

# Common requirements and capabilities of smart cities and communities

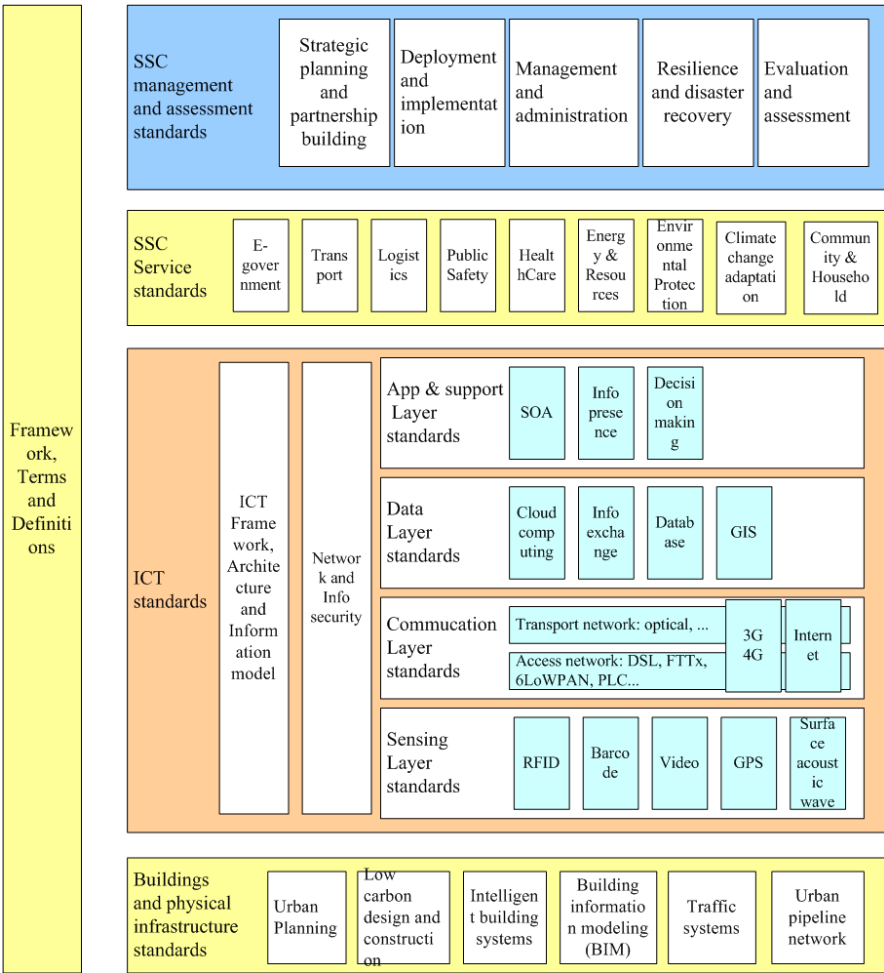
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# Standardization Roadmap of Smart Cities

