

Title	MaaS service combinations for different geographical areas
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Citation	24th World Congress on Intelligent Transportation Systems, 29 October - 2 November 2017, Montreal, Canada
Date	2017
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**MaaS service combinations for different geographical areas**

# 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**



# Finland as a forerunner?

- 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)***

***International visibility and marketing of concrete services is guaranteed!***

## 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 tech in the help of open data conditions will be prc lighten regulation.

\*Mobility has to be a) for users. There is pla in interoperability of to improving the situ ensuring the quality) and Communication

\*Our aim is to turn Fi productivity is possit sector. Digitalisation As part of a Governm

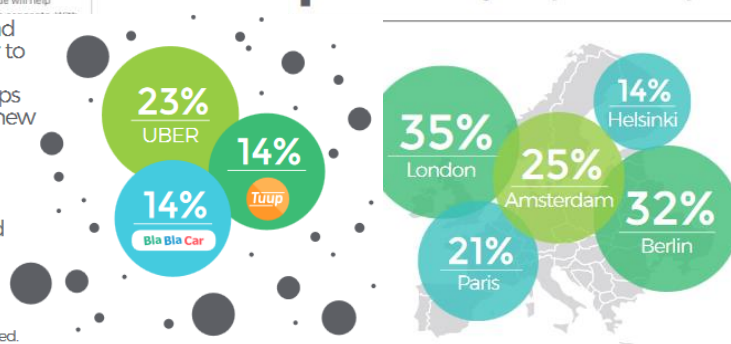
Uber, Tuup Oy, and BlaBlaCar appear to be the most promising start-ups in the European new mobility market.

The new mobility market is intransparent and dynamic!

\*Multiple responses allowed.

GBD's European new mobility survey 2016

## 1 New mobility hotspots in Europe.



\*Multiple responses allowed.

PAKKILOITUS

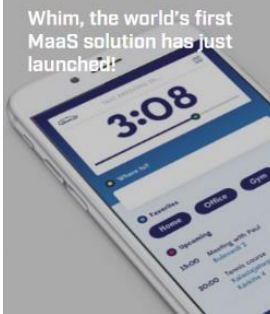
## Liikennekaari avaa joukkoliikenteen markkinoita ja voi oikeasti helpottaa liikkumista

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

PAKKILOITUS 23.9.2016 2:00 Päivätyö 23.9.2016 7:47

Helsingin Sanomat

LASSE RANTANEN



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



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# 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

