Enterprise Singapore

Submit Comments

ENTERPRISE SINGAPORE CALLS FOR PUBLIC COMMENTS – 16 APRIL 2021

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:

Food – good agriculture practice

Information Technology – cards and security devices, radio frequency power and signal interface, initialisation and anticollision, biometric data interchange, finger minutiae data, face image data, iris image data, voice data

For more information on viewing the documents, click here.

Closing date for comments: **17 June 2021**

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

B)   Notification of New Work Items

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 standard and content that can be included into the following proposal:

Robots and Unmanned Aerial Systems – unmanned aircraft systems

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

Closing date for comments: **17 May 2021**

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

B2.   **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Published Singapore Standards are reviewed to determine if they should be updated, confirmed or withdrawn (if they no longer serve the industry's needs) or classified as mature standards (no foreseeable changes; to be reviewed only upon request).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:

Quality and Safety - gas canisters, portable gas cookers

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: **17 May 2021**

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)   Food

New

1.   **Specification for good agriculture practice (GAP)**

The standard specifies requirements for a farm management system, detailing best practices to prevent risk of hazards from occurring, ensuring the production of safe and high-quality produce, as well as minimising impact to the environment and workers.

The standard covers all phases of farm operations, including pre-production (nursery), cultivation, harvesting and post-harvest handling prior to delivery of agriculture products for both outdoor and indoor agriculture. This standard applies to vegetables, fruits and herbs farms.

It covers the following four areas of agriculture farm production:

a) food safety;
b) crop protection and produce quality;
c) environmental management; and
d) worker health safety and welfare.

Potential users of the standard include farmers, farm suppliers, buyers of farm produce (e.g. importers, exporters and retailers), testing, inspection and certification bodies, training providers, institutes of higher learning and government agencies.

(II)   Information Technology

(i)   Identical adoption of ISO/IEC 14443 Parts 1, 2 and 3

The ISO/IEC 14443 is a series of international standards which defines proximity objects/cards used for identification. These objects/cards are intended for use when they are placed near the associated coupling devices.

Potential users of these standards include technology vendors, solution providers, systems integrators and agencies deploying systems/solutions using contactless proximity cards or objects.

2. **Cards and security devices for personal identification — Contactless proximity objects — Part 1: Physical characteristics** (identical adoption of ISO/IEC 14443-1:2018)

   This standard defines the physical characteristics of proximity cards (PICCs).

   It is intended to be used in conjunction with other parts of ISO/IEC 14443.

3. **Cards and security devices for personal identification — Contactless proximity objects — Part 2: Radio frequency power and signal interface** (identical adoption of ISO/IEC 14443-2:2020)

   This standard specifies the characteristics of the fields to be provided for power and bi-directional communication between proximity coupling devices (PCDs) and proximity cards or objects (PICCs). It does not specify the means of generating coupling fields, nor the means of compliance with electromagnetic radiation and human exposure regulations, which can vary depending on the country.

4. **Cards and security devices for personal identification — Contactless proximity objects — Part 3: Initialisation and anticollision** (identical adoption of ISO/IEC 14443-3:2018)

   This standard describes the following:
   - Polling for proximity cards or objects (PICCs) entering the field of a proximity coupling device (PCD);
   - The byte format, the frames and timing used during the initial phase of communication between PCDs and PICCs;
   - The initial Request and Answer to Request command content;
   - Methods to detect and communicate with one PICC among several PICCs (anticollision);
   - Other parameters required to initialise communications between a PICC and PCD;
   - Optional means to ease and speed up the selection of one PICC among several PICCs based on application criteria;
   - Optional capability to allow a device to alternate between the functions of a PICC and a PCD to communicate with a PCD or a PICC, respectively. A device which implements this capability is called a PXD.

   This document is applicable to PICCs of Type A and of Type B (as described in ISO/IEC 14443-2), to PCDs (as described in ISO/IEC 14443-2) and to PXDs.

(ii) <u>**Identical adoption of ISO/IEC 19794 Parts 1, 2, 4, 5, 6 and 13**</u>

The ISO/IEC 19794 series of standards describes interchange formats for different types of biometric data. It is one of a family of International Standards developed by ISO/IEC JTC 1/SC 37 (Biometrics) that supports interoperability and data interchange among biometric applications and systems. This family of standards specifies requirements that solve the complexities of applying biometrics to a wide variety of person-recognition applications, whether such applications operate in an open systems environment or consist of a single, closed system.

For ISO/IEC 19794 Parts 1, 2, 4 and 5, there are two concurrent versions of the ISO/IEC standard, which are not mutually compatible. However, both versions are in use by the industry, and have been proposed for adoption as Singapore Standards. The two versions will be published as separate standards, and be differentiated by a suffix in the standard number of the Singapore Standard, e.g. SS ISO/IEC 19794-1A for the first version, and SS ISO/IEC 19794-1B for the second version.

Potential users of these standards include technology vendors, solution providers, systems integrators and agencies deploying biometric systems/solutions.

5. **Information technology — Biometric data interchange formats — Part 1: Framework**
(Identical adoption of ISO/IEC 19794-1:2006)

The standard describes the general aspects and requirements for defining biometric data interchange formats. The notation and transfer formats provide platform independence and separation of transfer syntax from content definition.

The standard defines what is commonly applied for biometric data formats, i.e. the standardisation of the common content, meaning, and representation of biometric data formats of biometric types considered in the specific parts of ISO/IEC 19794.

