

Title MAASiFiE - Mobility As A Service For Linking Europe
Author(s) Aapaoja, Aki
Citation 2nd workshop on Infrastructure Cloud - Operation and Services, 9 June 2017, Brussel, Belgium
Rights This article may be downloaded for personal use only.

VTT
<http://www.vtt.fi>
P.O. box 1000
FI-02044 VTT
Finland

By using VTT Digital Open Access Repository you are bound by the following Terms & Conditions.

I have read and I understand the following statement:

This document is protected by copyright and other intellectual property rights, and duplication or sale of all or part of any of this document is not permitted, except duplication for research use or educational purposes in electronic or print form. You must obtain permission for any other use. Electronic or print copies may not be offered for sale.



austriatech



Mobility As A Service For Linking Europe (MAASiFiE)

the 2nd Workshop on Infrastructure Cloud,
Brussels, June 9th 2017

Dr. Aki Aapaoja, VTT Technical Research Centre of
Finland

Collaborative Innovation Days

2nd Workshop on Infrastructure Cloud - Operation and Services | workshop 09/06



MAASiFiE project information

- Research programme: CEDR Transnational Road Research Programme – Mobility & ITS
 - Funding partners of ITS & Mobility are the National Road Administrations (NRA) of Austria, Finland, Germany, the Netherlands, Norway, Sweden and United Kingdom
 - Research Calls are managed by the Austrian Research Promotion Agency
- Project duration: 1st June 2015 – 31st May 2017
- Project coordinator: VTT Technical Research Centre of Finland Ltd.
- Project partners:
 - AustriaTech (Austria)
 - Chalmers University of Technology (Sweden)

The Finnish And The Global Mobility Market



- The Government is pushing heavily to develop Finland into the forerunner in transport digitalization.
 - **“Transport code enables better transport services: the code will make market access easier and promote interoperability of the different parts of the transport systems” (MinTC 19.4.2016)**

New, high-quality transport services through Transport Code

Uutinen 06.11.2015 09:52 fi sv en

Regulation on transport markets will be brought together under one act, Transport Code. The aim of the project is to promote new service models and thus better meet the users' needs. Further aims are to review the transport system as a whole, make market access easier and promote interoperability of different parts of the transport system. The Transport Code will help introduce new technologies, digitalisation and new business concepts. With the help of open data and the better use of data resources, favourable conditions will be provided for new business ideas. The project also aims to lighten reg-

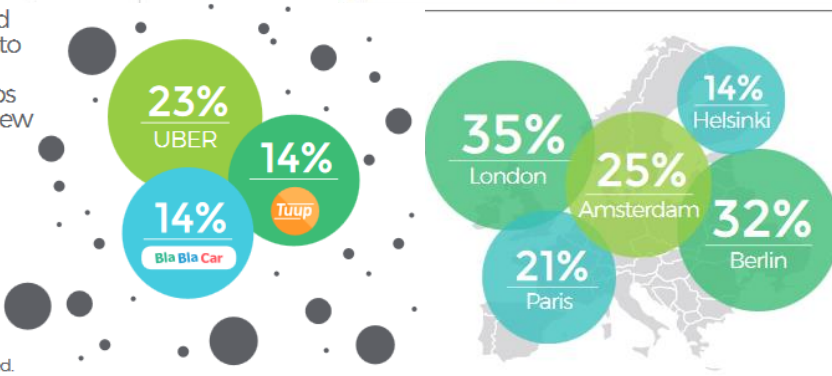
Uber, Tuup Oy, and BlaBlaCar appear to be the most promising start-ups in the European new mobility market.

The new mobility market is intransparent and dynamic!

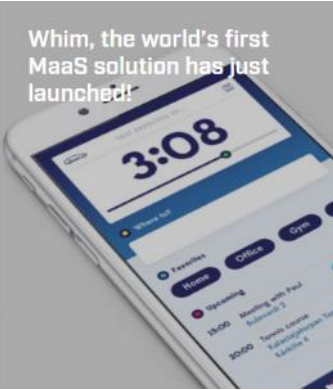
*Multiple responses allowed.

International visibility and marketing of concrete services is guaranteed!

1 New mobility hotspots in Europe.



*Multiple responses allowed.



Whim, the world's first MaaS solution has just launched!

