



DATA4PT FINAL EVENT

Advancing seamless and interoperable multi-modal mobility in Europe: The role of DATA4PT

IT-TRANS Karlsruhe, 15 May

09.30 – 13.30

Today's Event





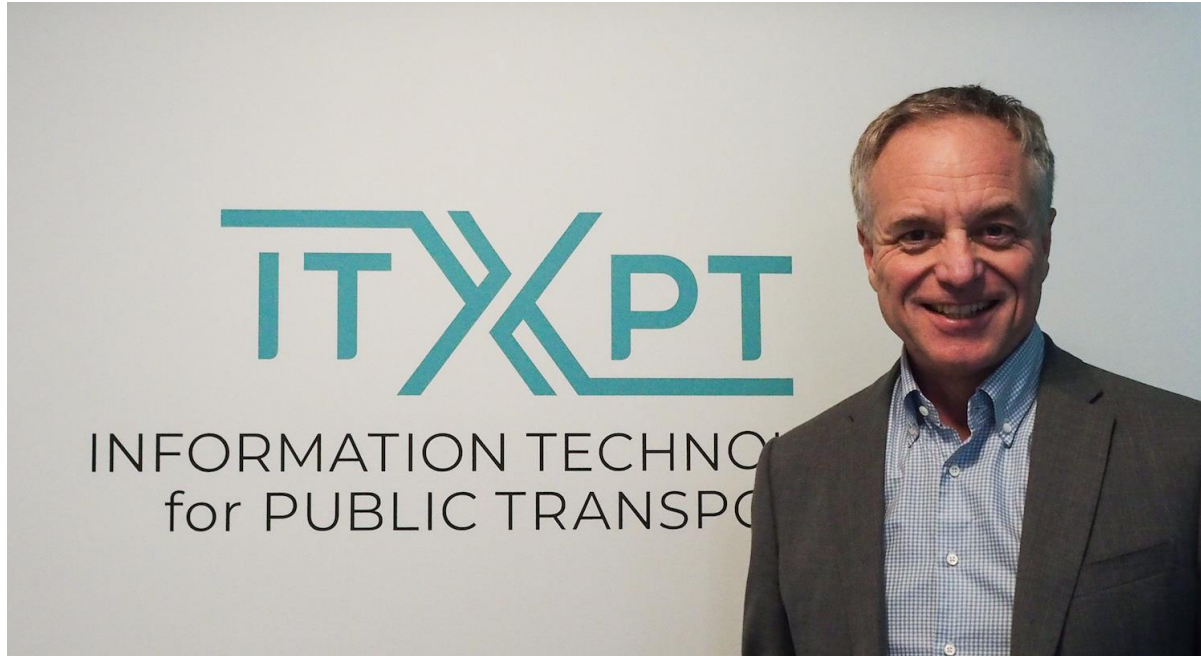
Keynote Speech



Mohamed Mezghani
UITP Secretary General



Keynote Speech



Anders Selling
ITxPT Secretary General



Keynote Speech



Petra Söderqvist
Policy Officer
European Commission DG
MOVE





ITS DIRECTIVE IMPLEMENTATION FOR MULTIMODAL TRAVEL INFORMATION SERVICES: WHY AND HOW TO IMPLEMENT AND ITS IMPORTANCE FROM PTO/PTA PERSPECTIVE

15/05/2024

Sabrina Ropp





Agenda

1. International Level – Perspective of UITP
2. Local Level – Perspective of Wiener Linien/ Wiener Stadtwerke

International Level

Perspective of UITP

THE INTERNATIONAL ASSOCIATION OF PUBLIC TRANSPORT

IN EUROPE

We represent the perspective of local passenger transport services by all sustainable road, rail and waterborne modes towards the EU



+450

PUBLIC TRANSPORT OPERATORS
AND AUTHORITIES



FROM
ALL

EU MEMBER STATES



+15

EXPERTS





At UITP, we are working to **enhance quality of life** and economic well-being by supporting and promoting **sustainable transport** in **urban** areas worldwide

Mobility as a service (MaaS)





Multimodal Travel Information Systems (MMTIS) Revision



EU POSITION PAPER

APRIL | 2023

MMTIS: Data for travel information

The European Commission, Parliament and Member States are revising the Delegated Regulation (EU) 2017/1926 on multimodal travel information services (MMTIS). **This regulation directly concerns the public transport authorities and companies represented by UITP**, which are required to provide data to the National Access Points (NAP) in the EU Member States. As more and more public transport operators and authorities are becoming the integrator of a multimodal transport offer in their city, they are also increasingly using the data provided through the NAP.

UITP believes the overall goal of the revision of the MMTIS regulation should be to provide sustainable mobility for all and promote modal shift. The public transport sector recognises the benefits of a strong data-sharing policy and already shares a lot of the companies' data. **We are in favour of open data when in service of sustainable multimodal mobility.**


While it is naturally part of the discussion how much (new, more) data has to be opened and shared, a key question for UITP is how to establish true reciprocity and a fair level-playing field. (Commercial) MaaS Platforms that are using data shared by public transport operators (PTO) and public transport authorities (PTA) should also share the data they generate from their service. Otherwise, this would create an uneven playing field. The EU decision-makers must also take into account the fact that **the public transport sector is an extremely competitive market**, as public transport companies are now competing with private mobility providers and digital service providers that are not subject to the same rules and do not necessarily have the public interest at heart. Moreover, data produced by UITP members can sometimes be confidential and should in that case not be shared.

From the public transport sector's perspective, the following points are most important for the revision of the MMTIS regulation:

- ONLY DATA THAT IS ALREADY DIGITALISED MUST BE SHARED**

It is an important principle of the delegated regulation on MMTIS that only data sets that are already digitalised must be shared via the NAP. For UITP members, this is extremely important, as any new obligation to digitalise information or create new digital data sets for the purpose of sharing them via the NAP would require costly investments by the companies and authorities, which those who did not (yet) intend to digitalise their processes could not afford (and would not be able to recover).

1





UITP position on MMTIS Revision

1. Maintain the principle that only data that is already digitalised must be shared.
2. Occupancy data should only be shared based on a business decision.
3. APIs should be harmonised, but remain voluntary in the beginning. The sector needs time to adapt to using them.
4. Standards are usually made for voluntary application. Those standards that become mandatory should be available for free.
5. Consider the environmental impact of data storage; it could make sense to specify after which time data may be deleted.



MMTIS Revision

Entered into force **4th of March 2024**

Who is concerned:

This regulation directly concerns UITP members, PTOs, and PTAs, which are required to provide data to the National Access Points (NAPs).

What remained:

The general principles for data sharing persist in the revised MMTIS, i.e. that **only digitalised data must be shared**, with the understanding that such data does not need to be shared free of charge and may be subject to license agreements.



What's new

introduction of new datasets and categories related to **dynamic, observed, and historical travel and traffic data**, including new delivery timeframes

Static data sets:

- Data on vehicles facilities and their accessibility; park&ride stops or zones; or fare information *[by December 2024]*
- Data on historic travel and traffic data on delays; observed data on delays and passing time; cancellations; or information on parking tariffs *[by December 2025]*



What's new

Dynamic data sets:

- Data sets such as passing times, trip plans, and other real time data about parking tariffs or availability check and location for transport on demand and personal transport *[by December 2025 or 2026 for the comprehensive TEN-T network/ by December 2028 for other parts of the Union]*
- **occupancy information** of the vehicle, which is for scheduled transport and transport on demand, it is not compulsory. The decision remains at Member State level.

