

Session 5: U4SSC deliverables

U4SSC deliverable on Reference framework for integrated management of an SSC

Presented by:

Ernesto Faubel

Smart City Officer - Valencia City Council

Co-leader of the Thematic Group on City Platforms

20 June 2023



WG 5 – Main objectives & experts' contribution



41 Experts
20 Countries
8 PhD

The purpose of the deliverable is to help cities identify the strategic, operational and connectivity needs that a Smart Sustainable City's integrated management can meet.

WG 5 – Reference framework for integrated management of an SSC

This group deals with aspects related to the definition of a reference framework for integrated city management to help cities currently committed to the sustainable and smart cities promoted by USSC.

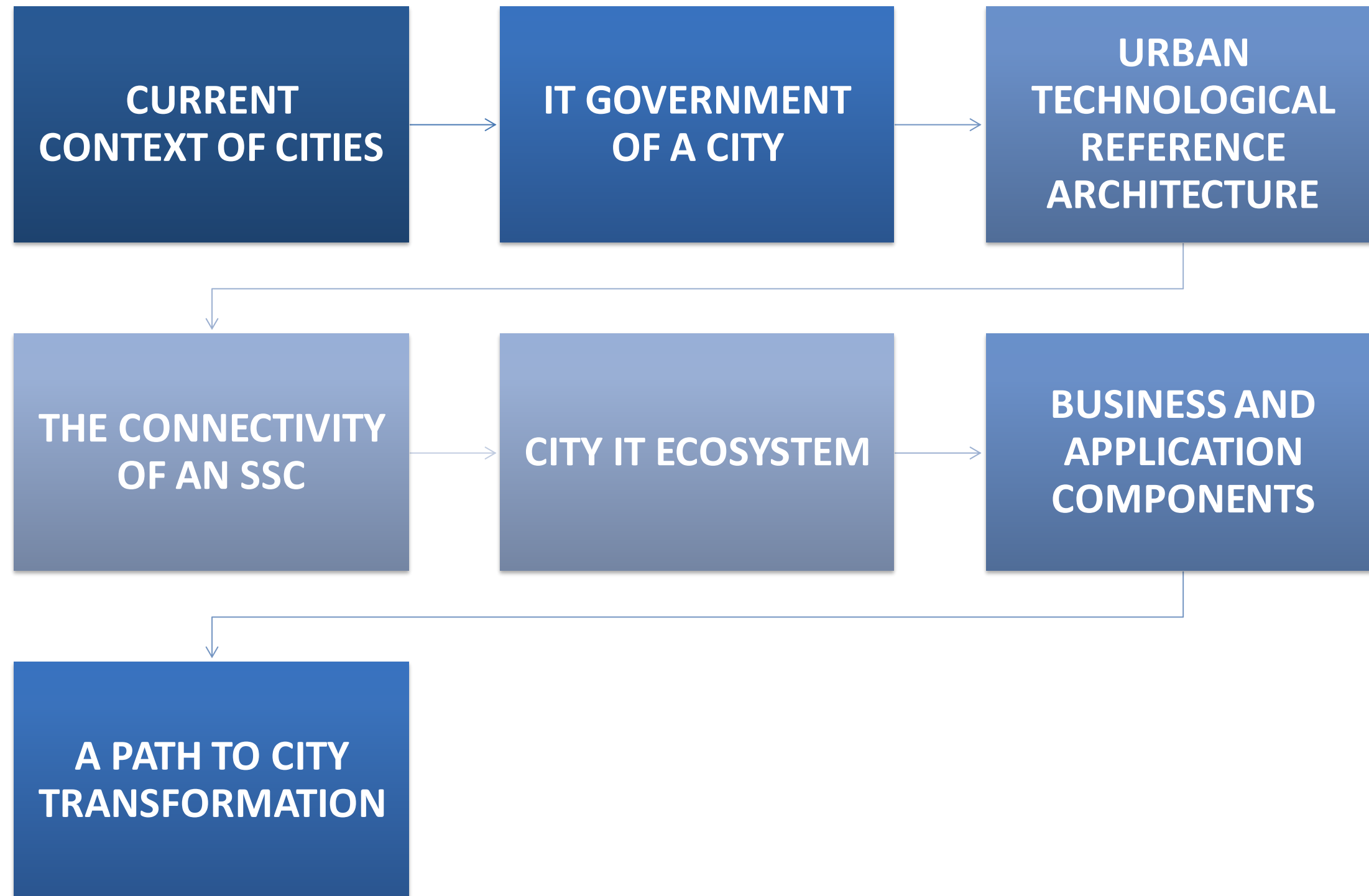
This Working Group highlights from a city perspective:

- Role of IT and connectivity on SSC.
- IT governance and reference technological architecture.
- Cities IT ecosystem and digital government services.
- A path to City Transformation.

| Professional sector | Count |
|--|-------|
| Central government administration | 3 |
| General information and Communications | 2 |
| General public administration sector | 3 |
| Information technology | 16 |
| Law and justice | 3 |
| Other industry | 1 |
| Sanitation | 1 |
| Sub-national government administration | 2 |
| Telecommunications | 6 |
| Tertiary education | 2 |
| Vocational training | 1 |



WG 5 - Structure of the Deliverable



United Smart Sustainable Cities

Reference framework for integrated management of an SSC

A U4SSC deliverable on City Platforms

Logos on cover include: Convention on Biological Diversity, ECLAC, FAO, UNIDO, ITU, UNDP, United Nations Economic Commission for Africa, UNECE, UNESCO, UNEP, UN Finance Initiative, UN Framework Convention on Climate Change, UN HABITAT FOR A BETTER URBAN FUTURE, United Nations Department of Economic and Social Affairs, UN 4 PARTNERSHIPS, UNU EGOV, UNWTO, UN WOMEN, and WORLD METEOROLOGICAL ORGANIZATION.

