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Information technology — Smart City ICT reference framework —

Part 1: Smart city business process framework

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Foreword

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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 document 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 or www.iec.ch/members_experts/refdocs).

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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. In the IEC, see www.iec.ch/understanding-standards.

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

A list of all parts in the ISO/IEC 30145 series can be found on the ISO and IEC websites.

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 and www.iec.ch/national-committees.

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Introduction

0.1 General

The purpose of the ISO/IEC 30145 series is to assist city chief information officers (CIO) and other stakeholders in planning and implementing a smart city. It comprises the following three parts:

— Part 1: Smart city business process framework (this document)

— Part 2: Smart city knowledge management framework

— Part 3: Smart city engineering framework

Each of the three parts are aimed at a different role or viewpoint within the city and thus separate focus needs to be maintained. The "separation of concerns" is a principle for the development of a city as it uses ICT to deliver the vision and objectives for the city. The value of using the separation of concerns is to simplify development and maintenance of the architecture as the city both develops and delivers improved outcomes for the city stakeholders.

Figure 1 shows the components of the smart city ICT reference framework, which consist of 5 components: stakeholders, vision and outcomes, the business process framework, the knowledge management framework, and the engineering framework. This document describes stakeholders, vision and outcomes, and the business process framework. The knowledge management framework and engineering framework are described in ISO/IEC 30145-2 and ISO/IEC 30145-3 respectively.

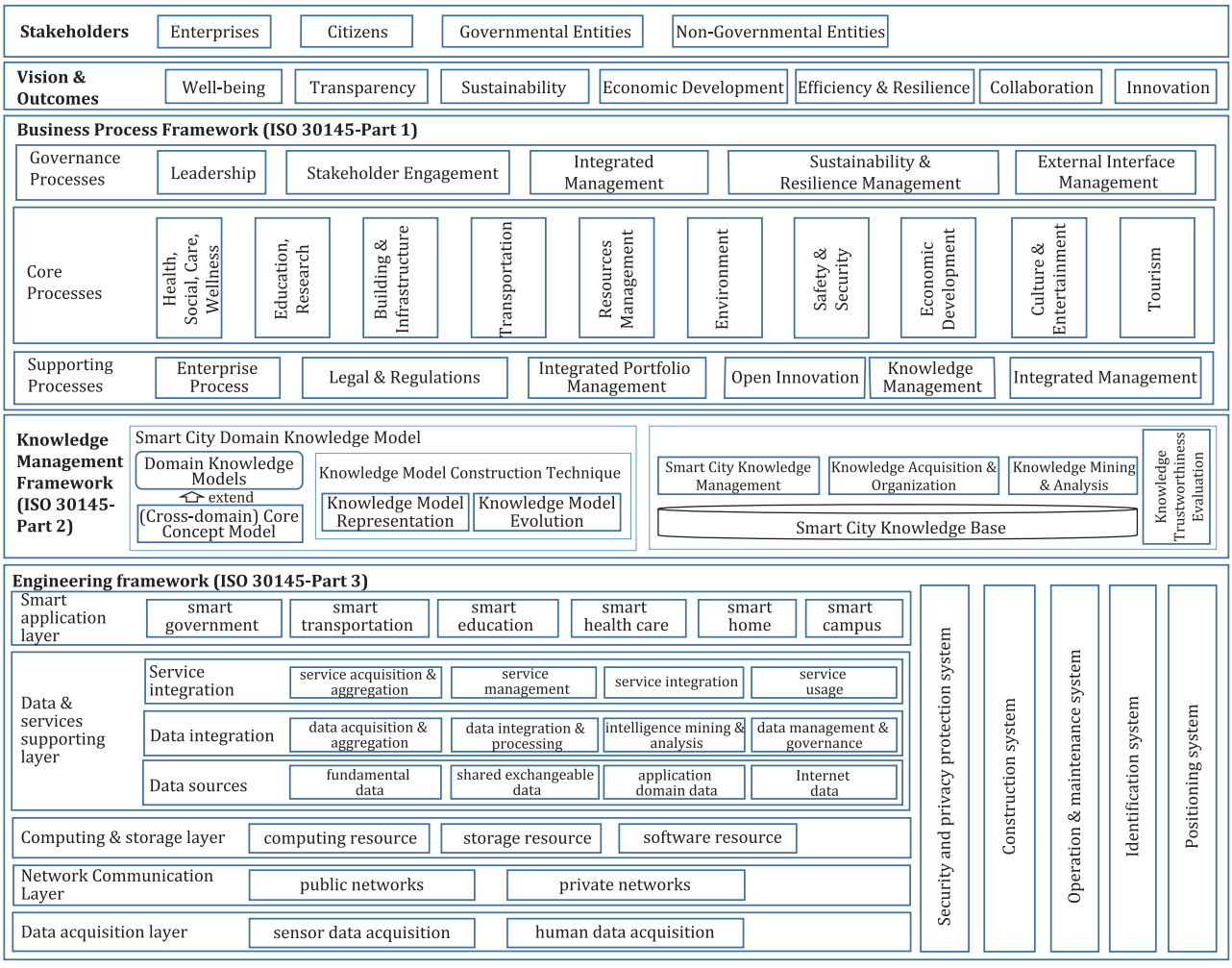


Figure 1 — Smart city ICT reference framework

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0.2 Stakeholders

The stakeholders served by the smart city ICT reference framework are enterprises, citizens, government entities and non-government entities. This stakeholder list is not exhaustive but defines the key stakeholders in a smart city and the user for the smart city ICT reference framework.

0.3 Vision and outcomes

The motivation for making a city smart is a result of a shared vision and a set of agreed outcomes from all the city stakeholders. The vision and outcomes of the smart city ICT reference framework are well-being, transparency, sustainability, economic development, efficiency and resilience, collaboration and innovation. This vision and outcomes list is not exhaustive, but defines the key vision and outcomes of a smart city. The smart city ICT reference framework articulates a vision that the Smart City will be transparent in the delivery of city services that meet city sustainability ambitions. This vision uses collaboration and innovation approaches to deliver desired city outcomes. City outcomes are expected to improve the efficiency and resilience of city services and promote economic development activities that enhance the well-being of citizens.

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Information technology — Smart City ICT reference framework —

Part 1:
Smart city business process framework

1 Scope

This document specifies a generic business process framework for a smart city focusing solely on smart city-specific processes. Generic business processes common between smart cities and commercial organizations are be identified but not detailed.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

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 http://www.electropedia.org/

4 Smart city business process overview

The objectives of a business process framework (adapted from the TM Forum 2015[8]) are to:

— create a common language for use across departments, systems, external partners and suppliers, reducing cost and risk of system implementation, integration and procurement; and

— adopt a standard structure, terminology and classification scheme for business processes to simplify internal operations and maximize opportunities to partner within and across industries.

The aim of the smart city business process framework is to identify and describe the key business processes required in a smart city and to provide a framework for individual cities to describe how those processes are being carried out within their city.

This will:

— allow cities to review how well their existing processes are designed to deliver the smart city outcomes for which they are aiming;

— allow business processes in different cities to be compared to enable the determination of best practices; and

— provide a foundation to enable more detailed work to be undertaken on these business processes in the future.

The business processes in this document are only a fraction of all the business processes found in a smart city. Only the most significant processes that make a city ‘smart’ have been included.

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