→ **Obligatory standards** for data for each field of application sharing are listed in the revised MMTIS

- NeTEX and DATEX II for the static, historic and observed travel and traffic data
- SIRI for the dynamic data.



What's further relevant for UITP members

Metadata Requirements and Data Provision (Art. 3(4)):

- Member States and relevant ITS stakeholders must establish an agreement regarding metadata requirements.
- Data holders are obligated to provide metadata in accordance with specified requirements.

Data Delivery via Proxy (Art. 3(6new)):

- Entities delivering data through the national access point can use proxies, adhering to existing agreements.

Collaborative Effort for Data Accuracy (Art. 4(5) and Art. 5(6)):

- Data users and holders must collaborate to promptly identify and notify inaccuracies to the originating data holder.

Personal Data and Neutral Re-use (Art. 4(6) and Art. 8(2)):

- Data provided via the national access point should be devoid of personal data and all data re-use should occur neutrally, without bias toward the data holder.

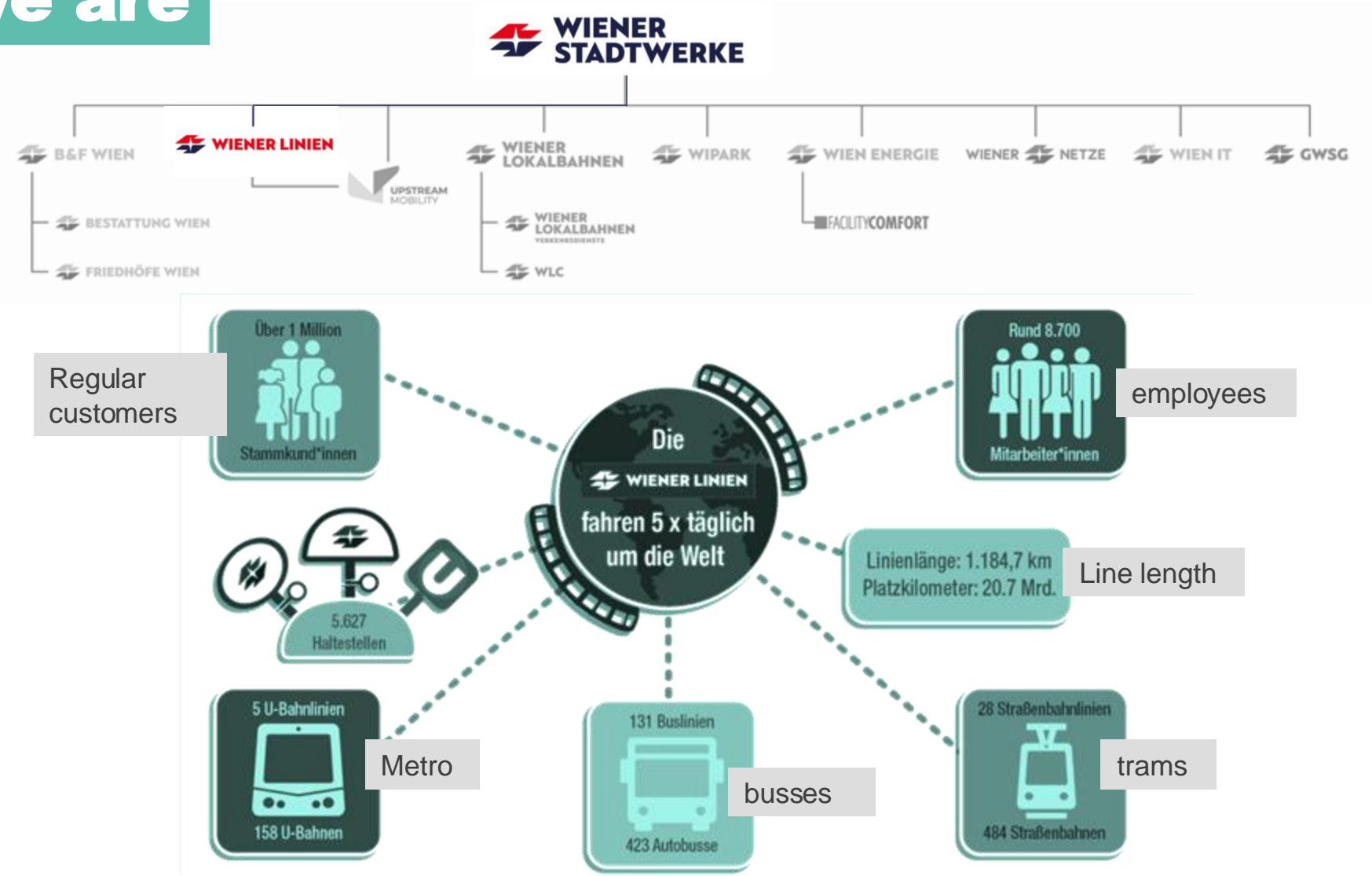
Source Indication and Update Intervals (Art. 8(3)):

- When utilizing this data, indicate the source upon request.
- Clearly specify update intervals for different data types.

Local Level

Perspective of Wiener Linien

Who we are



MMTIS – Overview

Current Status

The majority of required data is available in NETEX/SIRI standards, but there is also data in only machine-readable format but not yet in NETEX or SIRI format (e.g., information from ticket machines, ticket details, special tickets, elevators, disclaimers, etc.)

Successful Aspects

Pioneer in data provision (publication of data on **data.gv.at** since 2013)

