MaaS and role of rail sector

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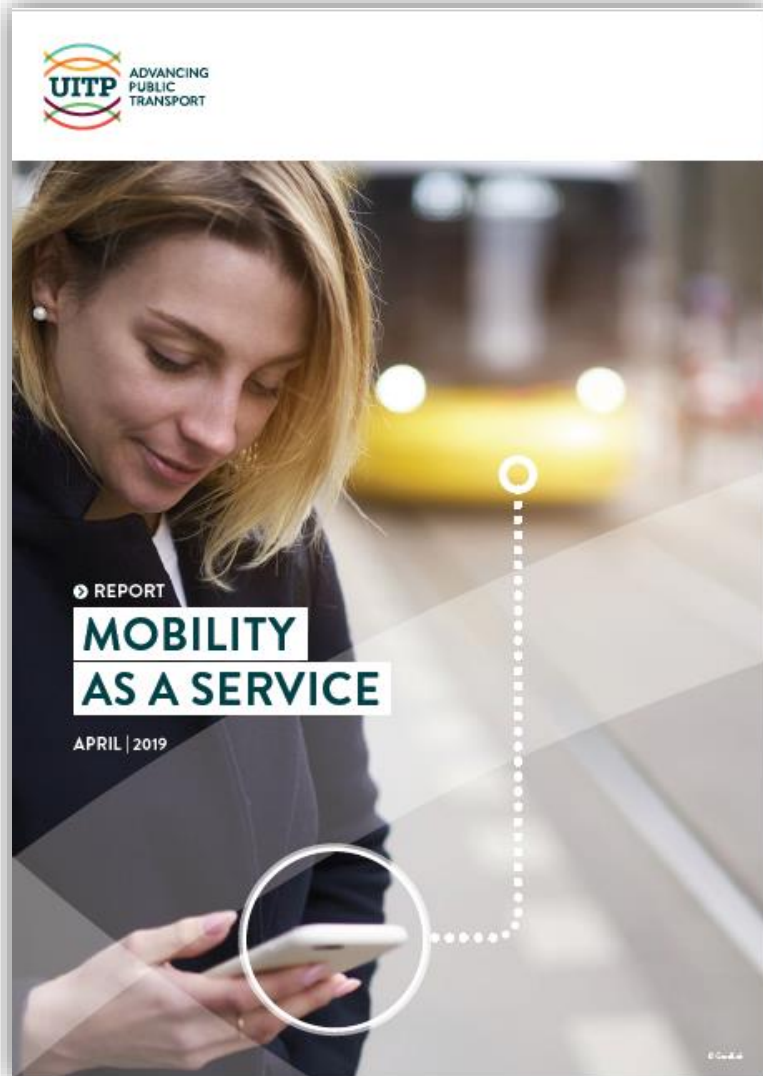Web Conference LIVE on #lessCARS

"The opportunities for railways in digital Platforms"

The concept of MaaS in UITP

# UITP WORK ON MAAS

UITP MAAS REPORT

&

POLICY BRIEF

WHAT IS MAAS? - UITP DEFINITION

Mobility as a Service (MaaS) is the integration of, and access to, different transport services in one single digital mobility offer with active mobility and an efficient public transport system as its basis.

This tailor-made service suggests the most suitable solutions based on the user's travel needs. MaaS is available anytime and offers integrated planning, booking and payment, as well as, en route information to provide easy mobility and enable life without owning a car.

CURRENT SITUATION

MaaS MODEL

MaaS PROVIDER

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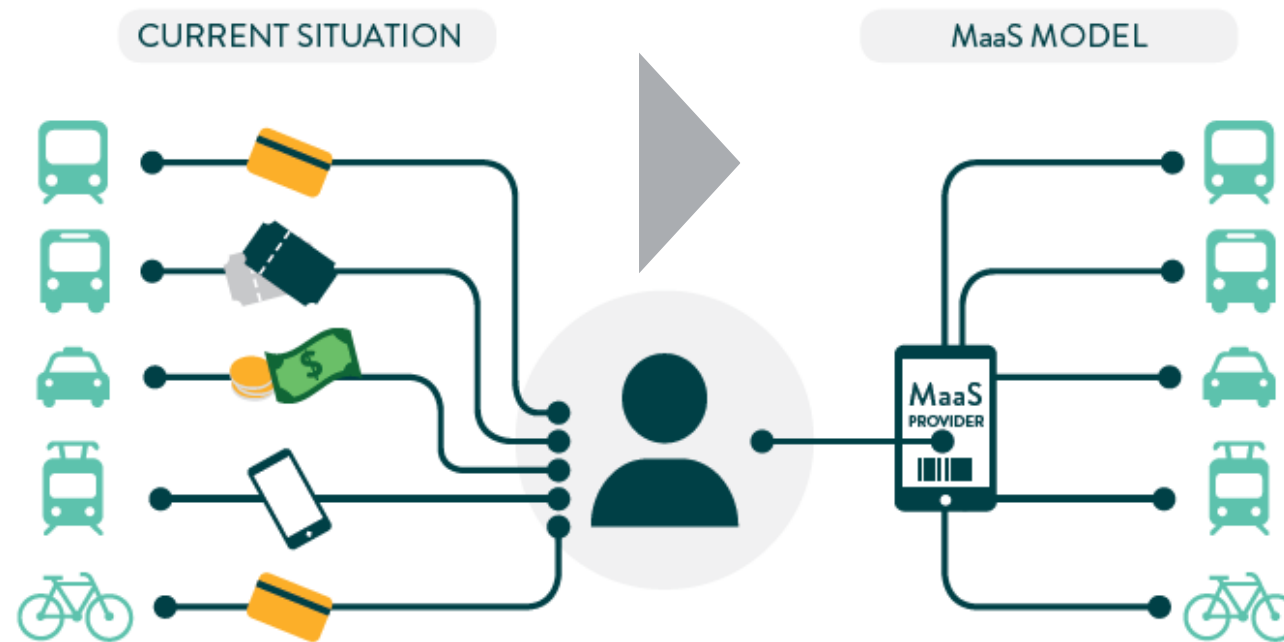
WHY IS MAAS INTERESTING?