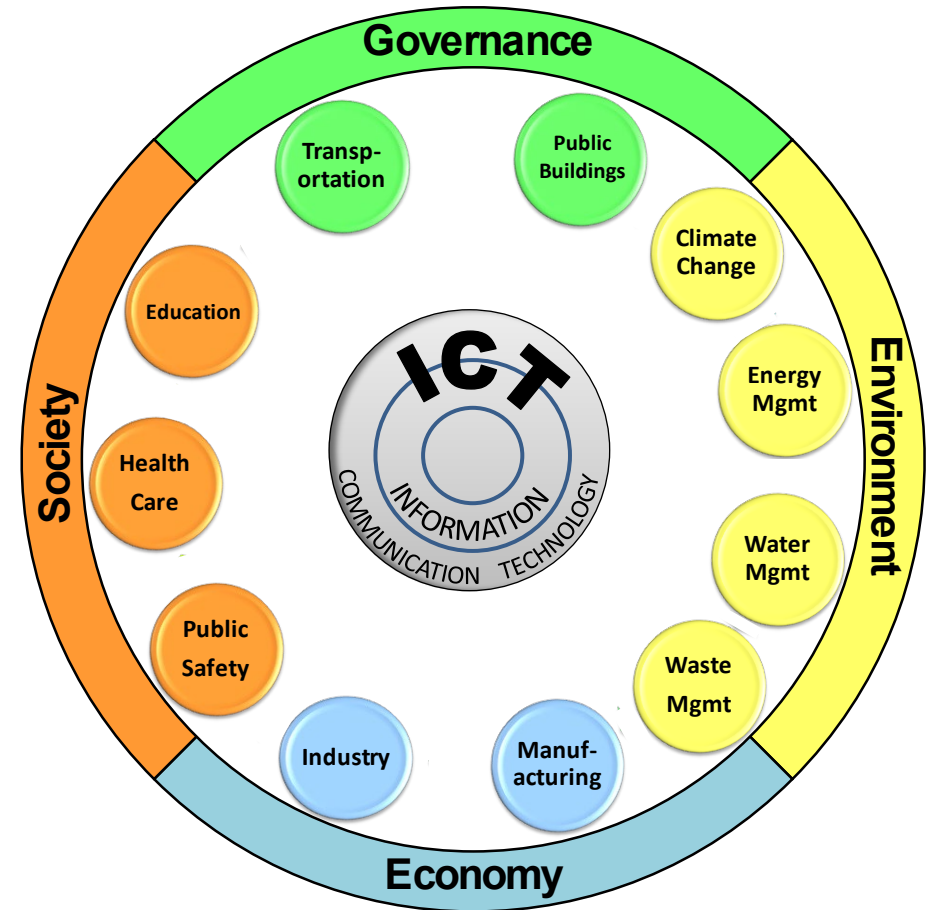
- Smart city management and assessment standards
- Smart city service standards
- ICT standards
- Buildings and physical infrastructure standards

Source: ITU-T FG-SSC reports “Standardization roadmap for smart sustainable cities”



# Role of ICT in Smart Cities

- Definition of smart sustainable cities:  
*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.*

