Solving Urban Multi-Modal Congestion

Time wasted in traffic can be reduced by 20%, and pollutants like CO2 emissions can be lowered by 10-20% on routes with intelligent transportation systems. Globally, the emerging Smart City market is worth US$408 billion in 2020. There are additional benefits such as employment and opportunities for third parties to create mobile applications that improve community engagement. Despite their growing populations, SMART Mobility will keep cities liveable for decades to come.

ADDRESSING THE CHALLENGE
By 2050, 68% of the global population will live in urban areas. Cities will have to cope with this growth while facing constrained budgets, limited natural resources and the economic, environmental and social damage associated with congestion. Congestion in the EU, often in and around urban areas, costs €100 B (1% of the EU’s GDP) annually. Tackling these issues is complicated by the lack of easily accessible transportation data because it is usually spread across a city’s departments.

PROPOSED SOLUTIONS
The SMART (Spatial Modelling Analytics and Real-time Tracking) Mobility project aims to give city planners and managers the tools needed for decision-making, such as integrated sensors, agile data repositories and automated visualisation, simulation and analysis systems. Six pillars make up the technological framework.
1. An innovative 4D analysis platform
2. Access to real-time vehicle data
3. Sophisticated data modelling tools
4. Connectivity and data exchanges between different stakeholders
5. Detailed traffic flow sensing, followed by data analysis to facilitate smart decisions
6. Traffic control streamlining via precise transporting and mobility

Together, these tools, models and data will deliver enhanced situational awareness of transportation flows, which supports better planning and management, reducing traffic congestion. It will also facilitate faster and easier access to on-demand ride services, ridesharing, carsharing and bikesharing programmes. The SMART Mobility solution will be demonstrated in selected field labs.

PROJECTED RESULTS AND IMPACT
Above all, SMART Mobility will improve a city’s quality of life. More effective city planning reduces economic inefficiencies and environmental degradation, resulting in direct savings of time, money and effort for both residents and local governments. Time wasted in traffic can be reduced by 20%, and pollutants like CO2 emissions can be lowered by 10-20% on routes with intelligent transportation systems. Globally, the emerging Smart City market is worth US$408 billion in 2020. There are additional benefits such as employment and opportunities for third parties to create mobile applications that improve community engagement. Despite their growing populations, SMART Mobility will keep cities liveable for decades to come.
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SMART

Project start
January 2020

Project end
October 2023

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