PAÄKKIRIÖTUS
Liikennekaari avaa joukkoliikenteen markkinoita ja voi oikeasti helpottaa liikkumista

Eri liikennevälineitä voi yhdistellä joustavasti ja yhdellä lipulla voi matkustaa Suomen halki. Yhdessä paikassa se toivon mukaan tuo säästöjä, toisessa uusia palveluja.

PAÄKKIRIÖTUS 22.9.2016 2:00 Päivätyö 22.9.2016 7:47
 Helsingin Sanomat

LASSE RANTANEN



Project background and motivation

Changes in our environment...

- Decreasing importance of owning a car
- Sharing economy
- Modal shift targets (public transport)
- Sustainability
- Smartphones and applications
- Digitalization and automatization

...require and enable new transport services

- New mobility services, e.g. car sharing, ride sharing...
- Strong IT-support for new mobility services
- Access to services at any time and from anywhere
- Real-time information
- Automated passenger and freight services

Emergence of Mobility as a Service (MaaS) can make the use of alternative transport modes even more attractive



MaaS definition by MAASiFiE (2016)

“Multimodal and sustainable mobility services addressing customers' transport needs by integrating planning and payment on a one-stop-shop principle”

Multimodal transport; shared mobility

+

Multimodal traveller information

+

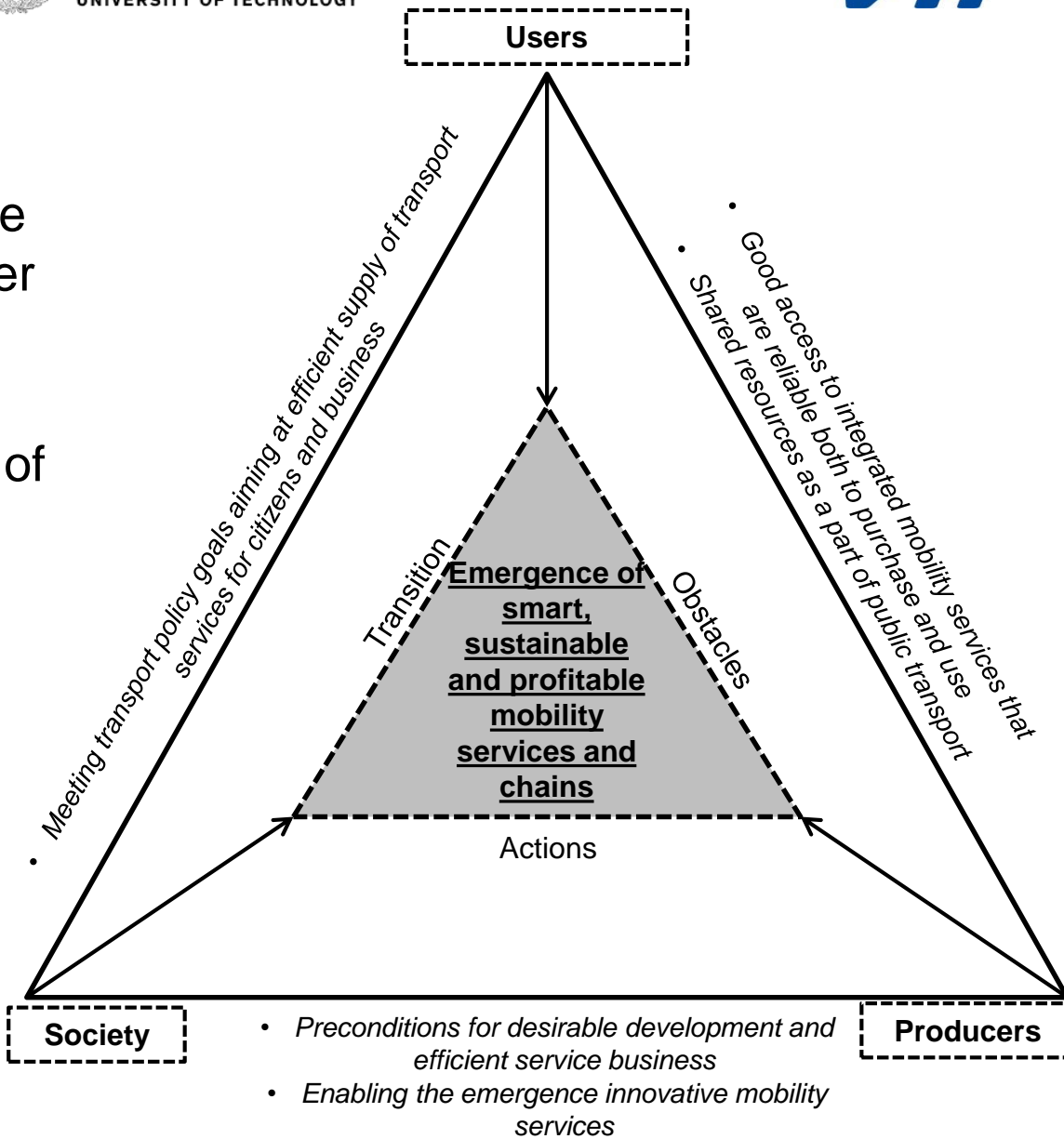
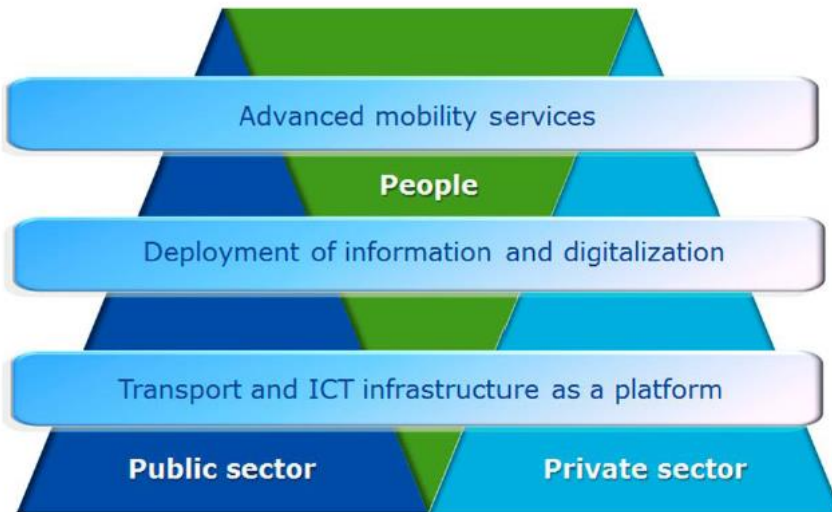
Integrated booking/ticketing/payment