1. **Mega trends in mobility are boosting MaaS**

2. **Advantages for all stakeholders**

    ➢ **User:** complete and easy mobility

    ➢ **City:** helps to shape travel behaviour towards more sustainable modes

    ➢ **PT:** more customers and higher revenues

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CREATING A USER CENTRIC EXPERIENCE

Usability and Trust are the keywords

- Simplicity: easy, user-friendly, convenient service

- High quality: correct information, reliability

- Impartiality: present mobility options in a transparent way

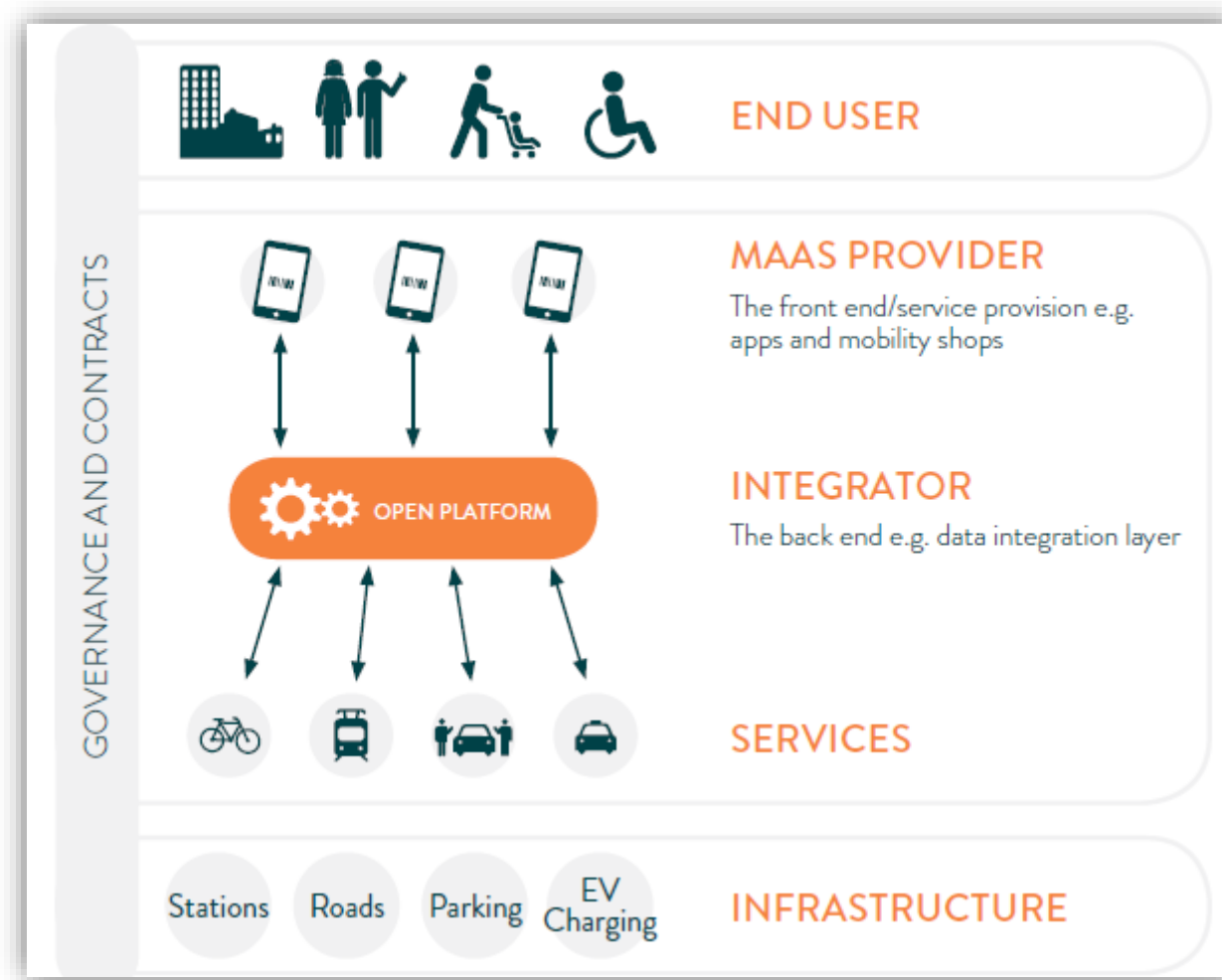- Flexibility: personalized service adapted to customer needs

