Future Mobility

Specific Challenge

We live in a fast and ever-changing world where new services and disruptive technologies have the potential to reshape the way in which we live and work and how we move. Innovative and disruptive technologies take-up can be challenging for mobility providers, cities and citizens due to unsuitable processes, skill sets, administrative rules, lack of training, data ownership, pace of innovation etc.

One of the clear enablers of new mobility services and innovations is digitalisation: technologies such as artificial intelligence, blockchain, 5G and IOT are and will shape all sectors and fields. In the field of mobility, these innovative technologies enable the creation and adoption of new services such as mobility as a service (MaaS), shared micro-mobility services, autonomous driving, and urban air mobility to name a few.

New mobility services have the potential to improve liveability in our cities, release space to citizens and help decarbonise our transport systems by supporting a systemic change to more people-friendly sustainable transport solutions. However, there are many administrative, legal, and technical challenges that stand in the way of unlocking the potential benefits.

Expected outcomes & impacts

The expected outcome would be to contribute to city policy objectives through the use of innovative measures in one or more European city. It is expected that a business model for the new service is tested and implemented. The measure implemented should have the potential for replication and scaling in other European contexts. The expected impacts are better mobility services for citizens, higher levels of accessibility, reduction in greenhouse gas emissions, and better use of urban space.

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Examples

Some examples of specific topics that can be addressed include:

- Demonstration of new pan-European MaaS services, particularly ones that integrate micro-mobility services and active mobility with public transport. The focus should be on accessibility for a wide range of citizens.

- Development and testing of new models for city authorities to prepare and support the implementation of new mobility services in line with their policy goals, for example digital city models, data ecosystems, new cooperation models, new stakeholder / co-creation fora.

- Increasing integration of transport services in the form of ticketing, information, and service provision.

- Demonstration of new digital tools / applications, / solutions to manage use of urban spaces, including road spaces (e.g., curbside management, geo-fencing) and pro-actively communicate management actions in real-time with logistics, mobility providers, and citizens.

- Launch of applications of connected and automated driving for all types of Vehicles of the Future. Market introduction of highly automated driving systems towards SAE level 4 is expected.

- Demonstration of urban air mobility solutions in alignment with city policies, ensuring safe and sustainable solutions for both passenger and freight transport.

- Demonstration of artificial intelligence in mobility management applications e.g., complex mobility scenario predictions and applications that facilitate journey user experience. Data protection management and cyber-security are key considerations.

- Creation of transport on demand services adapted to user needs enabling accessibility for low-density areas and vulnerable users.

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