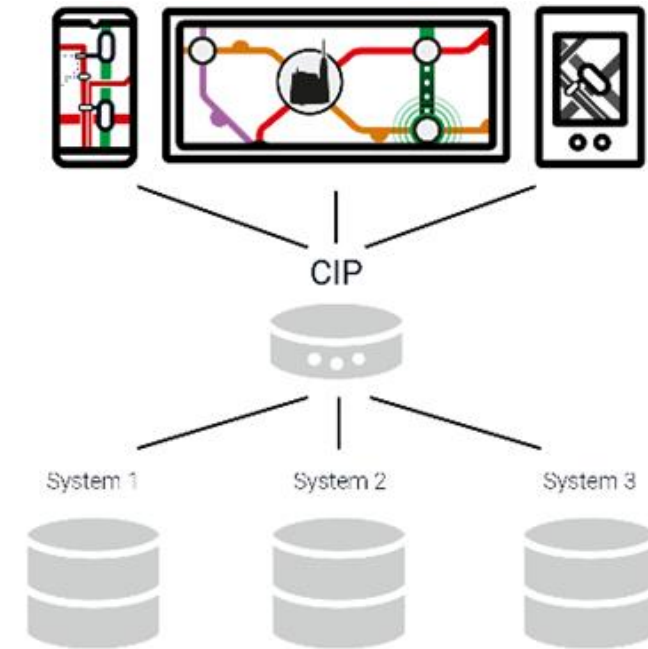
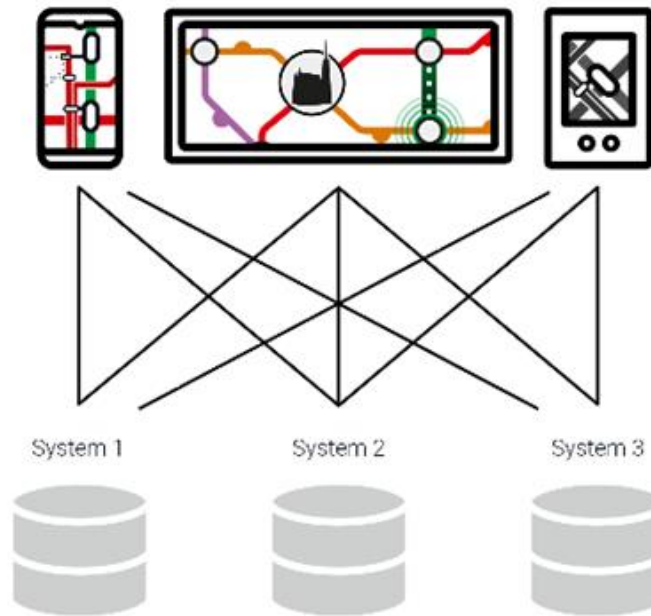
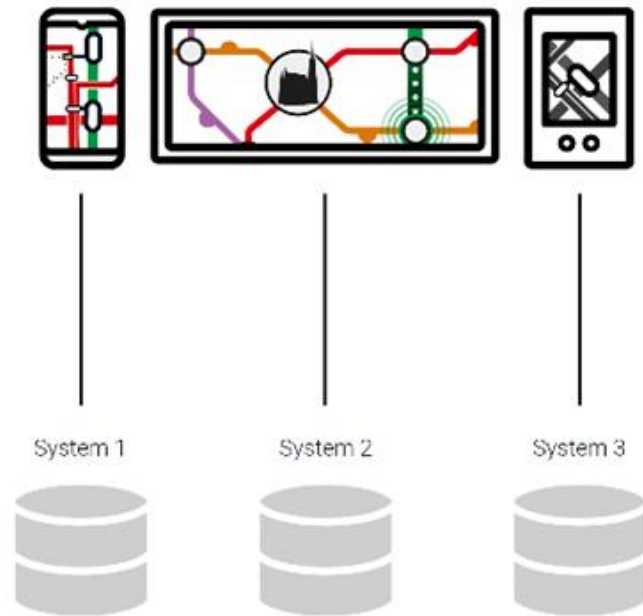
Challenges

- Conversion
- Optimization of internal processes
- Different datasets for different platforms
- Difficulties providing some real time data

Collaboration with NAP and DATA4PT:

- A good sparring partner and open to questions.
- NAP serves as the contact point for issues that would otherwise remain open and, with their assistance, drives harmonization in the industry.
- It's beneficial to have a central interface.

Customer Information Platform (CIP)

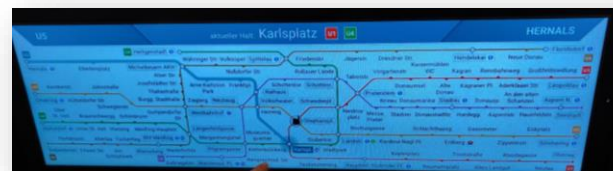
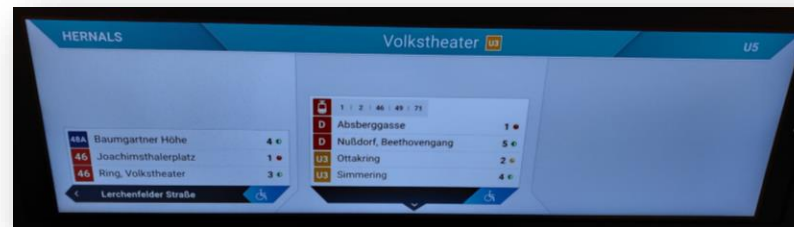


Examples

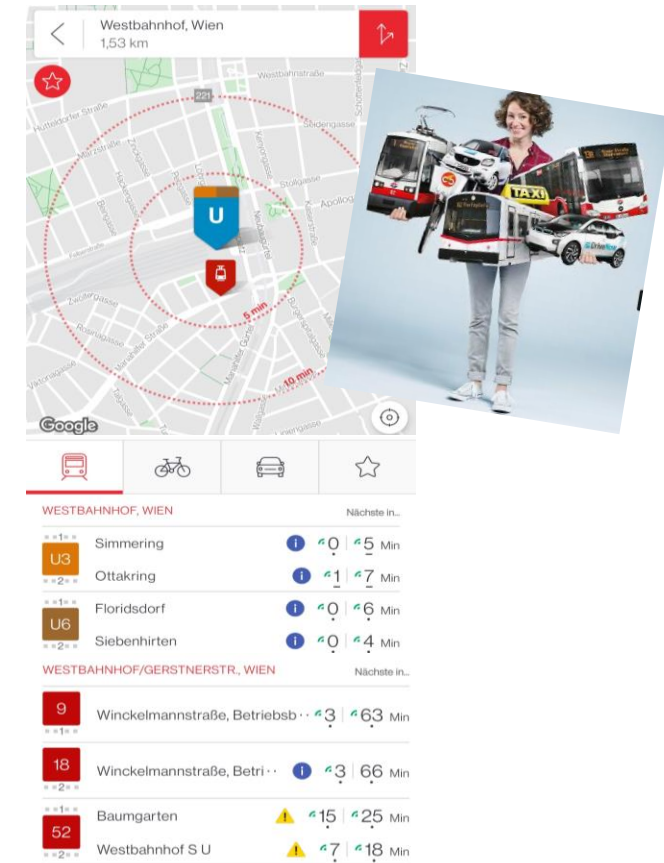
Digital Information Pillar (station)



Digital Passenger information and routing system (metro)



WienMobil App



The importance of local digital mobility platforms



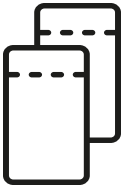
WienMobil App - mobility as a service

- is the digital mobility platform for the encouragement of multimodal mobility in Vienna
- links all offers (public transport, car- & bikesharing, e-scooter, cab, own car, parking, walking etc.) and provides a simple, transparent, comprehensible and comparable access to mobility
- makes a contribution to the socio-ecological traffic turnaround
- had more than 2 million unique users in 2022



90% of the travelled paths* are locally/regionally in a combination of different forms of mobility

To meet the needs of customers tailored, **a regional offer with high quality info** (barrier-free access, real-time information, traffic scene, traffic management, route planning, etc.) is required.



Public transport tickets


Additionally Wiener Linien **enables other companies to sell public transport tickets** (up to 7 days VIENNA) e.g. for tourism purposes or for operational mobility management via a ticket sales interface.

* MAFO 2022



Multimodal Digital Mobility Services (MDMS)





Joint paper of UITP, POLIS & EMTA

- What are the risks and opportunities of the upcoming EU legislation on MDMS?
- To present a sector perspective

Link: [https://cms.uitp.org/wp/wp-content/uploads/2021/02/UITP EMTA POLIS Joint-opinion-on-EU-wide-integrated-ticketing.pdf](https://cms.uitp.org/wp/wp-content/uploads/2021/02/UITP_EMTA_POLIS_Joint-opinion-on-EU-wide-integrated-ticketing.pdf)

2021





Main principles

1. Recognising **local diversity** and the principle of subsidiarity
2. Delivering **public policy goals** and a **viable market** through effective **governance**
3. Leveraging the **fare structure** to achieve sustainability, equity and effective governance (PT to set conditions for resale)
4. Guaranteeing **fairness** : rights and obligations for all
5. Forestalling market asymmetry through **data reciprocity**
6. Ensuring **proportionality** of necessary investment and expected benefit
7. Respecting the collaborative **nature of public transport**
8. Recognising potential needs for **customer protection** action



In conclusion

UITP welcomes the EU's initiative, provided that...