- EXTRA VALUE

BUILDING A STRONG PARTNERSHIP

MaaS is all about collaboration

- There must be a value for every partner

- Reciprocity & data deals

- Providers may keep their customer relationship

WHO TAKES WHICH ROLE WITHIN THE ECO-SYSTEM?

GOVERNANCE AND CONTRACTS

END USER

MAAS PROVIDER
The front end/service provision e.g. apps and mobility shops

OPEN PLATFORM

INTEGRATOR
The back end e.g. data integration layer

SERVICES

Stations   Roads   Parking   EV Charging   **INFRASTRUCTURE**

DIFFERENT MAAS MODELS

MAAS MODEL 1
COMMERCIAL INTEGRATOR
MaaS PROVIDERS

MAAS MODEL 2
OPEN BACK-END PLATFORM
MaaS PROVIDERS
OPEN PLATFORM

MAAS MODEL 3
TRANSPORT AS THE INTEGRATOR
PUBLIC TRANSPORT
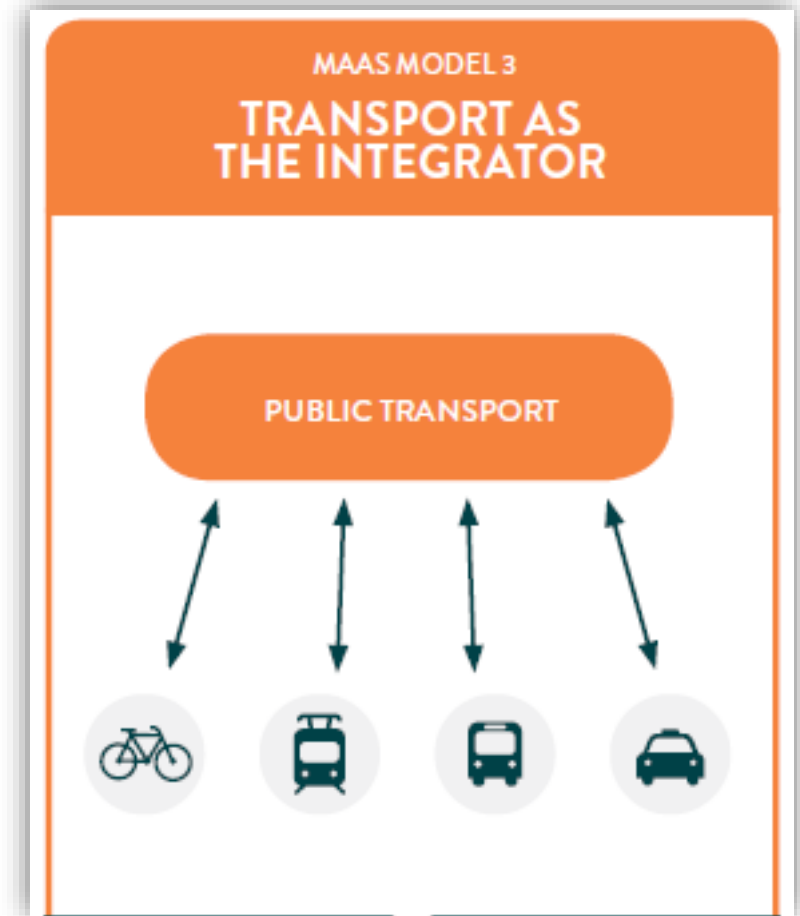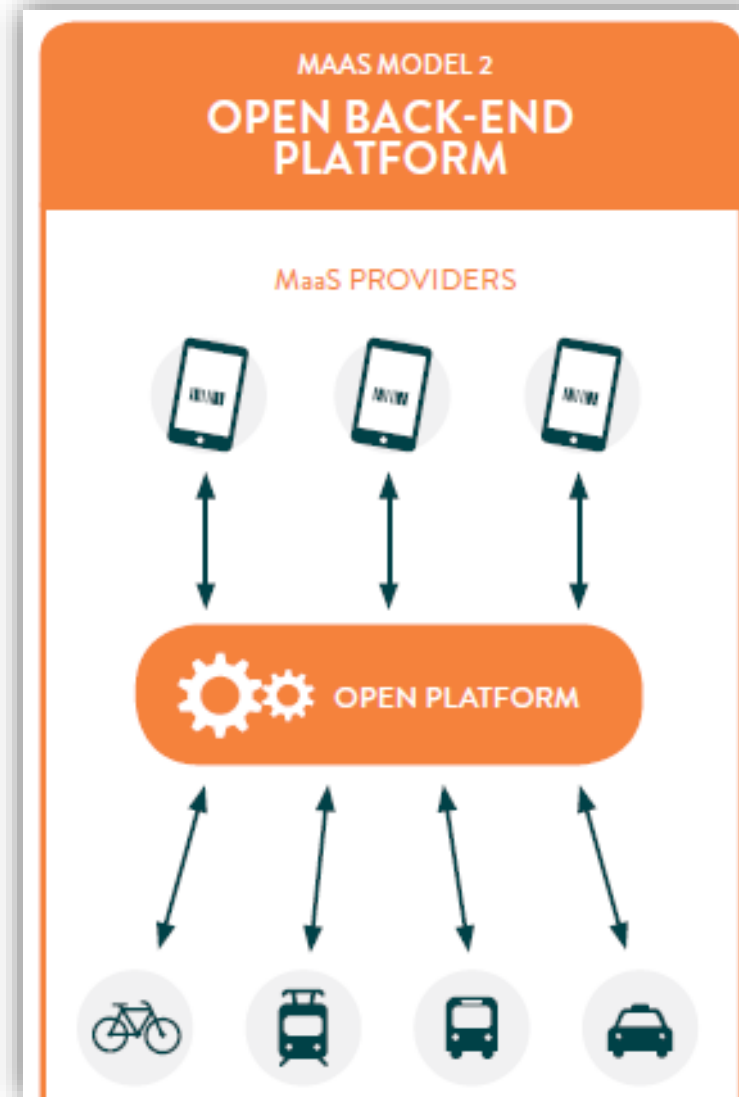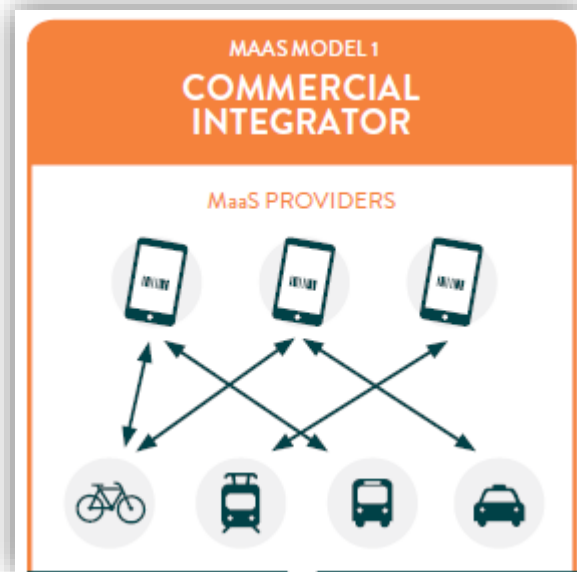
Can rail be a backbone of MaaS?

