EUROPEAN
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ASSOCIATION

Mobility as a Service

(Presentation prepared by Leaseurope)

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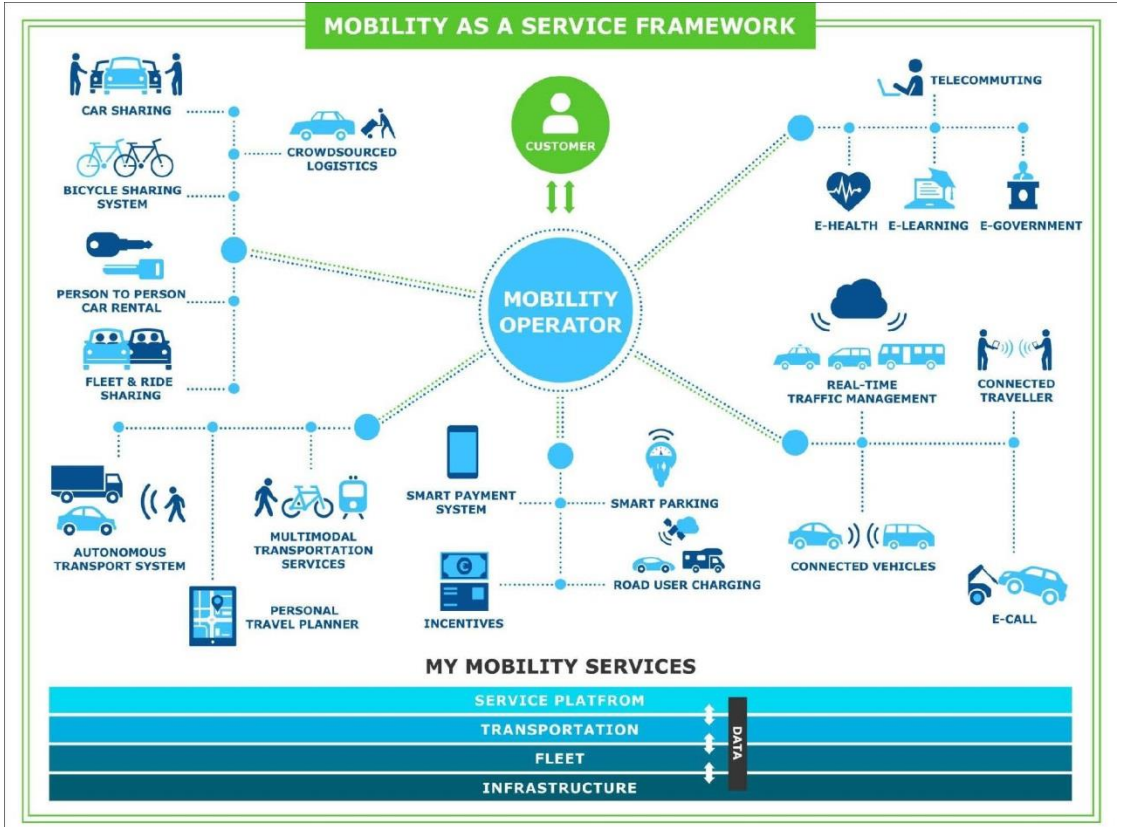

MOBILITY AS A SERVICE FRAMEWORK
CAR SHARING
BICYCLE SHARING SYSTEM
PERSON TO PERSON CAR RENTAL
FLEET & RIDE SHARING
CROWDSOURCED LOGISTICS
CUSTOMER
MOBILITY OPERATOR
TELECOMMUTING
E-HEALTH
E-LEARNING
E-GOVERNMENT
REAL-TIME TRAFFIC MANAGEMENT
CONNECTED TRAVELLER
AUTONOMOUS TRANSPORT SYSTEM
MULTIMODAL TRANSPORTATION SERVICES
PERSONAL TRAVEL PLANNER
SMART PAYMENT SYSTEM
INCENTIVES
SMART PARKING
ROAD USER CHARGING
CONNECTED VEHICLES
E-CALL
MY MOBILITY SERVICES
SERVICE PLATFROM
TRANSPORTATION
FLEET
INFRASTRUCTURE
DATA