- ... it is proportionate (e.g. no obligation for the urban level; subscriptions excluded / can be sold voluntarily)
- ... it does not lead to data-rich platforms and data-poor public transport companies
- ... it does not make public transport more expensive (i.e. no high commission fees)
- ... it promotes the most sustainable mobility options



Let's connect!



Sabrina ROPP

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Annika DEGEN

annika.degen@uitp.org



PANEL DISCUSSION

Data exchange and EU standards as the backbone for seamless mobility: Data providers and data users' perspective

10:15 – 11:15





A **unique support platform** for **Public Transport stakeholders** to comply with the **MMTIS Delegated Regulation** using the full potential of **EU CEN Data Standards (Transmodel ecosystem: NeTEX and SIRI)** to fulfill ITS Directive.

Vision:

- ✓ To facilitate and speed up the implementation of EU standards to achieve Multi-modal and cross-border travel

Offers:

- ✓ Capacity building, knowledge sharing and technical toolboxes

To empower and align:

- ✓ Public Transport Authorities, Operators, Ministries, National Access Points

Budget: 2,423,200 €

Funding: 1,998,560 €

Timespan: 2020-2024 (4.5 years)



Different ways to provide support

Training & Capacity building

Knowledge base
Wiki page...



Technical support Validation Tools



Exchange of experiences and best practices

Stakeholders' fora ...



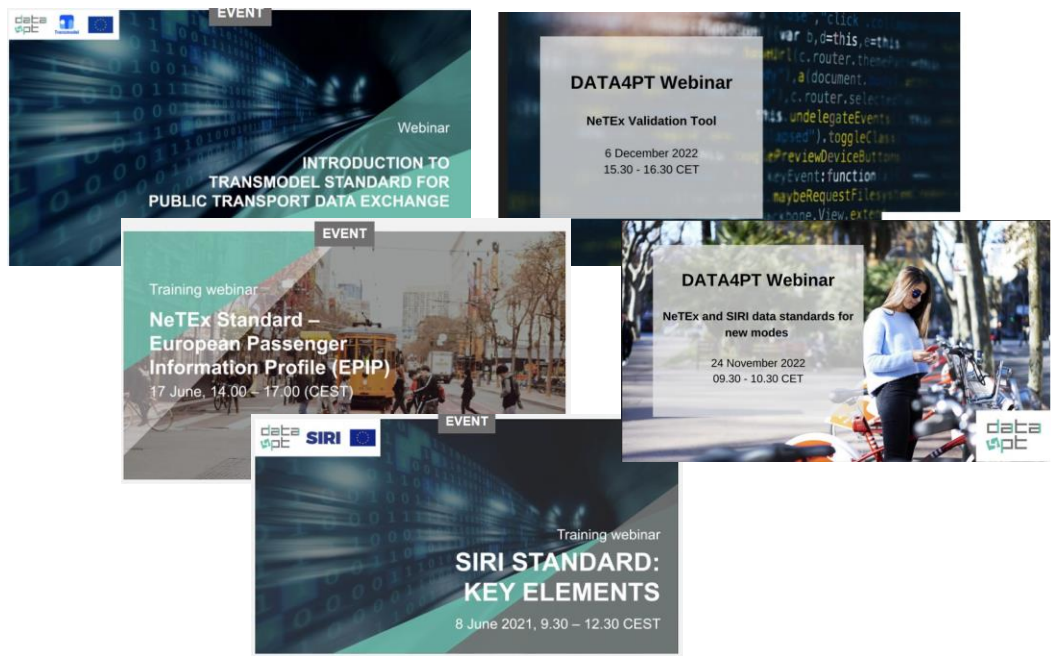
Long term support – future projections




dataapt



Trainings




10-minute
tutorial series

HOW TO MANAGE & SHARE
PUBLIC TRANSPORT
DATA
IN ONE GO

DATA4PT series

ITxPT
3 videos • 22 views • Last updated on 22 Mar 2024

⏮

➡


⋮

▶ Play all

🔀 Shuffle


Get more with these 10-minute tutorials focusing on topics such as NeTex, SIRI, Transmodel applications

- 1


10-minute
tutorial series


**HOW TO MANAGE & SHARE
PUBLIC TRANSPORT
DATA**
10:27

2. NeTex for Public Transport operations
ITxPT • 83 views • 3 days ago
- 2


10-minute
tutorial series

**HOW TO IMPROVE THE
PASSENGER
EXPERIENCE
REAL-TIME DATA**
UPCOMING

3. SIRI Benefits for travelers
ITxPT • • Premieres 30/04/2024, 12:45
- 3


10-minute
tutorial series

**EVERYTHING YOU NEED
TO KNOW ABOUT
NETEX**
12:51

1. The functional overview of NeTex
ITxPT • 900 views • 1 year ago



WEBSITE: data4pt-project.eu
ITxPT Youtube playlist

Webinars
Videos
Presentations



Technical support

[ABOUT](#)[DATA MODELS](#)[CONSORTIUM](#)[TECHNICAL SUPPORT](#)[KNOWLEDGE BASE](#)[NEWS & EVENTS](#)[CONTACT US](#)

Technical requests

What kind of technical requests can you submit to the DATA4PT team?

Implementation support: related to "day to day" operation where DATA4PT related topics are implemented. It includes artefacts maintenance, standard use-cases, national profiles etc. Some examples are:

- ✓ *System interface specifications with operational system*
- ✓ *Support on NAP implementation*
- ✓ *SIRI support and bug report*
- ✓ *Question related to profile definition*
- ✓ *Use of NeTEx for ERP (accessibility of public places)*
- ✓ *Support for NeTEx implementation*

Tools: support for the use of existing tools or to build extra tools to support implementation. Some examples are:

- ✓ *How to use NeTEx/SIRI with MS Tools ?*
- ✓ *Question around the implementation for Chouette*

[SUBMIT A REQUEST](#)

Requirements

There might be additional requirements for you to be able to implement NeTEx, Transmodel and SIRI. The DATA4PT team is happy to provide you with additional tools such as:

Training: our expert team will assess any requirements for training events/webinars and training material development. These can be trainings on for example:

- ✓ *Explanation of the Transmodel Ecosystem*
- ✓ *General questions and questions about fares*

Public Transport Standards update: for example standards to include car-sharing, bike-sharing, mobility on demand... etc.

External exchanges: Our expert team will assess any requirements and consider proposing liaison exchange / dialogue with related bodies.

[SUBMIT A REQUIREMENT](#)

WEBSITE: data4pt-project.eu

SCAN ME





Greenlight NeTEx validator

Web interface

Using the online version may apply limitations. For regular use, download and install the tool for free from Docker or GitHub. You can read more about requirements [here](#).

Data4PT

The DATA4PT project aims to advance data-sharing practices in the public transport sector by supporting the development of data exchange standards and models, to fulfil the needs of multimodal travel information service providers.

By supporting EU Member States in deploying a set of harmonised European public data standards (Transmodel, NeTEx and SIRI), DATA4PT wants to enable union-wide multimodal travel information services and contribute to a seamless door-to-door travel ecosystem across Europe that covers all mobility services.

