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## **The concept of Smart Cities; A literature review and a proposed framework for analyzing and enriching dimensions of the “smartness” of a city**

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### **Référence à la session / reference to the session**

### **Résumé / Summary**

Nowadays cities face complex challenges in order to meet objectives regarding socio-economic development and quality of life. The concept of “smart cities” is a response to these challenges.

The concept of “Smart City” embraces several definitions depending on the meanings of the word “smart”: intelligent city, knowledge city, ubiquitous city, sustainable city, digital city, etc. Many definitions of Smart City exist, but no one has been universally acknowledged yet. According to literature, it emerges that Smart City and Digital City are the most used terminologies to indicate the “smartness” of a city. Smart cities represent a conceptual urban development model based on the utilization of human, collective, and technological capital for the enhancement of development and prosperity in urban agglomerations (Angelidou, 2014). A digital city is substantively an open, complex and adaptive system based on computer network and urban information resources, which forms a virtual digital space for a city. It creates an information service marketplace and information resource deployment center (Qi, L., & Shaofu, L., 2001).

The idea of Smart/Digital City is the result of the development of Information & Communication Technologies (ICT's) and contributes to the redefinition of the concept of natural region. To be more specific, smart city is the end result of a new, innovative idea about city and urban life: more pleasant, more inclusive, greener and cleaner. Many national or international governments, institutions or political bodies, finance the implementation of project called “Smart Cities”, as they suggest it as an answer to city sustainable

development. The Smart City is nowadays seen like a key strategy to improve the quality of life of billions of people living in cities all over the world.

Regarding the definition of both Smart City and Digital City, we notice that a shared and acknowledged definition of both Smart City and Digital City still lacks. Strategic planning for the development of a Smart/Digital City remains a rather abstract idea for several reasons, including the fact that it is still largely unexplored and refers to interdisciplinary fields. However, there are several most cited definitions and they are establishing themselves like standards (Hall, 2000, Caragliu, 2011, Giffinger, 2007). Digital City definitions show a higher uniformity, because all of them are focused on the key role of ICT in improving the quality of services and information supplied to citizens. Smart City definitions are various, as the goal of a Smart City has to do with improvement of quality of urban life; and based on the assumption that all services and applications used in this city have to be smart i.e smart government, smart public services, smart education, etc .

The aim of this paper is to propose a framework for understanding the dimensions of Smart/Digital City and to provide a methodology for enriching them. Specifically, it will determine the concept of Smart/Digital City and explore aspects which determine a digital entity as a region or town and will make a record of the current situation in the European Union. The first part of this paper reviews the literature concerning the Smart/Digital City from the early 1990s, the time period when the smart city label gained interest, while the second part proposes tools and methods for analyzing the difference between Smart and Digital City.

Keywords: Smart City; Digital City; urban planning; ICT's

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