Process management

Geographically differentiated

Cities	• **Objectives**: reduce the use of private cars (causing problems related to congestion, parking and emissions and air quality) • **Based on**: existing public transport, extended with rental and shared cars and bikes etc
Suburban areas	• **Objectives**: No need for a second car, first mile & 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, maintain sufficient service level, improve accessibility • **Based on**: demand-reposonsive transport, taxis, buses and connections to long-haul transport, car-pooling: parcel deliveries, library services, grocery & medicine distribution as add-on services
Long-haul transport	• **Objectives**: offer easy all-in-one packages • **Based on**: long-haul transport services (incl. aviation), ride-sharing: accommodation, event tickets as add-ons

End user differentiated

Accounts	Corporate / Institutional / Organisational	Group (affinity or other)	Family	Individual
Users	Employees	Members	Family members	Individual
Usage	Employment -related mobility Mobility access and price may vary depending on level within the corporation / organization	Personal mobility Mobility access and price will vary depending on package purchased by member	Personal mobility Mobility access and price will vary depending on package purchased by family	Personal mobility Mobility access and price will vary depending on package purchased by individual

Preconditions

Single market	User perspectives	Legal and regulation	Technology & standards
The ecosystem should be open for varied service providers to establish their business • no exclusivity to any operator, • no vendor or operator lock-ins	MaaS is a user-centric, customer-centric, market-centric proposition within a societally grounded context	The optimal legal environment for Maas enables cooperation and sharing	MaaS relies on interoperability of IT systems and openness of interfaces
MaaS development requires open APIs	MaaS should be the best value proposition for users	Legislation designed for conventional transport systems (transport modes provided and consumed separately) can unintentionally work against multimodal service provision and MaaS	The ecosystem, especially its IT systems, need to provide flexibility and adaptability to new types of user and customer requirements
Appropriate data management is a priority	MaaS should be the best value proposition for innovators, industry, enterprises and government leaders	Clear environmental policy targets may be beneficial to MaaS	It is not possible to define a complete IT architecture and system preconditions for MaaS at this stage
Regulatory framework to provide legal certainty to public and private stakeholders	Need to explicitly define certain MaaS service user rights, e.g. in the form of "Bills of Rights"	Regulatory measures to facilitate openness and exchange of data are needed	The viable solutions will only emerge via pilots and trials
Regulatory framework needed to ensure technical rules are widely applied		Public sector activities like taxation and procurements may have significant impact	A high quality and reliability of the data being exchanged is an imperative requirement for successful MaaS

End goal

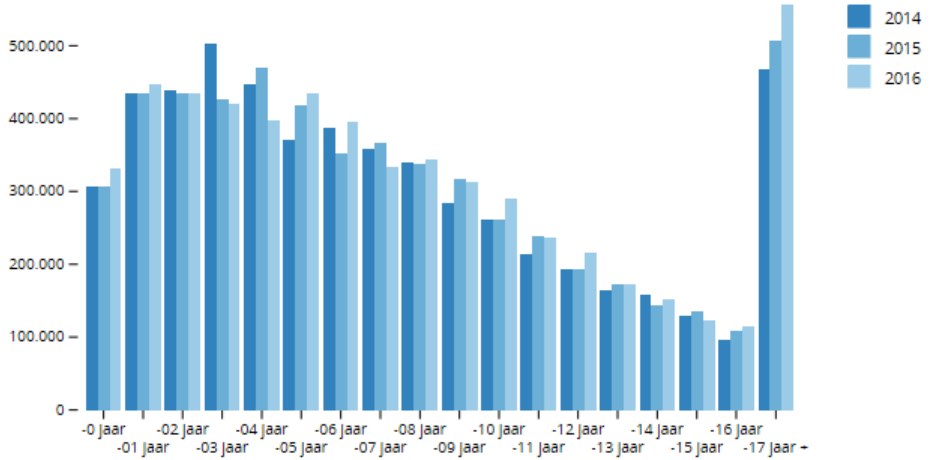
- **The Mobility as a Service sector is expected to grow to a business worth over one trillion euro by 2030.** All over Europe, MaaS initiatives are planned or starting up and the MaaS Alliance helps these to cooperate through a shared work programme engaging service providers, transport operators, public authorities and users in order to create a vital and interoperable MaaS ecosystem to fulfil high expectations.