Validation tool

Key activity of DATA4PT project is the development of validation tools for NeTEx and SIRI datasets. As NeTEx and SIRI are the EU standardised formats for public transport data in National Access Points (NAPs), the purpose of validation is to ensure a certain level of quality of the published data. The quality dimension is aligned with the overall objective of the project to enable the implementation of ITS Directive Delegated Regulation EU 2017/1926 and therefore the interoperable exchange of travel and traffic data across Europe.

If you have feedback, questions or bug reports please do not hesitate to send them our way through [GitHub](#) or [Email](#).

Start validating

<https://greenlight.itxpt.eu/>

Core tool

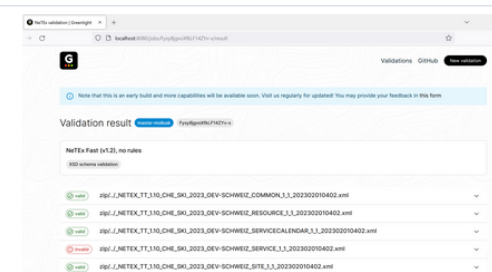
Greenlight - The Data4PT Validation tool

GO VERSION **>=1.17** DOCKER PULLS **59** DOCKER STARS **0**

[Web](#) · [CLI](#) · [Source](#)

The minimal, customizable, NeTEx validation tool

- **Customizable:** configure what you see and how you see it.
- **Scripting** write your own validation rules using JavaScript
- **Fancy** shows relevant information at a glance.
- **Easy** quick to install – start using it in minutes.
- **Try it yourself** <https://greenlight.itxpt.eu>



<https://github.com/ITxPT/DATA4PTTools>

BEFORE DATA4PT

Many EU MS had no published multi-modal data at all

→ Nowhere to start

Most of the published data across EU claiming the NeTEx format **had errors**

→ Not useful or interoperable data



AFTER DATA4PT

Croatia, Czech Republic, Slovenia and Portugal built their multimodal NAP using DATA4PT resources

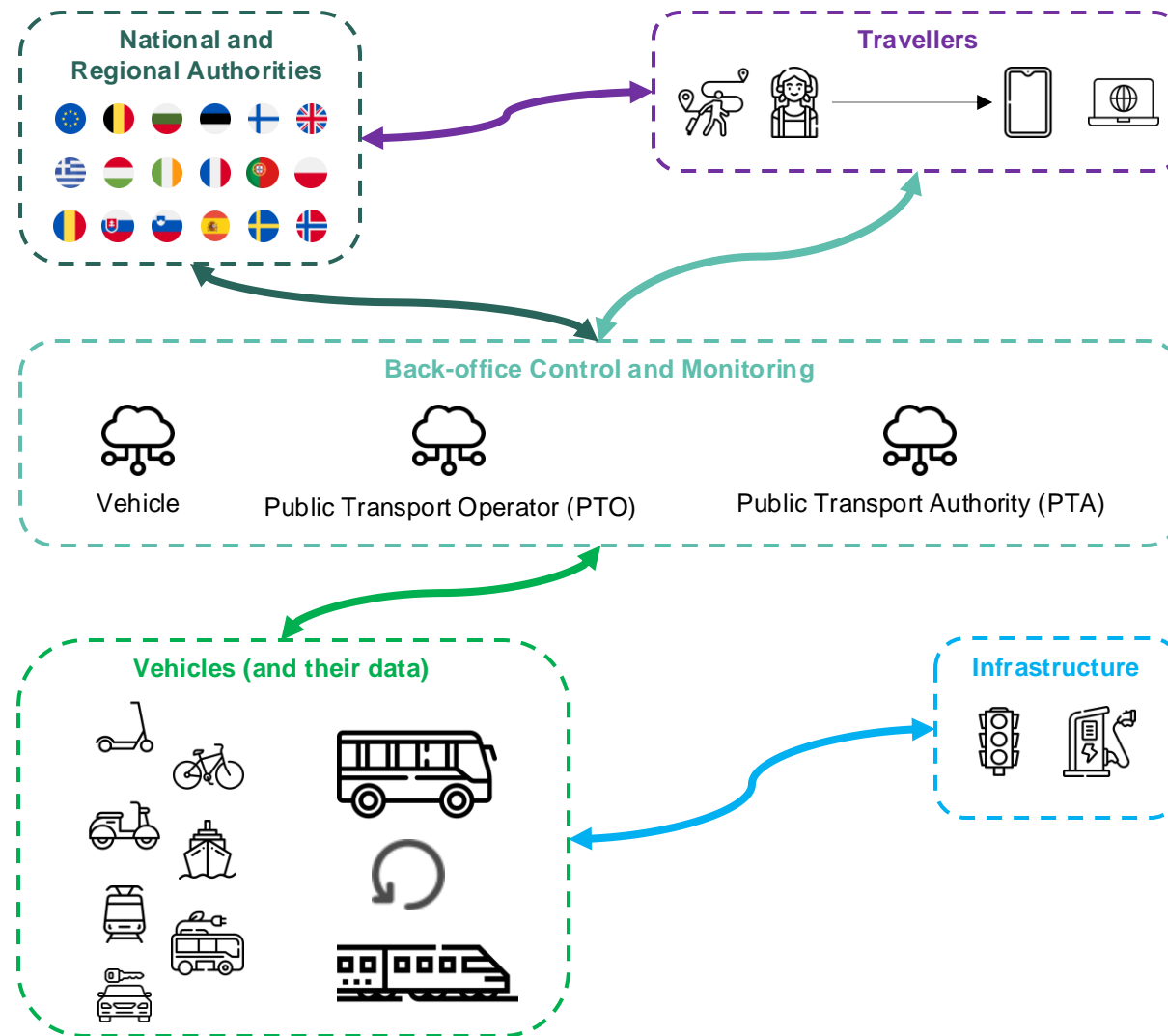
Austria, Denmark, France NAPs improved publishing static data (NeTEx) and introduced **the DATA4PT validation tool** in their processes

Italy uses NeTEx and SIRI data gathered in the NAP for improving MaaS services

Sweden publishing and using NeTEx data for Swedish National Distribution System for multimodal ticket bookings