6. **Information technology — Biometric data interchange formats — Part 1: Framework**
(Identical adoption of ISO/IEC 19794-1:2011 (Confirmed in 2017))

As above in 4.

7. **Information technology — Biometric data interchange formats — Part 2: Finger minutiae data** (Identical adoption of ISO/IEC 19794-2:2005)

The standard specifies a concept and data formats for representation of fingerprints using the fundamental notion of minutiae. It is generic, in that it may be applied and used in a wide range of application areas where automated fingerprint recognition is involved. It contains definitions of relevant terms, a description of how minutiae are to be determined, data formats for containing the data for both general use and for use with cards, and conformance information. Guidelines and values for matching and decision parameters are provided.

The standard specifies the following:
- the fundamental data elements used for minutiae-based representation of a fingerprint;
- three data formats for interchange and storage of this data: a record-based format, and normal and compact formats for use on a smart card in a match-on-card application;
- optional extended data formats for including additional data such as ridge counts and core and delta location.

The standard provides for interchange of finger minutiae data between sensing, storage and matching systems.

8. **Information technology — Biometric data interchange formats — Part 2: Finger minutiae data** (Identical adoption of ISO/IEC 19794-2:2011 (Confirmed in 2017))

As above in 6.

9. **Information technology — Biometric data interchange formats — Part 4: Finger image data** (Identical adoption of ISO/IEC 19794-4:2005)

The standard specifies a data record interchange format for storing, recording, and transmitting the information from one or more finger or palm image areas within an ISO/IEC 19785-1 data structure. This can be used for the exchange and comparison of finger image data. It defines the content, format, and units of measurement for the exchange of finger image data that may be used in the verification or identification process of a subject. The information consists of a variety of mandatory and optional items, including scanning parameters, compressed or uncompressed images and vendor-specific information. This information is intended for interchange among organisations that rely on automated devices and systems for identification or verification purposes based on the information from finger image areas. Information compiled and formatted in accordance with ISO/IEC 19794-4 can be recorded on machine-readable media or may be transmitted by data communication facilities.

10. **Information technology — Biometric data interchange formats — Part 4: Finger image data** (Identical adoption of ISO/IEC 19794-4:2011 (Confirmed in 2017))

As above in 8.

11. **Information technology — Biometric data interchange formats — Part 5: Face image data** (Identical adoption of ISO/IEC 19794-5:2005)

    The standard:
    - Specifies a record format for storing, recording, and transmitting information from one or more facial images or a short video stream of facial images;
    - Specifies scene constraints of the facial images;
    - Specifies photographic properties of the facial images;
    - Specifies digital image attributes of the facial images; and
    - Provides best practices for the photography of faces.

12. **Information technology — Biometric data interchange formats — Part 5: Face image data** (Identical adoption of ISO/IEC 19794-5:2011 (Confirmed in 2017))

    As above in 10.

13. **Information technology — Biometric data interchange formats — Part 6: Iris image data** (Identical adoption of ISO/IEC 19794-6:2011 (Confirmed in 2017))

    The standard specifies iris image interchange formats for biometric enrolment, verification and identification systems.

14. **Information technology — Biometric data interchange formats — Part 13: Voice data** (Identical adoption of ISO/IEC 19794-13:2018)

    This standard specifies a data interchange format that can be used for storing, recording, and transmitting digitised acoustic human voice data (speech) assumed to be from a single speaker recorded in a single session. This format is designed specifically to support a wide variety of Speaker Identification and Verification (SIV) applications, both text-dependent and text-independent, with minimal assumptions made regarding the voice data capture conditions or the collection environment.

Copies of the drafts and standards are available at:

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Closed on Saturdays, Sundays and Public Holidays

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 New Work Items**

B.1 **Proposal for New Work Items**

Robots and Unmanned Aerial Systems

1. **Specification for quality management and application of artificial intelligence on building facade inspection using unmanned aircraft systems**

This standard provides the following:

a) Competency requirements for unmanned aircraft systems (UAS) service providers to carry out building facade inspection. This includes their capabilities on drone technologies, abilities to provide engineering assessment on facade inspection, or have a drone inspection system that is able to auto detect facade defects (with the application of Artifical Intelligence (AI)), construct 3D mapping and auto generate reports.

b) Analysis, verification and diagnosis requirements for UAS service providers such as the interpretation of results/images through AI. This would allow conformity assessment bodies to be able to deliver a report (inspection report, test report or certification report etc.) which are essential for accreditation.

Potential users of the standard may include UAS service providers and end-users, government agencies, testing, inspection and certification bodies, professional institutions, companies, institutes of higher learning and training providers.

B2. **Proposal for the Review of Singapore Standards**

(I) *Quality and Safety*

1. **Specification for Liquefied Petroleum (LP) gas and non-refillable gas canisters for portable gas cookers** (SS 400 : 1997)

The standard specifies the requirements for canisters which contain liquefied petroleum gas for use in portable gas cookers.

Potential users include government authority, TIC (testing, inspection and certification) bodies as well as suppliers of portable gas cookers and gas canisters.

2. **Specification for portable gas cookers – General specifications and test methods** (SS 401 : 1997)

The standard specifies the requirements for portable gas cookers equipped with a canister filled with liquefied petroleum gas.

Potential users include government authority, testing, inspection and certification bodies and portable gas cooker and gas canister suppliers.

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].