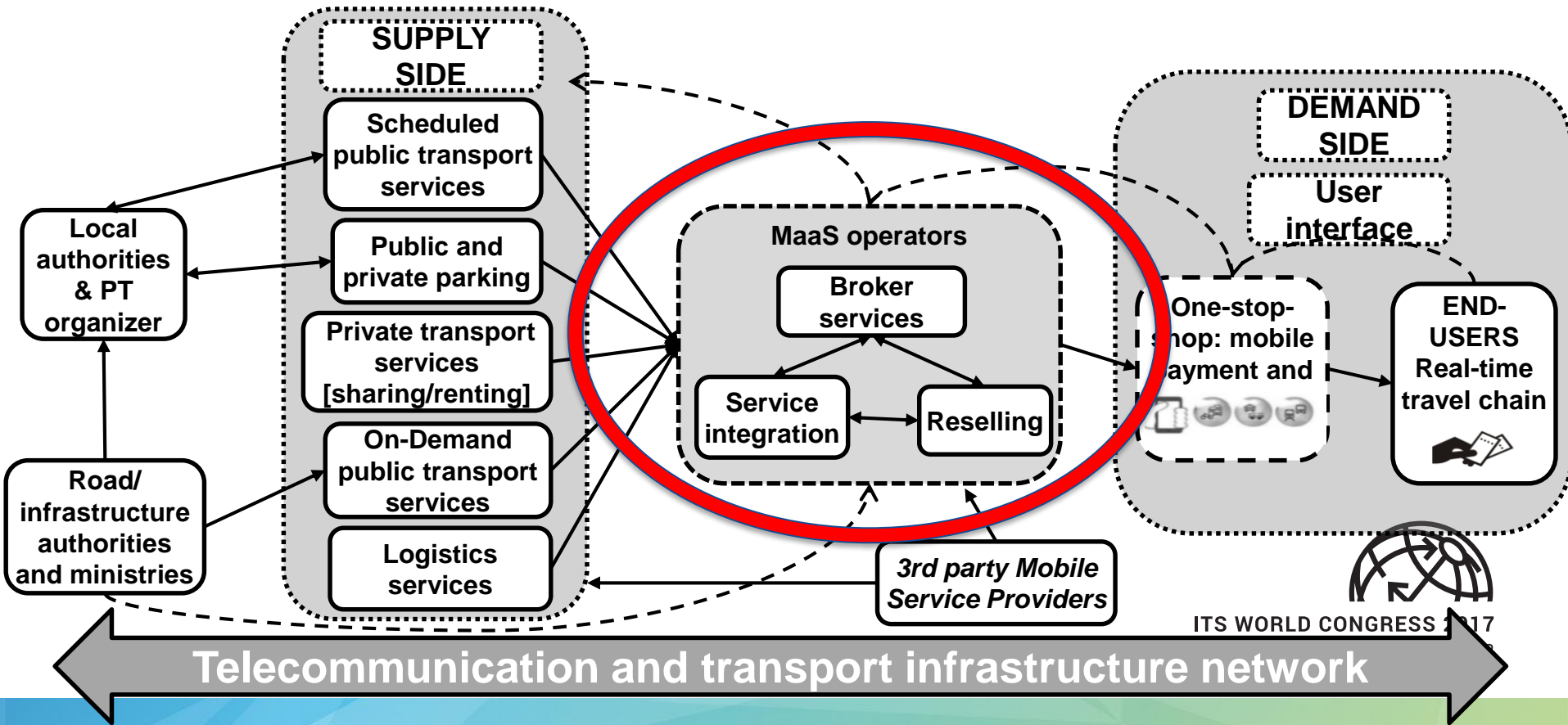


Public and regulatory level

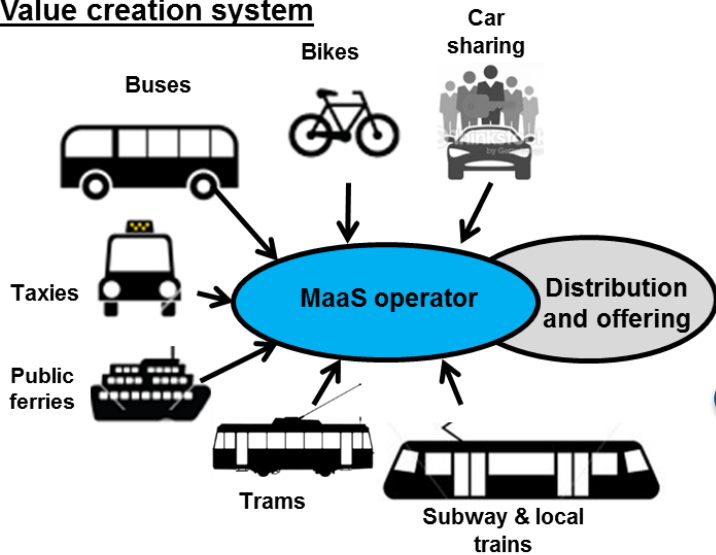
Transport and logistics service provider level

Mobility service level

"FLEXIBLE MOBILITY MARKET"



## Value creation system



## Value proposition

- Reduced use of private cars
- Reduced emissions
- Enhanced urban planning
- Sustainable low-carbon mobility
- Multimodal one-stop-shop
  - interoperable services
  - Integrated routing, booking and payment
- Individual preferences, priorities, constraints and needs

**MaaS in  
urban  
areas**

**ALTERNATIVES &  
LIVEABILITY**

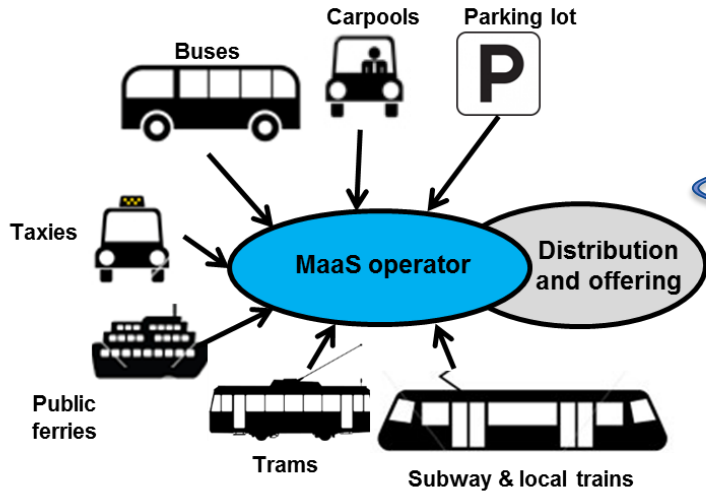
## Revenue model

- Pay per usage: A mobility service directory helps in finding the smartest mobility option for the single journey (for occasional users, and ad-hoc and exceptional needs)
- Prepaid monthly commuter package: Single access point to multimodal service base (trains, buses, trams and sufficient amount of taxi) for regular everyday needs
- Tailored all-in-one package: Highly customized travel solutions for users with varying travel needs (Monthly fee + pay per usage)



