







WEBINAR P+R

13 December 2023

10-11h30



PRACTICALITIES

-  Please keep your **microphone and video off** at all time
-  The **moderator** will guide you through the meeting. The meeting will be **recorded** (*please signal if you disagree*)
Everybody speaks his/her language
-  Don't hesitate to **comment** or ask **questions**, or to use the **chat box**.
Please change your **nickname** in "*first name last name (organization)*"
-  All **slides** will be send to you afterwards

ITS.BE

*“SUSTAINABLE MOBILITY ENABLED BY INNOVATION -
IMPARTIAL, PUBLIC-PRIVATE, MULTIMODAL”*



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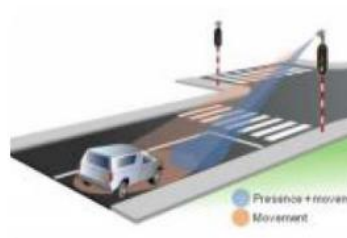
Mobility card

Traffic, Public transport & shared mobility,
Parking & urban mobility



ANPR-based solutions

Traffic, Goods transport, Public transport &
shared mobility, Parking & urban mobility,
Police and rescue, Taxation



ITVP-2 radar solutions

Traffic, Public transport & shared mobility,
Parking & urban mobility



Mobility management consulting

Traffic, Goods transport, Public transport &
shared mobility, Parking & urban mobility,
Police and rescue, Automotive,
Automotive+, Taxation



PRIORITY DOMAINS



- **Multimodality**

- » **MaaS** - Mobility as a Service
- » **MMM** - Multimodal Mobility Management



- **Automotive**

- » **ACE** - Autonomous, Connected and Electrical vehicles
- » **RUC** - Road User Charging extensions



OUR MEMORANDUM



1. Digital access rights to cities
2. Digital road operators
3. Optimal use of public charging infrastructure
4. Commercial licenses for autonomous driving
5. Advances in intelligent road charging
6. P+R
7. Fully-digital ticketing

AGENDA

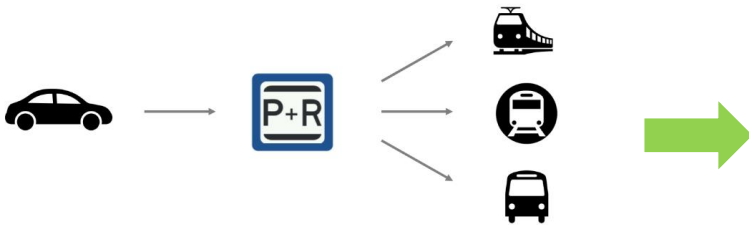


1. Welcome - Peter Van der Perre, director ITS.be
2. Short pitches:
 - » P+R's in Antwerp - *Candide De Bruyn team lead sustainable mobility Lantis*
 - » P+R's in Wallonia - *Slaven Bosnjak attaché SPW MI*
 - » P+R's in Liège - *Bruno Sciannamea mobility consultant city of Liège*
 - » P+R's in Brussels - *Emmanuel Dawans project manager Parking.Brussels*
 - » P+R data within the NAP - *Laura Kupers attaché NGI/IGN*
3. Open discussion

P+R

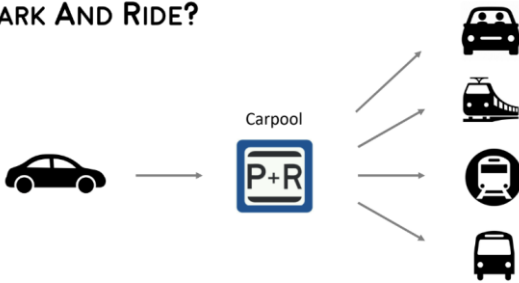


 PARK AND RIDE?



 MOVIAS
smart mobility

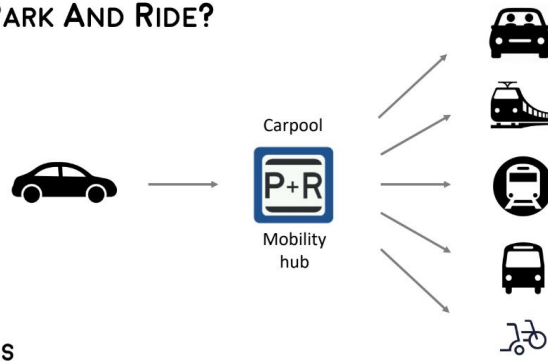
 PARK AND RIDE?



 MOVIAS
smart mobility



 PARK AND RIDE?



 MOVIAS
smart mobility

END USER CENTRAL



PARK AND RIDE EVOLUTIONS



- Large public infrastructure investments



=> How to convince the user?



