

Title	Business models for MaaS
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Business models for MaaS


1st international conference on Mobility as a Service, 28-29.11.2017, Tampere

Aki Aapaoja, Jenni Eckhardt & Lasse Nykänen, VTT

Project information: MAASiFiE

Mobility as a Service for Linking Europe




- Funding: CEDR Transnational Road Research Programme – Mobility & ITS
- Project duration: June 2015 – May 2017
- Project coordinator: VTT Technical Research Centre of Finland Ltd. 
- Partners: AustriaTech (Austria) and Chalmers University of Technology (Sweden)

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- Main content:
 - MaaS vision, Roadmap 2025 and implementation of MaaS
 - MaaS state-of-the-art
 - MaaS service combinations in different geographical areas
 - Business and operator models (PPP & Commercial models)
 - Key performance indicators (KPIs) and impact assessment
 - Technology for MaaS (architecture, interoperability, roaming...)

Project information: MaaS concept - promoting the development of business and services in rural areas

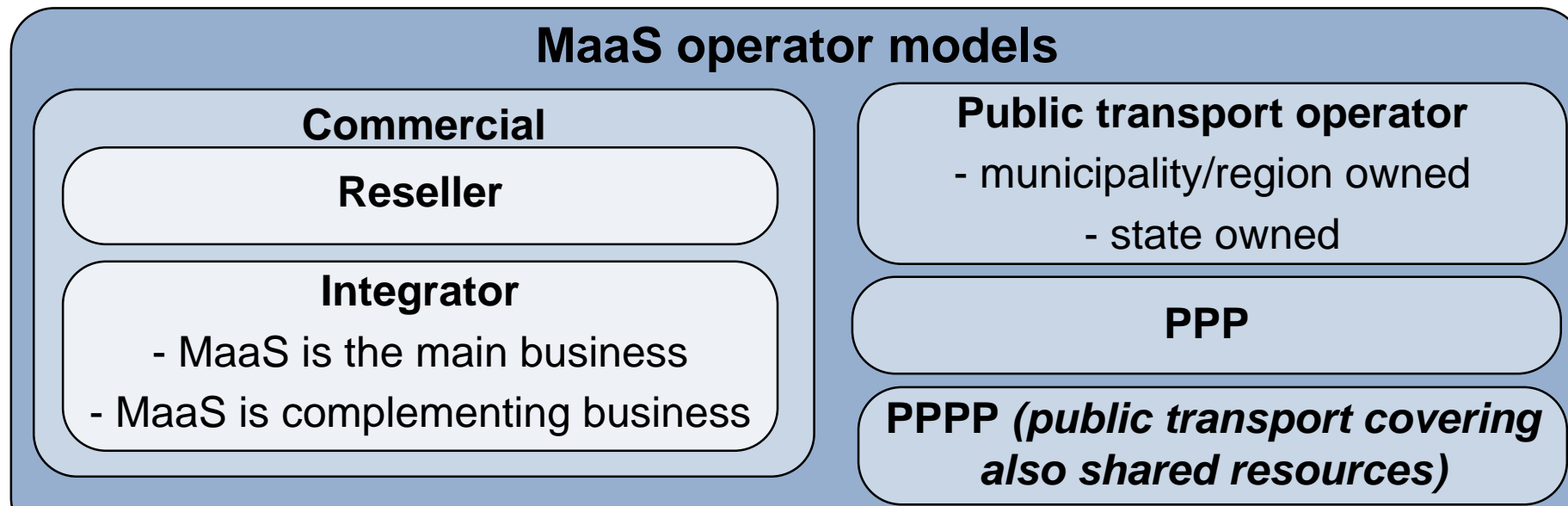
- Co-funded: Ministry of agriculture and Forestry and VTT
 - Project duration: June 2016 – June 2017
 - Project coordinator: VTT Technical Research Centre of Finland Ltd.
 - Partner: Lappeenranta University of Technology
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- Main Content
 - Create a (national) vision for MaaS in rural areas
 - Recognize emerging business models
 - Give recommendations on technical aspects of the new mobility services
 - Recommend measures for the development of mobility regulation
 - Improve awareness of MaaS concept in rural areas
 - Identify rural MaaS SWOTs + Challenges
 - Propose solutions for the development of rural MaaS

MaaS definition by MAASiFiE (2016)

