Series of ITU-T Standards on Smart City Platforms

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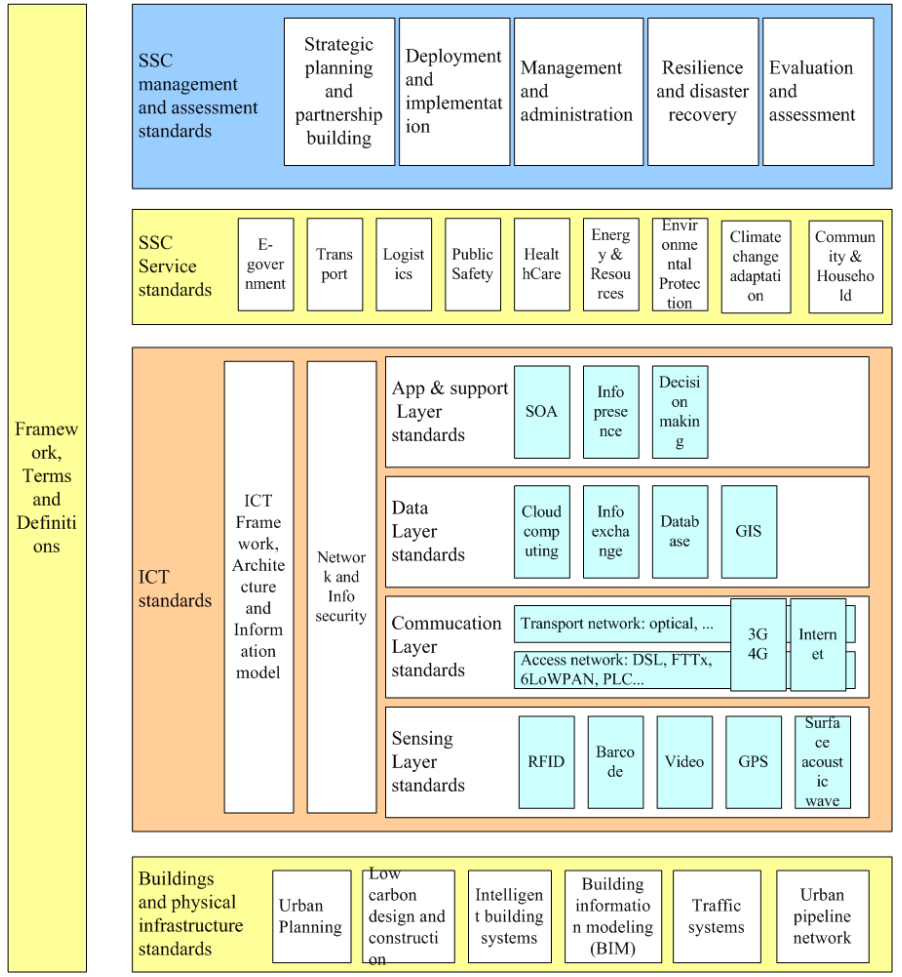
Standardization Roadmap for Smart Cities

