

# "Mobility as a Service"

CARNET Innovation Day 2016

**LLUIS PUERTO**

Technical Director, Fundació RACC



# Background changes

## CAMBIOS EN LA POBLACIÓN

1



Envejecimiento, multiculturalidad, urbanización, Todo "on-demand"

## SENSIBILIDAD AL PRECIO

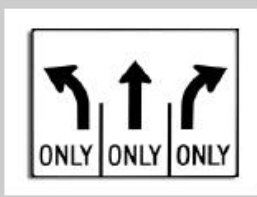
2



Todo "on-demand"

## CALIDAD Y TIEMPO LIBRE

3



Liberar tiempo, compra rápida

## MARCA

4



Alea jacta est

## PERTENENCIA

5



Formar parte de una comunidad

## CONCIENCIACIÓN SOCIAL

6



Vincular ingresos a impacto social

## MOVILIDAD

7



Movilidad costosa, pasar tiempo en casa

## 'SIEMPRE CONECTADOS'

8



85% españoles tiene smartphone

## CUIDADO DE LA SALUD

9



Deporte, alimentación, bienestar emocional

## NUEVAS FORMAS DE VIDA FAMILIAR

10



20% familias monoparentales, hogares 1 miembro +49%

# Policy Challenges

## Policy challenges



### Urbanisation

- » 2030: 60% of population in cities. Public space redefinition



### Demographic Change

- » 65+ generation will double by 2030 while keeping wealth & health



### Climate Change and Resource Scarcity

- » Transport accounts for 20% of all CO<sub>2</sub> emissions in EU (+23% since 1990)



### Behavioral Change

- » Car usage instead of car ownership
- » Home delivery of consumer goods



### Safety

- » 25000 deaths per year in traffic accidents in EU
- » More usage of “soft” transport modes

## Estimated potential contributions of ITS to policy goals

### Intelligent Transport Systems and Services

for safer, smarter and cleaner mobility

- » 30% reduction in fatalities
- » 30% reduction in seriously injured persons
- » 15% reduction of congestion
- » 20% improvements in energy-efficiency \*



Most benefits concern urban mobility

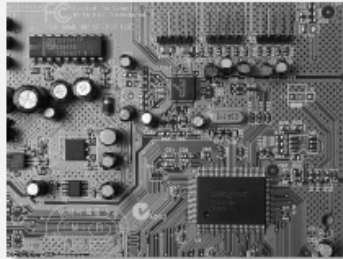
# Mobility Trends

## 1 CONECTIVIDAD



- Tendencia hacia el **incremento de la conectividad de los vehículos**
- **Proliferación de servicios de valor añadido** alrededor del concepto de **Connected Car**

## 2 CONTENIDO TECNOLÓGICO



- **Seguridad, fiabilidad y confort** son los criterios principales de compra
- **Sistemas de asistencia e infotainment** están siendo diseñados e incluidos en los vehículos **incrementando el contenido tecnológico de los mismos**

## 3 VEHÍCULOS ELÉCTRICOS E HÍBRIDOS



- **Creciente presión regulatoria para reducir las emisiones**
- **Creciente concienciación y demanda por parte de los clientes** de vehículos eléctricos e híbridos

## 4 NUEVOS MODELOS DE MOVILIDAD



- **Cambios de preferencias y nuevas tecnologías** se combinan para modificar el **modo en que se resuelven las necesidades** de movilidad

MaaS

# Mobility as a Service: concept

Mobility as a Service brings every kind of transport together into a single intuitive mobile app. It seamlessly combines transport options from different providers, handling everything from travel planning to payments..