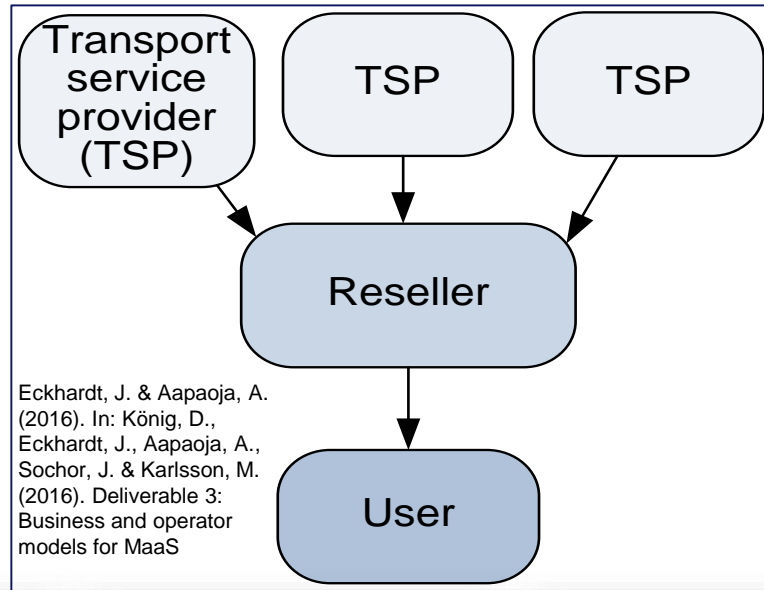
“Multimodal and sustainable mobility services addressing customers' transport needs by integrating planning and payment on a one-stop-shop principle”

Multimodal transport; shared mobility
+
Multimodal traveller information
+
Integrated booking/ticketing/payment


