Reference framework for an integrated management of a smart sustainable city

Thematic Group on City Platforms and Data Spaces

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Current Context of Cities



It addresses

- Challenges facing Smart and Sustainable Cities
- Governance and Smart Cities
- Contribution to the Sustainable Development Goals
- The digital transformation of cities as a basic piece in innovation
- Value-based Digital Government

- Is a Smart City also a sustainable city?
- How can the SDGs contribute to the development of cities?
- How does SDG 11, Sustainable Cities and Communities, apply in the development of cities?
- What guidance can we use to develop an SDG action plan?
- What are the main barriers to the implementation of an urban digital infrastructure?



SDG 11 - Sustainable Cities and Communities

City & ICT governance

U4SSC V

It addresses

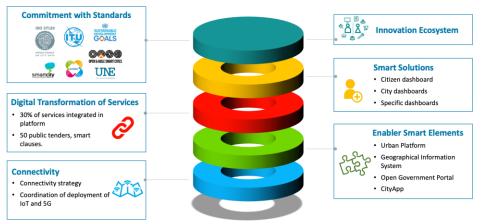
- Conceptual vision of a Smart City strategy
- Strategic Management in SSCs and ICT
- Smart City Offices and SCO Areas of Actions

To answer

- How to define people-centred smart strategy?
- What technological complexity do they represent for a small city? And at what financial level?
- How can an urban platform and a smart office generate savings for citizens, businesses, and public administrations?
- What ethical and legal measures must be taken in cities where private companies and external agents control the management of city services?
- Administrative tools for the digital transformation of services. "Smart clauses" in public procurements.



Smart Strategy



Smart City Office

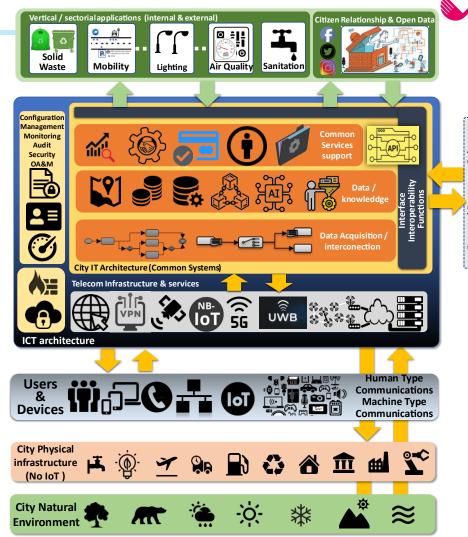
Smart City Action Layers

Urban technological reference architecture

It addresses

- SSC Taxonomy
- Reference technological architecture

- Cities are a dynamic system in permanent evolution, with multiple and complex interactions among people (citizens, visitors) and the environment (physical world)
- What are the main infrastructures of a city?
- What should the ICT architecture model of a smart and sustainable city be?
- Benefits that urban digital infrastructure brings to citizens.
- What layers should be present to improve the integrated management of the city?
- How can information silos be broken and proprietary information systems avoided?



ICT Architecture of a Smart City

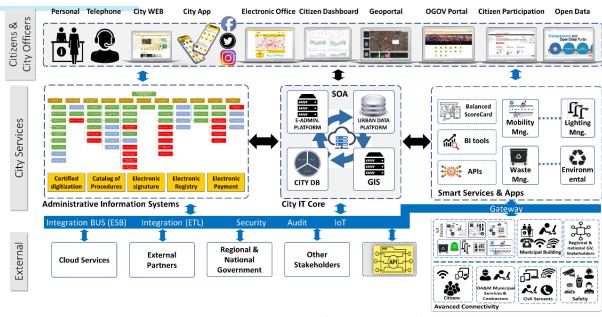
City Information Technologies Ecosystem



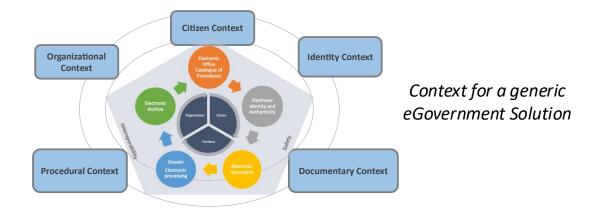
It addresses

- IT Ecosystem and Core IT components
- Applications of value for citizenship.
- ICT Governance life cycle & IT macro processes

- What are the core ICT components of a city?
- Hybrid architecture oriented towards services and microservices.
- Contexts and cross-cutting elements for electronic administration.
- Building Blocks and technical requirements for implementation.
- Interoperability problems between systems, platforms and external entities to obtain integrated management.



Smart ICT Ecosystem – Data infrastructure for City Services



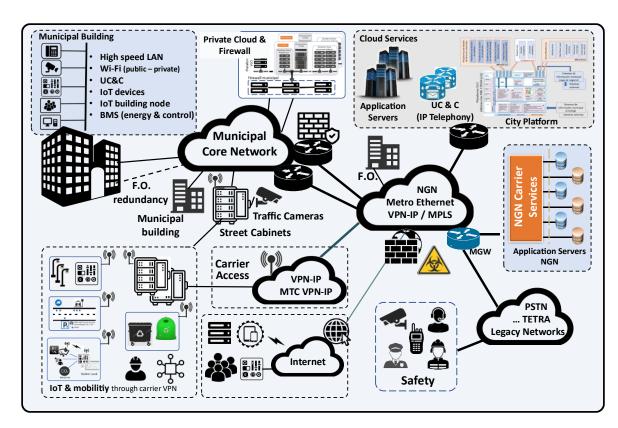
Connectivity of a Smart and Sustainable City



It addresses

- Connectivity Scenarios and Telecommunication Services
- People personal communications
- Processes, machine-machine communications (MTC)
- City corporate network

- What are the main connectivity scenarios in an SSC?
- What are the general needs of people and IoT devices in an SSC?
- What are the main services that and SSC should offer in terms of connectivity to citizens, municipal officials and other actors?
- What would be the simplified model of a municipal corporate network?



Generic Smart City Communications& connectivity Architecture

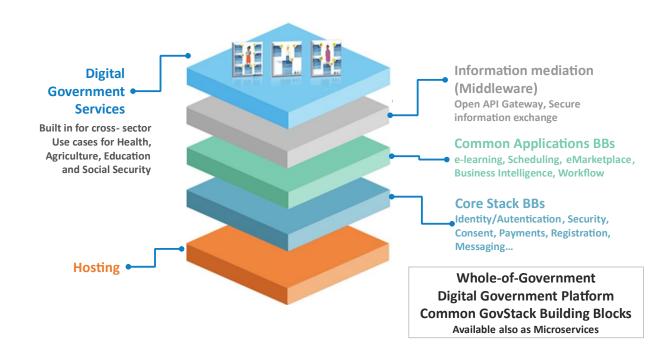
Business and application components



It addresses

- Guidance with the Principles for Digital Development
- GovStack Digital Government Platform Approach
- GovStack software components (Building Blocks)
- IndEA Building Blocks and Smart Destination Platform

- What are the principles of digital development?
- What are building blocks, and how can their technology improve the agility and deployment of components?
- What technologies offer a guide or model to build an integrated city or government platform, taking advantage of implementing the Digital Public Goods (DPGs) model?
- Why and how is the GovStack framework relevant to the Smart Sustainable City Reference Framework?



WoG Digital Government Platform

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Thank you!



