



SYSTEMS REFERENCE DELIVERABLE

**Smart city use case collection and analysis – Intelligent operations centre for smart cities –
Part 1: High-level analysis**

INTERNATIONAL
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CONTENTS

FOREWORD.....	8
INTRODUCTION	10
1 Scope.....	11
2 Normative references.....	11
3 Terms, definitions and abbreviated terms.....	11
3.1 Terms and definitions.....	11
3.2 Abbreviated terms.....	13
4 Description of the study of intelligent operations centre	13
4.1 General	13
4.2 Outline of IOC conceptual reference model	14
4.3 Outline of IOC reference architecture.....	15
4.4 IOC characteristics	17
4.5 Roles of stakeholders.....	17
5 IOC application area description.....	18
5.1 General	18
5.2 Smart market supervision	18
5.2.1 Description.....	18
5.2.2 Objective	18
5.2.3 Current practice	18
5.2.4 Gaps	18
5.2.5 Stakeholders	19
5.2.6 Stakeholder ecosystem.....	19
5.2.7 Scenarios.....	20
5.2.8 Requirements	20
5.3 On-line government services.....	21
5.3.1 Description.....	21
5.3.2 Objective	21
5.3.3 Current practice	21
5.3.4 Gaps	21
5.3.5 Stakeholders	21
5.3.6 Stakeholder ecosystem.....	21
5.3.7 Scenarios.....	22
5.3.8 Requirements	22
5.4 Smart urban management	22
5.4.1 Description.....	22
5.4.2 Objective	22
5.4.3 Current practice	22
5.4.4 Gaps	23
5.4.5 Stakeholders	23
5.4.6 Stakeholder ecosystem.....	24
5.4.7 Scenarios.....	24
5.4.8 Requirements	25
5.5 Smart emergency response	26
5.5.1 Description.....	26
5.5.2 Objective	26
5.5.3 Current practice	26

5.5.4	Gaps	26
5.5.5	Stakeholders	26
5.5.6	Stakeholder ecosystem.....	27
5.5.7	Scenarios.....	27
5.5.8	Requirements	27
5.6	Emergency response through safety network.....	27
5.6.1	Description.....	27
5.6.2	Objective	27
5.6.3	Current practice	28
5.6.4	Gaps	28
5.6.5	Stakeholders	28
5.6.6	Stakeholder ecosystem.....	28
5.6.7	Scenarios.....	29
5.6.8	Requirements	30
5.7	Natural disaster prevention and control	30
5.7.1	Description.....	30
5.7.2	Objective	30
5.7.3	Current practice	30
5.7.4	Gaps	30
5.7.5	Stakeholders	31
5.7.6	Stakeholder ecosystem.....	31
5.7.7	Scenarios.....	32
5.7.8	Requirements	33
5.8	Intelligent fire hydrant monitoring	34
5.8.1	Description.....	34
5.8.2	Objective	34
5.8.3	Current practice	34
5.8.4	Gaps	34
5.8.5	Stakeholders	34
5.8.6	Stakeholder ecosystem.....	35
5.8.7	Scenarios.....	35
5.8.8	Requirements	36
5.9	Smart transportation: barrier-free transportation service	36
5.9.1	Description.....	36
5.9.2	Objective	36
5.9.3	Current practice	36
5.9.4	Gaps	36
5.9.5	Stakeholders	36
5.9.6	Stakeholder ecosystem.....	37
5.9.7	Scenarios.....	38
5.9.8	Requirements	38
5.10	Smart parking.....	38
5.10.1	Description.....	38
5.10.2	Objective	38
5.10.3	Current practice	39
5.10.4	Gaps	39
5.10.5	Stakeholders	39
5.10.6	Stakeholder ecosystem.....	39
5.10.7	Scenario	40