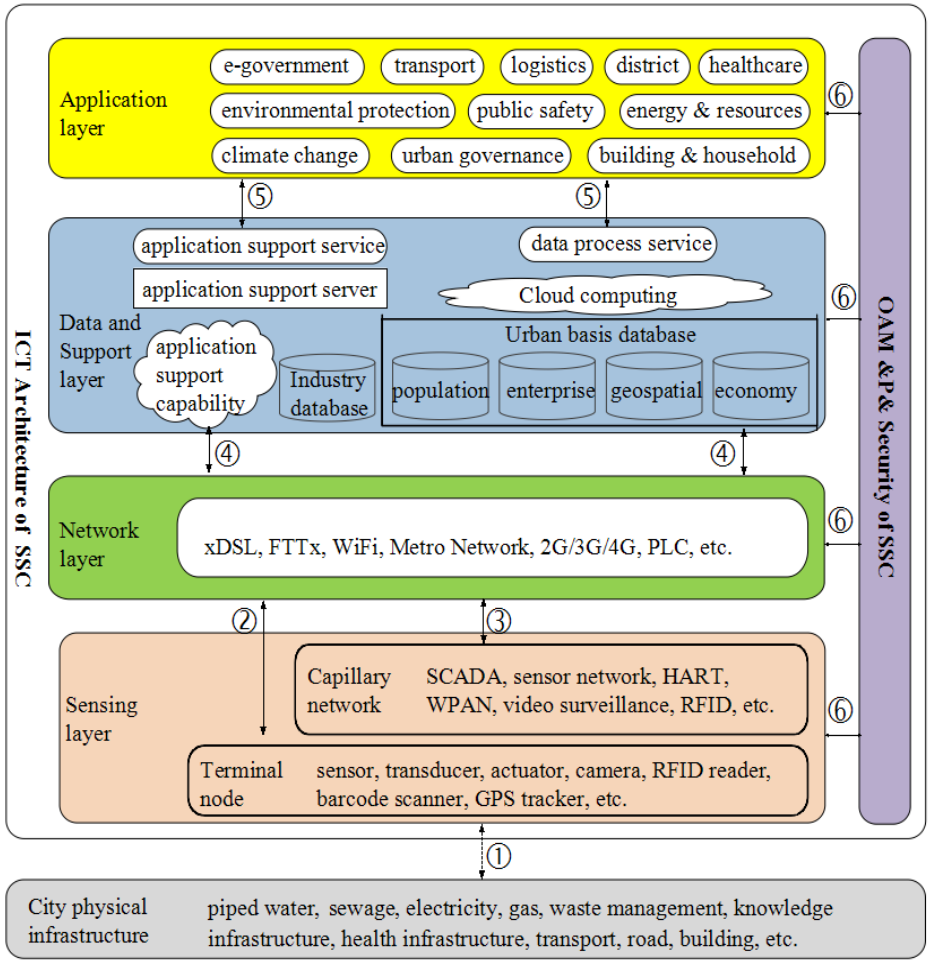
- Smart city management and assessment standards
- Smart city service standards
- ICT standards
- Buildings and physical infrastructure standards



Source: ITU-T FG-SSC reports **"Standardization roadmap for smart sustainable cities"**

Smart city platforms: ICT Hub for Smart Cities

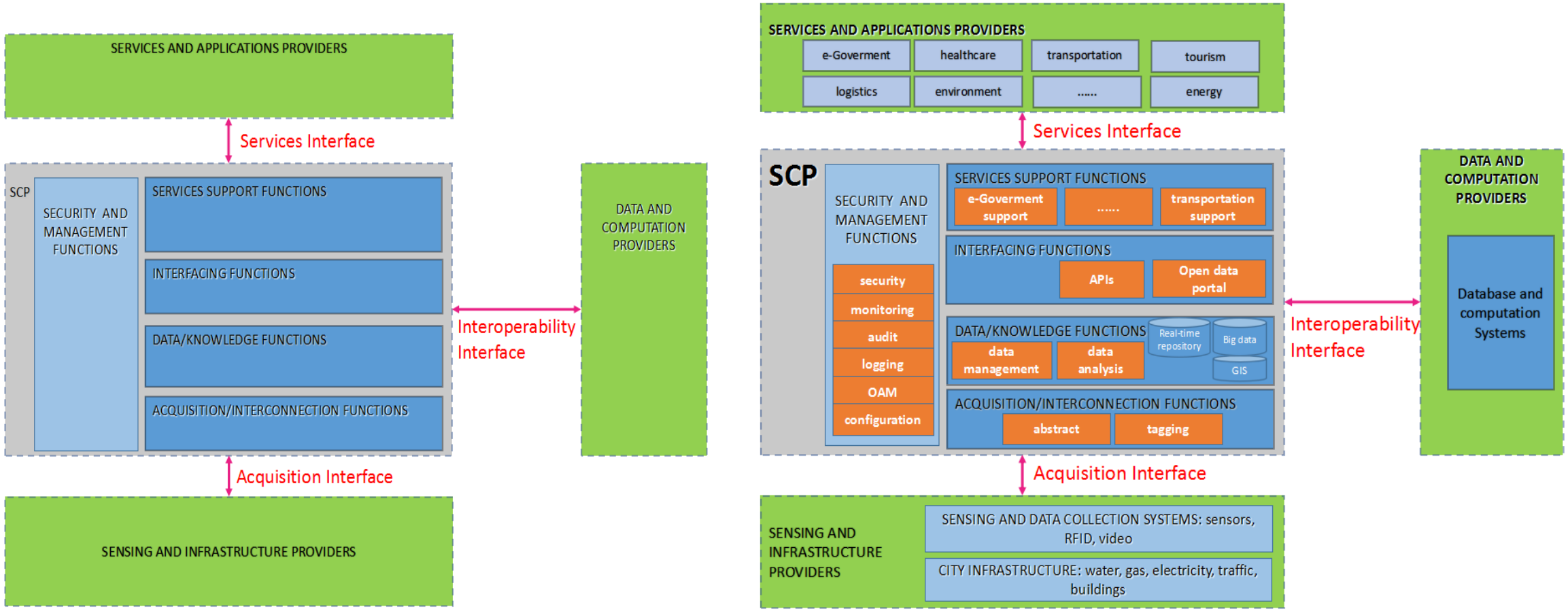
- A multi-tier SSC ICT architecture from communications view, emphasizing on a physical perspective