MaaS operator models

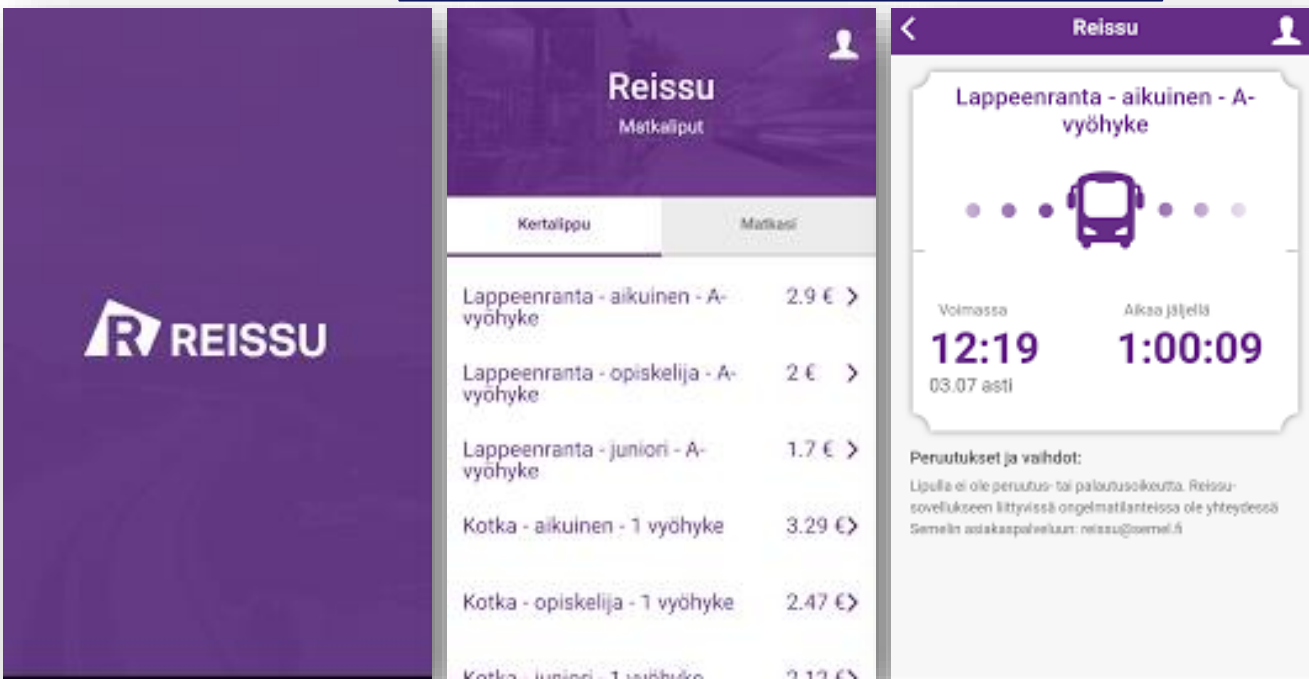


Commercial MaaS models: Reseller

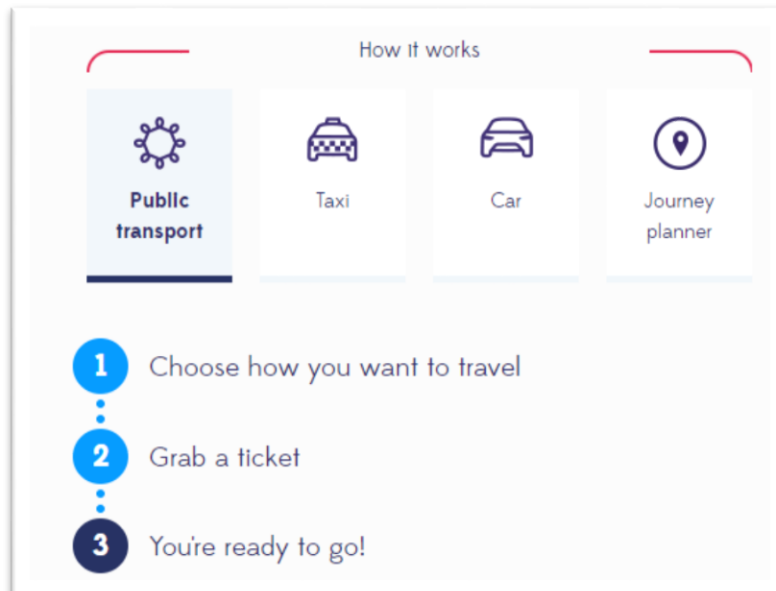
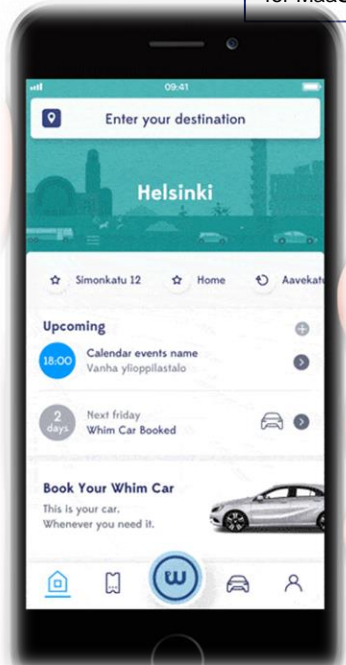
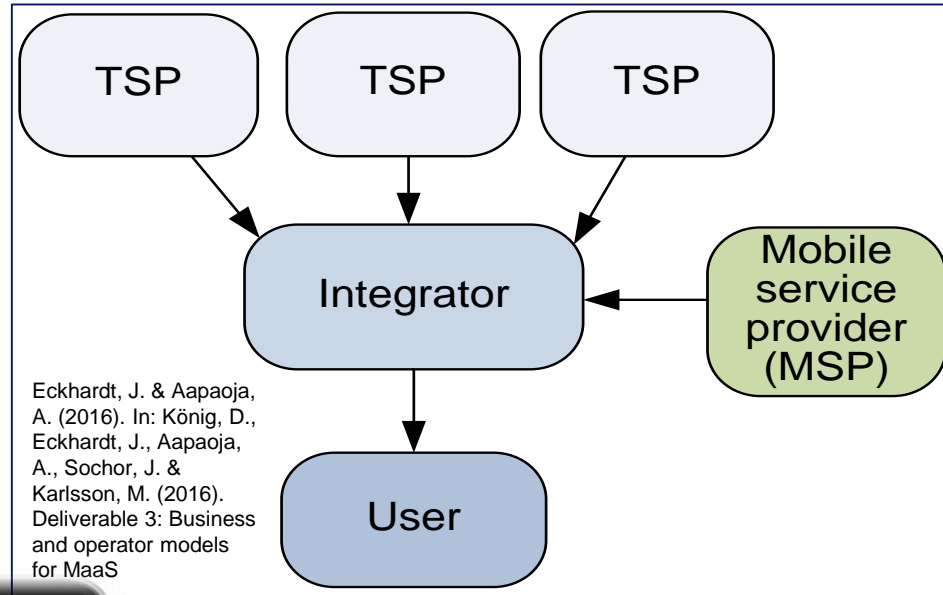