No need to buy tickets or sign up for separate transport accounts: one MaaS account provides the freedom to choose the needed mobility for a single monthly or pay-as-you-go subscription



# MOBILITY AS A SERVICE FRAMEWORK



## MY MOBILITY SERVICES



# MaaS: bundling and marketing



## Urban commuter package for 95 € month:

- Free public transport in home city area
- Up to 100 km free taxi
- Up to 500 km rental car
- Domestic public transport 1500 km

## 15 minutes package for 135 €/ month:

- 15 minutes from call to pick up by shared taxi
- EU wide roaming for shared taxi at 0,5 €/km
- Free public transport in home city,
- Domestic public transport 1500 km



## Business world package for 800 €/month:

- 5 minutes pickup in all EU
- Free taxi in home city
- Lease car and road use
- Taxi roaming worldwide

## Family package for 1200 €/month:

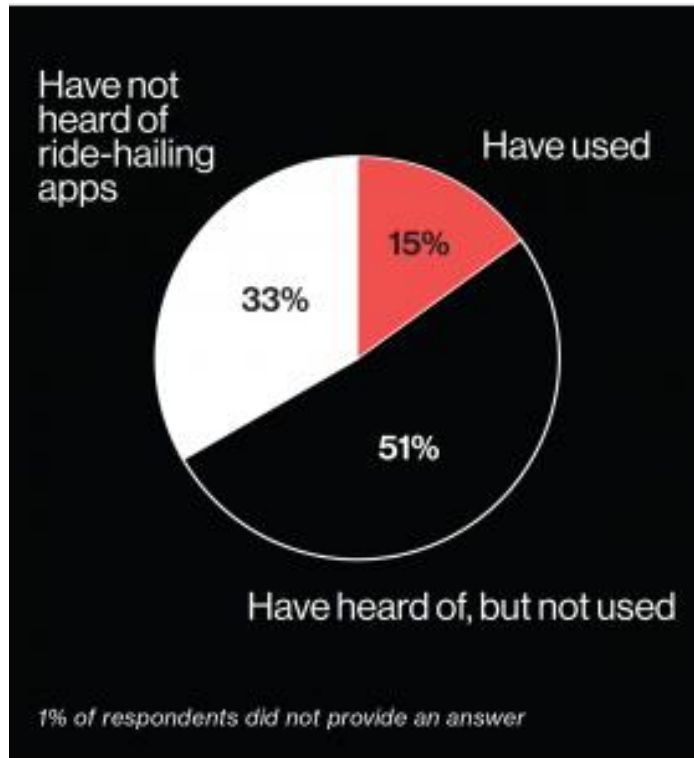
- Lease car and road use
- Shared taxi for all family with 15 minutes pickup
- Home city public transport for all
- Domestic public transport 2 500 km



# MaaS: How far from it? (I)

## Hitchin' a Ride

Millions of Americans have used ride-hailing apps, but an even larger portion have never heard of them.



MIT Technology Review

Source: Pew Research Center

## SOCIAL AND LEGAL BARRIERS

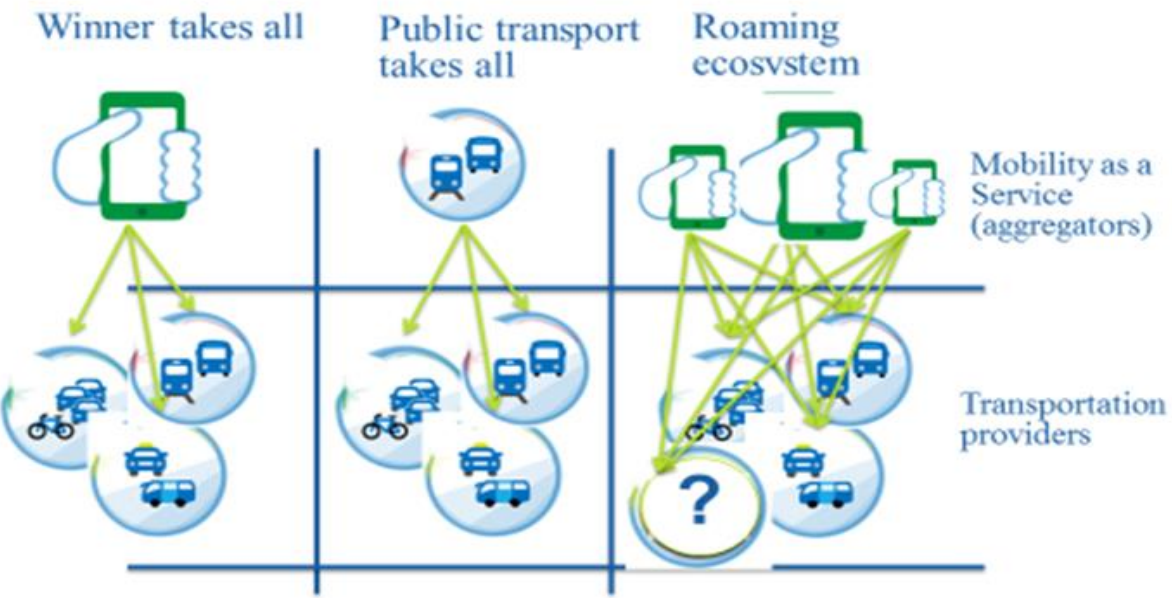
Today a small proportion of users have used new mobility concepts, but the annual growth rate is high.