Current context of cities

CURRENT CONTEXT OF CITIES

CHALLENGES FACING CITIES

GOVERNANCE AND SMART CITIES

CONTRIBUTION TO THE SUSTAINABLE DEVELOPMENT GOALS AND CLIMATE CHANGE

CRISIS RESPONSE

THE DIGITAL TRANSFORMATION OF CITIES AS A BASIC PIECE IN INNOVATION

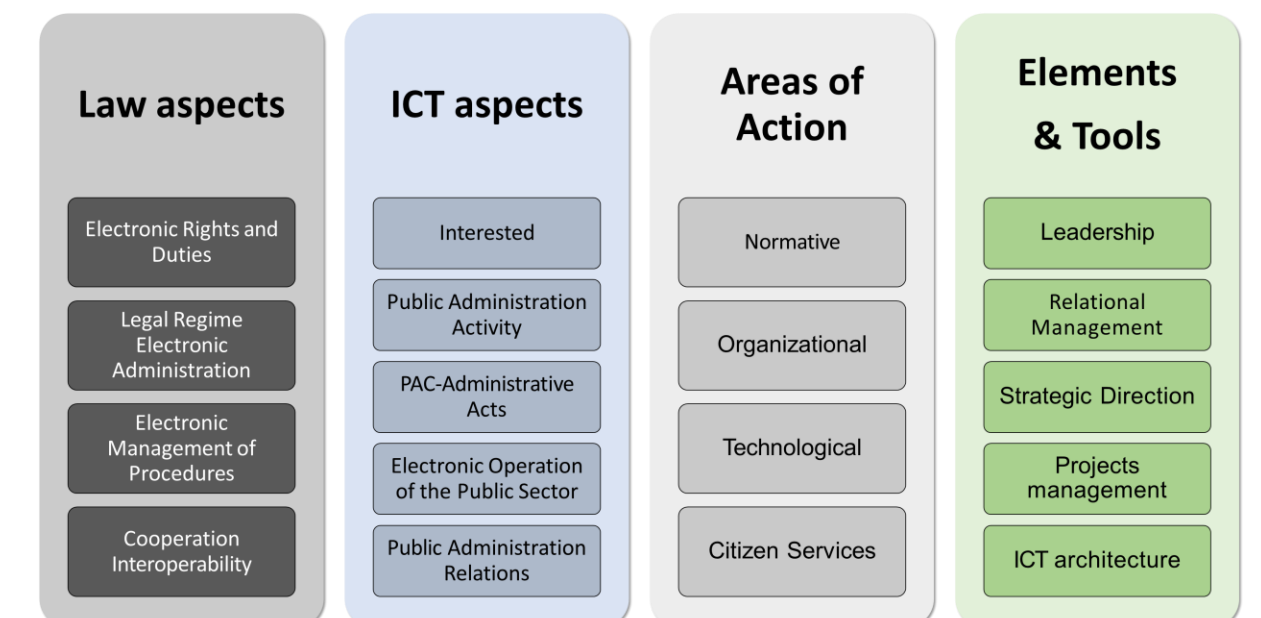
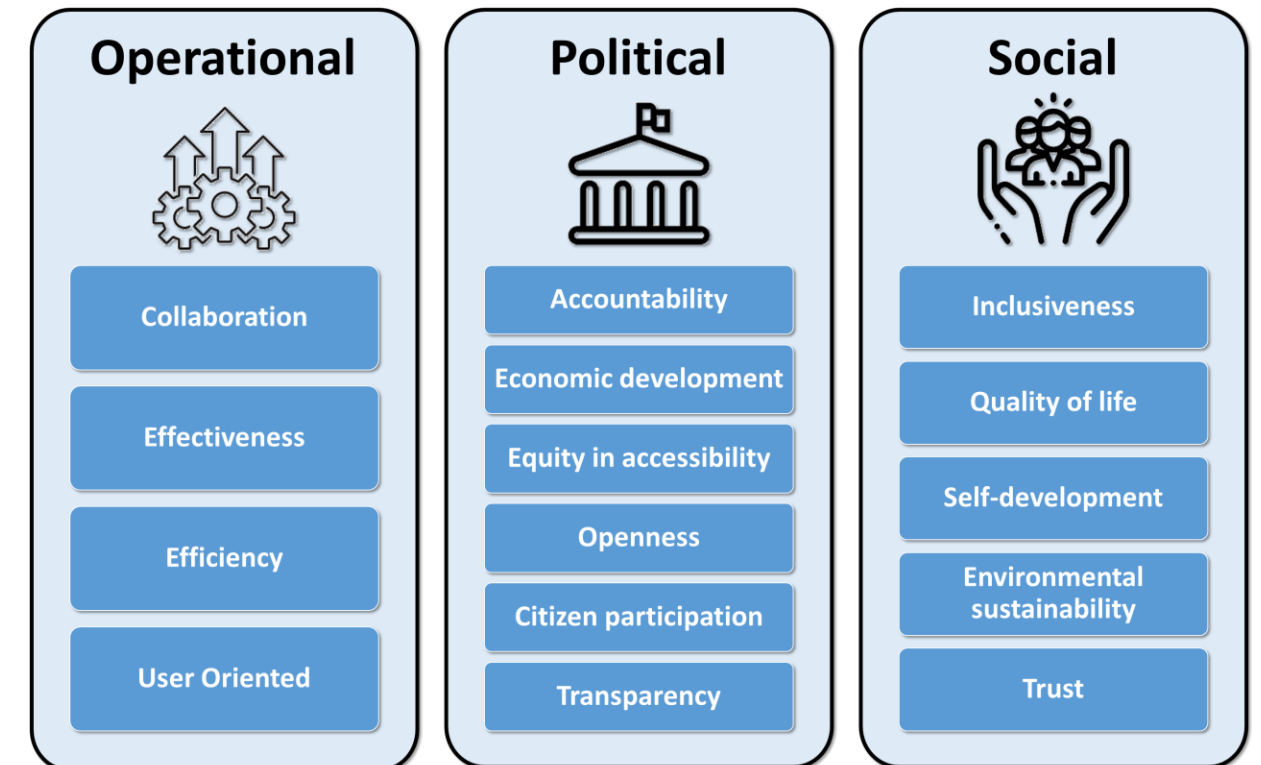
THE MASSIVE USE OF ICT STRATEGIC PLANNING