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## Value creation system



## Value proposition

- No need for the 2<sup>nd</sup> car
- Integrating private transport with public transport services in city areas
  - Park & Ride
  - Demand responsive transport
  - Integrated routing, booking and payment
- Individual preferences, priorities, constraints and needs

## MaaS in Suburban areas

**FIRTS-LAST MILE SERVICES**

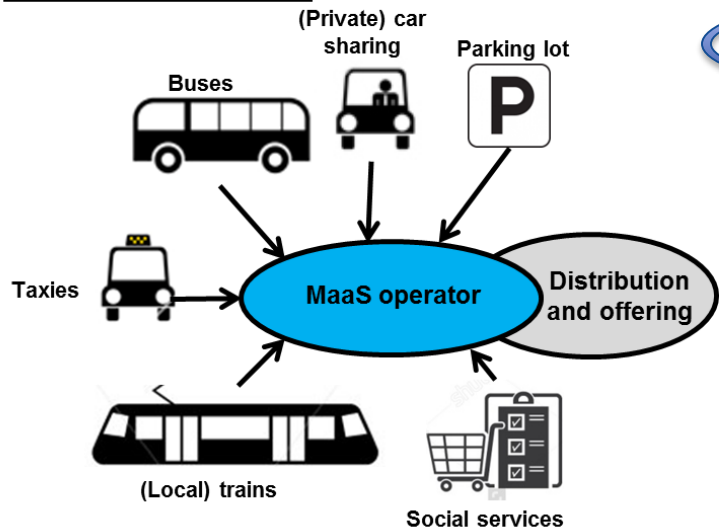
## Revenue model

- Pay per usage: A mobility service directory helps in finding the smartest mobility option for the single journey (*for occasional users, and ad-hoc and exceptional needs*)
- Prepaid monthly package: Single access point to multimodal service base (trains, buses, trams and sufficient amount of taxi)
- Tailored all-in-one package: Highly customized travel solutions for users with varying travel needs (*Monthly fee + pay per usage*)





## Value creation system



## Value proposition

- Increased efficiency and utilization rate of publicly subsidized transport
- Sustaining current services and levels
- Accessibility for different user groups (inhabitants, tourists etc.)
- Integrating private transport with public and social services
  - Combined passenger transport and logistics
- Individual preferences, priorities, constraints and needs

**MaaS in rural areas**

**ACCESSIBILITY**

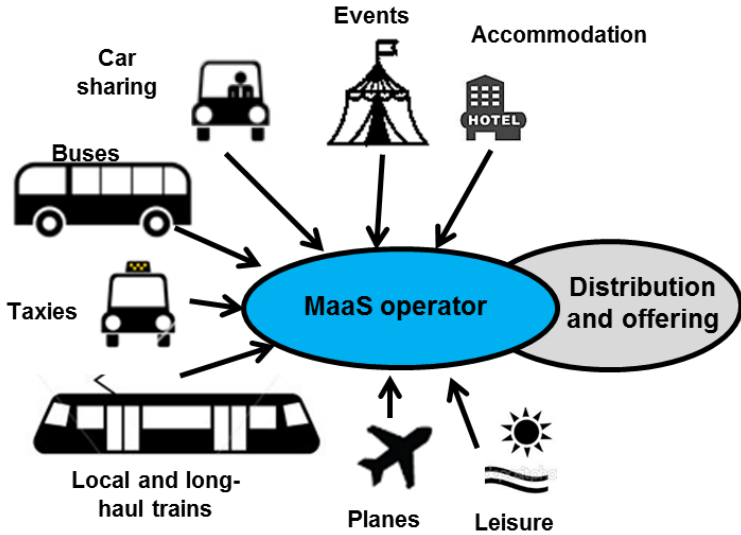
## Revenue model

- Pay per usage: A service directory helps in finding the smartest option that may contain journey or related services
- Monthly package: Single access point to multimodal service base (short + long-haul trains and buses, and sufficient amount of taxi)
- Tailored all-in-one package: Highly customized travel solutions for users with varying travel needs. May also include socially supported services (*Monthly fee + pay per usage*)



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## Value creation system



## Value proposition

- One-stop-shop for all the travel services
- Door to door transport services + entertainment
- To fulfill the ultimate need and objective behind the travelling
  - Combining short- and long-haul transport
  - Mobile ticketing and payment
- Individual preferences, priorities, constraints and needs

**CROSS-BORDER SERVICES**

**MaaS on international level**

## Revenue model

The whole travel chain can be bought from the one-stop-shop principle to fulfil all the travellers' needs

- Negotiated series ticket: Option may include combination of services for a given period negotiated in advance (e.g., flying + accommodation)
- Case-specific pricing: A service directory helps in finding, booking and paying the preferred option that may contain journey and entertainment services



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# Summary

## 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...



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