5.10.8	Requirements	40
5.11	Smart crosswalk	40
5.11.1	Description	40
5.11.2	Objective	40
5.11.3	Current practice	41
5.11.4	Gaps	41
5.11.5	Stakeholders	41
5.11.6	Stakeholder ecosystem	41
5.11.7	Scenarios	42
5.11.8	Requirements	42
5.12	Intelligent rail transit	42
5.12.1	Description	42
5.12.2	Objective	42
5.12.3	Current practice	43
5.12.4	Gaps	43
5.12.5	Stakeholders	43
5.12.6	Stakeholder ecosystem	43
5.12.7	Scenarios	44
5.12.8	Requirements	44
5.13	Smart metro	44
5.13.1	Description	44
5.13.2	Objective	44
5.13.3	Current practice	44
5.13.4	Gaps	45
5.13.5	Stakeholders	45
5.13.6	Stakeholder ecosystem	46
5.13.7	Scenarios	47
5.13.8	Requirements	47
5.14	Public health emergency management	47
5.14.1	Description	47
5.14.2	Objective	48
5.14.3	Current practice	48
5.14.4	Gaps	48
5.14.5	Stakeholders	48
5.14.6	Stakeholder ecosystem	49
5.14.7	Scenarios	49
5.14.8	Requirement	49
5.15	Smart motion sensing device	49
5.15.1	Description	49
5.15.2	Objective	49
5.15.3	Current practice	50
5.15.4	Gaps	50
5.15.5	Stakeholders	50
5.15.6	Stakeholder ecosystem	51
5.15.7	Scenarios	51
5.15.8	Requirements	51
5.16	CIM-based space-time asset management	51
5.16.1	Description	51
5.16.2	Objective	51

5.16.3	Current practice	52
5.16.4	Gaps	52
5.16.5	Stakeholders	52
5.16.6	Stakeholder ecosystem.....	53
5.16.7	Scenarios.....	53
5.16.8	Requirements	54
5.17	Smart campus	54
5.17.1	Description.....	54
5.17.2	Objective	54
5.17.3	Current practice	54
5.17.4	Gaps	55
5.17.5	Stakeholders	55
5.17.6	Stakeholder ecosystem.....	55
5.17.7	Scenarios.....	56
5.17.8	Requirement.....	57
5.18	Cold-chain management.....	57
5.18.1	Description.....	57
5.18.2	Objective	57
5.18.3	Current practice	57
5.18.4	Gaps	57
5.18.5	Stakeholders	58
5.18.6	Stakeholder ecosystem.....	59
5.18.7	Scenarios.....	59
5.18.8	Requirements	59
5.19	Smart environment.....	60
5.19.1	Description.....	60
5.19.2	Objective	60
5.19.3	Current practices	60
5.19.4	Gaps	60
5.19.5	Stakeholders	60
5.19.6	Stakeholder ecosystem.....	61
5.19.7	Scenarios.....	62
5.19.8	Requirements	62
5.20	Medical waste monitoring	63
5.20.1	Description.....	63
5.20.2	Objective	63
5.20.3	Current practice	63
5.20.4	Gaps	63
5.20.5	Stakeholders	63
5.20.6	Stakeholder ecosystem.....	64
5.20.7	Scenarios.....	65
5.20.8	Requirements	65
5.21	Smart water	65
5.21.1	Description.....	65
5.21.2	Objective	66
5.21.3	Current practice	66
5.21.4	Gaps	66
5.21.5	Stakeholders	66
5.21.6	Stakeholder ecosystem.....	66

