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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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

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Introduction

Smart city is a concept that has been widely used by city administrators, planners and implementers for decades. Although the precise definition of smart city has not been agreed upon among different international standardization organizations, the significance of information and communication technology (ICT) as indispensable key enablers is universally recognized. During the global development of smart cities, the issue of effectively adopting ICT in smart city programs as key enablers has become a common focus among scientific research institutions, industries, city administrators and construction implementers. This document supports the United Nations Sustainable Development Goals[1][7][8].

It is an urgent and important task to develop standard evaluation methods and indicators focusing on the area of ICT within the smart city, with which the city stakeholders can understand the smart city performance from the perspective of ICT. The evaluation methods and indicators focus on the individual efficient functioning of different systems, infrastructures and facilities. In addition, they also provide the guidance on how cities function holistically and facilitate innovation and growth in an integrated and coherent way.

The purpose of establishing smart city ICT indicator systems and conducting smart city evaluations is to guide and promote a systematic construction of a smart city. The indicators can be used as a whole package to evaluate a smart city holistically. The package can also be tailored as individual parts when evaluating cities or certain aspects of cities. The indicators can be used to:

— evaluate the city ICT preparation state before starting the smart city construction;

— evaluate the effect of city ICT during and after the smart city construction;

— compare the smart city construction between cities in the area of city ICT in a certain area to promote smart city healthy competition and development.

This document establishes criteria to evaluate in making cities smarter. This document can be used to evaluate the level of smart city development. It is applicable to city, municipality or the local government. For city administration organizations, it can be used for self-evaluation and to develop corresponding ICT strategies to make cities smarter. For related evaluation agencies and scientific research institutions, it also provides guidance and reference in developing smart city ICT indicators.

The indicators in this document are consistent with the overall work of ISO/TC 268/WG 2 on smart city indicators.

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Information technology — Smart city ICT indicators

1 Scope

This document defines a comprehensive set of evaluation indicators specially related to information and communication technologies (ICT) adoption and usage in smart cities. Firstly, it establishes an overall framework for all the indicators. Then, it specifies the name, description, classification and measurement method for each indicator.

2 Normative references

There are no normative references in this document.

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