VALUE-BASED DIGITAL GOVERNMENT

ELECTRONIC ADMINISTRATION CHALLENGES

PRIVACY AND DATA PROTECTION

REGULATORY FRAMEWORK OF LOCAL COMPETENCE



IT Government of a City

IT GOVERNMENT OF A CITY

CONCEPTUAL VISION OF A SMART CITY STRATEGY

STRATEGIC MANAGEMENT IN SSC CITIES AND ICT

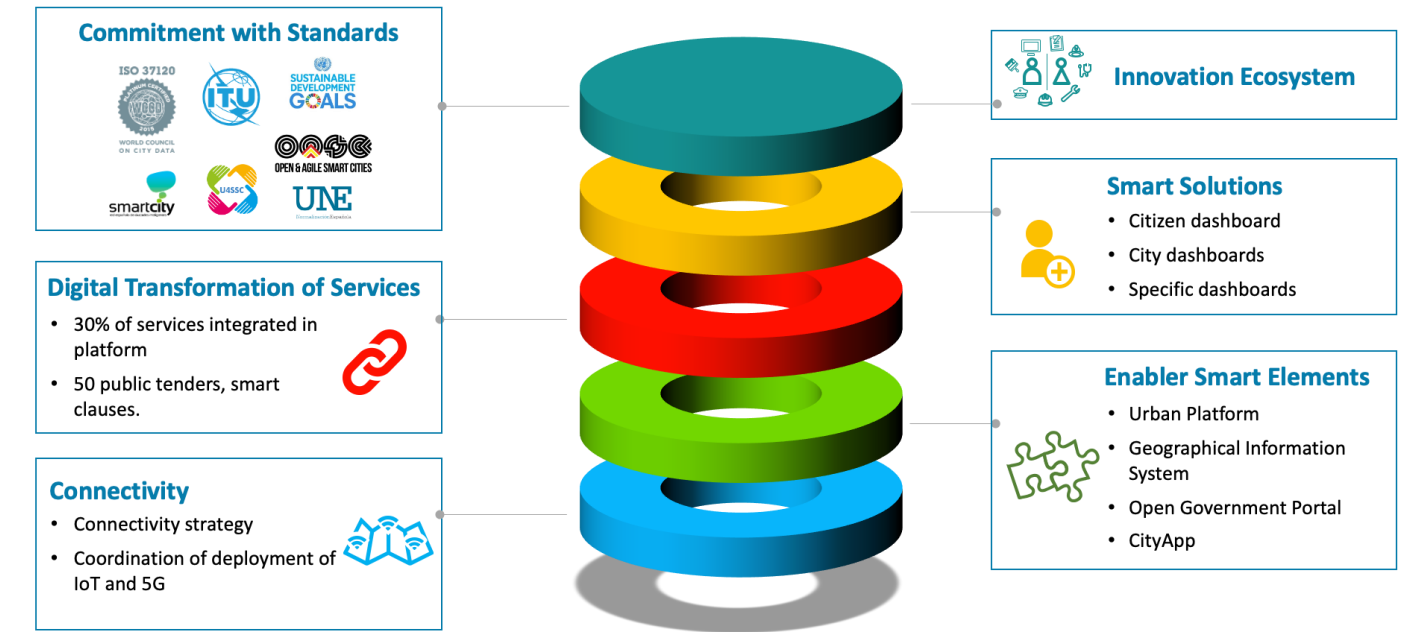
IT GOVERNANCE

SMART CITY OFFICES

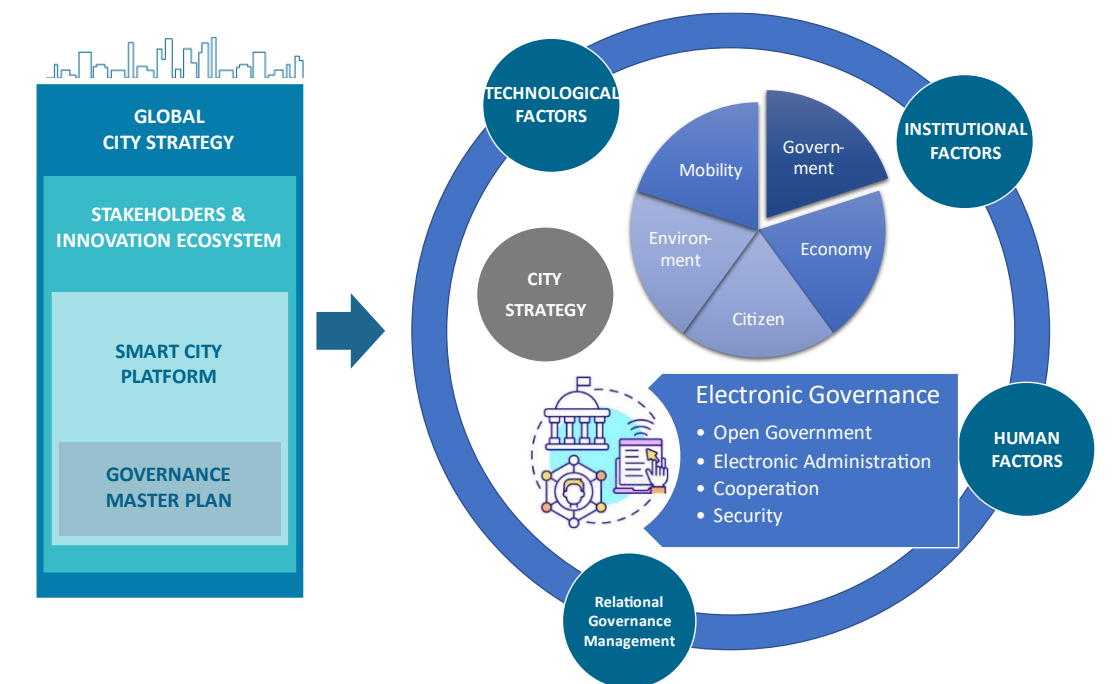
SMART AREAS OF ACTION

ICT STRATEGY EVOLUTION

ROADMAP



Smart City Action Layers



Strategic Management

Urban Technological Reference Architecture

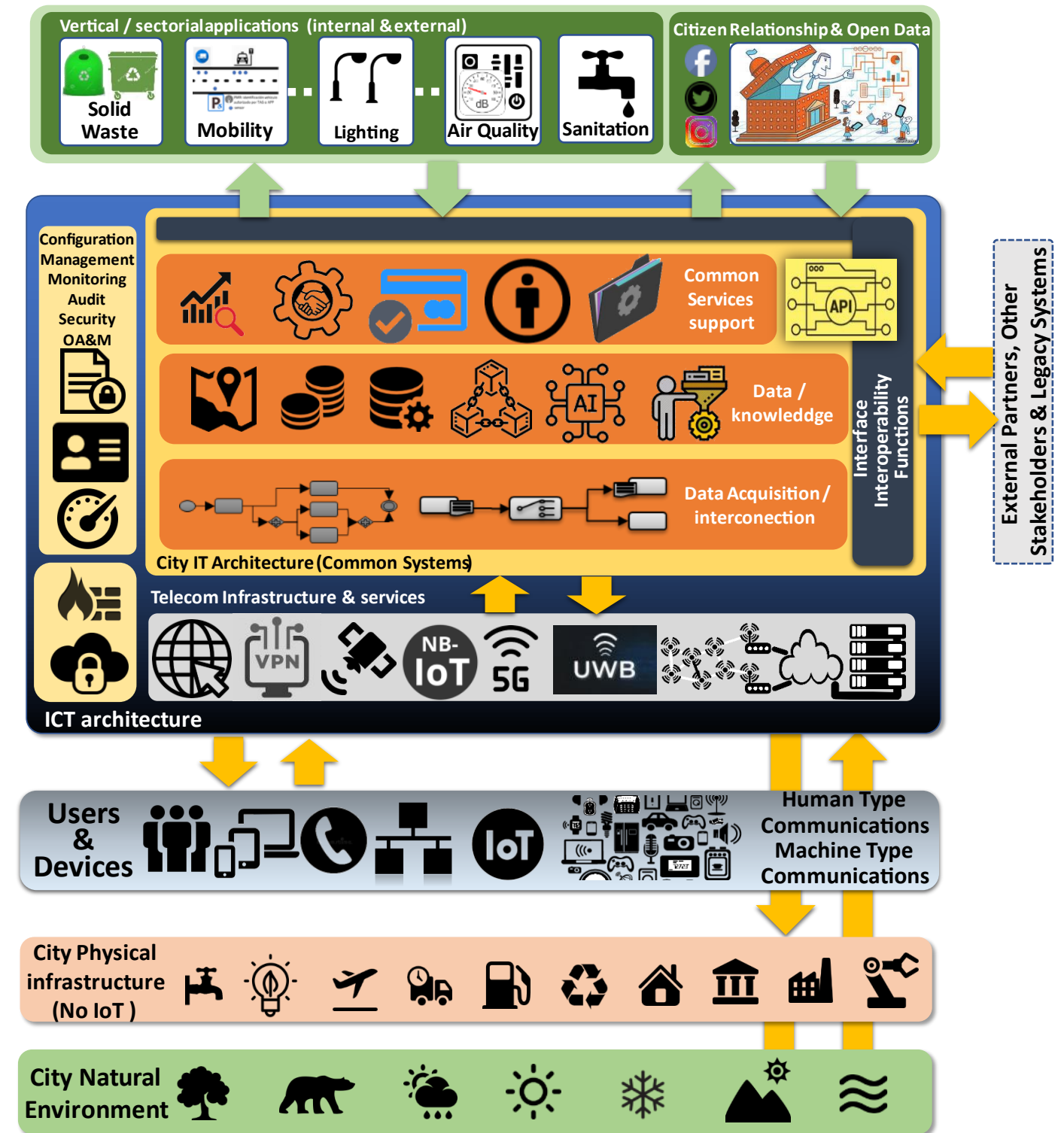
URBAN TECHNOLOGICAL REFERENCE ARCHITECTURE