- Reseller
 - Travel agencies
 - National and international traveling
- Revenue model
 - Commission (i.e., Agency model)
 - Fixed price (monthly etc.)
 - Buy cheap, sell higher price (i.e., Merchant model)

- Example service 
 - Semel Reissu (former Sonera Reissu)
 - MaaS as a complementing business



Commercial MaaS models: Integrator



■ Integrator

■ MaaS as a main business

- Whim  freedom of mobility.

■ MaaS complements offering

- Telia Company

■ Mobile services and ICT as a cornerstone

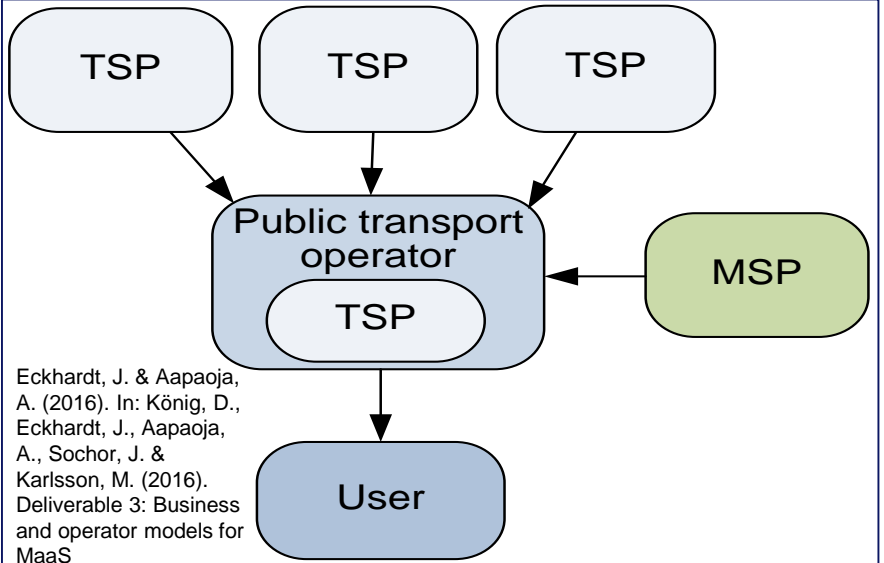
- Apps: mobile ticketing, payment, routes, availability...