Source: ITU-T FG-SSC reports and ITU-T Y.Sup.27

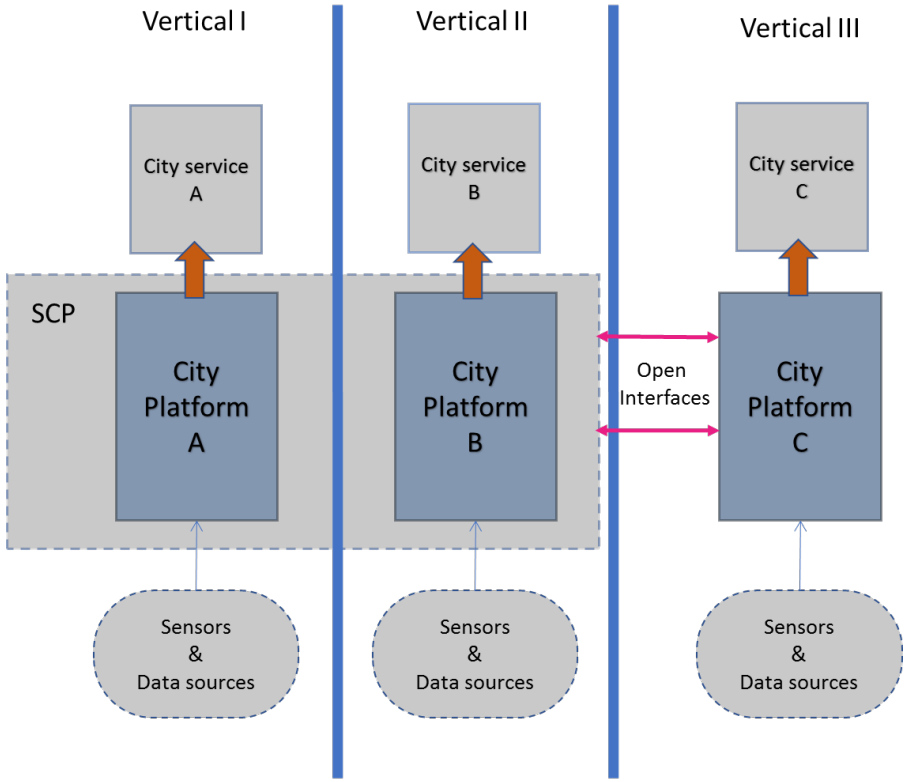
"**Setting the framework for an ICT architecture of a smart sustainable city**"

ITU-T Y.4201 – "High-level requirements and reference framework of smart city platforms"