LET'S THINK IN THE FRAME OF EUROPE

MaaS projects in cities are not something new
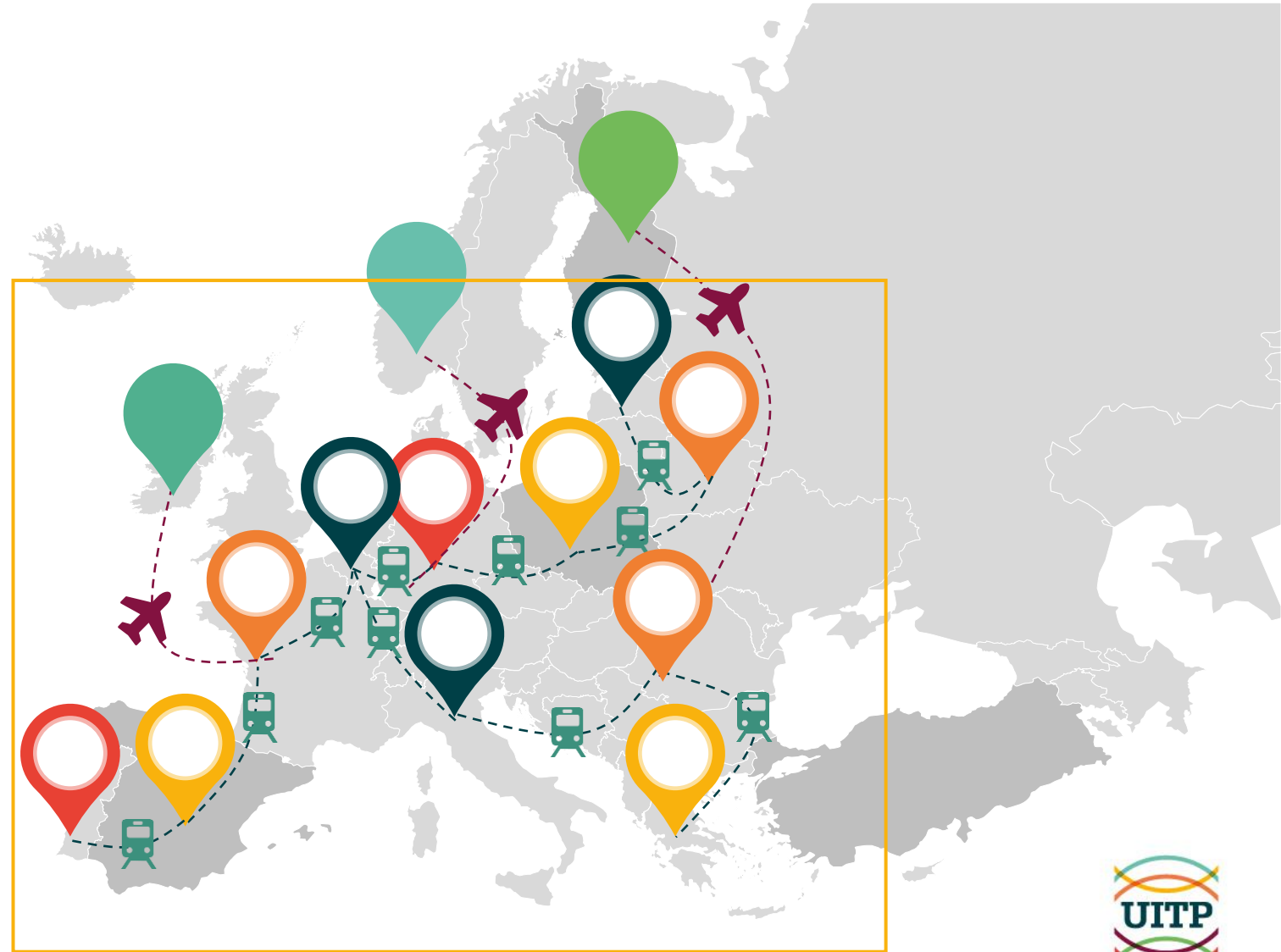
Can we go towards globe MaaS?

