MaaS

16th Annual AASHTO International Day (AID)

ITS World Congress: Smart Mobility, Empowering Cities

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The European MaaS model holds a huge potential in our exploration for faster but more sustainable horses.
MaaS in transport decarbonisation tool kit

50 %
Vehicle-km reduction potential of MaaS

30 %
CO2 reduction potential of MaaS

by 2050 in scenario of accelerated uptake of shared modes combined with public transport and strong regulation

Source: ITF Transport Outlook 2019
With MaaS we get ’em all

DISRUPTING THE CAR
Alternatives to car ownership by trip length

<table>
<thead>
<tr>
<th>Micromobility</th>
<th>Medium distance</th>
<th>Long distance</th>
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</thead>
<tbody>
<tr>
<td>0-5 miles</td>
<td>5-15 miles</td>
<td>15+ miles</td>
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**Bikes & Scooters**
- motivate
- Thumb
- Lime
- Scoot
- Spin
- Skip
- Bird
- Jump
- Razor

**Ride Hailing**
- Uber
- Lyft
- Via
- Gett
- Getaround
- Turo

**Car Sharing**
- Maven
- Car2go

60% of trips in the US
25% of trips in the US
15% of trips in the US

Source: NHTS
Mechanisms on how MaaS can change the world

By encouraging desired modal shift:

- From single-occupancy to shared vehicles / rides
- Providing better information on active mobility options
- Making multimodal combined trips more predictable, easy and attractive
- Providing access to occasional use of vehicles so that those who doesn’t need to use car everyday can mainly rely on PT and other services
- Providing better info & access to tourist to PT network and services

By making transport network operations more efficient:

- Reduction in vehicles – reduction in parked vehicles – reduction in traffic & congestions related to search of the parking space
- “Fleet effects” (B2B market): Easier to implement measures through agreement with fleet operators (efficient driving tools, speed control systems, incentive schemes, etc.)
- Data gathered by MaaS app used for predictive traffic management services and network and capacity management
USA & Canada: Automated and electric vehicles

Europe: Public transport as a core service, strong PPP

China: Electric and shared vehicles

Different context, different focus
Mobility-as-a-Service (MaaS) and Sustainable Urban Mobility Planning (SUMP)*

*PUBLISHED ON www.eltis.org
- Explore advanced data management models, strengthen the data management capabilities & flows
- Strategic use of public procurement and public service obligations

- Encourage pilots
- Build preconditions for MaaS (moderisation of ticketing systems, support access to data and use of open APIs)
- Seek for cross-sectoral benefits (MaaS & traffic management, MaaS & housing...)
- Funding priorities

- Public-People-Private dialogue
- Analyse the mobility situation (supply and demand)

- Determine the most suitable model

**Figure 16: Exercise for practitioners: Build a MaaS model for your city (Source: UCL MaaSLab)**
Key recommendations for policymaking

1. Facilitate access to data
   - With regulation
   - Via code of conduct
   - Via reciprocity models

2. Consider ticketing and payments system as transport infrastructure

3. Set right requirements in procurements and PSOs

4. Don’t enable new technical / operational gatekeepers

5. Build comprehensive passenger / consumer rights schemes
Study on the Roles of Public and Private Parties

Main conclusions:

• PTOs / PTAs are able to extend their scope and become a MaaS operator, but there is a lot to take into account before doing so: competition law, pricing and providing equal access to all services.

• MaaS operators must be able to access the same deals concerning tickets and services, such as mobile tickets, monthly tickets etc., as the ones offered to end-users by public transport operators.

• When defining the price of public transport tickets paid by MaaS operators, the PTOs should apply similar pricing principles as the ones applied to their own distribution channels.

• Competition concerns could also arise as a result of the use made by a dominant PT of aid received from the State, the region or the municipality. By way of example, this could happen if the PT was to receive public funding for the provision of universal transport services and it were to use this aid to cross-subsidise MaaS services so as to apply predatory prices in this segment.

User satisfaction – the only KPI that counts?

**DIGITAL INTERFACE**

Safety & Security
- Personal data
- Data security
- Safety during the journey

Convenience
- Contracts & plans
- Seamless transit experience
- Flexibility
- Accurate display of travel options

Inclusivity
- Inclusive service
- Accessibility
- Information related to environmental and health benefits

Customer care
- Real-time assistance
- Information about liabilities
- Customer protection in event of insolvency of service provider

**PHYSICAL TRANSPORT SERVICE**
Innovation for tomorrow’s journey.

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