Target users

Types of trips

Competing alternatives

Classification type of trips

	Once	Regular
Ad hoc		
Planned trip		

Park + Rides - Lantis



Candide De Bruyn – Teamleader Modal Shift

13/12/2023

Modal shift by Lantis



Local cycle
and footpath



Cycle highways



Shared electric
bicycle network



P+R's, gateway
to the city



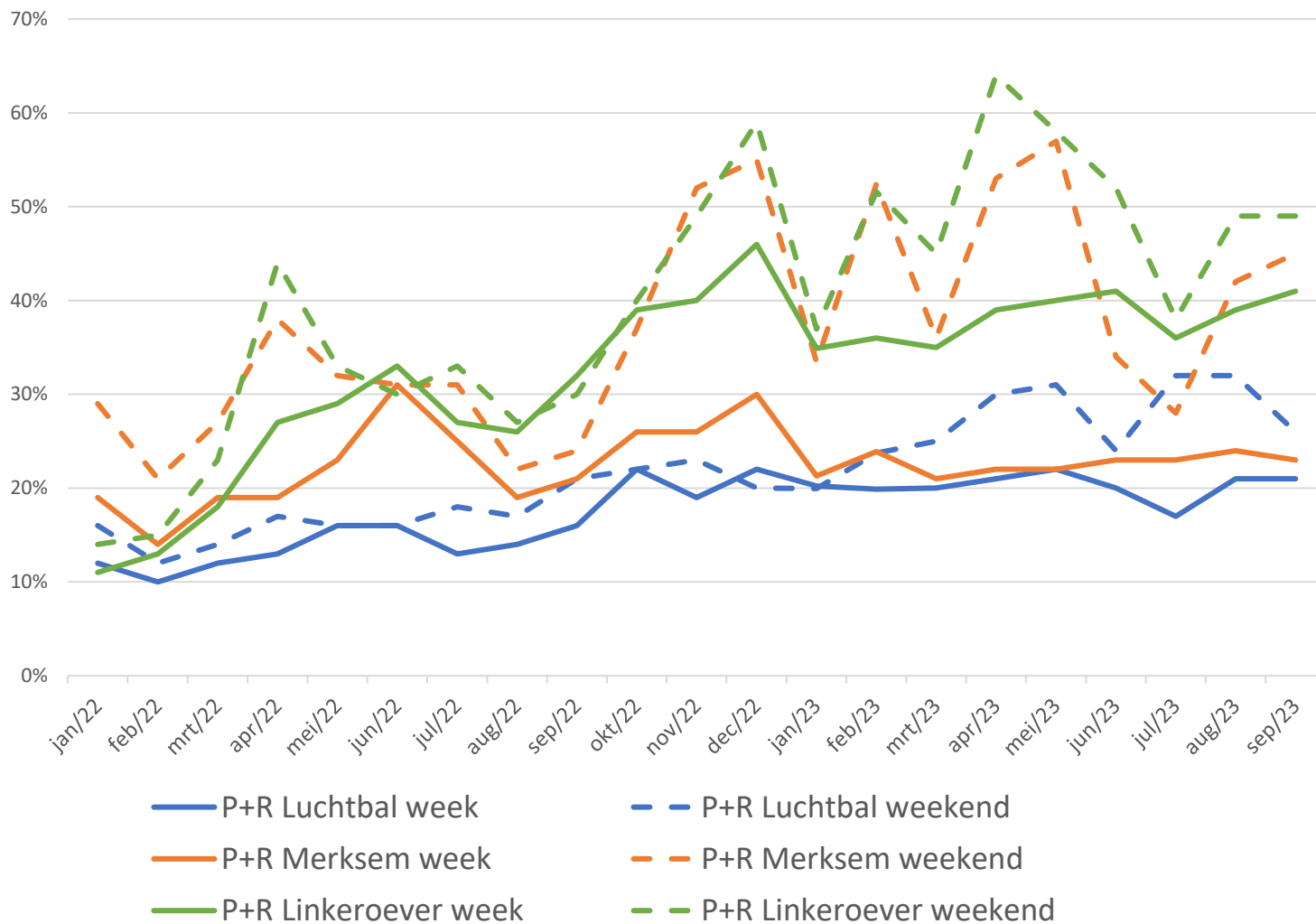
Bus lane A12



P+R bicycle
parking

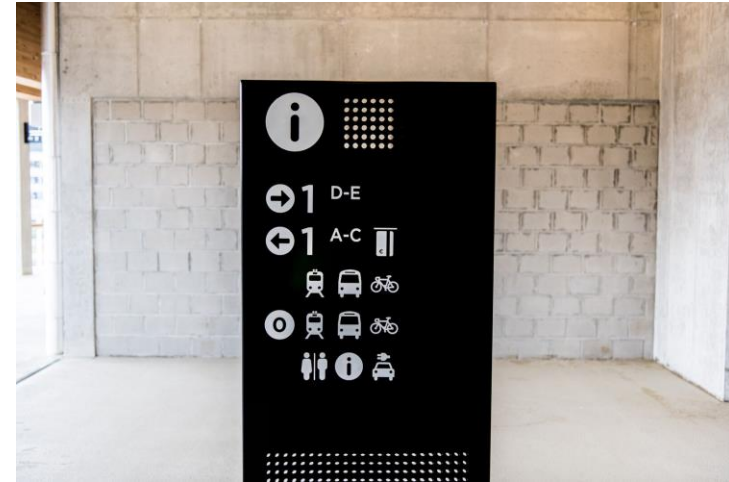


Occupancy rate P+R / month



Lessons learned

- Ticketless needs explanation
 - Payment options
 - Combiticket & MaaS
 - Wayfinding
 - No long-term parking
 - Charging infrastructure & policy
 - Unwanted visitors
 - Reservations
- Behavioral change
 - **BE PATIENT**