5.21.7	Scenarios.....	67
5.21.8	Requirements	67
5.22	Intelligent pipeline network	67
5.22.1	Description.....	67
5.22.2	Objective	67
5.22.3	Current practice.....	67
5.22.4	Gaps	68
5.22.5	Stakeholders	68
5.22.6	Stakeholder ecosystem.....	68
5.22.7	Scenarios.....	68
5.22.8	Requirements	69
5.23	Smart urban business environment.....	69
5.23.1	Description.....	69
5.23.2	Objective	69
5.23.3	Current practice.....	69
5.23.4	Gaps	69
5.23.5	Stakeholders	70
5.23.6	Stakeholder ecosystem.....	71
5.23.7	Scenarios.....	72
5.23.8	Requirements	73
5.24	Urban economic operation monitoring and early warning analysis.....	73
5.24.1	Description.....	73
5.24.2	Objective	73
5.24.3	Current practice.....	73
5.24.4	Gaps	74
5.24.5	Stakeholders	74
5.24.6	Stakeholder ecosystem.....	74
5.24.7	Scenarios.....	75
5.24.8	Requirements	76
5.25	Smart urban investment management	76
5.25.1	Description.....	76
5.25.2	Objective	76
5.25.3	Current practice.....	77
5.25.4	Gaps	77
5.25.5	Stakeholders	77
5.25.6	Stakeholder ecosystem.....	78
5.25.7	Scenarios.....	79
5.25.8	Requirements	79
6	High-level system analysis of intelligent operations centre application areas.....	80
6.1	Intelligent operations centre use case and characteristics.....	80
6.2	High-level system analysis of intelligent operations centre application areas (gap and requirements).....	85
7	Needs of standardization of intelligent operations centre	86
7.1	Need of general standards.....	86
7.2	Need of infrastructure facility standards	86
7.3	Need of data standards	86
7.4	Need of application scenario services standards.....	86
7.5	Need of construction management standards	86
7.6	Need of safety standards.....	86

Annex A (normative) List of stakeholders and description	87
Bibliography	97
Figure 1 – Conceptual reference model	14
Figure 2 – IOC reference architecture	16
Figure 3 – Stakeholders of relationship in market supervision	20
Figure 4 – Stakeholders of relationship in smart urban management	24
Figure 5 – Stakeholders of relationship in emergency response	29
Figure 6 – Stakeholders of relationship in intelligent fire hydrant monitoring	35
Figure 7 – Stakeholders of relationship in smart transportation	37
Figure 8 – Stakeholders of relationship in smart parking	40
Figure 9 – Stakeholders of relationship in smart crosswalk	42
Figure 10 – Stakeholders of relationship in smart metro	47
Figure 11 – Stakeholders of relationship in smart motion sensing device	50
Figure 12 – Stakeholders of relationship in smart campus	56
Figure 13 – Stakeholders of relationship in cold-chain management	59
Figure 14 – Stakeholders of relationship in smart environment	61
Figure 15 – Stakeholders of relationship in medical waste monitoring	64
Figure 16 – Stakeholders of relationship in smart urban business environment	72
Figure 17 – Stakeholders of relationship in urban economic operation	75
Figure 18 – Stakeholders of relationship in smart urban investment management	79
Table 1 – List of IOC use cases	80
Table 2 – IOC use cases and requirements	81
Table A.1 – List of stakeholders and description	87

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTELLIGENT OPERATIONS CENTRE FOR SMART CITIES –****Part 1: High-level analysis****FOREWORD**

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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. Isolated city services, data flows and data need integration. To be effective, the coordination of data and service requires an overarching framework coupled with an intelligent operations centre (IOC). The first step to identify solution options is by collecting and analysing relevant use cases.

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., IOC processes city information and provides innovative services for urban managers, operators and other stakeholders. Compared with single-domain systems, IOC can better support monitoring and visualizing, decision making and cross-domain cooperation. 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 IOC's 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.

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 should be 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. This document focuses on collecting and analysing use cases from diversified areas, with the goal of developing consensus-based descriptions of IOC features and capabilities across all stakeholders, and uses this to scope out the standardization requirements related to the field of IOC.

SMART CITY USE CASE COLLECTION AND ANALYSIS – INTELLIGENT OPERATIONS CENTRE FOR SMART CITIES –

Part 1: High-level analysis

1 Scope

This part of IEC SRD 63302 provides use case collection and analysis, identifies the market relationships of relevant stakeholders, scopes out capabilities and a reference model of intelligent operations centre (IOC) for smart cities, and proposes the requirements for standards development in this field.

This document is for use by authorities, solution providers, utilities, citizens, and other relevant stakeholders, to identify good practices regarding IOC, and how they can implement them.

2 Normative references

There are no normative references in this document.