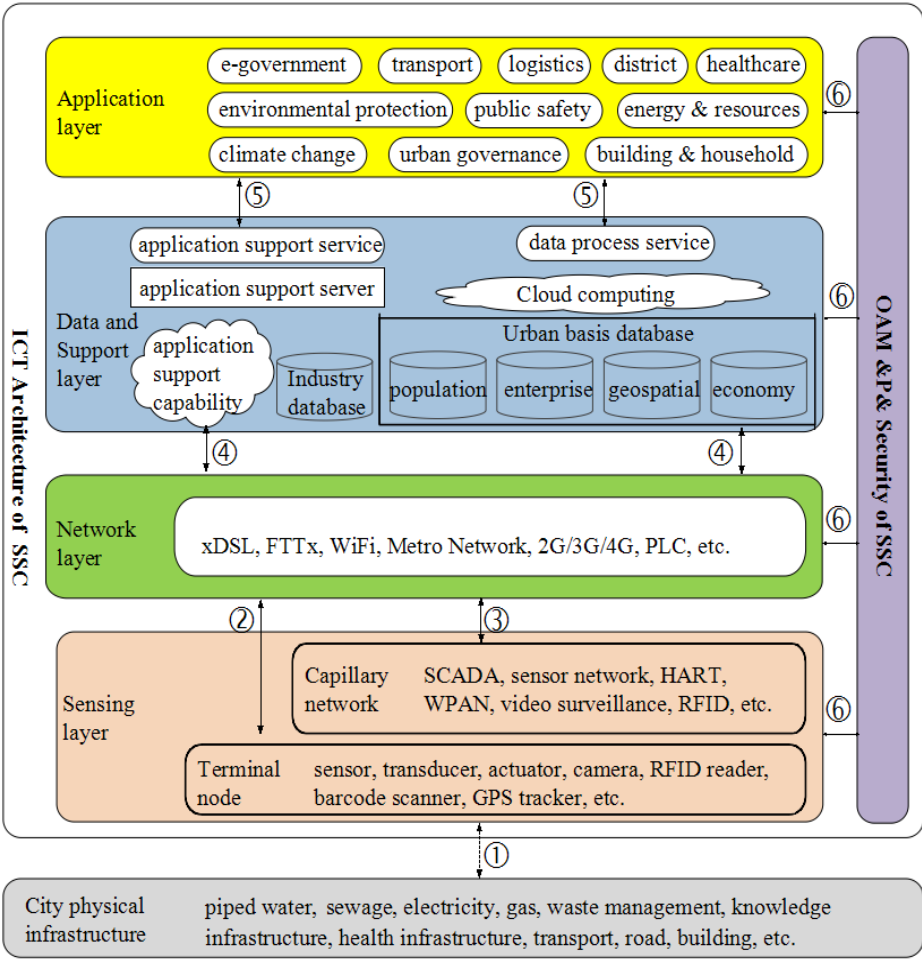


Source: ITU-T FG-SSC reports and Y.Sup.45

**“An overview of smart sustainable cities and the role of information and communication technologies”**

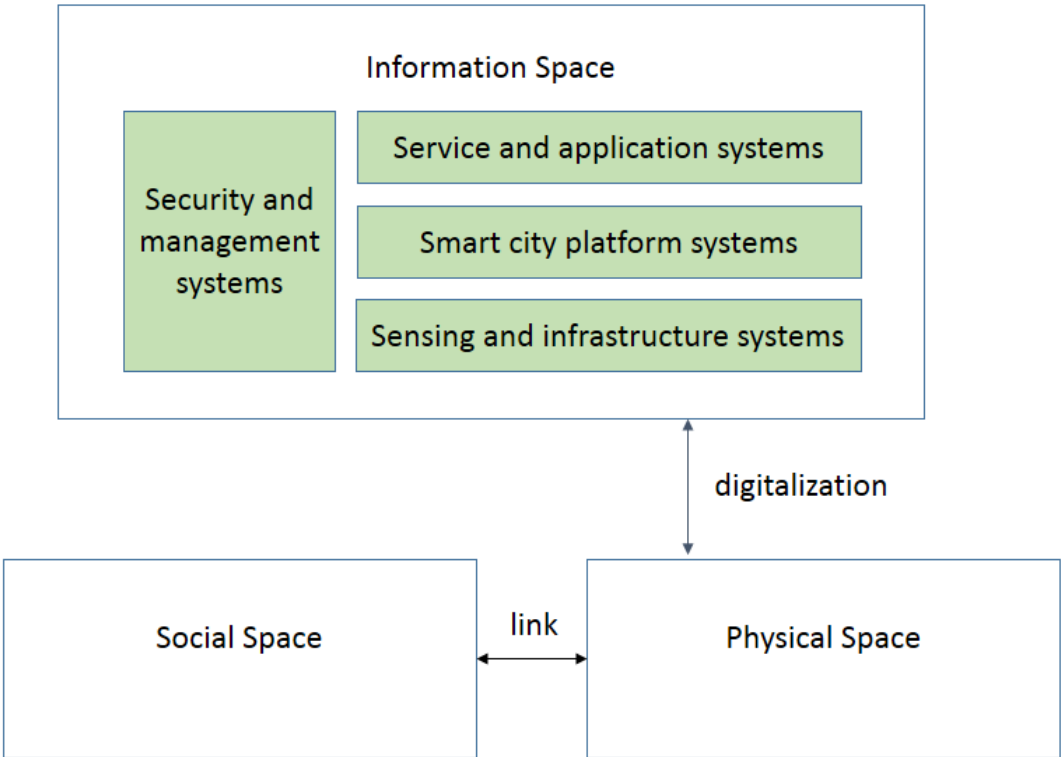
# Network capability and support in Smart Cities

- Multi-tier Smart Cities ICT architecture from communications view, emphasizing on a physical perspective

