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Smart city system — Methodology for concepts building

AS IEC SRD 63235:2022

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Clean Energy Council
Engineers Australia
Institute of Public Works Engineering Australasia
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Smart city system — Methodology for concepts building

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Preface

This Standard was prepared by the Standards Committee IT-269, Smart Cities Systems.

The objective of this document, which is a Systems Reference Deliverable (SRD), is to provide a holistic system of systems approach to provide views, methodology framework, principles, processes, rules, and evaluation criteria for smart city system concepts building.

This document does not specify the definitions of a smart city system.

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SMART CITY SYSTEM – METHODOLOGY FOR CONCEPTS BUILDING

FOREWORD

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IEC SRD 63235, which is a Systems Reference Deliverable, has been prepared by IEC systems committee Smart Cities.

The text of this Systems Reference Deliverable is based on the following documents:

Draft SRD	Report on voting
SyCSmartCities/135/DTS	SyCSmartCities/153/RVDTS

Full information on the voting for the approval of this Systems Reference Deliverable can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

This document provides methodologies being performed and to be continually performed in the sustainable development of a future part of IEC 60050[1] on smart city systems.

The methodology in this document provides system approaches to coordination, cooperation and connectivity of the terminology sources including IEC, ISO and ITU. The methodology fosters a multi-dimensional system of systems view on smart city systems across dimensions, domains and layers along the lifecycle of a smart city system, scenarios and use cases, supporting the sustainable development of smart city system arrangements, activities and artefacts, convergence of people, process and productivity globally.

[1] Planned as IEC 60050-831, *International Electrotechnical Vocabulary (IEV) – Smart city systems*.

SMART CITY SYSTEM – METHODOLOGY FOR CONCEPTS BUILDING

1 Scope

This document, which is a Systems Reference Deliverable, provides a holistic system of systems approach to provide views, methodology framework, principles, processes, rules, and evaluation criteria for smart city system concepts building.

The methodology is applicable to continual improvement of a future part of IEC 60050 on smart city systems, but is not limited to it.

NOTE It is planned that smart city systems will form the subject of IEC 60050-831.

This document does not specify the definitions of a smart city system.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

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

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

3.1
characteristic
abstraction of a property (3.3)

Note 1 to entry: Characteristics are used for describing concepts (3.2).

[SOURCE: ISO 1087:2019, 3.2.1, modified – The EXAMPLE has been deleted.]

3.2
concept
unit of knowledge created by a unique combination of **characteristics** (3.1)

Note 1 to entry: Concepts are not necessarily bound to particular natural languages. They are, however, influenced by the social or cultural background, which often leads to different categorizations.

Note 2 to entry: This is the concept "concept" as used and designated by the term "concept" in terminology work. It is a very different concept from that designated by other domains such as industrial automation or marketing.

[SOURCE: ISO 1087:2019, 3.2.7]