Government policy action will be key either to push or to hold back the transition to MaaS (forbidding UBER vs enabling car sharing)



# MaaS: How far from it? (II)

## TECH AND BUSINESS BARRIERS

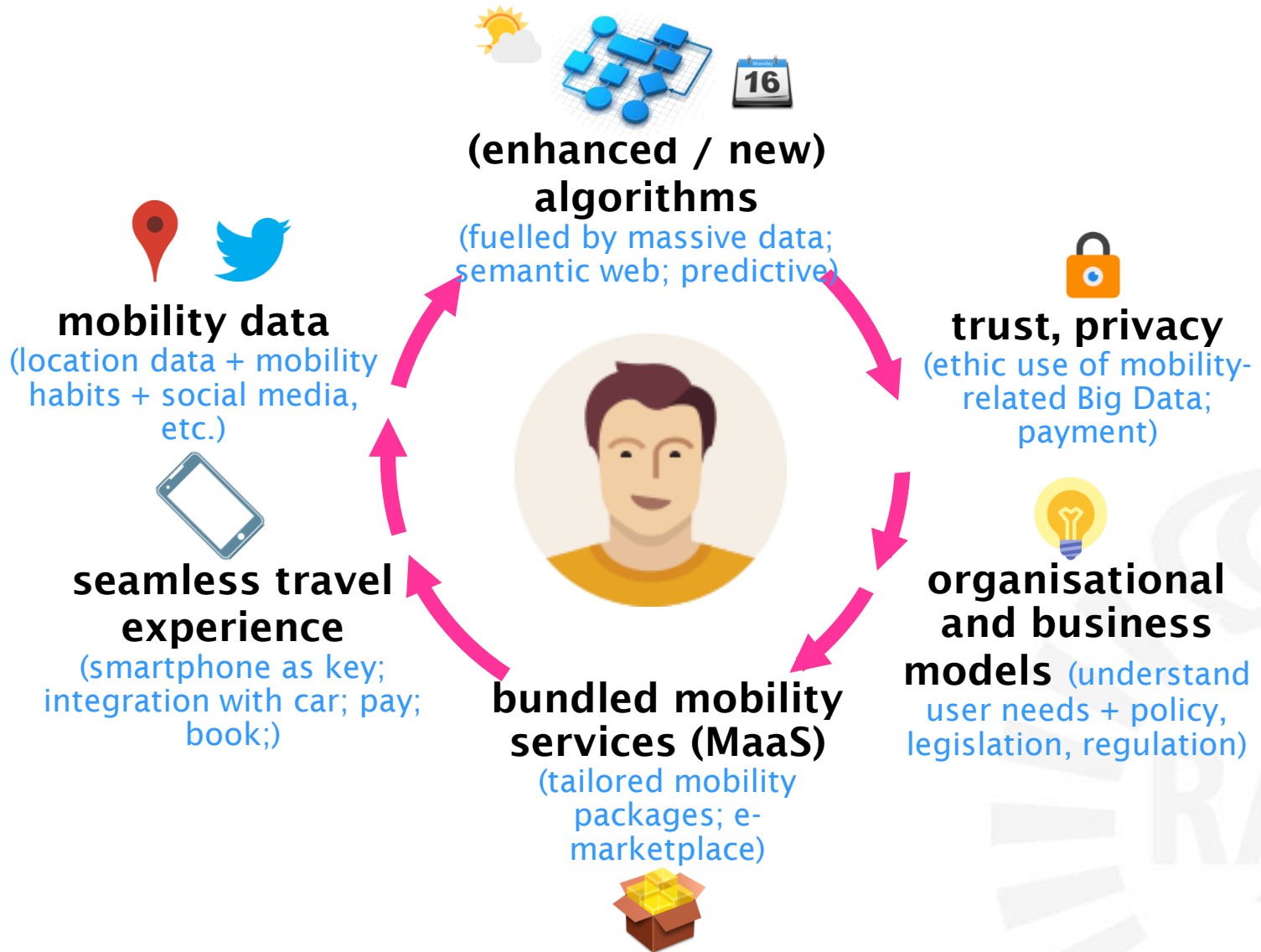


Intelligent transport systems interoperability has been an issue.

Single market issues: privacy, open data for transport, etc



# MaaS: How do we get there?



# MaaS: How do we get there?

Cooperation among the ecosystem actors is necessary to unlock a seamless MaaS experience



academia, research centres



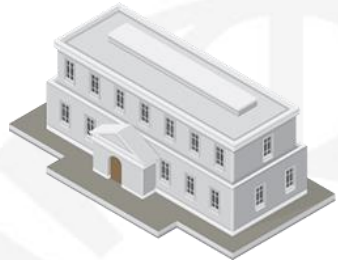