SSC TAXONOMY

REFERENCE TECHNOLOGICAL
ARCHITECTURE

VISION OF THE ICT ARCHITECTURE

LAYERED MODEL



Architecture of a Smart City

The Connectivity of a Smart Sustainable City

THE CONNECTIVITY OF A SMART SUSTAINABLE CITY

CONNECTIVITY SCENARIOS AND TELECOMMUNICATION SERVICES

PEOPLE – PERSONAL COMMUNICATIONS

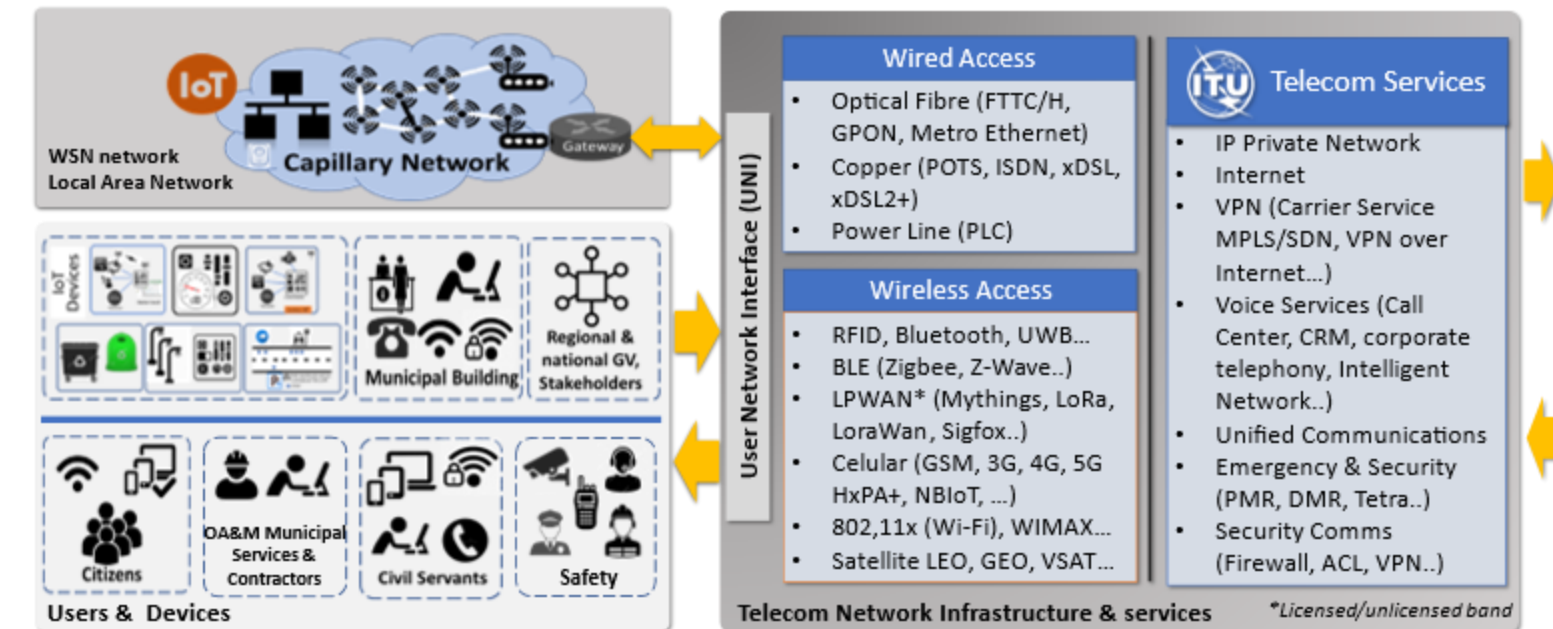
PROCESSES, MACHINE-MACHINE COMMUNICATIONS (MTC)