Candide De Bruyn

Teamleader Modal Shift

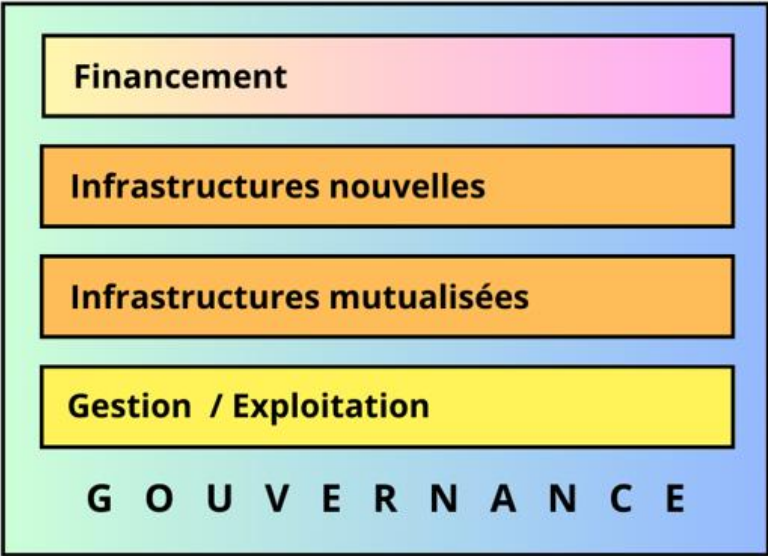
Lantis

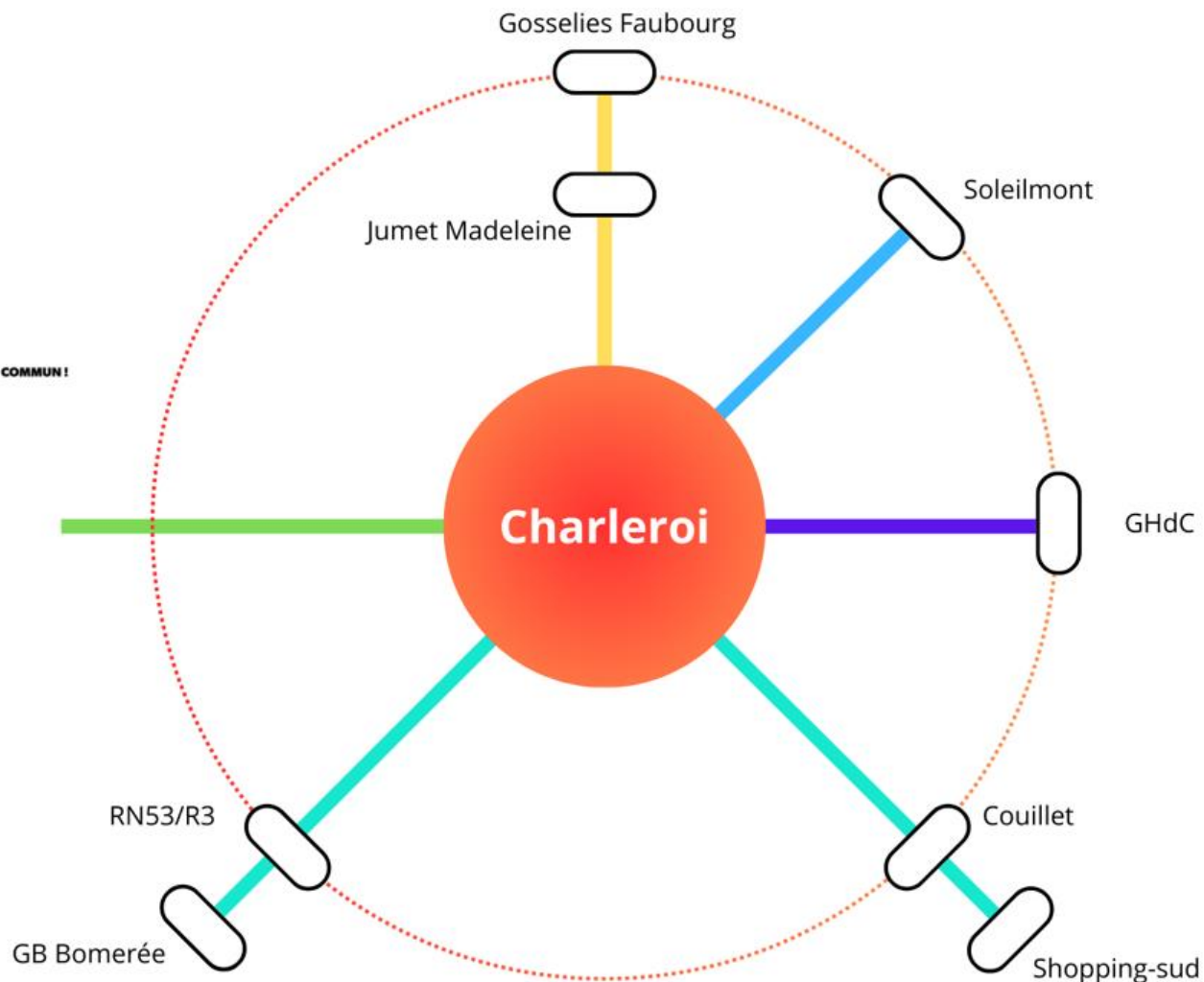
Candide.debruyn@lantis.be

