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Interested committees:

Title: Draft BS ISO/IEC 25005-1 ISO/IEC 25005-1 Information technology. Data use in smart cities. Part 1: Framework.

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- iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	



DRAFT International Standard

ISO/IEC DIS 25005-1

Information technology — Data use in smart cities —

Part 1: Framework

ICS: 13.020.20; 35.240.01

ISO/IEC JTC 1

Secretariat: **ANSI**

Voting begins on:
2025-09-03

Voting terminates on:
2025-11-26

This document has not been edited by the ISO Central Secretariat.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by ISO/IEC JTC 1/ WG 11 Information technology, smart cities.

This first edition cancels and replaces the first/second/... edition (ISO #####:#####), which has been technically revised.

The main changes compared to the previous edition are as follows:

— xxx xxxxxxxx xxx xxxxx

A list of all parts in the ISO ##### series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

This document provides an integrated framework for data use that supports the multi-dimensional use of data as citywide strategic resources and assets. It aims to facilitate the evidence-based decision making and enable data-based, data-driven and data-enabled smart city development and applications.

Data use involves the activities enabling data value realization for specific purposes in smart cities along the data value chain. This document will benefit to problem-solving strategies and solutions for data use, data applications and data services citywide, including but not limited to data being not available when needed, data being not trusted when used, data being not used easily when available, data being not used securely and data value being not realized when they are in use.

This document provides a framework for data use in smart cities across five dimensions:

- data availability (ensuring data are accessible);
- data quality assurance (ensuring data are useful);
- ease of data use (ensuring data are easy to use);
- data use security (ensuring data are used securely); and
- data-enabled innovation (ensuring data are used for enabling intelligent applications and services).

This document enhances the total capabilities of data use to support data-based, data-driven and data-enabled city-wide ICT, big data and AI applications and smart city services. It will fill in the gaps in standards development for better collaboration and harmonization of sustainable data use considerations for smart cities from different SDOs to satisfy the maximized needs of multiple stakeholders from many views and various dimensions, e.g. effective, sustainable, comprehensive and innovative use of data as strategic resources and assets citywide.

This document can be used for city wide data use planning, deployment of design, implementation and management in the smart city development and applications.

Data use in smart cities standard series consists of three parts. This document as the Part 1 of data use in smart cities standard series, provides foundations for standards collaboration on data use city wide and provides basic principles and core characteristics of considerations for harmonization of a series of standards for data use in smart cities, including ISO/IEC TR 25005-2 Information technology – Data use in smart cities – Part 2: Use case analysis and common considerations and ISO/IEC TS 25005-3 Information technology – Data use in smart cities – Part 3: Measurement, evaluation and reporting.

[Figure 1](#) provides the relations among ISO/IEC 25005-1, ISO/IEC TR 25005-2 and ISO/IEC TS 25005-3, describing guiding principles for data use in smart cities, core characteristics of considerations of data use in smart cities which are the basis for data use in smart cities standard series.

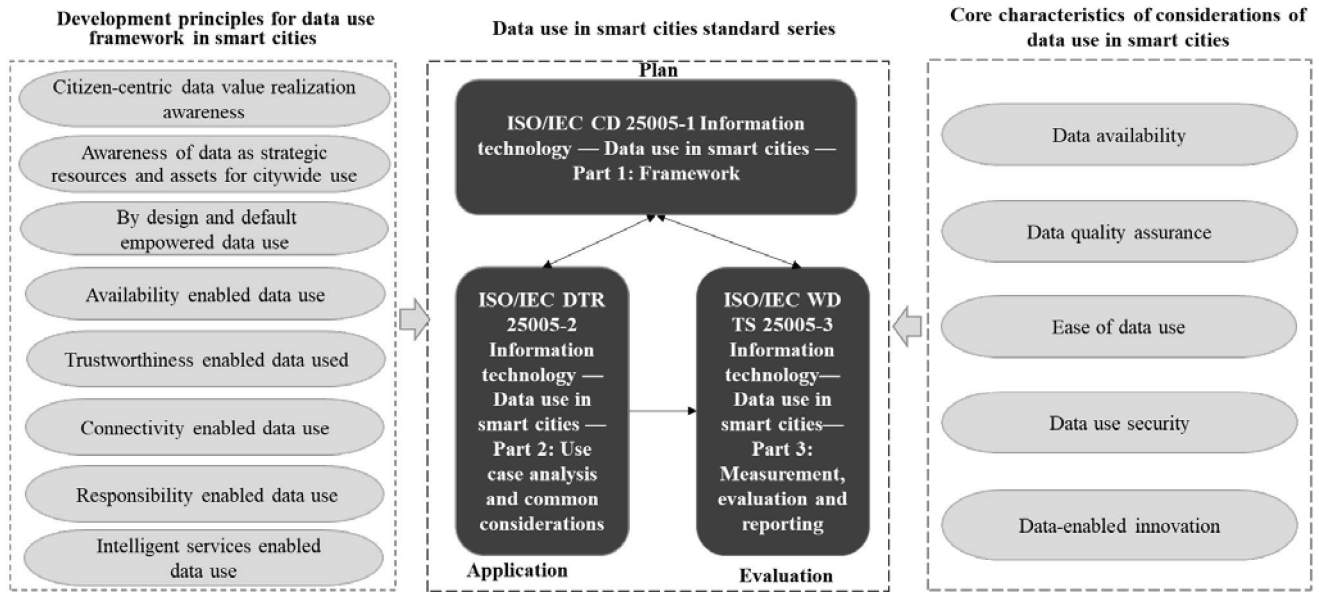


Figure 1 — Data use in smart cities standard series

Information technology — Data use in smart cities —

Part 1: Framework

1 Scope

This document provides a framework for data use in smart cities from five dimensions including that data are available (data availability), data are useful (data quality assurance), data are easy to use (ease of data use), data are used securely (data use security), and data are used for enabling intelligent applications and services (data-enabled innovation), which facilitates effective, sustainable, comprehensive and innovative use of data as citywide strategic resources and assets.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1 data availability

property of being accessible and usable upon demand by an authorized entity

[SOURCE: ISO 37166:2022, 3.2]

3.2 data exchange

concerning the representation, transmission, reception, storage, and retrieval of data

[SOURCE: ISO/IEC 20944-1:2013, 3.21.13.1, modified — Note 1 to entry deleted]

3.3 data-enabled innovation

extent to which data are used by specified users to achieve specified goals with data-enabled monitoring applications, data-enabled early warning and prediction applications, data-enabled intelligent decision-making applications in a specified context of use

3.4 data privacy

right and obligation of individuals and organizations with respect to the collection, use, retention, disclosure and disposal of personal data

[SOURCE: ISO/TS 17573-2:2020,^[2] 3.57, modified — the word “information” has been replaced by “data”, “rights and obligations” and changed in singular form.]