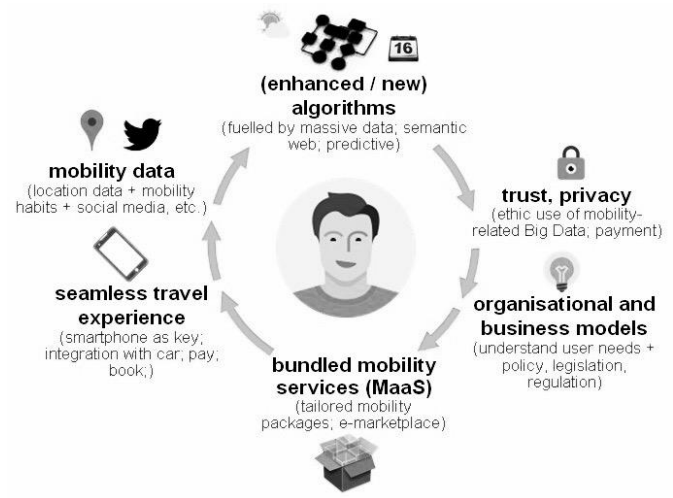
telcos



big players



transit operators



public authorities



Service Providers, start-ups,



financial entities

# Launch of MaaS Alliance

Finland is  
Traffic Lab 2.0 – [www.trafficlab.fi](http://www.trafficlab.fi)



**RACC**

# MaaS Alliance: (current) members

[www.maas-alliance.eu](http://www.maas-alliance.eu)



# Proof of concept and beyond

23 key organizations in Finland have partnered to cooperate in the establishment of the first Mobility-as-a-Service operator. Ministry of Transport full support and lead by ITS Finland.

