



FINAL DRAFT Technical Report

ISO/IEC DTR 25005-2

Information technology — Data use in smart cities —

Part 2:
Use case analysis and common standards considerations

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

A list of all parts in the ISO 25005 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.

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Introduction

This document aims to provide common considerations about data use in smart cities based on the analysis of collected use cases.

The objectives and implications of this document are:

- to support effective, sustainable, comprehensive and innovative use of data as strategic resource city-wide for better performance, operation, service and sustainability of city;
- to support human-centred standardization collaboration on data use for better harmonization, connectivity, interoperability and reusability of data as strategic resources and asset in digital transformation of city;
- to synthesize common considerations that enable data availability, data usefulness, data connectivity, data security, and data enabled intelligent predictions and actions from city wide multi-stakeholder's interests from collected use cases;
- to collect good practices that enable mapping, building, operating, assessing and continuous improvement of data use in ICT development and applications, investment, procurement, monitoring, auditing and performance assessment;
- to improve digital enhancement of total capabilities of data use and evidence-based decision making in smart cities such as data use for public health emergency and control across multi-dimensions, multi-domains, multi-layers and multi-regions;
- to support data-based and data-driven and data-enabled ICT development and applications in smart cities including but limited to digital governance, legal governance, data quality governance, ICT governance, data security governance, smart governance, etc;
- to support the appropriate use of rights related to data distributed within and between cities, including intellectual property rights and privacy data derived from human rights.

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Information technology — Data use in smart cities —

Part 2: Use case analysis and common considerations

1 Scope

This document provides use cases, common considerations for use cases analysis for data use in smart cities.

In particular, this document includes:

- a) collected use cases;
- b) methods of analyzing the collected use cases about data use in smart cities;
- c) common considerations about data use in smart cities based on the analysis of collected use cases.

2 Normative references

There is no normative reference 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 use

handling or dealing with data for a specific purpose

Note 1 to entry: In smart cities, data use refers to activities enabling data value realization along with data value-chain, including data availability, data qualifiability, ease of data use, data use security, and data-enabled innovation from city wide multi-stakeholder's interests.

[SOURCE: ISO/IEC 5207:2024, 3.30, modified — Note 1 to entry is changed.]

3.2

data value chain

intelligent use, management and reuse of data to deliver insight

Note 1 to entry: Data value chain in this document includes data availability, data qualifiability, ease of data use, data use security, and data enabled innovation for intelligent predictions and actions from city wide multi-stakeholder's interests.

[SOURCE: ISO/IEC 17917:2024, 2.5, modified — Note 1 to entry is added.]