Objective of MAASiFiE



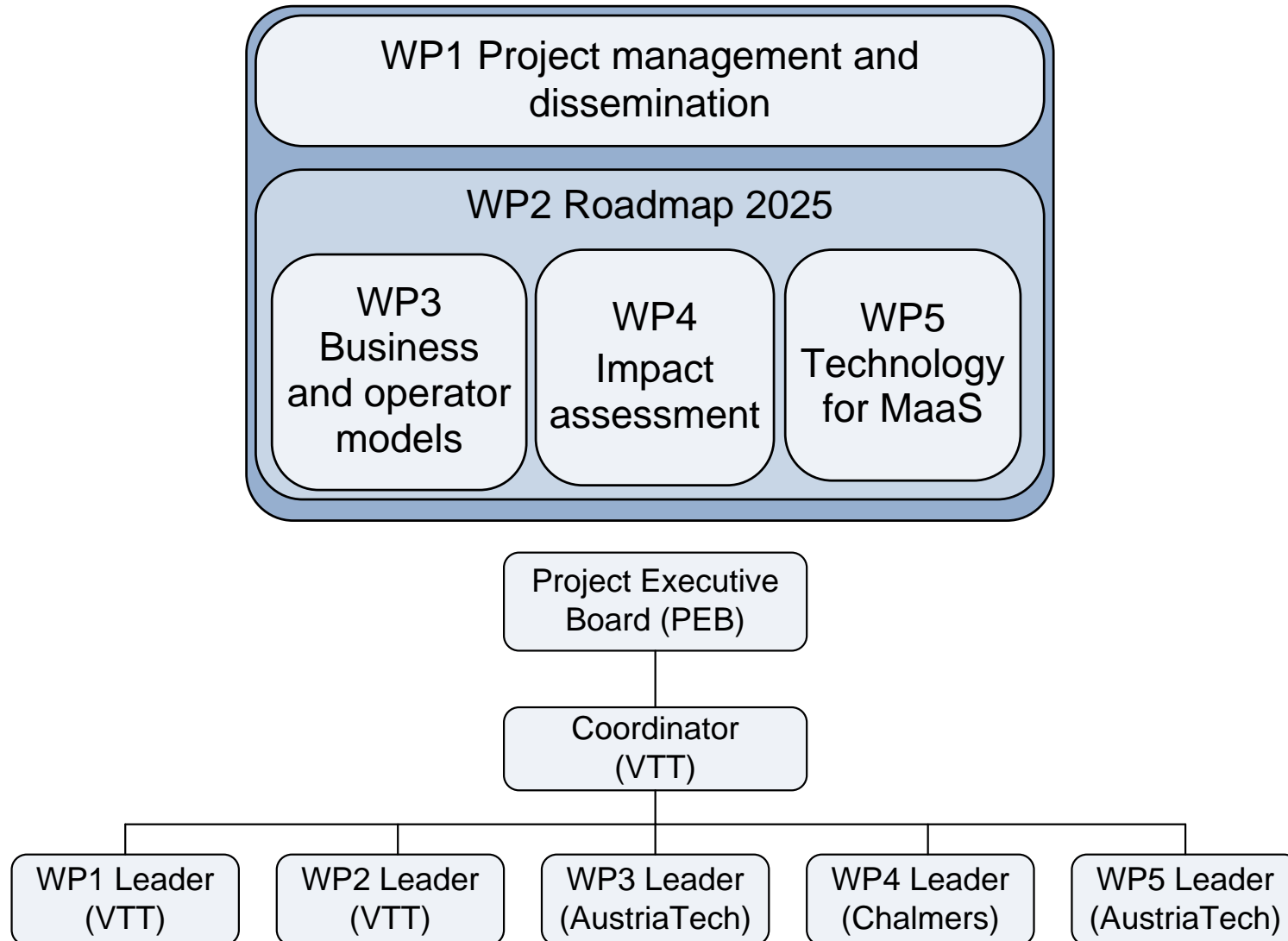
MAASiFiE aims to

- create a roadmap for the development of MaaS in Europe and especially in CEDR member states
- increase the national road administrations' understanding of a wide scale implementation of MaaS