Rail can have a significant role in its delivering

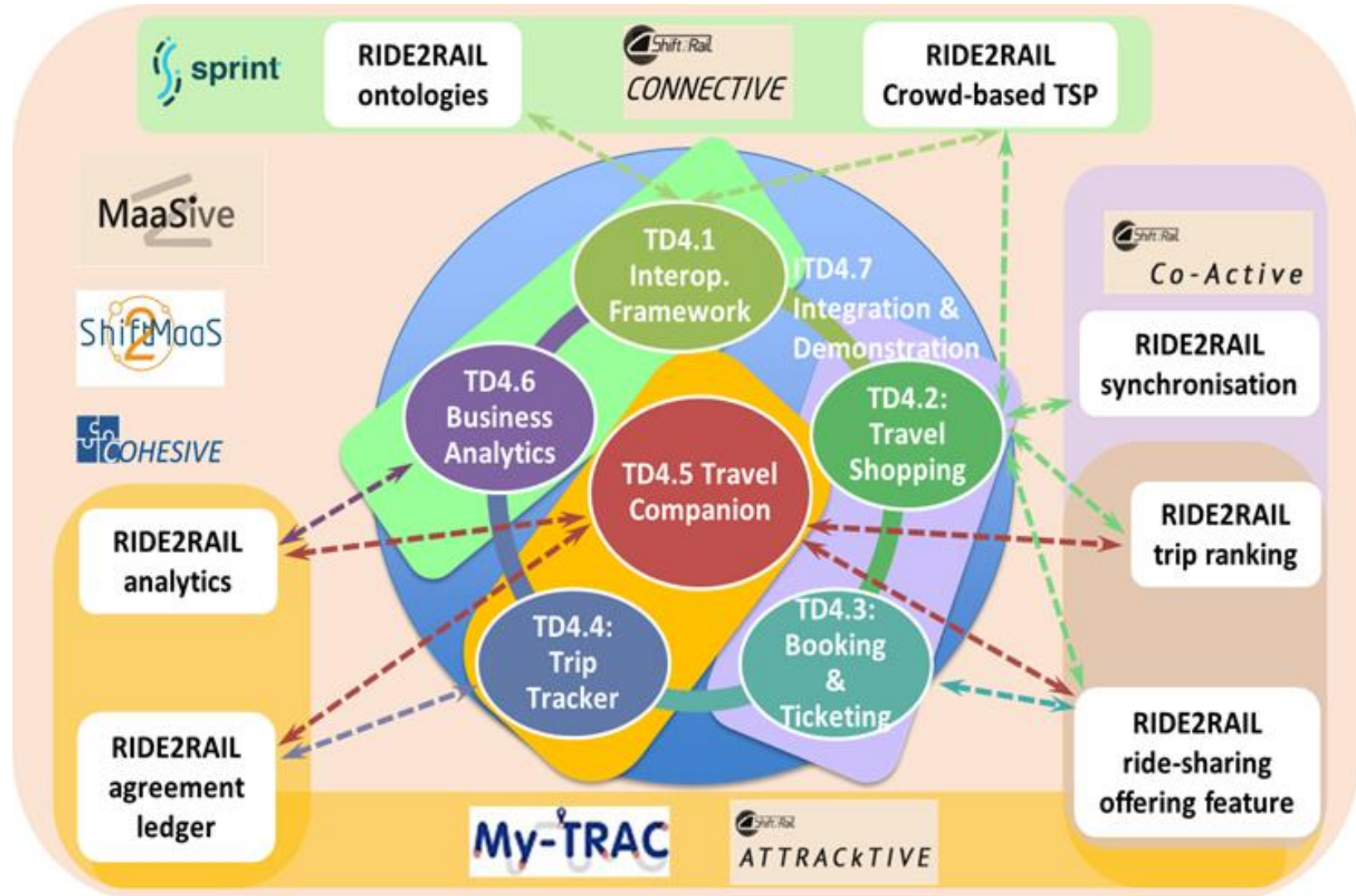# LET'S THINK IN THE FRAME OF EUROPE

Planes can compliment MaaS for full seamless travel experience.
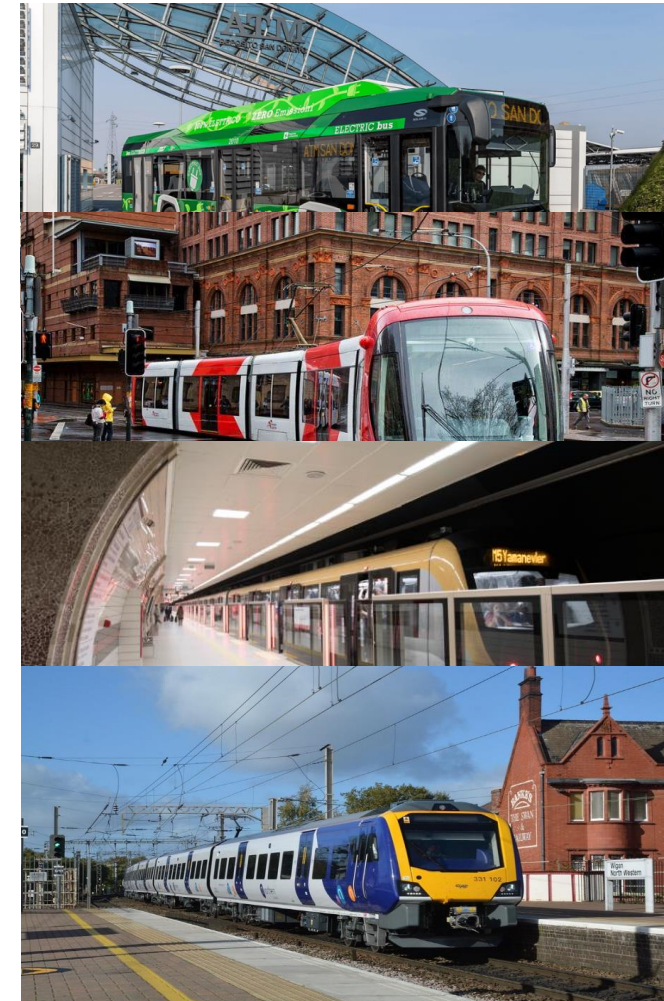
But rail is the backbone.

MAAS IN THE IP4 ECOSYSTEM

UITP is involved in some rail research initiatives of Shift2Rail that aims to deliver MaaS through IT technologies with focus on rail.

RIDE2RAIL - VISION

RIDE2RAIL OBJECTIVES AND IMPACT

Objectives:

- To **encourage carpooling** (and ride sharing) **as complementary for PT**

- To **enhance** the performance of the **overall mobility system**, reducing road congestion and environmental impact **reinforcing** the **mobility offer in rural and low-demand areas**

HOW?

- **Framework for combined flexible and scheduled transport services**

- **Multimodal** and **integrated** travel planning, booking, ticketing features including **software components** and a **tool to choose/compare services across a set of criteria**

- **Recommendations** for replicability

Impact:

- **Increase** the **number of passengers** using **public transport**

- **Improve** the **rail connection** with the **rural areas**

- **Minimise** environmental **pollution** while traveling

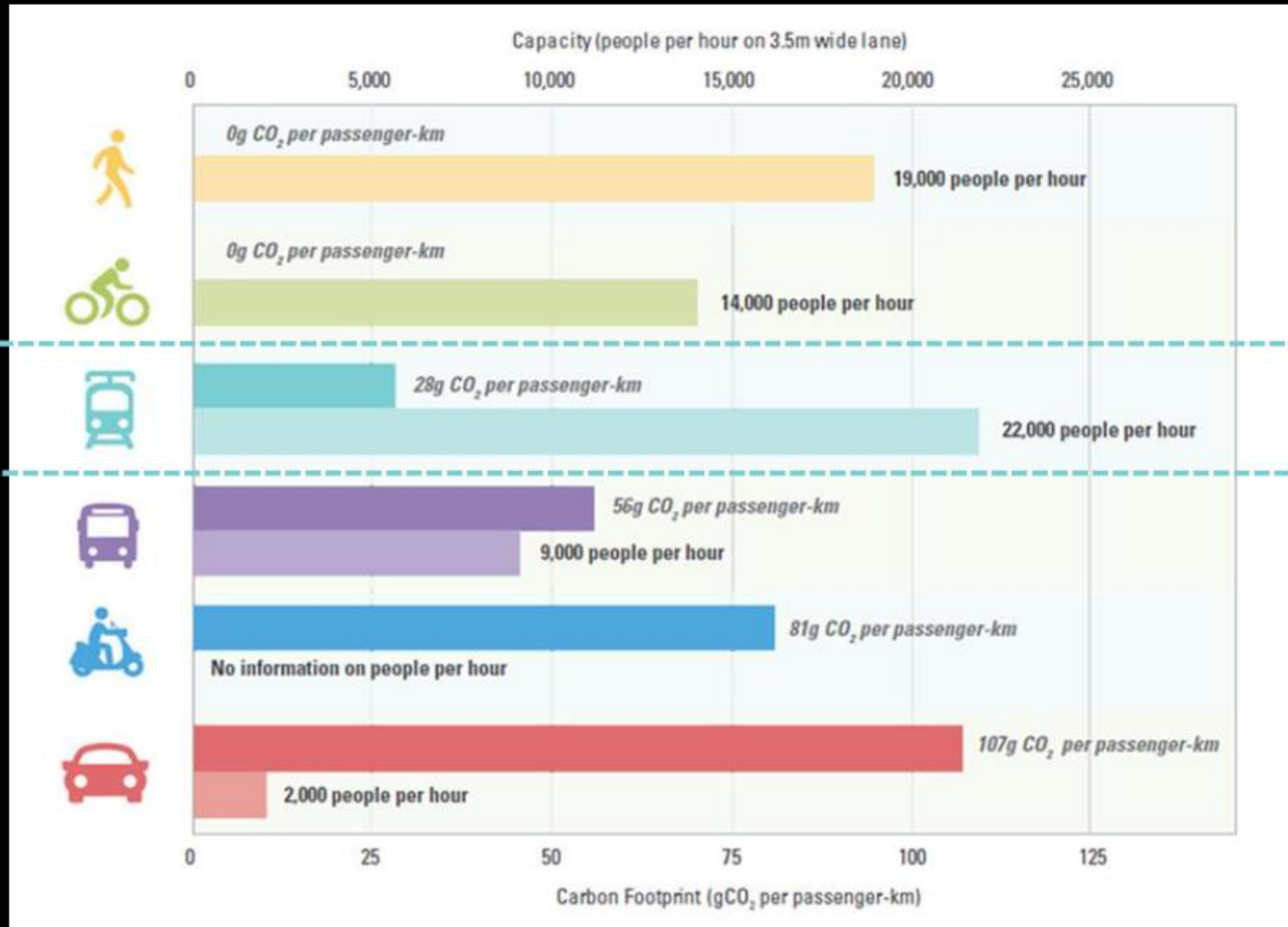- Propose **additional