



SYSTEMS REFERENCE DELIVERABLE



**Smart city use case collection and analysis – Water systems in smart cities –
Part 1: High-level analysis**

INTERNATIONAL
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SMART CITY USE CASE COLLECTION AND ANALYSIS –
WATER SYSTEMS IN SMART CITIES –**
Part 1: High-level analysis**FOREWORD**

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This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 63301 series, published under the general title *Smart city use case collection and analysis – Water systems in smart cities*, can be found on the IEC website.

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

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INTRODUCTION

The construction of a smart city can create benefits for a society and its stakeholders. Water is a critical resource to support urban development and its sustainable use is recognized as a UN Sustainable Development Goal. Water infrastructure development, water management efficiency, water supply resilience, and the safe operation and use of water are important focal areas for IEC SyC Smart Cities.

This document focuses on water systems management, specifically water security whether directly from a natural source or via man-made infrastructure. Information and communications technologies (ICT) and electro-technologies can provide greater visibility and control, however their application does depend on the characteristics of individual water markets. Technology is not a panacea for resolving all issues and problems.

A gap exists in effective coordination and clear orientation and how industry and stakeholders are engaged within it.

Major stakeholders of water management and use include citizens, the water authority (government), and organizations (associations, business groups, utility companies). Each stakeholder has different and competing interests, market relationships and touch points to water system infrastructure, processes, operations, management and use.

Modelling these complex interactions into a systems architecture is a valuable exercise in understanding the issues, gaps and opportunities for sustainable water management.

This document focuses on use case collection and analysis to elicit requirements to support technical committees such as ISO/TC 224 and ISO/TC 147 in preparing sustainable water management standards for cities and communities.

This document also seeks to inform IEC technical committees to enable them to provide the technical standards needed.

SMART CITY USE CASE COLLECTION AND ANALYSIS – WATER SYSTEMS IN SMART CITIES –

Part 1: High-level analysis

1 Scope

This part of IEC 63301 provides an overview of water systems in smart cities, establishes a general approach for use case collection and analysis, and identifies major stakeholders and application areas for high-level analysis of water systems.

2 Normative references

There are no normative references in this document.