Urban Space Management CITY CORPORATE NETWORK

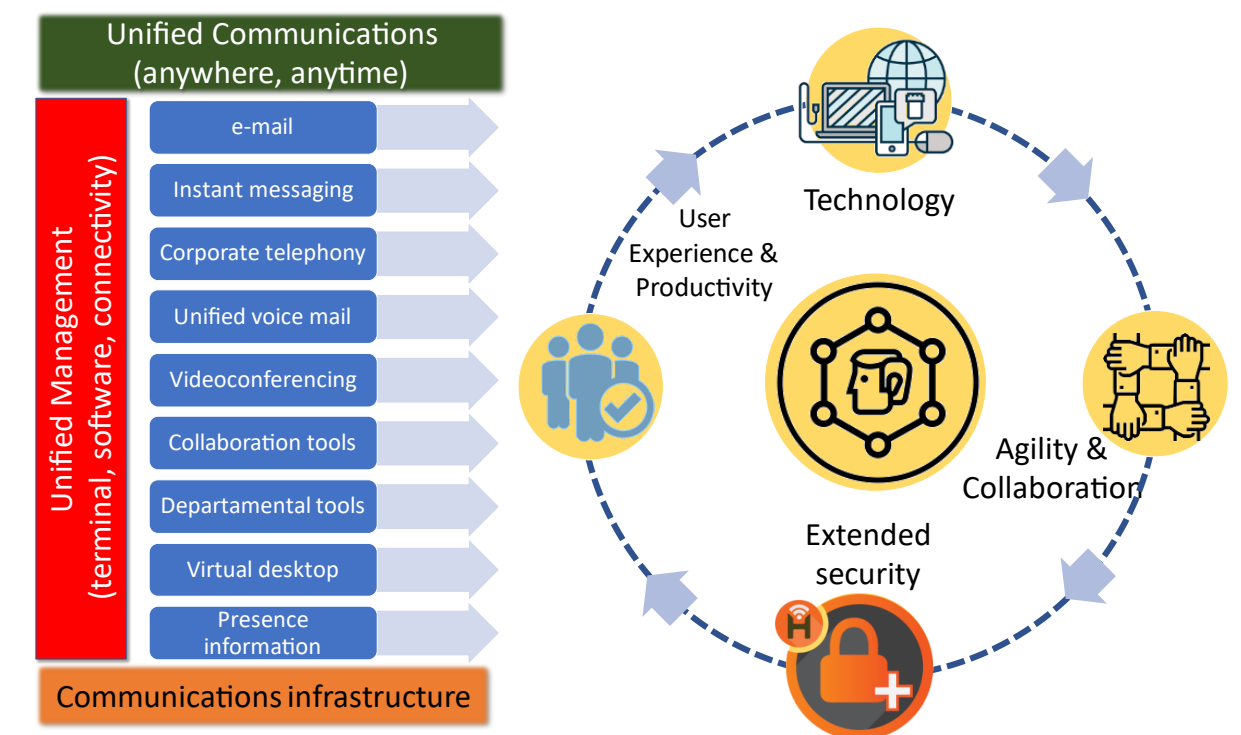
City CORE NETWORK

VOICE AND VPN CARRIER SERVICES

ACCESS TO SERVICES and devices via the Internet



Users, devices, telecom infrastructure & services



Unified Communications paradigm

City IT Ecosystem



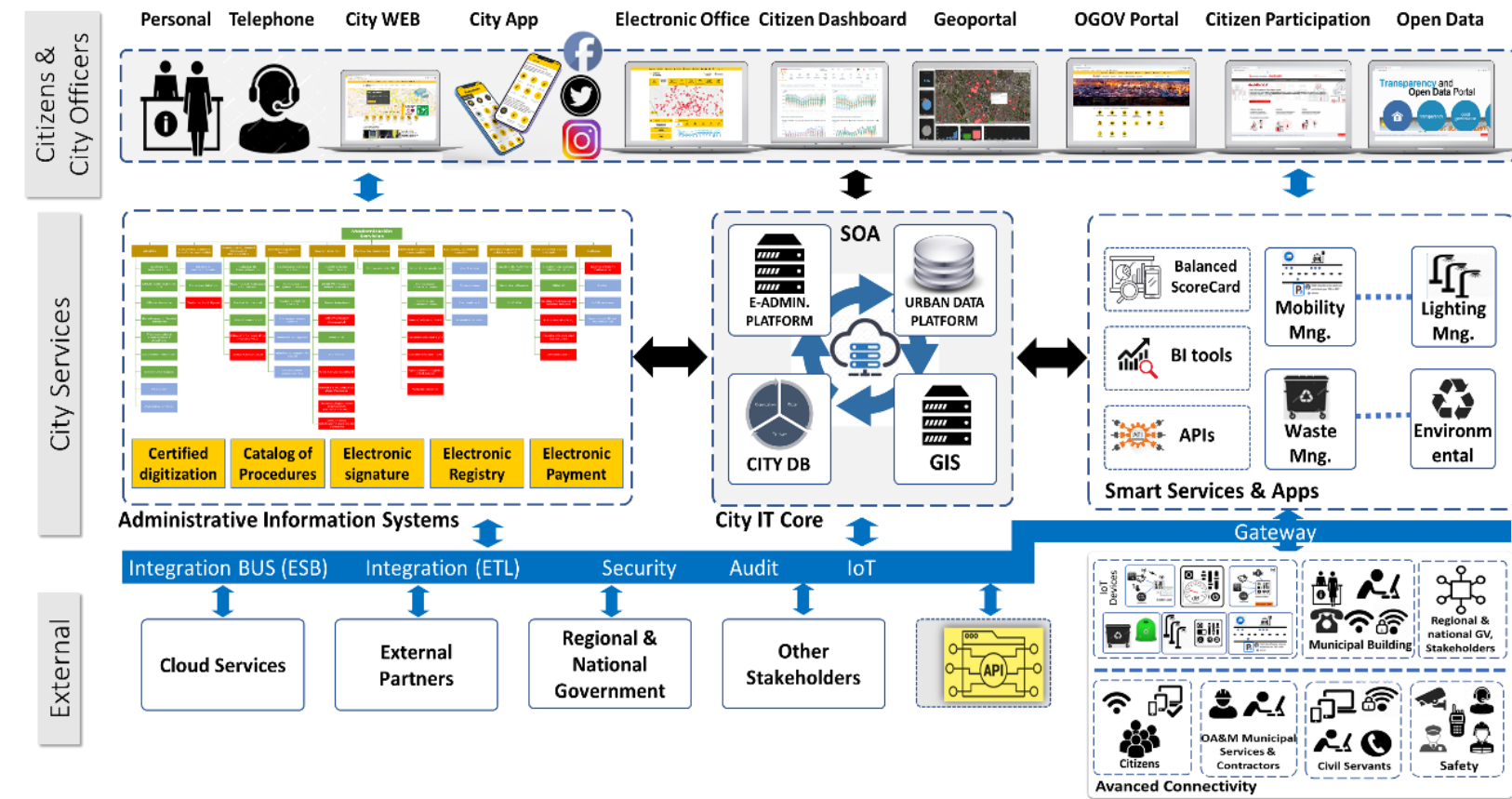
CITY IT ECOSYSTEM

THE IT ECOSYSTEM

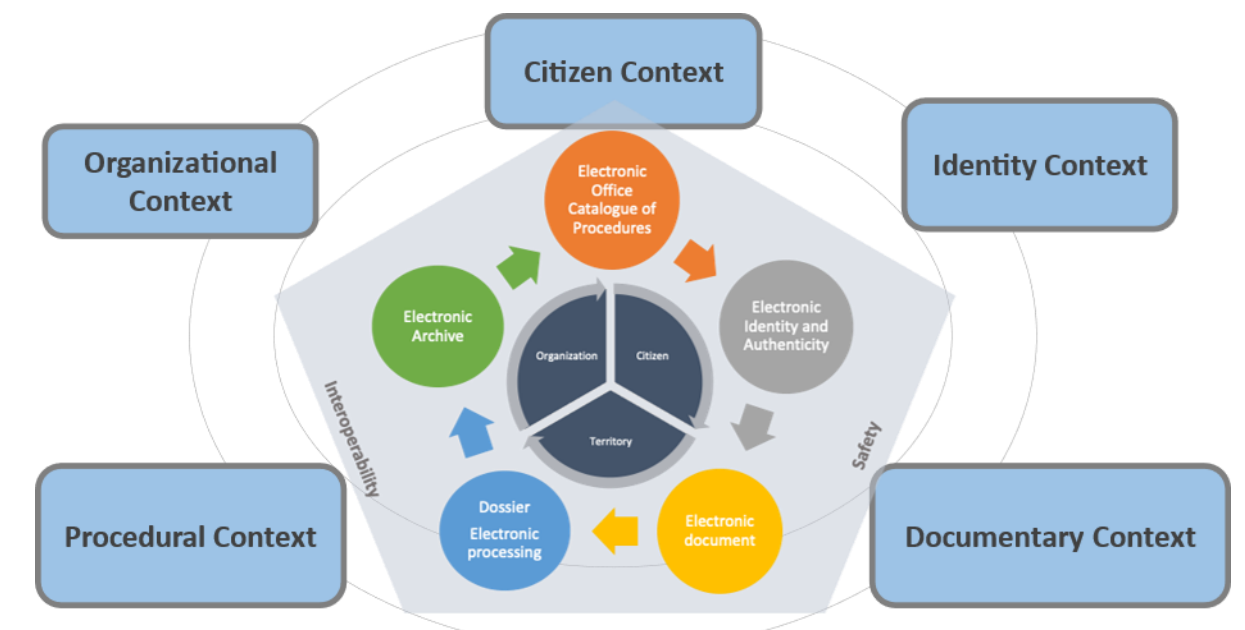
APPLICATIONS OF VALUE FOR CITIZENSHIP

CORE IT COMPONENTS

ROADMAP FOR THE DIGITAL TRANSFORMATION OF A SMART AND SUSTAINABLE CITY



Smart City ICT Ecosystem - Data infrastructure for City Services



Context for a generic eGovernment Solution

Business and Application Components

BUSINESS AND APPLICATION COMPONENTS

GUIDANCE WITH THE PRINCIPLES FOR DIGITAL DEVELOPMENT

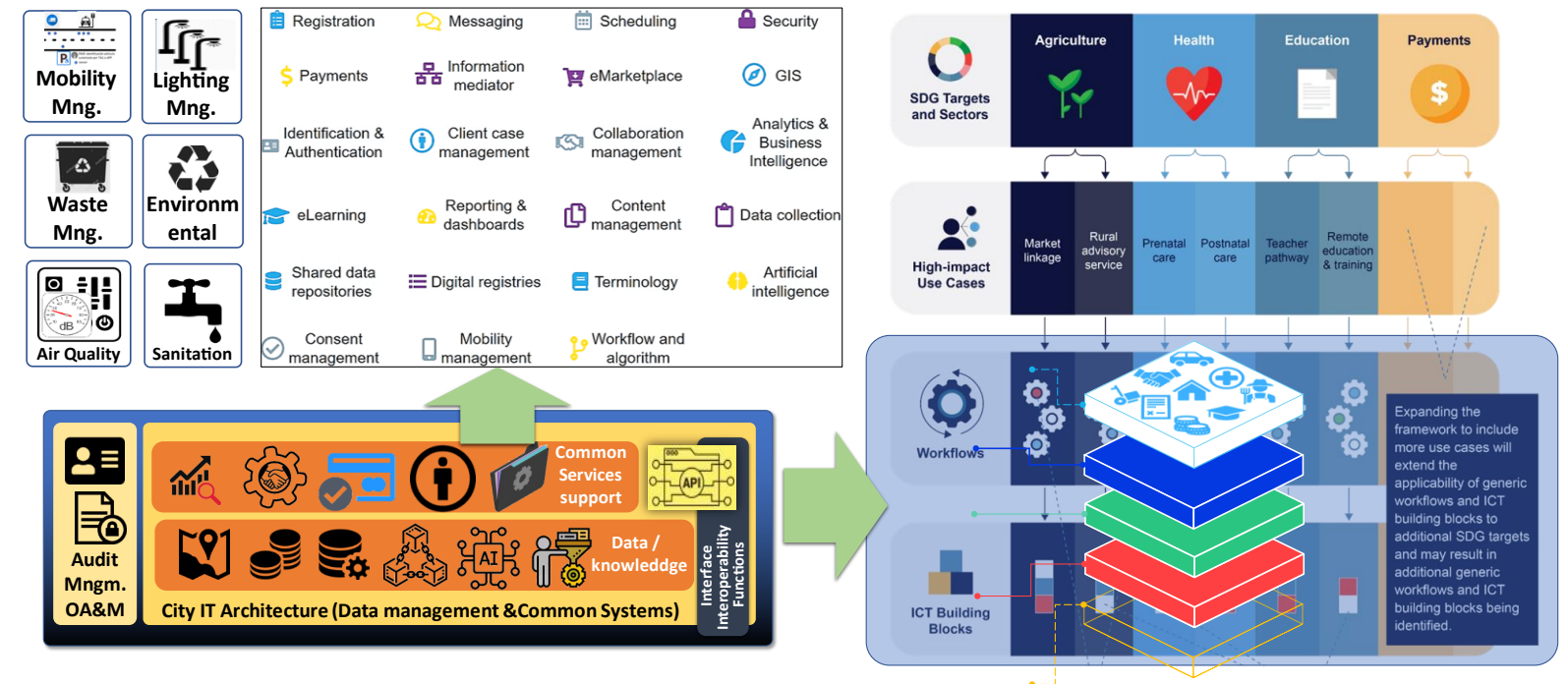
GOVSTACK DIGITAL GOVERNMENT PLATFORM APPROACH

DIGITAL GOVERNMENT PLATFORM BENEFITS

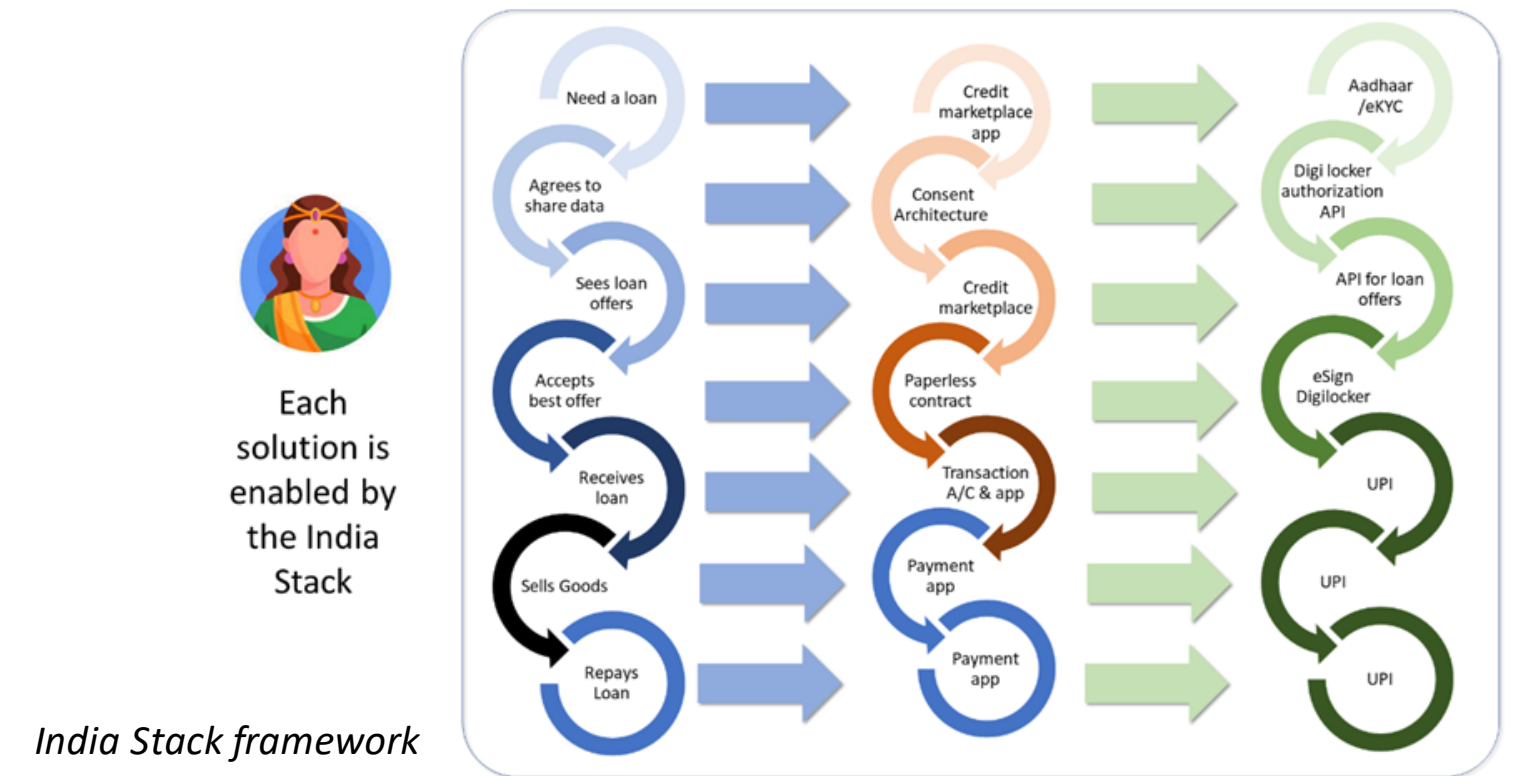