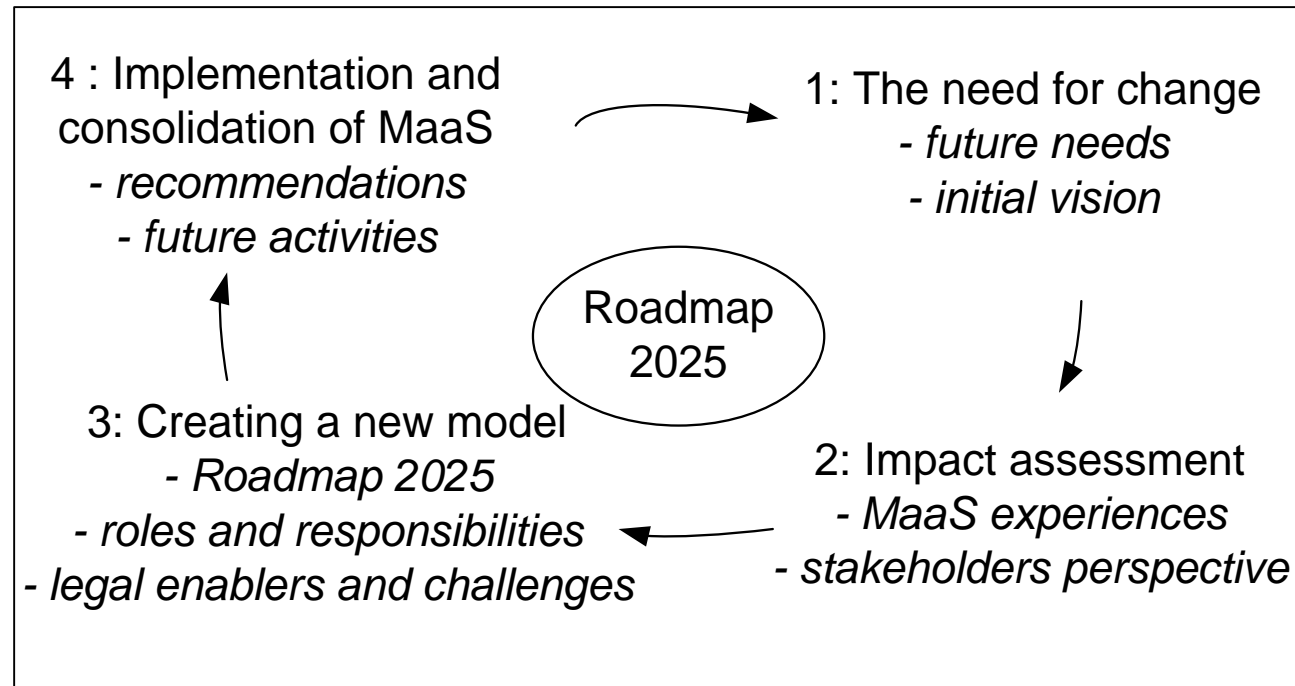


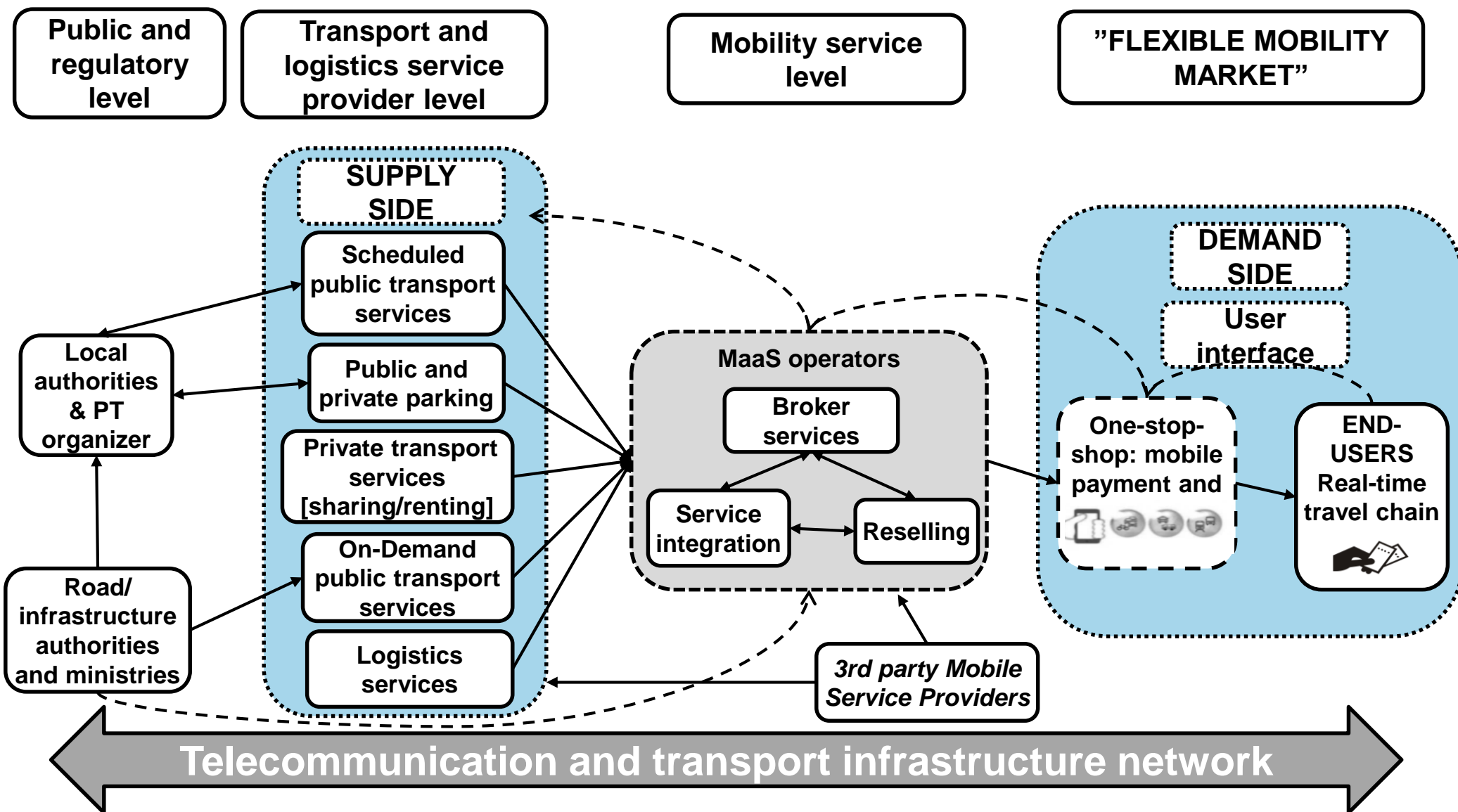
Source: Ministry of Transport and communication 2014

