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SERIES Y: GLOBAL INFORMATION
INFRASTRUCTURE, INTERNET PROTOCOL ASPECTS,
NEXT-GENERATION NETWORKS, INTERNET OF
THINGS AND SMART CITIES

Internet of things and smart cities and communities standards roadmap

ITU-T Y-series Recommendations – Supplement 58

International Telecommunication Union

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Supplement 58 to ITU-T Y-series Recommendations

Internet of things and smart cities and communities standards roadmap

Summary

Supplement 58 to the ITU-T Y-series presents the Joint Coordination Activity on Internet of Things and Smart Cities and Communities (JCA-IoT and SC&C) roadmap, which contains a collection of standards and ITU-T Recommendations related to Internet of things (IoT), smart cities and communities (SC&C), network aspects of identification systems, including RFID (NID) and ubiquitous sensor networks (USNs).

History

Edition	Recommendation	Approval	Study Group	Unique ID[*]
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Keywords

IoT, roadmap, smart cities, standards.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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Supplement 58 to ITU-T Y-series Recommendations

Internet of things and smart cities and communities standards roadmap

1 Scope

This Supplement provides the standards roadmap for Internet of things and smart cities and communities. The roadmap is regularly updated and is available at: https://www.itu.int/net4/itu-t/roadmap#?topic=0.78&workgroup=1&searchValue=&page=1&sort=Revelance

2 References

None.

3 Definitions

3.1 Terms defined elsewhere

This Supplement uses the following terms defined elsewhere:

3.1.1 Internet of Things [b-ITU-T Y.4000]: A global infrastructure for the information society, enabling advanced services by interconnecting (physical and virtual) things based on existing and evolving interoperable information and communication technologies.

NOTE 1 – Through the exploitation of identification, data capture, processing and communication capabilities, the IoT makes full use of things to offer services to all kinds of applications, whilst ensuring that security and privacy requirements are fulfilled.

NOTE 2 – From a broader perspective, the IoT can be perceived as a vision with technological and societal implications.

3.1.2 smart sustainable city [b-ITU-T Y.4900]: A smart sustainable city is an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social, environmental, as well as cultural aspects.

NOTE – City competitiveness refers to policies, institutions, strategies and processes that determine the city's sustainable productivity.

3.2 Terms defined in this Supplement

None.

4 Abbreviations and acronyms

This Supplement uses the following abbreviations and acronyms:

IoT Internet of Things

NID network aspects of identification systems, including RFID

RFID Radiofrequency Identifier

SC&C Smart Cities and Communities

5 Conventions

None.

6 Internet of things and smart cities and communities standards roadmap

The JCA IoT and SC&C roadmap is a collection of standards shared by other SDOs and ITU-T Recommendations related to Internet of things and smart cities and communities that can be accessed at: https://www.itu.int/net4/itu-t/roadmap#?topic=0.78&workgroup=1&searchValue=&page=1&sort=Revelance.

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