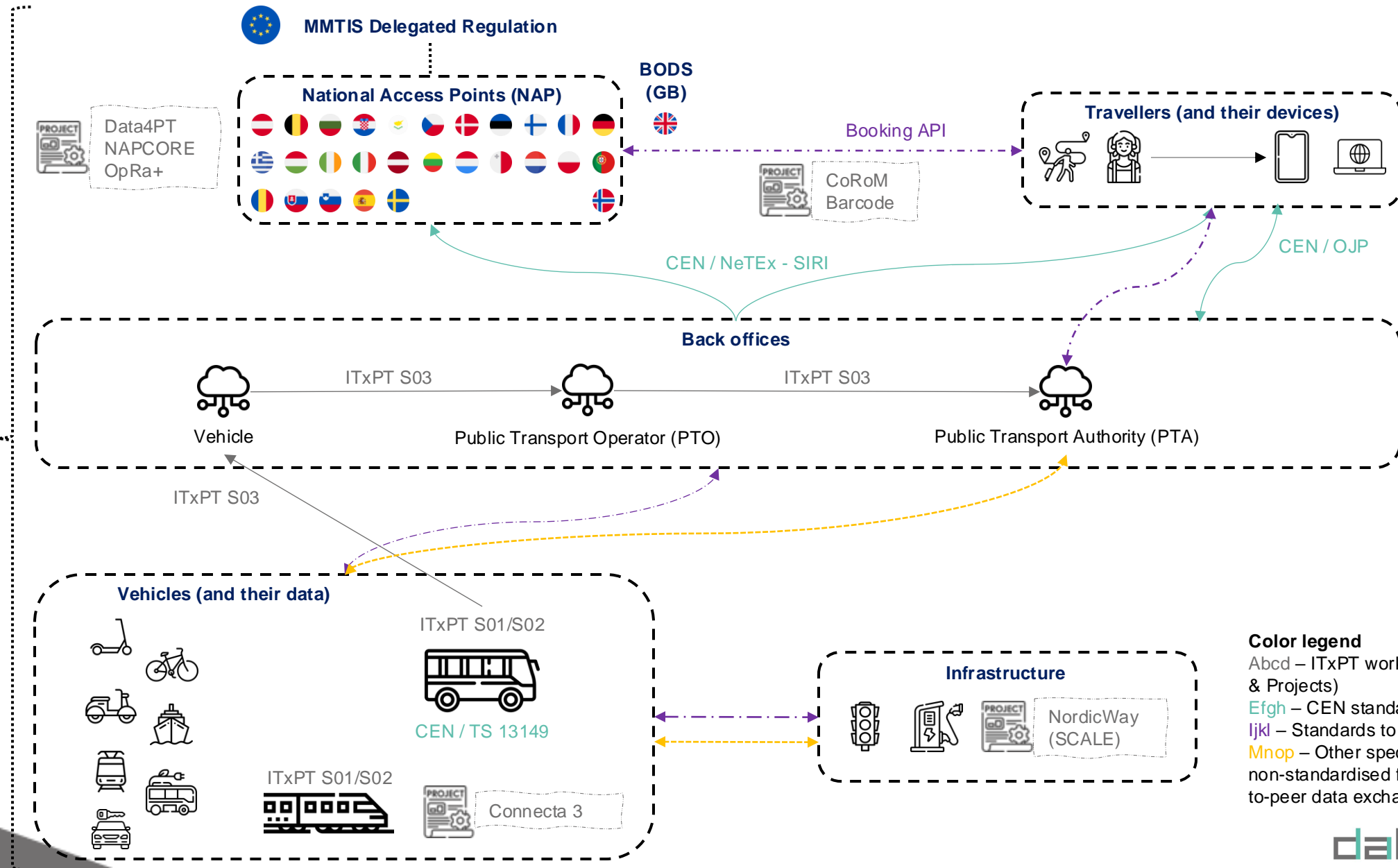


Mobility data interfaces landscape – overview





Mobility data interfaces landscape – detailed view





Short presentations

- Antonio Matos, AMP
- Patrick Dejaco, STA Bolzano
- Johan Hammar, Samtrafiken



METROPOLITAN AREA OF PORTO IN PORTUGUESE NAP

15 May 2024

António Matos





Joint project of IMT and AMP



National Authority for Mobility



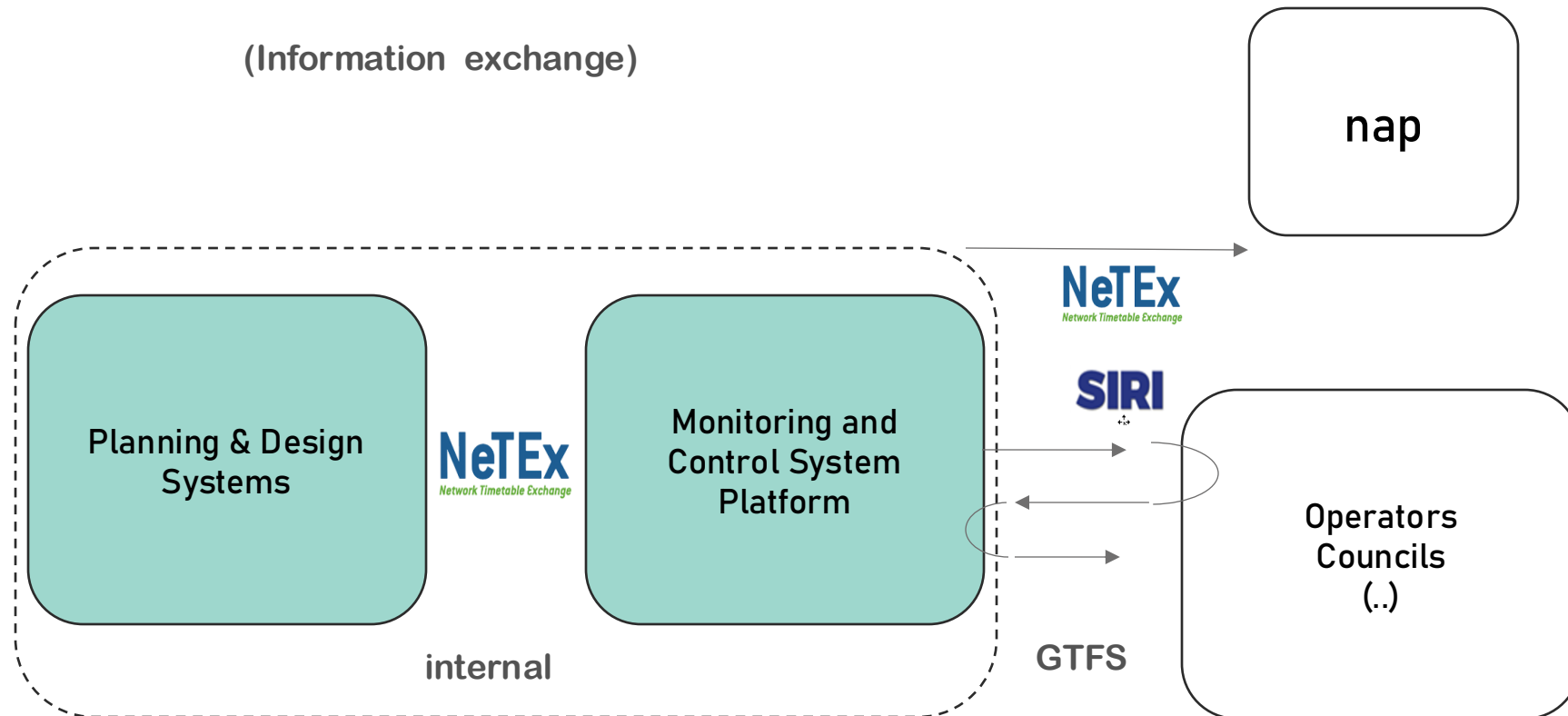
Porto metropolitan area public transport authority

Implemented & tested





Monitoring and Control System for Bus Public Transport Contracts



previous steps

Monitoring platform has been implemented

Production and communication between services with NeTEx has been tested (validated with Data Validation Tool)

Communication of vehicle positions with SIRI-VM has been tested



Operation Started 1 december 2023

TODAY

All internal transfer of data using export/import rely on NeTEx

The information has been made available in the NeTEx and GTFS protocols

Despite the availability of the NeTEx and GTFS protocols, operators use GTFS.