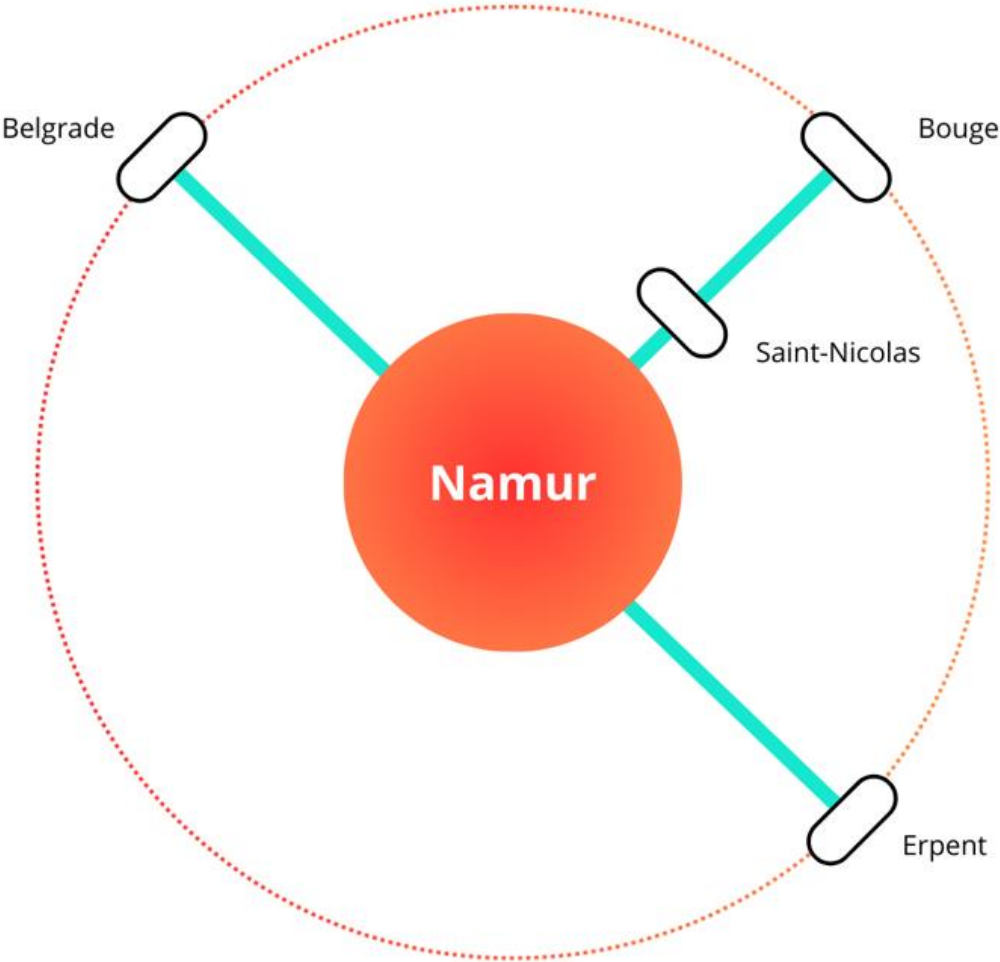
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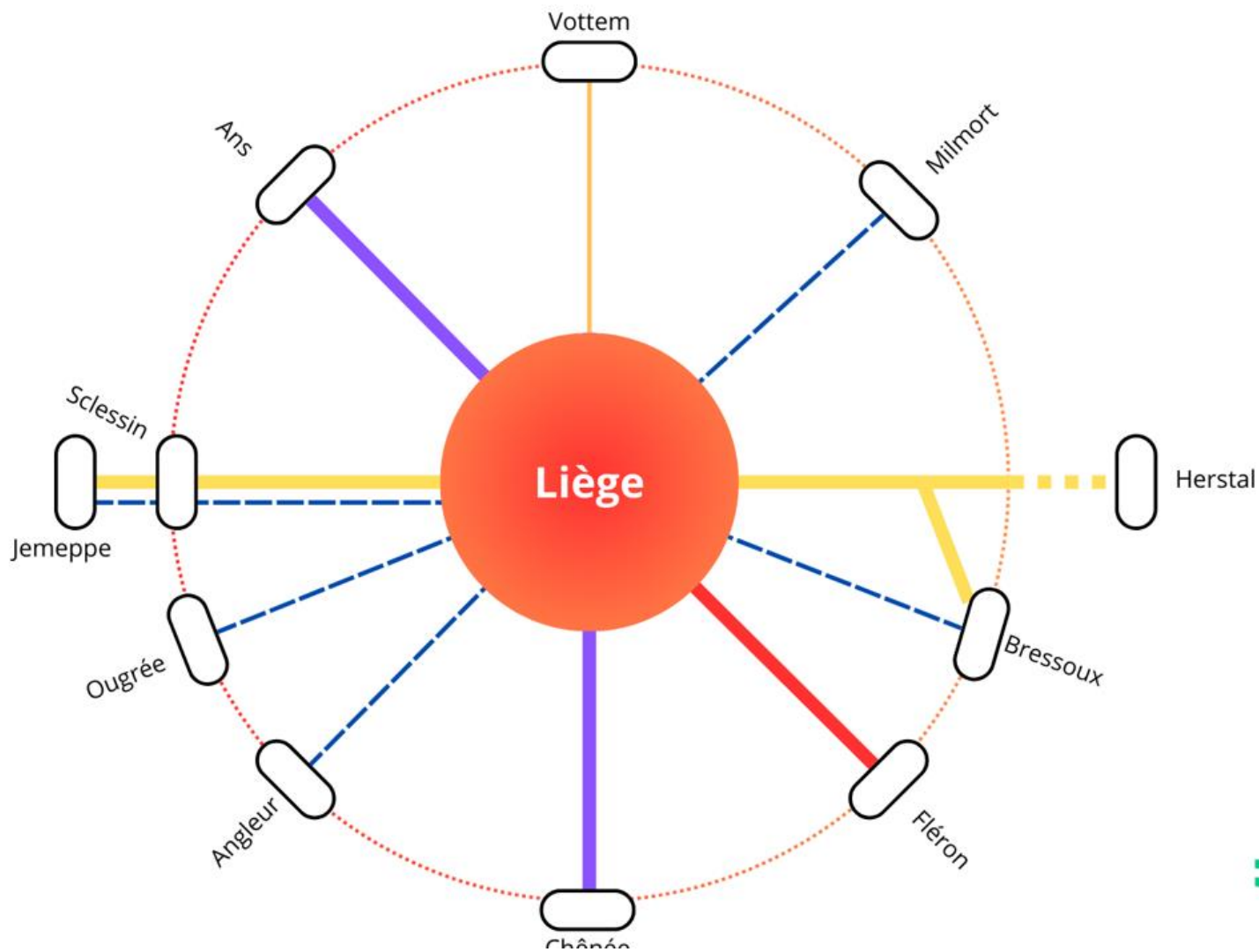
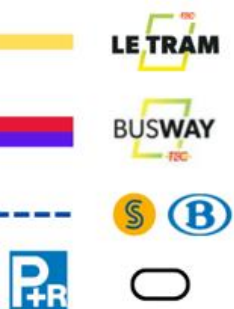