GOVSTACK SOFTWARE COMPONENTS (BUILDING BLOCKS)

A REFERENCE TO INDIA'S GOVERNMENT ENTERPRISE ARCHITECTURE, (INDEA)

SMART DESTINATION PLATFORM



City IT Architecture & GovStack approach



India Stack framework

Chapter 8: A Path to City Transformation

| | | |
|----------|--|------------|
| 8 | A PATH TO CITY TRANSFORMATION | 142 |
| 8.1 | LEADERSHIP | 143 |
| 8.2 | CITY STRATEGIC FORMULATION | 144 |
| 8.2.1 | <i>Diagnostic and actual context</i> | 144 |
| 8.2.2 | <i>Vision and City Objectives</i> | 146 |
| 8.2.3 | <i>Governance</i> | 146 |
| 8.3 | CITY ICT STRATEGIC FORMULATION | 147 |
| 8.3.1 | <i>Context and Current Diagnosis</i> | 148 |
| 8.3.2 | <i>Technological leadership & ICT governance</i> | 148 |
| 8.3.3 | <i>Reference ICT technological architecture</i> | 149 |
| 8.3.4 | <i>ICT Evolution</i> | 152 |
| 8.4 | MILESTONES AND LINES OF ACTION ALONG THE PATH OF TRANSFORMING VALENCIA INTO AN SSC | 153 |