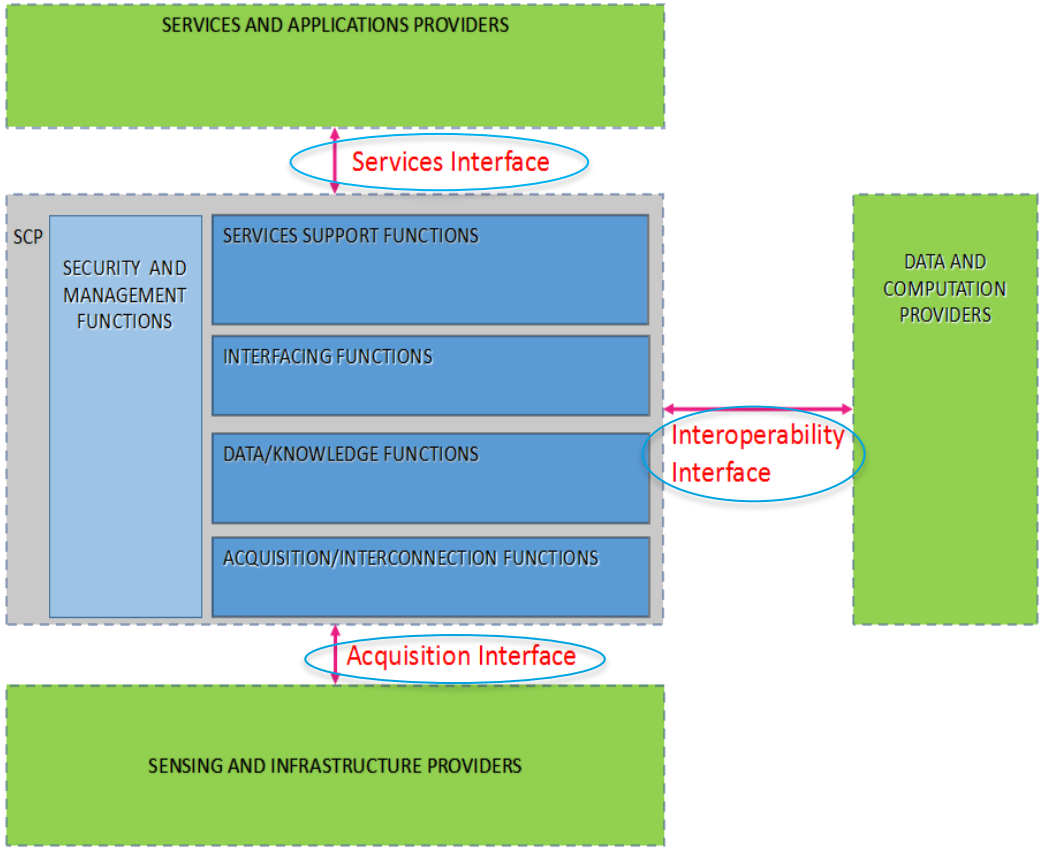


ITU-T Y.4200 – "Requirements for the interoperability of smart city platforms"

Integrating vertical systems into the SCP



Defining 3 interfaces of the SCP



Series of standards on smart city platform and their relevant (draft) standards

- **Y.4201**, High-level requirements and reference framework of smart city platforms
- **Y.4200**, Requirements for the interoperability of smart city platforms

- **Y.infra**, Requirements of sensing and data collection system for city infrastructure
- **Y.isms**, Functional framework and requirements for disaster monitoring system
- **ITU-T Y.4213 (Y.AM-SC-Reqts),** IoT requirements and capability framework for monitoring physical city assets
- **Y.EMM-Reqts,** Requirements for real-time event monitoring and integrated management in smart city platforms

Use cases of Recommendations ITU-T Y.4201 and ITU-T Y.4200

Case # 1– The Sharing Application Platform for Government Information System, Hubei, China

- In 2015, the provincial government of Hubei developed a Sharing Application Platform for Government Information System. This platform is developed in accordance to the framework and specifications proposed in Y.4201 and Y.4200.
- Through the platform, many isolated data islands have been eliminated. At present, there are 700+ digital government applications from 70+ government departments running on this platform.
- Several other provinces in China are now adopting a similar structure as described in the two Recommendations.

Case #2 - Smart Destination Platform for Tourism, Benidorm, Spain

- To enhance tourists' experience in Benidorm, the government has implemented a Smart Destination Platform. This Smart Destination Platform is constructed based on the specification listed in Y.4201 and Y.4200.
- This smart platform is an open SCP that is able to receive information from a wide-ranged of external communication sources including TripAdvisor, Twitter, Airbnb and so on.
- The Smart Destination Platform has made remarkable improvements to the tourism industry in Benidorm. At present, there are more than 24 other tourist destinations that have implemented this type of smart city platform in Spain.

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