Shared mobility, from problem to opportunity

The opportunity

- Scale
- Lifecycle

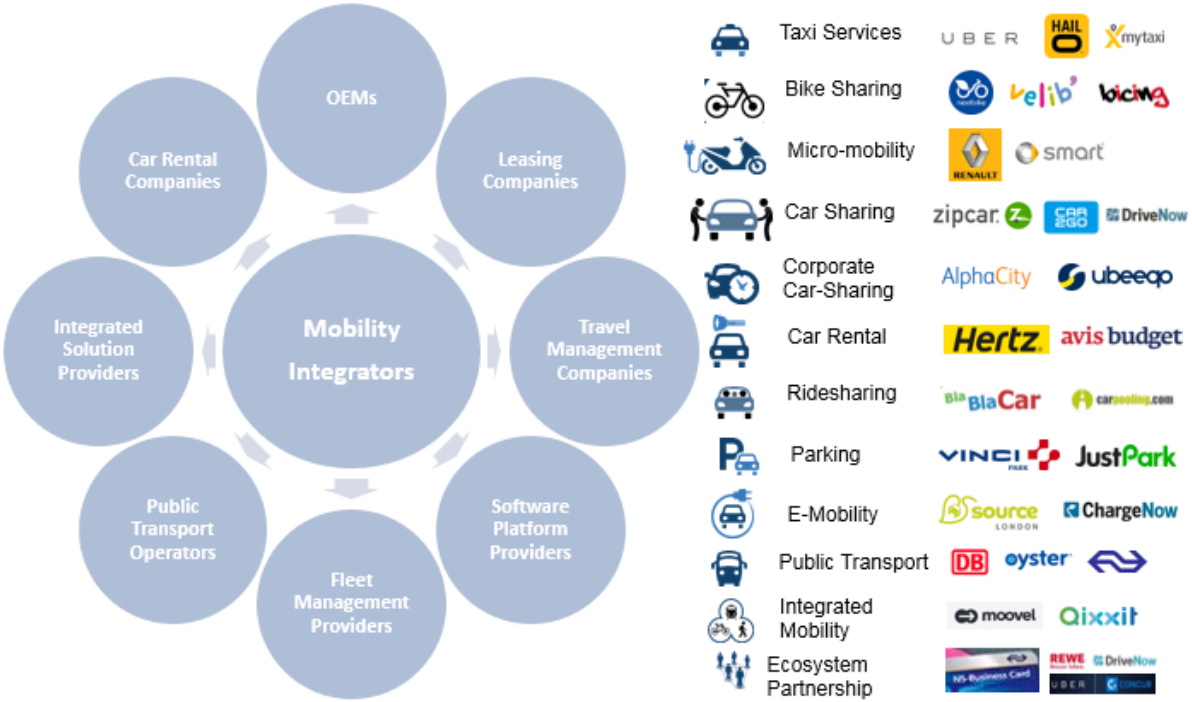
➔Impact²



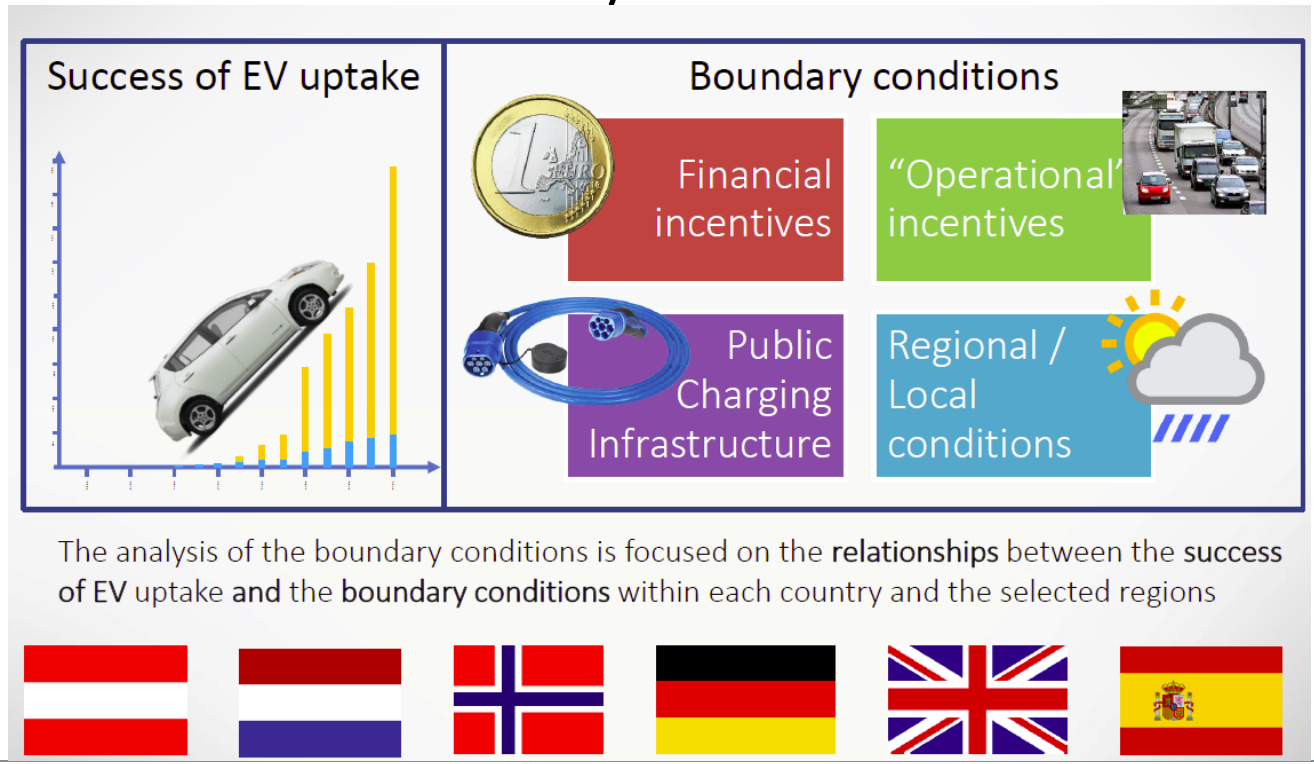
Belgium: Avg age private car: 8y ➔ Lease car: 2y

