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Abstract

Autonomous Vehicles in Urban Planning Documents: Perspectives from Hungarian Cities

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Sustainable urban mobility, as part of sustainable transport, is a declared aim of both international (UN Sustainable Development Goals, New Mobility Paradigm) and European-level (European Green Deal, EU cohesion policy objectives) strategies. Cities, however, face significant challenges in transforming their transport systems to make them sustainable. Autonomous vehicles are expected to revolutionise urban transport in the coming decades and can also contribute significantly to solving urban problems, provided their integration is carried out in line with cities' interests. This is a complex process that requires thorough preparation and planning and fundamentally affects urban transport, infrastructure, land use, urban budgeting, and regulatory systems.

Drawing on an in-depth analysis of the international state-of-the-art literature, the presentation outlines different perspectives on where cities currently stand in their preparations for the arrival of autonomous vehicles, focusing on their appearance and integration in urban planning documents. Beyond the international examples found in the literature, the presentation also reveals the appearance of autonomous vehicles in the planning documents of eight large Hungarian cities. In addition to urban passenger transport, the presentation will also address the urban planning challenges of autonomous vehicles in urban freight transport, exploring innovative logistics solutions, technologies, and measures that cities anticipate will promote more sustainable freight transport.