criteria** for informed **decision making** when **planning** a **trip.**

To measure impact, specific target indicators will be monitored

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ADVANTAGES OF MAAS
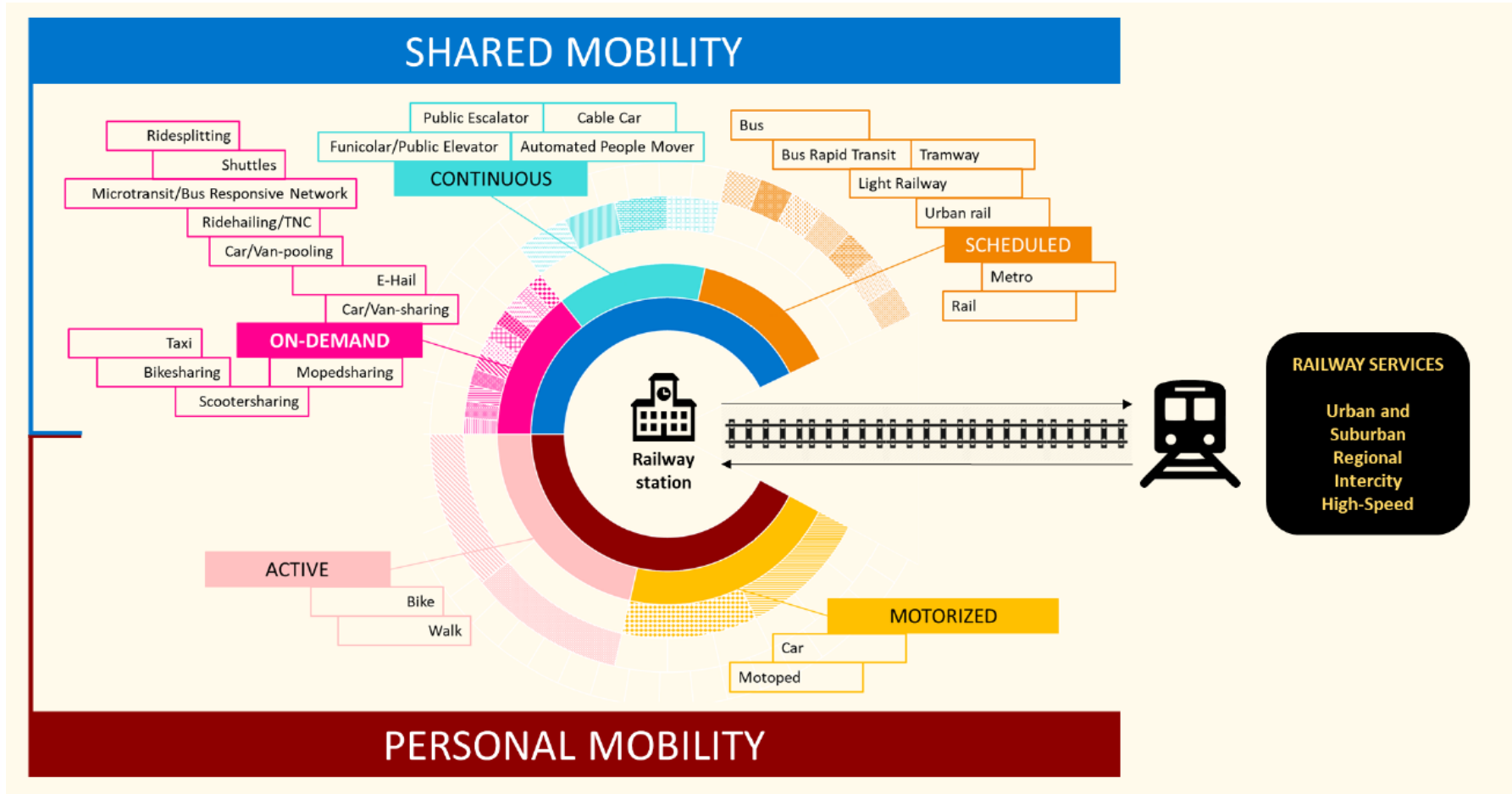

