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SYSTEMS REFERENCE DELIVERABLE

Smart city use case collection and analysis – Intelligent operations centre for smart cities –

Part 2: Use case analysis



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

Draft	Report on voting	
SyCSmartCities/383/DTS	SyCSmartCities/393/RVDTS	

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

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 SRD 63302 series, published under the general title *Smart city use* case collection and analysis – *Intelligent operations centre for 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

Digital solutions are accelerating the integration of real-world applications in urban areas, including city governance, healthcare, environment, traffic, education, security and so on. However, many smart solutions are still implemented within single-domains, providing isolated city services. The data flows and data across the various services can be suitably integrated to provide sharing and re-usability. To be effective, the coordination of data and service requires an overarching framework coupled with an intelligent operations centre (IOC).

An IOC is tailored to provide urban managers, enterprises and citizens with access to operational and organized solutions. Based on city-level database and new technologies, such as big data, AI, cloud computing, blockchain etc., the IOC processes city information and provides innovative services for urban managers, operators and other stakeholders. Compared with single-domain systems, the IOC can better support monitoring and visualizing, decision making and cross-domain cooperation. The IOC will play an important role in integrating city services such as police, health services traffic management and rescue services, including but not limited to the following methods.

- a) The centralized operations dashboard and mobile application will allow real-time monitoring and information processing to improve response to emergencies.
- b) The centralized and intelligent platform will enable noticeable improvements in the management of public safety, like crime prevention, emergency response, threat prevention and response, and traffic management.
- c) The IOCs technologically advanced analysis, integrated communications, GPS and video surveillance capabilities will help residents and domain (energy, water, horticulture, waste and security) supervisors to collaborate in a smarter way.
- d) The integrated data visualization, near real-time collaboration and deep analytics it provides will help agencies prepare for problems, coordinate and manage response efforts and enhance the efficiency of services.
- e) IOC will enable residents to report issues such as broken street lights, electricity failure, water wastage, etc. and check resolution status using their mobile devices.
- f) IOC will include cyber security, privacy, artificial intelligence trustworthiness and digital ethics safeguards to protect infrastructure, places and citizens.

Currently, IOC solutions are being implemented in different cities around the world, and the stakeholders of these smart cities face similar challenges, including cross-domain cooperation, monitoring and visualizing, intelligent analysis, user-oriented experience, etc. The provision of standardization is considered as one of key factors to support IOC development, including the development of the conceptual model, data exchange, IT infrastructures, services, and so on.

1 Scope

This part of IEC SRD 63302 deals with the intelligent operations centre for smart city from the perspective of market relationship based on the analysis of IEC SRD 63302-1. This document establishes a framework between existing standards and stakeholder requirements, aimed at scoping out standard requirements and further standardization work. This document is a contribution to the IEC use case management repository, which aims to collect, administer, maintain, and analyse use cases.

2 Normative references

There are no normative references in this document.