P+R en Wallonie











LA MOBILITÉ EN CITÉ ARDENTE POUR TOUTES ET TOUS !


Liège





PUM et PCM

Urban and Municipal Mobility Plan





P+R Localisation



771 pl



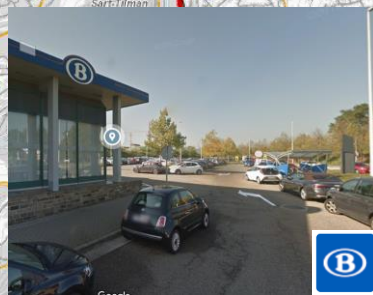
1350 pl



665 pl



In discussion

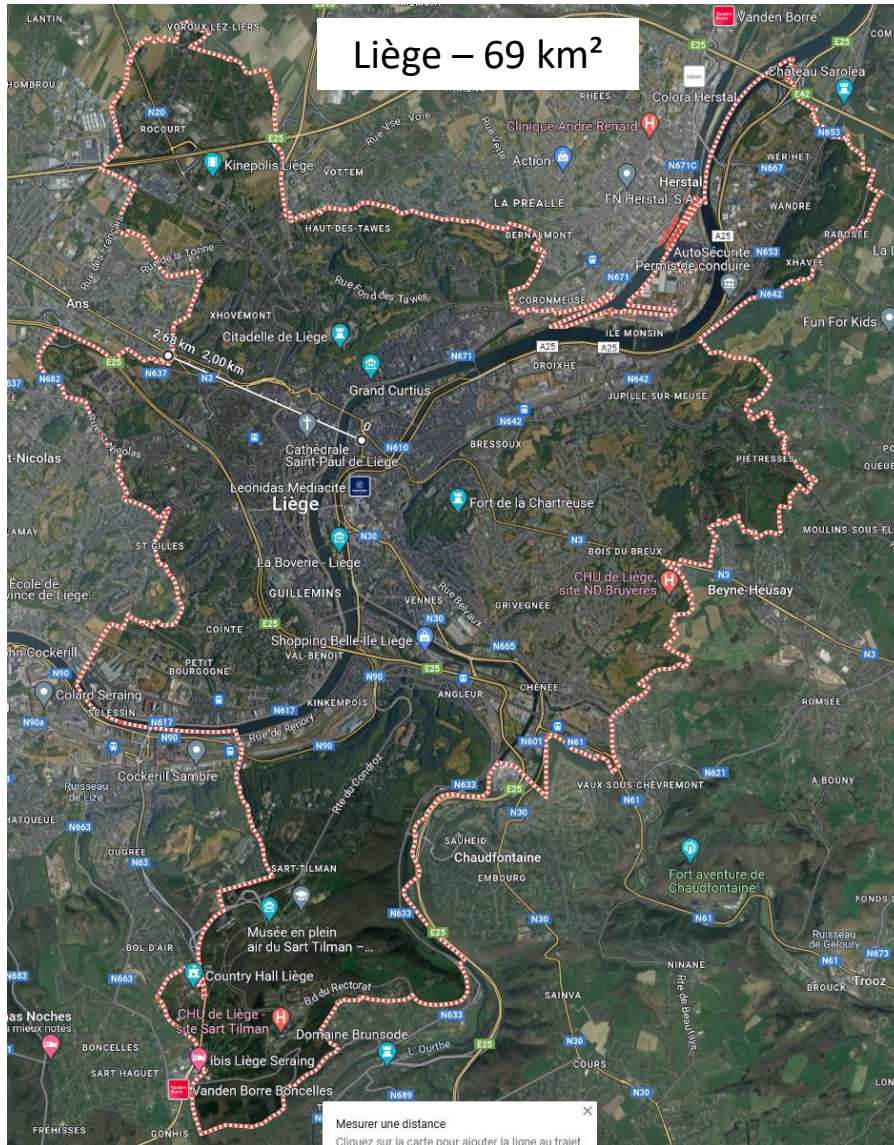


145 pl et P+R





Size of the city - comparison



LA MOBILITÉ EN CITÉ ARDENTE POUR TOUTES ET TOUS !



 **erci**



parkandride.brussels

From P+R to Mobility Hubs