strengths

wide cover of the transport system areas

object oriented data model

frame concept

versioning mechanism

transmission as payload or a file

Portuguese NAP standard (imtt)

full European standard since 2006

weaknesses

complexity

small presence in commercial software
as import/export format

NeTEx files can be huge

Lack of documentation



IMPLEMENTING NETEX, SIRI AND ITXPT PROTOCOLS IN SOUTH TYROL, ITALY

15.05.2024

Patrick Dejaco, Responsible Information Systems Department,
STA – Strutture Trasporto Alto Adige SpA

Roberto Cavaliere, Subject Matter Expert AI & Mobility
Solutions, NOI Techpark



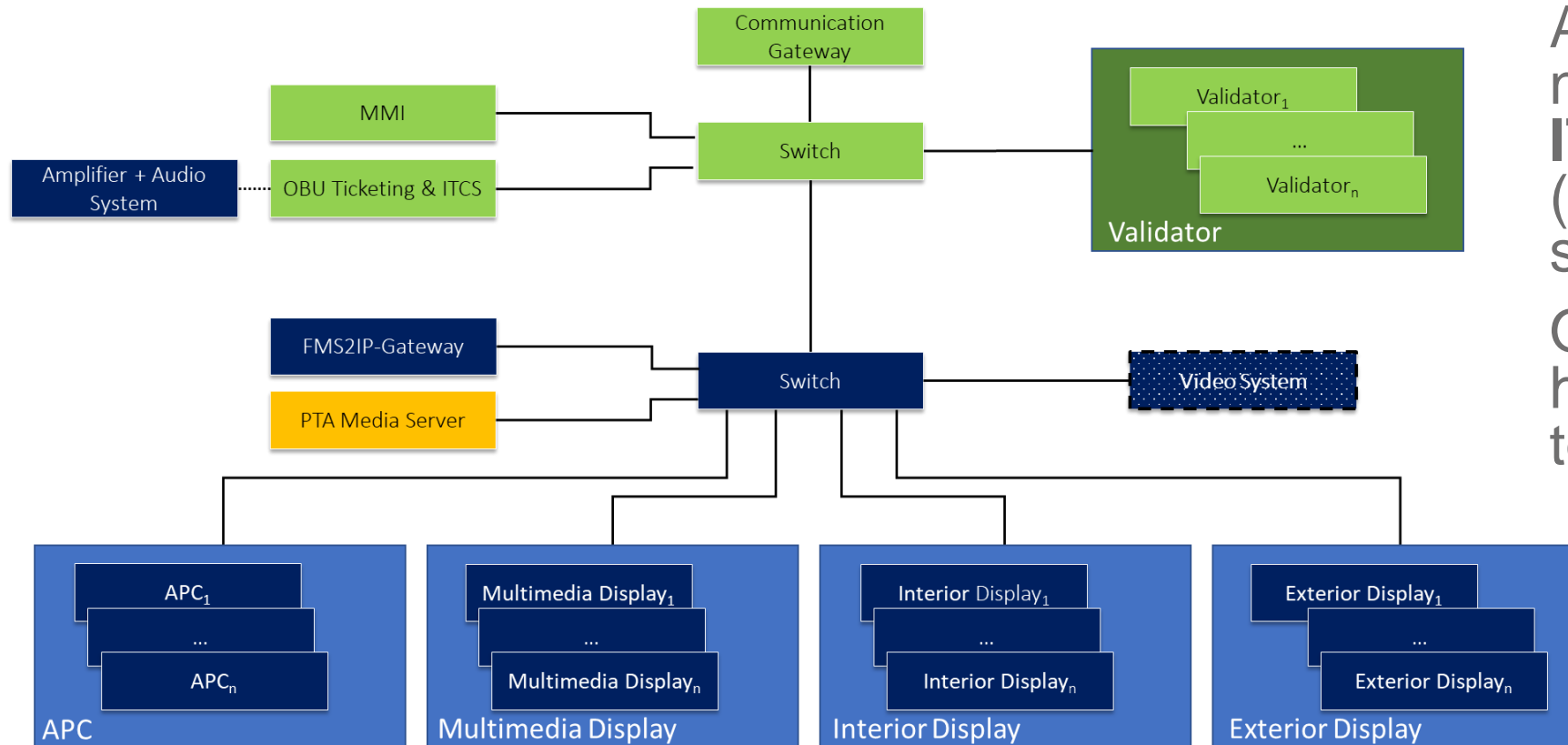


- STA
- STA Service
- Operator



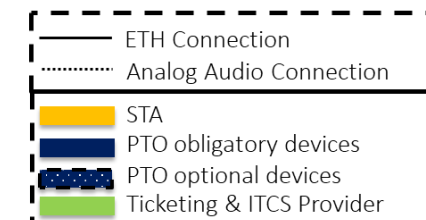


System architecture (2)



About 450 out of 800 new vehicles, fully **ITxPT** compliant (hardware and software).

Other 350 vehicles have been retrofitted to be ITxPT compliant





Where are we / lessons learnt

- Installations nearly completed, all vehicles linked to a new, unique modern ticketing (ABT) / ITCS system
- Implementation of protocols: from theory to practice / reality
 - Technological suppliers have been implementing now (in the last few years) these EU protocols → **not immediate implementation**
 - Specification requirements and «**legacy**» **requirements**: a difficult compromise (e.g. Global IDs and private codes, destination texts)
 - **Data quality and completeness**: need of automatic tools that can not only verify the semantic compliance of interfaces w.r.t. standards, but also if the data provided are correct and complete.
 - Particularly relevant for NeTEx → comparison between new and previous exports