Project structure



- MaaS vision, Roadmap 2025 and implementation of MaaS (WP2)
- MaaS state-of-the-art (WP2+3)
- MaaS service combinations in different geographical areas (WP3)
- Business and operator models (PPP & Commercial models) (WP3)
- Impact assessment and KPIs (WP4)
- Technology for MaaS (architecture, interoperability, roaming...) (WP5)







MaaS in different geographical areas

Cities

Objectives:

- Reduce the use private of cars (congestions, parking)
- Reduce emissions

Based on:

- Existing public transport
- Extended with rental and shared cars and bikes...

Suburban areas

Objectives:

- No need for a 2nd car
- First-/last-mile accessibility

Based on:

- Park & ride -services, on-demand transport and other services connecting suburban to city transport services

Rural areas

Objectives:

- Increase efficiency and utilization rate
- Maintain sufficient service level
- Improve accessibility

Based on:

- Demand-responsive transport, taxis, busses and connections to long-haul transport, and car pooling
- Additional services: parcel deliveries, library services, and food and medicine distribution...

National and international levels

Objective:

- Offer easy all-in-one packages

Based on:

- Long-haul transport including air traffic
- Additional services: accommodation, event tickets, activities...



European MaaS Roadmap 2025

	Status Quo	+1-3 years	+4-9 years	Vision 2025
Drivers	Tightening efficiency and environmental requirements	Urbanization and change of urban structures		High efficiency and utilization rate
	Goals for increasing in the share of PT	Decreasing public funding		Cross-cutting collaboration and coordination
	Digitalization develops	Incentives on all levels	Automation and changes in vehicle fleet (shared, electric, connected)	Accessible and sustainable transport for all regions
Markets	MaaS hype and uncertainty	Steadily growing and stabilizing MaaS market		Profitable MaaS markets
	Few MaaS offers and low market share	Mobile services becoming more common and intelligent		Strong demand for MaaS services
	Uncertainty regarding legal possibilities	Change of user demands: safe, easy, fast, flexible, comfort	New forms of collaboration and cross-financing (e.g., PPP)	Strong demand for MaaS
MaaS services	Increasing number of pilots, of which best will scale-up	Blur the walls of modal silos		P2P services commonly available
	Expanding service integration and combinations	Business for data and services		
	Imbalance between transport modes	One-stop-services combining all purposes of mobility and activities		Minimum SLA for MaaS defined
	Opening up data and interfaces proceeding	Combined public and private sector ; private cars as part of public transport (i.e., redefined PT)		PT carried out as DRT
Enablers	R&D funding available	One-stop-shop mobility services; from cities to everywhere		
	Extensive national and international networks	Defined My data concept enabling efficient data analysis		
	Roadmaps and strategies under development	Principles for cost/profit/subsidising	Systematic research; MaaS integrated into academic domain	
		Cross sector operation models incl. all transport modes; viable business models (B2B, B2C, P2P, B2G...)		
	Standards for data, ticketing...	Poi. and econ. steering promoting sustainable society development		
	Incentives for using MaaS; changed mind-set (public/private...)	Guidelines for city/infra planning		
	International MaaS platforms	MaaS as a part of combining societal services		

European MaaS Roadmap 2025.

http://www.vtt.fi/sites/maasfie/PublishingImages/results/cedr_mobility_MAASiFiE_deliverable_2_revised_final.pdf



More information?

Aki Aapaoja, Research Scientist
aki.aapaoja@vtt.fi



Jenni Eckhardt, Senior Scientist
MAASiFiE project coordinator
jenni.eckhardt@vtt.fi



Please visit: <http://www.vtt.fi/sites/maasifie/>



TECHNOLOGY «FOR BUSINESS»