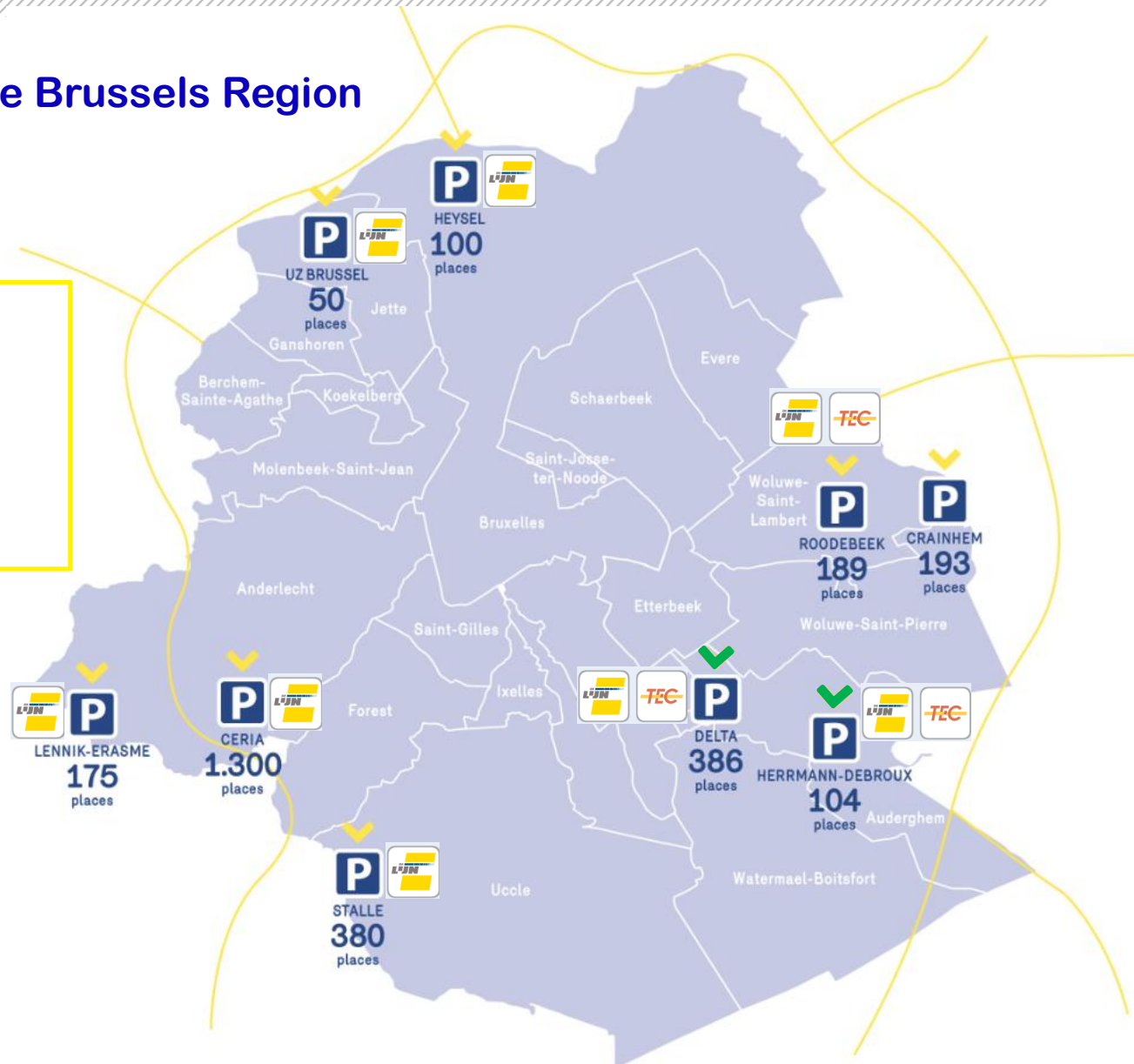
2023.12.13

➤ 9 P+R sites in the Brussels Region

P+R with

- ✓ Open access
- ✓ Controlled access

P+R for casual users:
CERIA only





> P+R and Mobib Subscriber

- Who : Regular commuters
- Price : Free subscription and free parking for first 24h. Fee over 24h: 1€/h (max 15€/day)
- Payment : post-paid invoicing (LPR *)
- Conditions (registration) :
 - Residence > 2 km < 40 km
 - Work place at min. 3 km from parking
 - Valid Mobib yearly subscription