Belgium: Avg CO^2 new private car: 123 gr ➔ Lease car: 109 gr

Fragmented offering

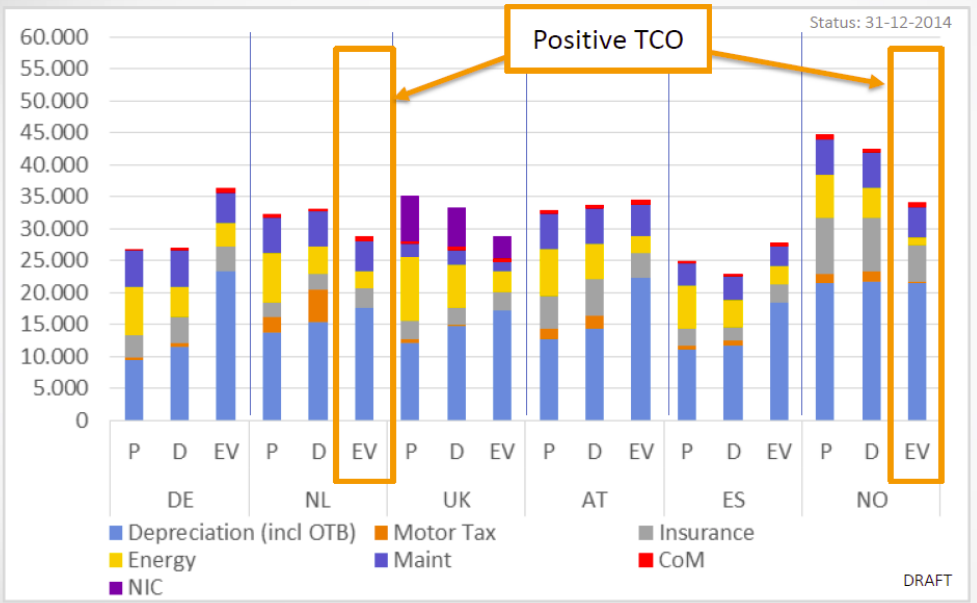


Boundary conditions



The analysis of the boundary conditions is focused on the **relationships** between the **success of EV** uptake **and** the **boundary conditions** within each country and the selected regions

Understanding TCO



TCO costs are cumulative cost of 4 year
P: Petrol
D: Diesel
EV: Electric Vehicle
TCO: Total Cost of Ownership
OTB: One Time Benefits
Energy: petrol/diesel/ electricity costs
NIC: National Insurance Contribution (social tax)
Maint: Maintenance costs
CoM: Cost of Money
ToPU: Tax on Personal Usage

Source: ICVUE

Co-funded by the Intelligent Energy Europe Programme of the European Union.

I-CVUE

In a nutshell

- Only the leasing and rental industries (captive and independent) has the ability to finance and manage shared fleets
- Policy makers have poor understanding of TCO calculations, over enthusiastic views on EVs and autonomous mobility

Comments? Reactions?