■ Viability

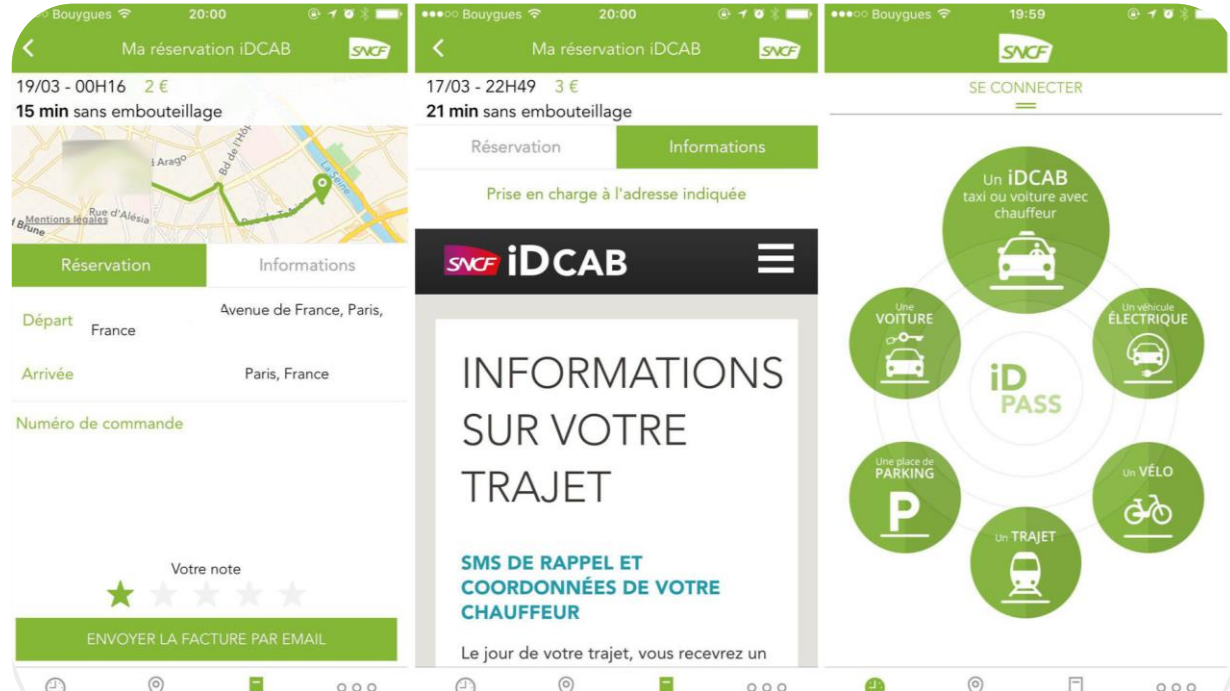
- Urban and suburban areas

- National/international MaaS

(Extended) Public transport operator model

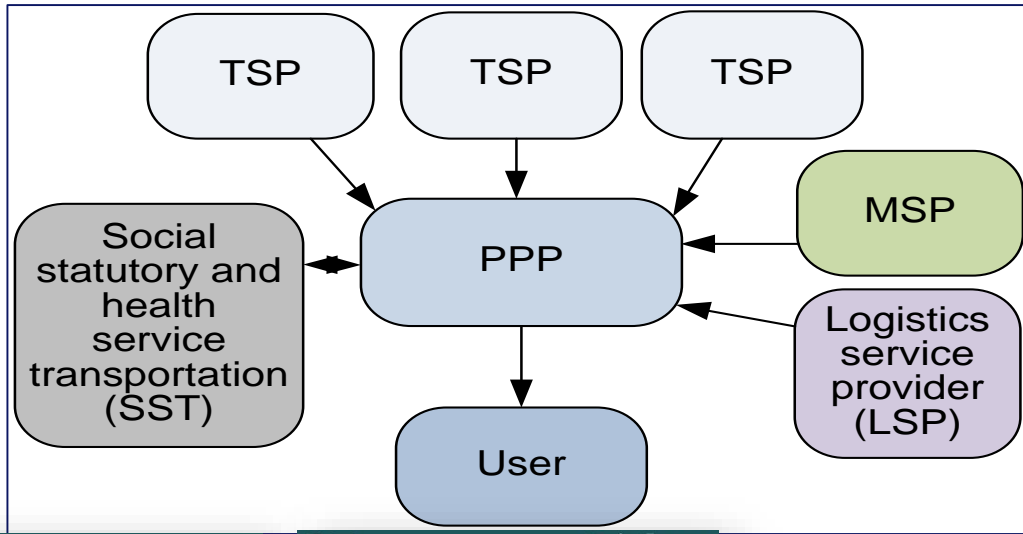


- Public transport operator model:
 - Mainly in cities where comprehensive public transport already exists
 - Interurban transport
 - Better customer value through extended and complementary service offering



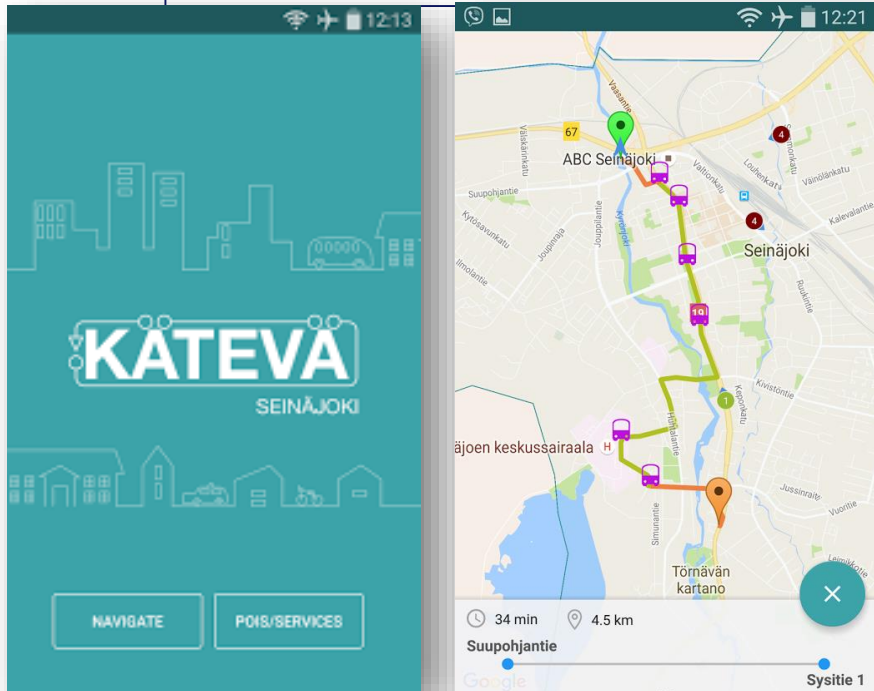
- Door-to-Door service by **SNCF ÜSTRA**
 - Car pooling service
 - Taxi
 - Rental car and car sharing
 - Bicycles

