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**Smart city use case collection and analysis – Smart urban planning for smart cities –  
Part 1: High-level analysis**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SMART CITY USE CASE COLLECTION AND ANALYSIS –  
SMART URBAN PLANNING FOR SMART CITIES –****Part 1: High-level analysis**

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A list of all parts in the IEC SRD 63320 series, published under the general title *Use case collection and analysis – Smart urban planning for smart cities*, can be found on the IEC website.

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## INTRODUCTION

In recent years, research on the relationship between information and communication technology (ICT) and cities, focused on imagining the future of urban planning, has been one of the most interesting topics in the industry. Smart urban planning (SUP) for smart cities is a relatively new concept and has not received much attention around the world. The “smartness” of urban planning describes the intensive use of digital technologies to optimize the urban planning process. The concept of “smart city” has been implemented and developed all over the world. In order to construct a smart city successfully, knowing how to implement SUP for smart cities is essential, because it is the foundation of smart urban construction. However, at present, reaching a consensus on the overall architecture of standards of SUP for smart cities is still challenging. The direction and user requirements of standards development is not clear, which affects the development and application effectiveness of international standards of SUP for smart cities.

Aimed at addressing the above problems, a systems approach to collect and analyse SUP for smart cities use cases is put forward. The purpose of this document is to collect SUP for smart cities use cases globally, to sort out the current situation of SUP for smart cities both domestically and internationally, including methods, framework, ideas, and GAPS model, and to analyse the needs of SUP for smart cities work and its stakeholders.

Understanding the use cases makes it easier to describe SUP for smart cities clusters and highlight use cases' commonalities. All use cases that are selected have actual legitimacy. Planning requirements are extracted from the use cases, and recommendations are given for future standardization items related to SUP for smart cities. Collecting the use cases provides SUP for smart cities to validate confirm the SUP for smart cities reference model and reference architecture.

The target users for this document include the following stakeholders who have interest in SUP for smart cities:

- 1) smart city planners and service providers, who can learn about SUP for smart cities needs and how to implement the ideas;
- 2) government agencies and heads, who can use SUP for smart cities and implement in future works;
- 3) citizens who want to have a better understanding of SUP for smart cities;
- 4) SUP for smart cities operators who need to understand the requirements;
- 5) regulators who are responsible for developing and managing SUP for smart cities and related regulations.

# **SMART CITY USE CASE COLLECTION AND ANALYSIS – SMART URBAN PLANNING FOR SMART CITIES –**

## **Part 1: High-level analysis**

### **1 Scope**

This part of IEC SRD 63320 explains the definition, development goals and theoretical models of smart urban planning use case collection and analyses. This document identifies the key application areas of smart urban planning and determines the stakeholders and the relationships among them in the guidance of use case template.

### **2 Normative references**

There are no normative references in this document.