Carbon Footprint of different modes of transport

Capacity (people per hour on 3.5m wide lane)

- 0g CO_2 per passenger-km — 19,000 people per hour
- 0g CO_2 per passenger-km — 14,000 people per hour
- **RAILWAY** — 28g CO_2 per passenger-km — 22,000 people per hour — **+ Capacity / − Emissions**
- 56g CO_2 per passenger-km — 9,000 people per hour
- 81g CO_2 per passenger-km — No information on people per hour
- 107g CO_2 per passenger-km — 2,000 people per hour

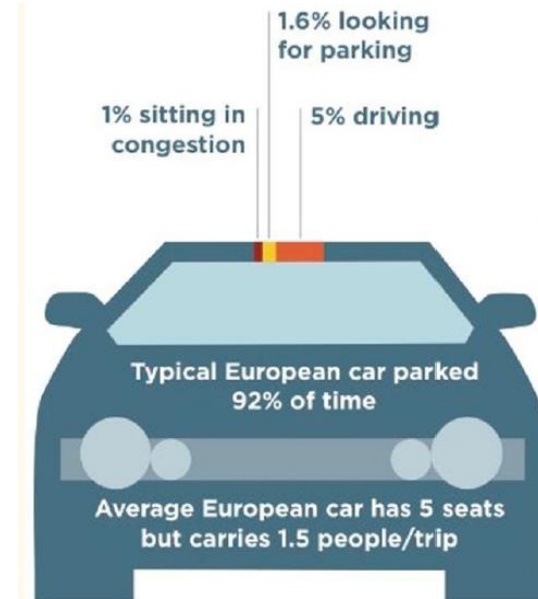Carbon Footprint (gCO_2 per passenger-km)

Source: SLOCAT

Source: UIC report of D2D mobility

ADVANTAGES OF MAAS

Source: UIC report of D2D mobility

Conclusions

CONCLUSION

- MaaS will become the future business model in transportation

- MaaS can be a brilliant tool for more sustainable mobility

  - if deployed around mass public transport & active modes

- Different approaches possible

- Move from a city to more global view: between countries, continents, global

- Promote complimentarity of different modes of transport

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RECOMMENDATIONS

Setting up successful MaaS solutions

- Start to build the eco-system

- Care about data reciprocity & data protection

- Make use of the data to optimize the urban mobility offer

- Adopt and harmonise quality standards for all mobility providers

- Foster innovation by funding and R&I activities

RECOMMENDATIONS

Build up institutional and policy integration

- Overcome institutional fragmentation with mobility agencies or multimodal transport authorities in charge of all urban mobility services

- Encourage multimodal urban planning for the development of mobility hubs and multimodal "user-centric" infrastructure

- Include MaaS as a catalyst to reach policy goals (SDG)

> RECOMMENDATIONS

Create the right framework to promote MaaS

- Stop wrong incentives that support car use and thus hinder sustainable mobility behaviour and MaaS (free parking, company cars, …)

- Increase measures to limit car use (access restrictions, road pricing, parking restrictions, street reclaiming…)

- Invest in digital solutions that promote integration and openness.

THANK YOU!

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