Objective

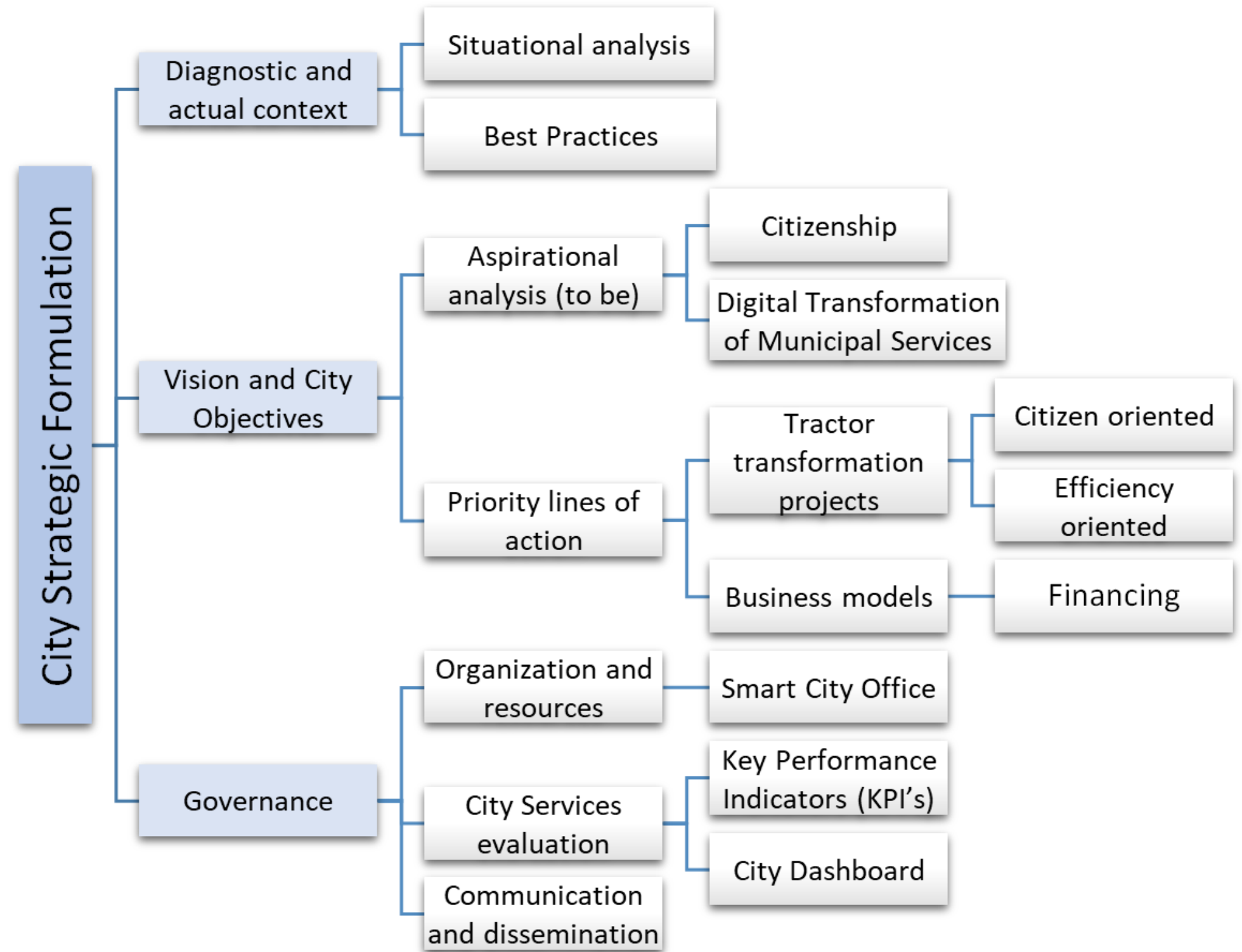
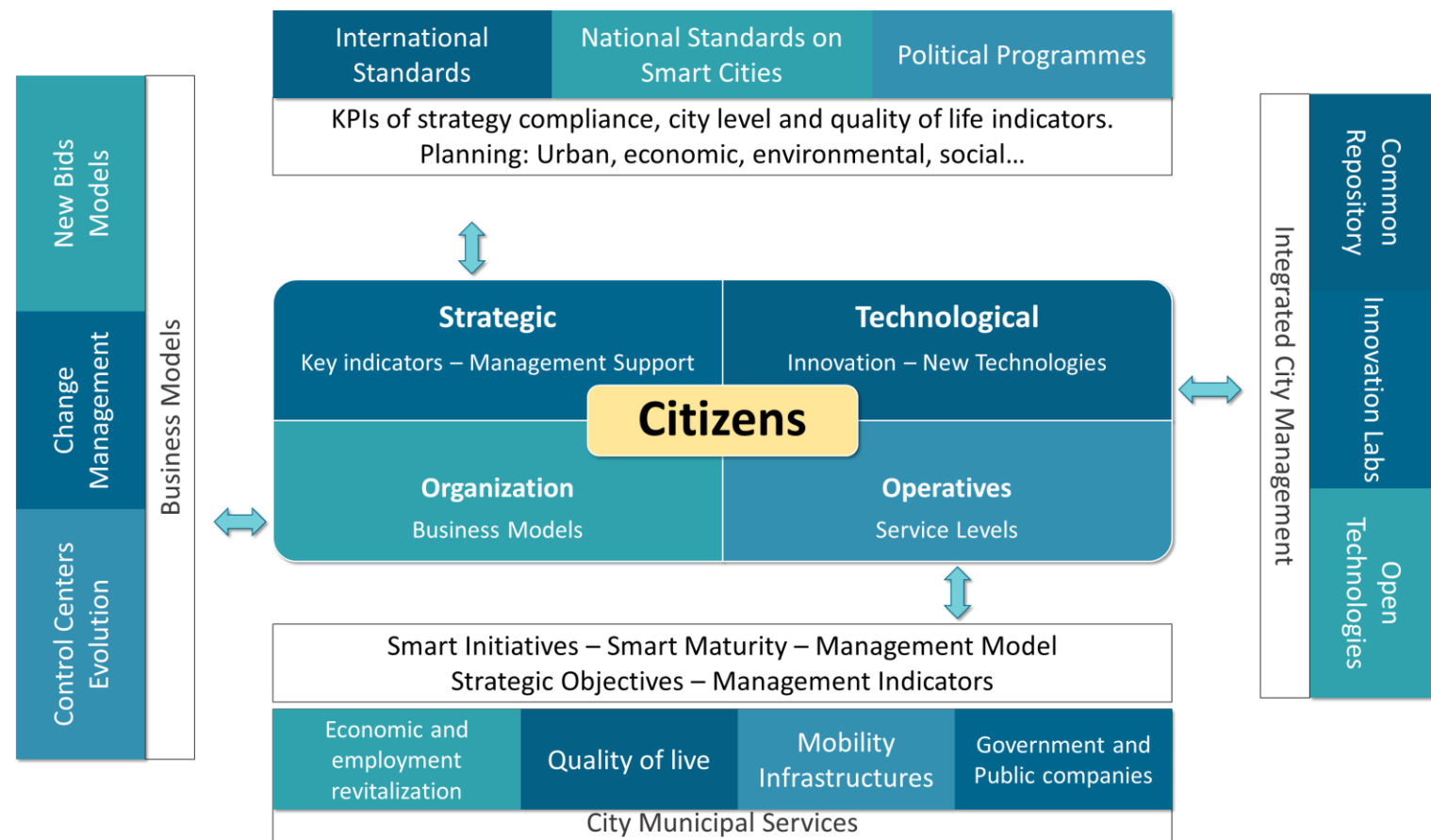
Help cities establish a high-level path for their transformation into SSC in the strategic and ICT fields.

