Developing smartainability management controls: The case of urban mobility in Belgian local governments

Dr. Djida Bounazef-Vanmarsenille, Pr. Nathalie Crutzen

Smart City Institute. HEC Liège. University of Liège. 35 rue Saint Gilles. 4000. Liège. Belgium

The concept of smart city is increasingly coming to the fore in recent literature review. This concept is mainly associated to the increasing interest dedicated to sustainability and social responsibility in local governments. The association between sustainability approach and smart city approach is explored to improve the quality of life, particularly, through the development of urban mobility. To do so, local governments tend to develop adapted management controls to analyse how urban mobility is planned, implemented and developed in the context of an increasing interest of sustainability and smart cities. This paper explores the development of management controls for urban mobility with a focus on sustainability and smart city measures, recently developed in the literature review as a smartainability approach. The paper develops an explorative qualitative study on eight Belgian local governments developing a smartainability overall strategy. The analysis refers to Malmi and Brown’s framework to study management controls for mobility in the context of sustainable and smart city approaches. The study required eight semi-structured interviews with sustainability mobility managers and an in-depth document analysis on sustainability and smart city approaches developed in the studied local governments. Finding shows that the development of smartainability management controls for urban mobility is influenced by the association between sustainability and smart city approaches. Even if all local governments develop a smartainability approach, they mainly set a priority on sustainability or on smart city measurements. Whereas sustainability measurements focus on developing alternative, dynamic and inclusive solutions, smart city measurements focus on developing innovative and digital-oriented solutions. Moreover, smartainability management controls are determined by the ability of local governments: (1) to develop a common vision of mobility challenges, (2) to increase collaboration and communication between involved actors, and (3) to develop flexible adaptations regarding to obsolete procedures.

**Keywords:** urban mobility, management controls, smart cities, sustainability, local governments