* LPR: License Plate Recognition

> Casual P+R user with Mobib ticket

- Who : visitors, tourists, locals, occasionnal users
- Price : no subscription, free parking for first 24h. Fee over 24h: 1€/h (max. 15€/day)
- Payment : scan at parking booth the Mobib card used for PT + balance payment at booth
- Conditions (for activation in **API WPS-Mobib**) :
 - STIB Mobib ticket to scan at parking booth at exit
 - Min. 3 PT stops (3km) from the parking
 - Min 4H30 parking

- > **Other** Who: Rotational parking / locals / events, without Mobib or **PT paid with bank card**
Full parking payment (1€/h, max 15€/24h), or advantageous rate for partner's events

Abonnements pour clients réguliers

Abonnements P+R

Abonnements à prix avantageux
pour les clients réguliers
du parking
combiné à un
abonnement MOBIB

Abonnements Riverains

Abonnements à prix avantageux
pour les habitants du quartier

Abonnements Classiques

Abonnements classiques pour
les autres clients réguliers

Tarifs pour clients occasionnels

Tarifs P+R

Tarifs avantageux
pour les clients
occasionnels du parking
combiné à l'utilisation
du réseau STIB

Tarifs Classiques

Tarifs classiques pour
les autres clients occasionnels

Tarifs Événements

Tarifs avantageux pour les participants
à un événement partenaire



➤ Data sources related to P+R in Brussels

Different data sources to combine:

- Dedicated website: www.parkandride.brussels
- Parking info: static and dynamic database from the Brussels dynamic parking guidance system (telejal) available in Datex through specific URLs
- Personal use of parking: Parking operators management system + LPR + payment systems
- Public transport : Mobib card / Mobib app
- « soft » ou shared mobility and other services in P+R like Bike & Ride (secure bike lockers)

➤ Evolution towards integration in MaaS, possible steps

to integrate all mobility providers in one place

- Static data of P+R in Floya (under study)
- Dynamic data on P+R in Floya : real time info on level of parking availability (under study)
- Itinerary optimisation : show comparative advantage (on time, cost, greenhouse impact) of itineraries with combined transport modes through P+R, in comparison to car-only itinerary
=> help for objective choice by the car user
- P+R Payment (for casual users) and parking spot booking



➤ Our focus for a better P+R's Interoperability in Belgium

- **Data standardization:** which sort of data in which format and standard?
 - Common or compatible standards for data on P+R / PP: Datex II / APDS
 - Common or standardized list and format of data on P+R / PP: Good practice?
 - Enforce parking operators to provide harmonised & updated static and dynamic data on parking (through regulation, parking concession / management contract)
- **Harmonized protocols for data exchange** to limit development of specific API's
 - from parking operators to regional / national database
 - from regional / national database to mobility platforms / MaaS
 - > Shared information system / platform?
 - > role for Transportdata?
 - > control of data reliability?
- Collaboration between cities / regions:
 - at PT operators level : TEC-De Lijn-STIB-SNCB / RER to serve P+R > mobility hub
 - at Transport authorities level : ex. for installation of Variable Message Signs (PMV) at border of Bxl to guide to P+R or to specific PP. Promote P+R outside Brussels using RER
 - at digital platforms level: Floya, Route planner, BeMobile... (harmonization, integration, good practices, ...)

Note: Need to limit number of mobility platforms?
- Uniform payment methods to enhance user experience : Mobib / MaaS / seamless connection

Thanks

Team:

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Fanny Ribereau – fribereau@parking.brussels

Alain Horvath – ahorvath@parking.brussels

Emmanuel Dawans – edawans@parking.brussels



Park & Ride Data on TRANSPORTDATA.BE

Laura Kupers



European Commission

Intelligent Transport Systems (ITS) Directive

**Setup of
National
Access Points**



Delegated regulations

Mandatory sharing of data & services regarding:

- Multimodal travel information services (MMTIS)
- Real time traffic information services (RTTI)
- Safety related traffic information (SRTI)
- Information services for safe and secure truck parking (SSTP)



European Commission

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Setup of
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TRANSPORTDATA.BE



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European Commission

Intelligent Transport Systems (ITS) Directive

**Park & Ride data
must be registered
on the NAP**

TRANSPORTDATA.BE



Delegated regulations

Mandatory sharing of data & services regarding:

- Multimodal travel information services (MMTIS)
- Real time traffic information services (RTTI)
- Safety related traffic information (SRTI)
- Information services for safe and secure truck parkings (SSTP)

Revision MMTIS : C_2023_8105

WHAT'S NEW?



Parking data is MMTIS data (no longer overlap with RTTI)

*“The **dataholder** shall provide the static, historic and observed travel and traffic data and the dynamic travel and traffic data”*

- (4) To be consistent and avoid overlaps with Commission Delegated Regulation (EU) 2022/670¹³, specific data types on **parking** should be added to the scope of Delegated Regulation (EU) 2017/1926 and data types on refuelling and charging stations should be removed from the scope of Delegated Regulation (EU) 2017/1926. Data on **parking**, such as location and availability of **parking** places, where and how to pay for **parking**, and information on **parking** tariffs, are considered important for the further development of reliable travel information services, and should be made accessible by data holders, such as transport authorities, transport operators, infrastructure managers, transport on demand service providers or **parking** operators.