Reference to other sections of the document as a guide for managers and stakeholders.



Chapter 8: A Path to City Transformation

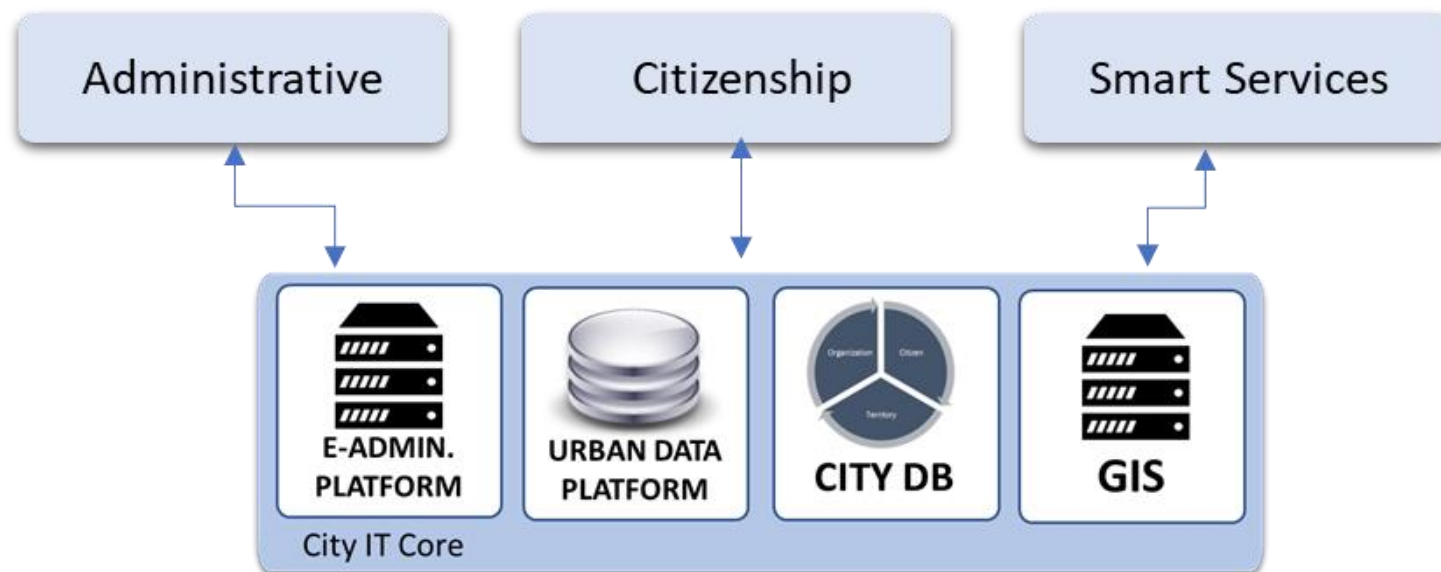
City Strategic Formulation



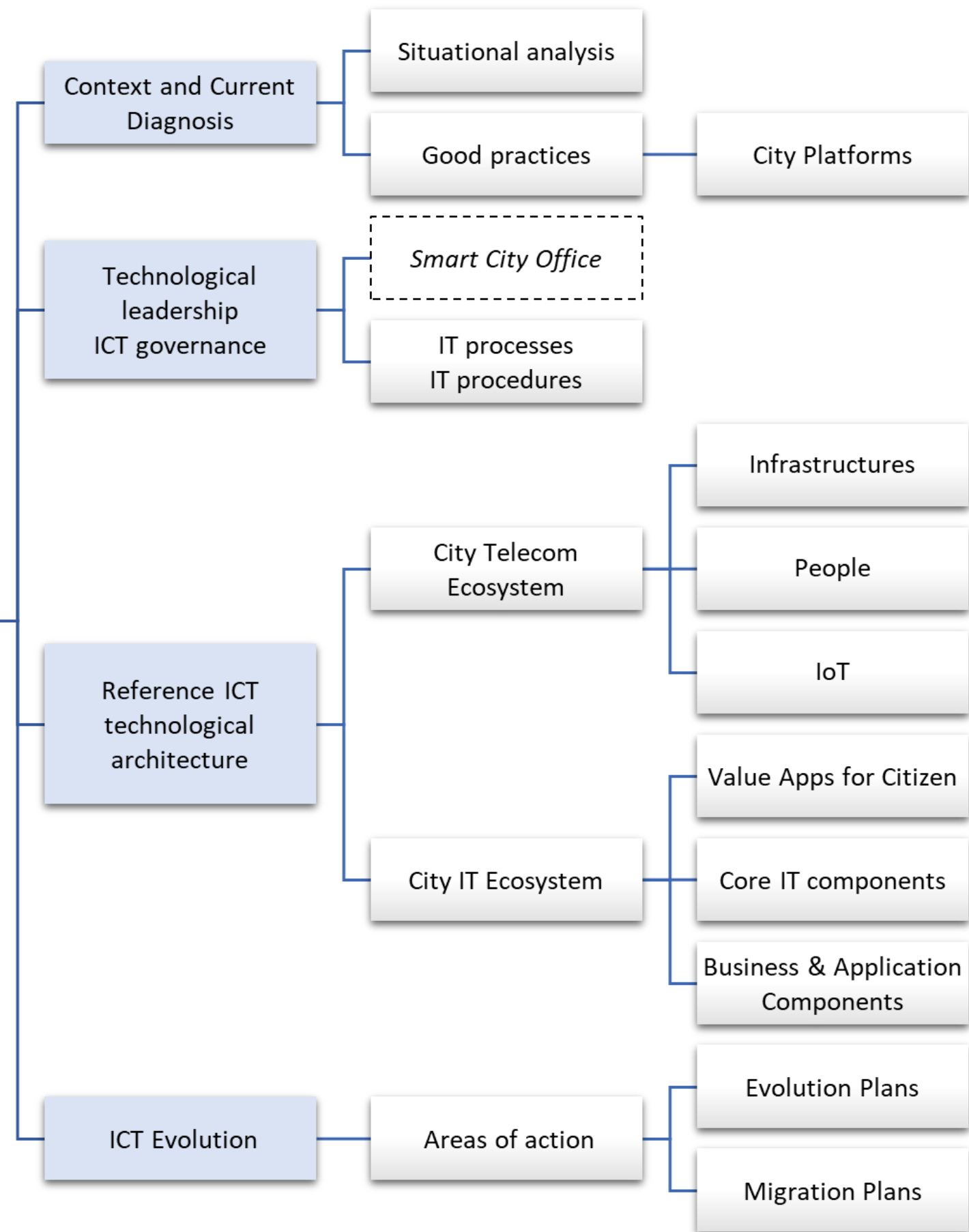
Chapter 8: A Path to City Transformation



ICT Strategic Formulation



ICT Strategic Formulation



Lessons Learned from other WG

Geographical distribution of the experts enriches the quality of the deliverables.

The **professional background** of the experts provides different views on the same subject.

Involvement of the experts in the development of the deliverable, including many cities

Strategic guidance and support from U4SSC secretariat

Good implementation of city platforms around the world, basic infrastructure for future smart, sustainable and resilient cities.

For more information, please contact:

Ernesto Faubel

Smart City Officer – Valencia City Council

CONTACT

U4SSCcityplatforms@valencia.es

u4ssc@itu.int

U4SSC website:

<https://www.itu.int/go/u4ssc>

Thank you!

