Mobility as a Service: How Changing Travel Use Habits Will Affect the Transition of Cities to Climate Neutrality

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Abstract – Transportation contributes significantly to air pollution and carbon emissions in cities, negatively impacting human health and the environment. Mobility as a Service (MaaS) is considered one of the promising solutions to this problem, as it reduces the number of trips by private vehicles. MaaS integrates different modes of transportation such as buses, trains, bicycles, and cars into a single platform, which increases the attractiveness of shared transportation and micromobility tools for users and facilitates the shift from private cars to more environmentally friendly modes of transportation. MaaS brings tangible changes in transportation use behavior. Research on behavioral factors influencing MaaS use and their relationship to transportation habits is underdeveloped, especially in regions with high levels of private car use and low environmental awareness. This article presents the results of a survey aimed at identifying the factors that influence transportation user behavior and the policies needed to promote MaaS adoption. These data are then used to assess the impact of MaaS on cities’ efforts to achieve carbon neutrality. The survey was conducted in the city of Riga, the capital of Latvia, and analyzes factors such as necessary changes in infrastructure, service design, pricing, public awareness, and information efforts to reduce carbon emissions.

Keywords – Behavior; city; MaaS; mobility as service; transport

Mobility as a service vs. private car ownership – paradigms of transport use.