the standards may include rail transport operators, contractors, suppliers/manufacturers, tertiary institutions, testing bodies and government agencies.

B.2 Review of Singapore Standard

(I) Electrical and Electronics

1. Technical Reference for electric vehicle charging system (TR 25 : 2016)

This standard applies to on-board and off-board equipment for charging electric vehicles in public and private residential premises at standard a.c. supply voltages up to 1000 V and at d.c. voltages up to 1500 V.

It covers the requirements for electrical installation, functional needs and safety, and connection to the electric vehicle. It states the safety requirements for the protection of persons and properties against electrical hazards.

Users of the standard include manufacturers/suppliers of electric vehicles and electric vehicle charging system, professional/consulting engineers, testing laboratories, electrical contractors and licenced electrical workers.

(II) Food

2. Guidelines for developing food products that qualify for approved nutrition or health claims (TR 58 : 2017)

This standard specifies the recommended practices/processes for the application of functional ingredients in food and beverage products in order to qualify for nutrition or health claims.

This standard provides practical guidance for food manufacturers to develop food products that qualify for approved nutrition or health claims. It can help local food manufacturers reduce the time and resources needed for the innovation and development of food products with functional ingredients.

Users of the standard include food manufacturers, consultancy firms, training providers, institutes of higher learning and government agencies.

3. Guidelines on food safety management for food service establishments (SS 583 : 2013)

This standard provides the necessary steps to assist companies to set up a basic food safety management system (FSMS) based on the hazard analysis and critical control point (HACCP) principles.

The standard focuses on critical hazards found in a typical food service establishment and measures to control and minimise them. It is used in conjunction with the Supplement to SS 583, which provides the necessary steps to get food establishments started on an FSMS by providing samples of documentation, HACCP plans and guidance on good food hygiene and food handling practices that are key to food safety.

Users of the standard include food service establishments (including caterers), consultancy firms, training providers, institutes of higher learning and 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 Leefung 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. What happens after I have submitted my comments?

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

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

Drafts will not be available after the public comment period.

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

You can propose the development of a new standard [here](#).