- (11) “data holder” means any legal person, public or private entity, such as transport authorities, transport operators, infrastructure managers or transport on demand service providers, who has the right to grant access to or to share the data under its control, listed in the Annex, in accordance with applicable Union or national law;

Level of service 1 – must be registered by 01/12/2023 (or 2024*)

- (c) location search (access nodes) – for scheduled transport and transport on demand where relevant:
 - (i) identified access nodes;
 - (ii) geometry/map layout structure of access nodes;
- (d) trip plan computation – for scheduled transport and transport on demand where relevant:
 - (i) connection where interchanges may be made;
 - (ii) default transfer times at interchanges;
 - (iii) network topology and routes/lines (topology);
 - (iv) transport operators;
 - (v) timetables;
 - (vi) planned interchanges between guaranteed scheduled services;
 - (vii) hours of operation;
 - (viii) facilities of access nodes (including platform information, help desk/information points, ticket booths, lifts/stairs, entrances and exit locations);
 - * (ix) vehicles, including their accessibility (such as low floor, wheelchair accessible, pram accessible) and accessibility of on-board services (such as toilets);
 - (x) accessibility of access nodes, and paths within an interchange (such as existence of lifts, escalators);
 - (xi) existence of assistance services (such as existence of on-site assistance);

Static data

A screenshot of a public transport website showing a list of routes and stations. The table has multiple columns, including route numbers, names, and station names.

Level of service 2 – must be registered by 01/12/2023 (or 2024*)



- (a) location search – for transport on demand and personal transport:
 - * (i) location of parking places (on and off-street), including accessible parking places for persons with disabilities and persons with reduced mobility;
 - (ii) Park & Ride stops;
 - * (iii) Park & Drive stops;
 - (iv) bike-sharing stations;
 - (v) car-sharing stations;
 - (vi) secure bike parking (such as locked bike garage);
 - * (vii) scooter parking zones;
- (b) information service:
 - (i) where and how to buy tickets for scheduled transport, including retail channels, fulfilment methods, payment methods;
 - (ii) where and how to pay for parking, including retail channels, fulfilment methods, payment methods;

Static data

Level of service 4 – must be registered by 01/12/2025

(d) information on parking tariffs.



A blue and white parking tariff sign for Vinci Park. The sign lists hourly and daily rates in Euros. It includes icons for a car, a car with a bicycle, and a car with a motorcycle. The text 'TARIF HORAIRE' is at the top left. The rates are listed in a table format. At the bottom, it says 'Toute tranche horaire entamée est due' and 'Forfait nuit'.

TARIF HORAIRE		
30 mn		0,60 €
1h		1,20 €
1h30		2,20 €
2h		3,20 €
2h30		4,10 €
3h		5,00 €
3h30		5,90 €
4h		6,80 €
4h30		7,70 €
5h		8,60 €
5h30		9,50 €
6h à 24h		10,00 €
Forfait nuit		2,00 €



Dynamic data

Level of service 2 – must be registered by 01/12/2026 for TEN-T network and by 01/12/2028 for the entire transport network



- (a) **information service on parking tariffs** – for transport on demand and personal transport;
- (b) **availability check and location** – for transport on demand and personal transport where relevant;
 - (i) car-sharing availability and location, bike-sharing availability and location, scooter-sharing availability and location, and other vehicle-sharing availability and location;
 - (ii) **car parking spaces available** (on and off-street).





- *Which data must be registered?*
- *Who must register the data?*
- *In which format must it be registered?*
- *How can the data be registered?*
- ...

Mail the NAP helpdesk: contact@transportdata.be



OPEN DISCUSSION



NEXT STEPS

1. Network / platform
2. Compelling use cases
 1. Access to data (static, dynamic)
 2. ...
3. Roadmap

Principles

- *End-user central*
- *Public-private*
- *EU context*

DATEX/APDS/OSLO

(static information)

Operator

Infrastructure

Access

Opening times

Tariffs and payment

...

Facilities for electric vehicles

Facilities for people with restrictions

...

(dynamic information)

Occupancy

Status

...

WORK PROGRAM 2024



- Th 1/2 10-11h30 - Data & ITS Solutions for Cycling (*webinar*)
- Fr 29/2 10-11h30 - Digital Access Rights to Cities (*webinar*)
- We 13/3 PM - General Assembly & Membership dinner (*Antwerp*)
- Tu 26/3 all day - P+R & Multimodal Hubs Technical Visit (*the Netherlands*) TBC
- 16-19/4 all day - Intertraffic (*Amsterdam*)
- Tu 30/4 10-12h - AI & 5G Opportunities within Mobility (*Deloitte Zaventem Airport*)
- Fr 24/5 10-11h30 - Public Charging Infrastructure, Harmonising Best Practices (*webinar*)
- Th 6/6 10-11h30 - Seamless Payment for Mobility (*webinar*)
- Mid August - Autonomous Driving Technical Visit (*San Francisco*) TBC
- 16-20/9 all day - ITS world congress (*Dubai*)
- We 2/10 all day - ITS.be congress (*Brussels*)
- Tu 26/11 10-11h30 - Multimodal Hubs & the NAP (*webinar*)



Thank you for your attention!

(All slides & recording will be sent to you)