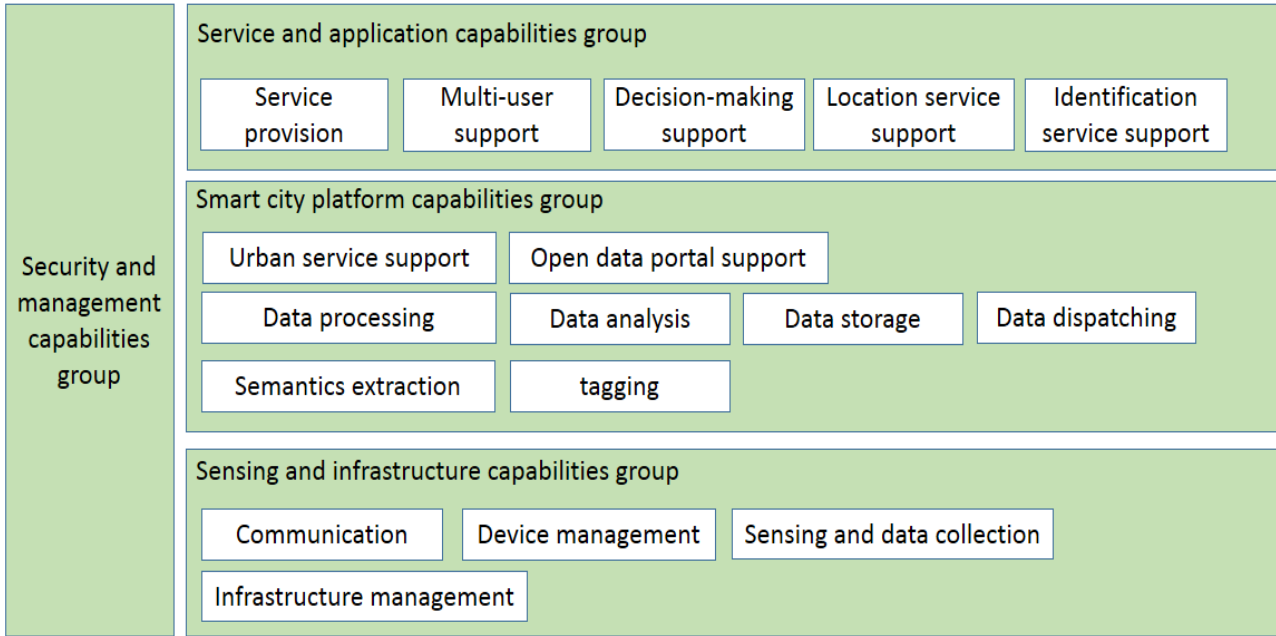


Source: ITU-T FG-SSC reports and Y.Sup.27  
 “Setting the framework for an ICT architecture of a smart sustainable city”

# Ongoing Draft Recommendation Y.SCC-reqts, Common requirements and capabilities of smart cities and communities from IoT and ICT perspectives



focusing on information space



framework of capabilities group

## Other relevant Recommendations on smart city: platform, interoperability, open data, data processing, AI, ID service

- ❑ Y.4201, High-level requirements and reference framework of smart city platform
- ❑ Y.4200, Requirements for the interoperability of smart city platforms
- ❑ Y.4209, Requirements for interoperability of the smart port with the smart city
- ❑ Y.4461, Framework of open data in smart cities
- ❑ Y.4472, Open data application programming interfaces (APIs) for IoT data in smart cities and communities
- ❑ Y.4560, Blockchain-based data exchange and sharing for supporting Internet of things and smart cities and communities
- ❑ Y.4561, Blockchain-based data management for supporting Internet of things and smart cities and communities
- ❑ Y.4470, Reference architecture of artificial intelligence service exposure for smart sustainable cities
- ❑ Y.4805, Identifier service requirements for the interoperability of smart city applications

Thank you for your attention.

### More information

ITU-T Study Group 20 website

<https://www.itu.int/en/ITU-T/studygroups/2017-2020/20/Pages/default.aspx>

ITU-T Focus Group on smart sustainable cities

<https://www.itu.int/en/ITU-T/focusgroups/ssc/Pages/default.aspx>