maas.fi

Recorte rectangular

ABOUT OUR TEAM PRESS & MEDIA

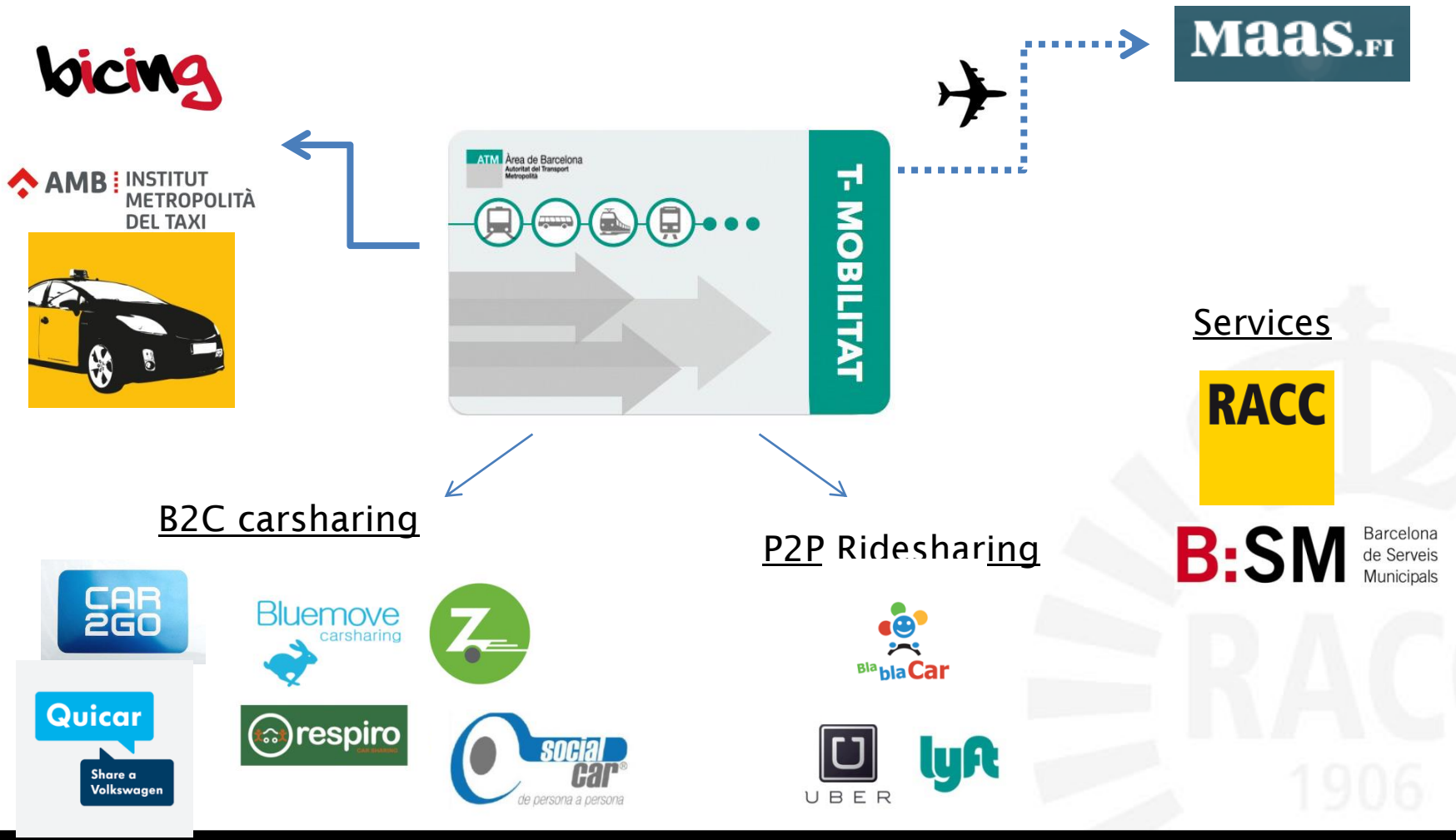
The best way to  
everywhere

Introducing the world's  
first mobility operator.



# What if we....?

T-Mobilitat roadmap foresees the scalability of the system to supply a demand-based full mobility service.



# Questions?



lluis.puerto@racc.es