PPP Model



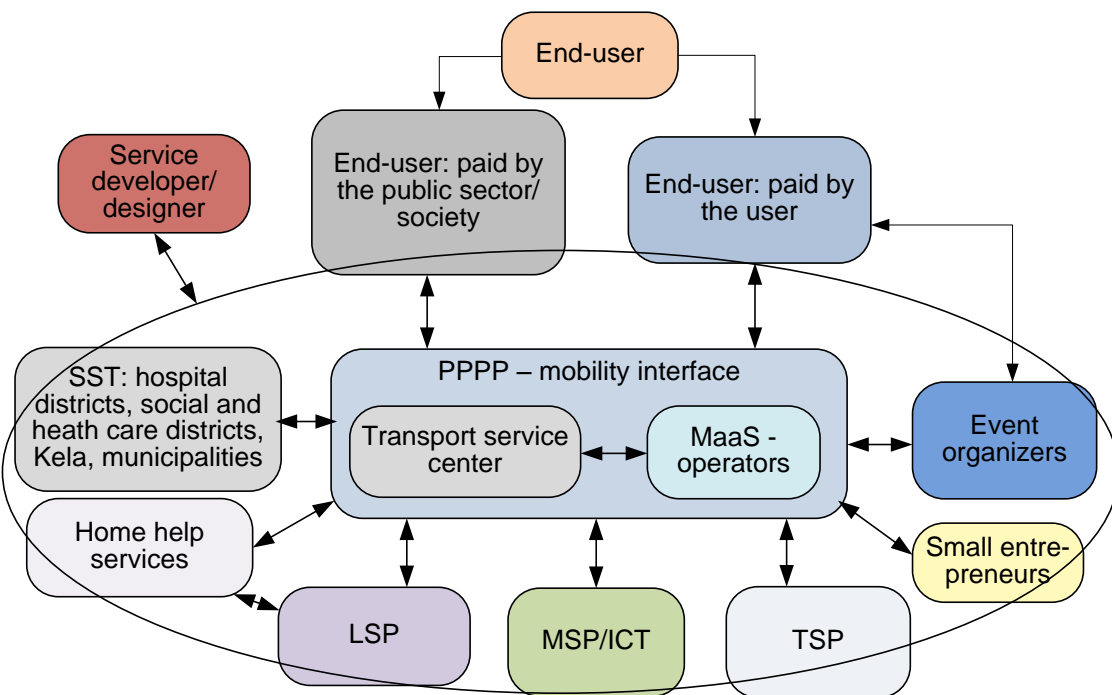
Eckhardt, J. & Aapaoja, A. (2016). In: König, D., Eckhardt, J., Aapaoja, A., Sochor, J. & Karlsson, M. (2016). Deliverable 3: Business and operator models for MaaS

- PPP model:
 - Suitable for rural areas or small towns
 - Public actor's / authorities' interest in increasing the efficiency of subsidized transportation
 - Utilization rate
 - Occupation rate
 - Combined freight and people transport



- Kätevä Seinäjoki 
 - City, Transport operators, Planning/consulting company
 - Scheduled PT + taxis + on-demand minibuses/shuttles

PPP(P) – model for rural areas



SWOT: services and market

Strengths

- Sharing economy and peer-to-peer services: trust
- Sufficient taxi fleet in each location
- Current subsidized **transportation creates basis for integration mobility systems**
- Finnish postal service: distribution network covers the whole country

