

## WHAT IS THE SMART CITY?

**Smart City** is a city management system, based on the use of innovative technologies in the field of ICT, networking, computer communications, big data and spatial planning, implemented (embodied) in the form of a specific model of the organizational structure of city management, which ensures the participation of society (citizens and all stakeholders) in the decision-making processes in key issues in city development.

**Smart Sustainable Cities** use information and communication technologies (ICT) to be more intelligent and efficient in the use of resources, resulting in cost and energy savings, improved service delivery and quality of life, and reduced environmental footprint – all supporting innovation and the low-carbon economy (Cohen, 2012).



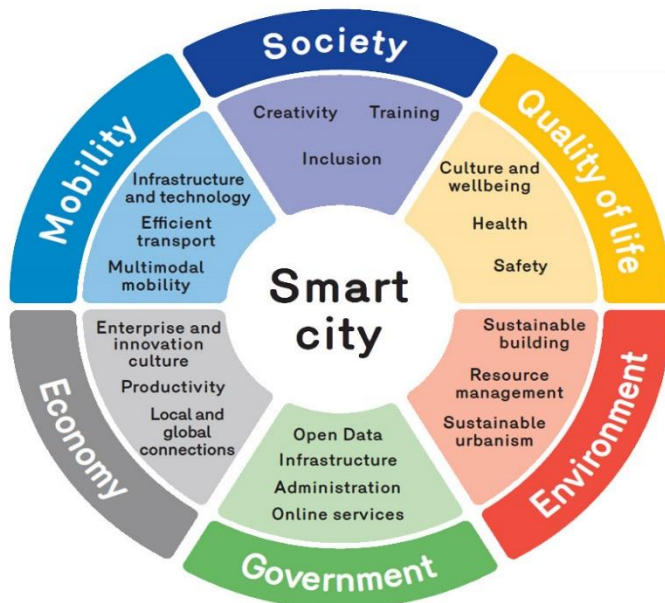
The term “**smart/connected city**” this is with the understanding that:

- A connected city is one where all relevant city systems are capable of communicating with each other.
- A smart city is one where the government and citizenry are using ICT and other available means to achieve their shared goals, including economic development, environmental sustainability, and improved quality of life for citizens.
- To be “smart,” a city must be “connected” to city’s infrastructure.

Key principles of creation an organizational model of smart city management:

- Smart city model should rely on a people-centric approach that responds to the sustainable development needs of people, and avoid a technology-centric approach.

- Smart city model should be chosen and designed with a deep understanding of people's lifestyles, cultures, behaviours and needs.
- Smart city model should be resilient to external shocks and ensure sustainability.
- Smart city model should be designed in order to be flexible with regard to future modifications and enhancements. Smart city development should be accompanied by appropriate risk management.



In Cohen's proposed smart city wheel are indicators for which the current compilation of smart city ratings. These indicators are designed to reflect how a smart city has an impact on the quality of services provided to citizens, on the work of government bodies and business activities:

**Smart mobility:** "Smart Mobility" focuses on increasing the efficiency and service quality of urban transportation to enhance the use and adoption of new mobility solutions as well as to increase people mobility through efficient mobility management and targeted infrastructure investments. Achieving cheaper, faster, and environmentally friendly mobility as well as integrated multi-modal transportation is an important challenge for cities and communities. Supporting the combination of multiple modes of public and private transport, and adopting new forms of transportation (e.g. electric vehicles, hydrogen-powered vehicles, autonomous vehicles, bike sharing, carpooling/car-sharing) is an important aspect for a future-oriented strategic approach to foster "Smart Mobility". A customer-centric and inclusive approach for all citizens, businesses, and visitors is needed to achieve a high-quality mobility service and to ultimately improve the flow of people and goods within a city or community, while at the same time reducing the environmental impact.

**Smart living:** "Smart Living" aims at increasing quality of life for residents and visitors by following an inclusive strategic approach – across all age groups and demographics. Facilitating liveability and optimizing the management of the living environment are two aspects that need to be jointly addressed to maximize benefits for the municipal government and its stakeholders.

Smart Living focuses on improving social and digital inclusion (e.g. the use of electronic services, connectivity, and social platforms), on improving healthcare and care for the elderly

(e.g. eHealth, Ambient Assisted Living), safety, housing conditions, and smart buildings. New methodologies for civic and social engagement as well as new technologies (e.g. IoT based on Wi-Fi or LPWA network technology) are leveraged to improve accessibility and citizen experience across all focus areas.

**Smart government:** “Smart Government” is about strengthening the connections and interactions between the government and all stakeholders - citizens, businesses and other organizations of the civil society - within a municipality. A municipal government following a smart city strategy is uniquely positioned to reconsider the quality, scale, and scope of services for citizens and businesses that it offers. By utilizing new methodologies, such as co-creation or crowd-sourcing, or by implementing new technology and innovation (e.g. for digital citizen or business services or the management of public infrastructure) a "smart government" can be developed. Following a "city as a service" model can help to increase efficiency and effectiveness as well as transparency and trust.

**Smart economy:** “Smart Economy” describes all actions aimed at transforming and strengthening a municipality’s economy. Improving the overall business climate, a city’s attractiveness for start-ups, investors, businesses, and new (highly qualified) talent as well as growing the economy in an innovative and sustainable way to increase competitiveness are the most important goals. Utilizing (digital) technology and intelligent approaches lead to economic prosperity that, in turn, generates stable and favorable conditions for all stakeholders. From a government perspective, "smart economic development" is an important tool to actively seize opportunities and provide conditions that support the creation and growth of businesses as well as new jobs.

**Smart people:** First, “Smart People” aims at transforming the way citizens interact – via information or the provision of services – with the public and private sector as individuals or businesses. Creating social and digital inclusion/digital equality through educational offers is an important prerequisite for a more efficient provision of information and services based on new technologies. Second, “Smart People” is about smart forms of education to facilitate career choices, labor market opportunities, vocational training as well as lifelong learning for all age groups and demographics. Talent development is also an important aspect from an economic development perspective as an increasingly important location factor. “Smart People” solutions support the creation of an accessible and inclusive environment to increase prosperity and innovation within a city or community. Participation, open-mindedness, and creativity are some aspects that are enabled or nurtured by implementing intelligent solutions.

**Smart environment:** “Smart Environment” describes how a municipal government manages the built and natural environment to improve liveability for citizens and visitors. Utilizing new technology and innovative methodology support the implementation of regulatory and cultural changes that facilitate sustainable standards and practices. The reduction of waste production, monitoring and managing pollution, emission reduction, water management, achieving energy efficiency, and accelerating the local energy transition are some important goals of "smart environment" initiatives. New urban planning standards to improve efficiency and to minimize the environmental impact, as well as the creation of a resilient community are further goals.