Weaknesses

- Insufficient use of resources and expensive current system
- Conditions of commercial actors in rural areas are more **challenging**
- Service offering is **limited**
- Lack of travel chains and **interoperability** of modes

Opportunities

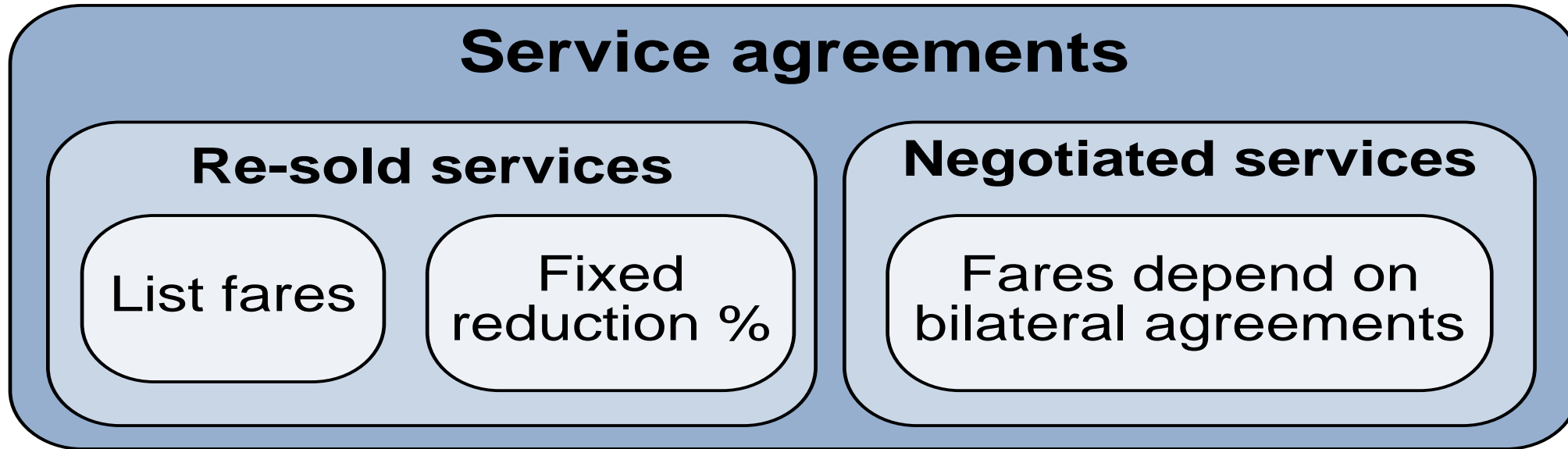
- Combining rides and creating travel chains → PPP(P)
- **Improvement of service level (accessibility)** due to economies gained through combining transportation and technical solutions
- **Bringing services to customers**

Threats

- Support and subvention is **decreasing**
- Remarkable cost rise
- Taxi services will reduce, increase in price, **availability**
- Transport Code may benefit large companies and small ones will lose

Translated from Eckhardt, J., Nykänen, L., Aapaoja, A. & Niemi, P. (2017). Liikkuispalvelut maaseudun elinvoimaisuuden ja saavutettavuuden mahdollistajana. VTT:n tutkimusraportti VTT-R-03429-17.

Service agreements and revenue models



Eckhardt, J. & Aapaoja, A. (2016). In: König, D., Eckhardt, J., Aapaoja, A., Sochor, J. & Karlsson, M. (2016). Deliverable 3: Business and operator models for MaaS

Revenue & pricing models

- **Pay-per-use (i.e., single tickets)**
- **Monthly/weekly packages**
- **Customized packages**

Summary: MaaS in different geographical areas

Cities

Objectives:

- Reduce congestion (congestions, parking, etc.)
- Improve air quality
- Increase liveability

Based on:

- Existing transport services
- Expansion with rental and shared cars and bikes...

ALTERNATIVES & LIVEABILITY

Suburban areas

Objectives:

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

Based on:

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

FIRST-/LAST MILE SERVICES

Rural areas

Objectives:

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

Based on:

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

ACCESSIBILITY

National and international levels

Objective:

- Offer easy all-in-one packages

Based on:

-
-

EASY TO USE CROSS-BORDER SERVICES



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