USING NeTeX DATA TO ENABLE NATIONAL TRAVELS IN SWEDEN

2024-05-15

Johan Hammar, Samtrafiken





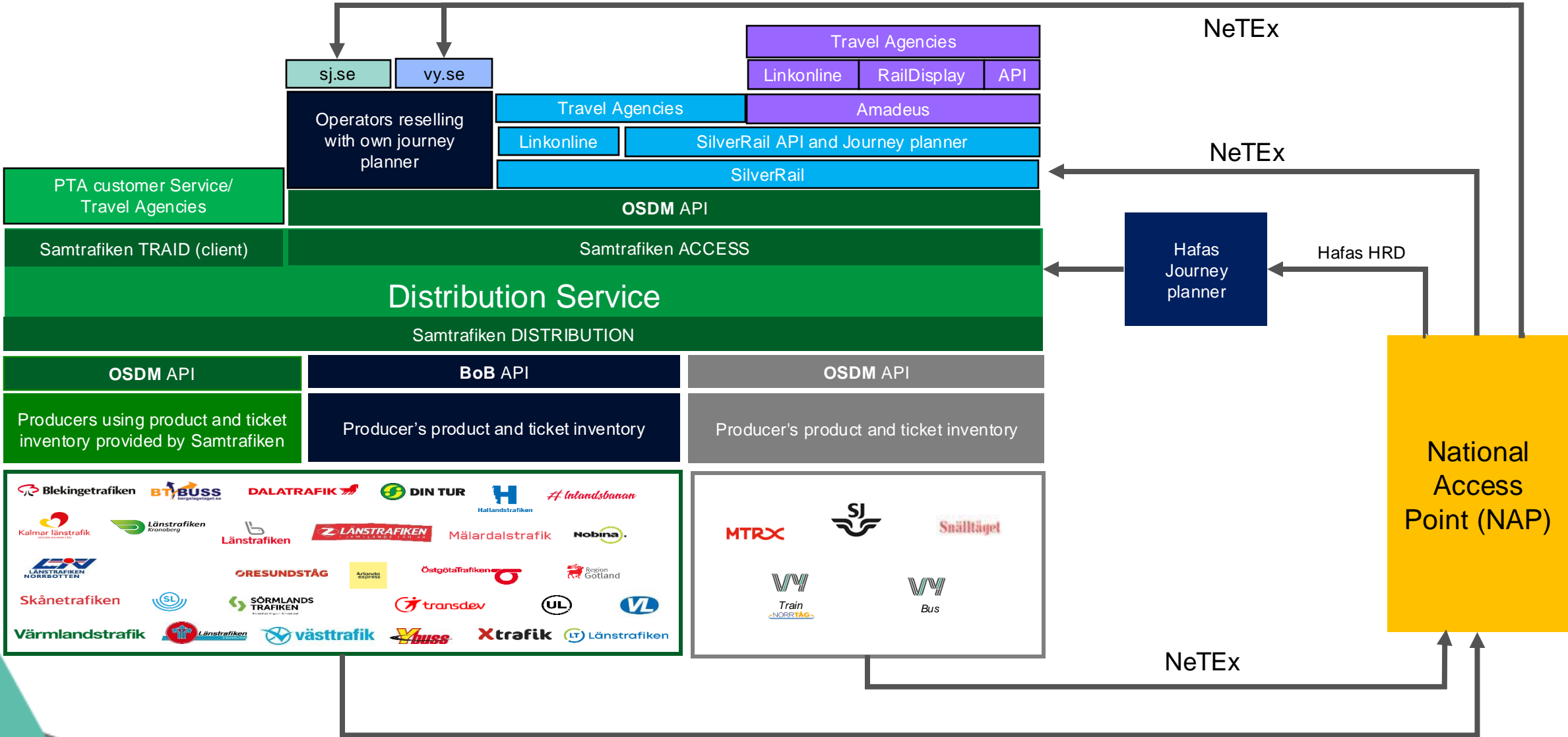
Progress this far

Currently we collect and publish

- Planned data from **all** operators in Sweden (public and private)
 - NeTEx and GTFS
- Real time data and vehicle positions from 15 operators
 - SIRI and GTFS Real Time
- Occupancy data from 2 operators
 - SIRI and GTFS Real Time



Using NeTEx data to enable national travels



Noptis, NeTEx or other



Panel Discussion

Data exchange and EU standards as the backbone for seamless mobility: Data providers and data users' perspective



Emmanuel de
Verdalle,
ITxPT



Johan
Hammar,
Samtrafiken



Patrick Dejaco,
STA Bolzano



Sabrina Ropp,
Wiener
Sdatwerke



Antonio Matos,
Area
Metropolitano
do Porto



Efe Usanmaz, UITP, Moderator



COFFEE BREAK

11:15 – 11:30





SHORT PRESENTATIONS AND PANEL DISCUSSION

*Can National Access Points (NAPs) be the driver for
multimodality and interoperability? The experience from NAP
Operators and Authorities*

11:30 – 12:30



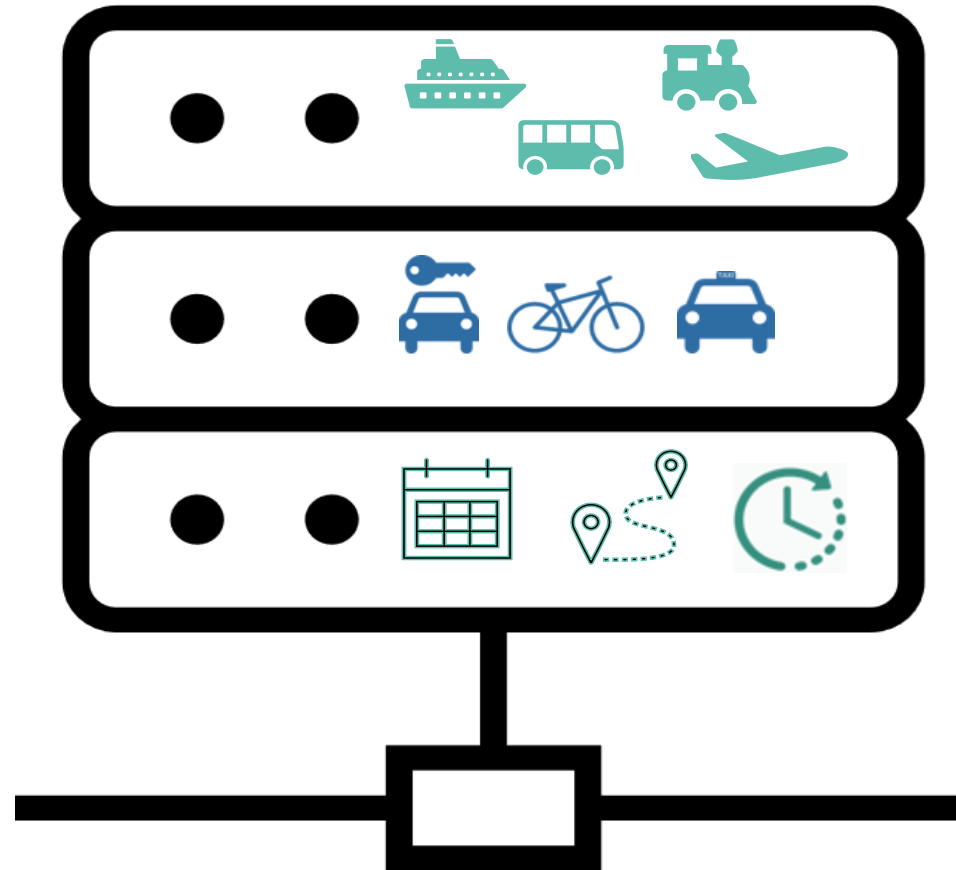


National Access Points for Multimodal Travel Information Services

MMTIS DR 2024/490

**NATIONAL
ACCESS
POINTS** (available
open data)

Databases VS data
catalogues



Transmodel

NeTEx

Planned
(static)

SIRI

Real-time
(dynamic)

OpRa

Historic, statistics
(in progress)



Short presentations

NAP implementation and their role in several countries and pan-european

- Timo Hoffmann, NAPCORE project
- Brede Dammen, ENTUR Norway
- Fabrizio Arneodo, 5T Italy and Italian Ministry
- Zuzana Švédová, CVD Czech Republic
- Jorge Gonzalez, DGITM – French ministry



NATIONAL ACCESS POINTS COORDINATION ORGANISATION (NAPCORE)

15.05.2024

Timo Hoffman, NAPCORE General Secretary





NAPCORE

– Overview, Status Update, Future

15 May 2024, DATA4PT Final DATA4PT Event, IT-TRANS, Karlsruhe

Timo Hoffmann

NAPCORE General Secretary



Co-funded by
the European Union

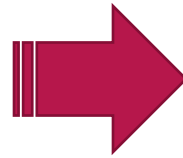
NAPCORE Scope – the ITS Directive (rev.) and Delegated Regulations

(a) DR No. 2017/1926 → 2024/490
Providing EU-wide multimodal travel
information services

(b) DR No. 2015/962 → 2022/670
Providing EU-wide real-time traffic information
services

(c) DR No. 886/2013
Data and procedures for the provision, where
possible, of road safety-related minimum
universal traffic information free of charge to
users

(e) DR No. 885/2013
Provision of information services for safe and
secure parking places for trucks and
commercial vehicles

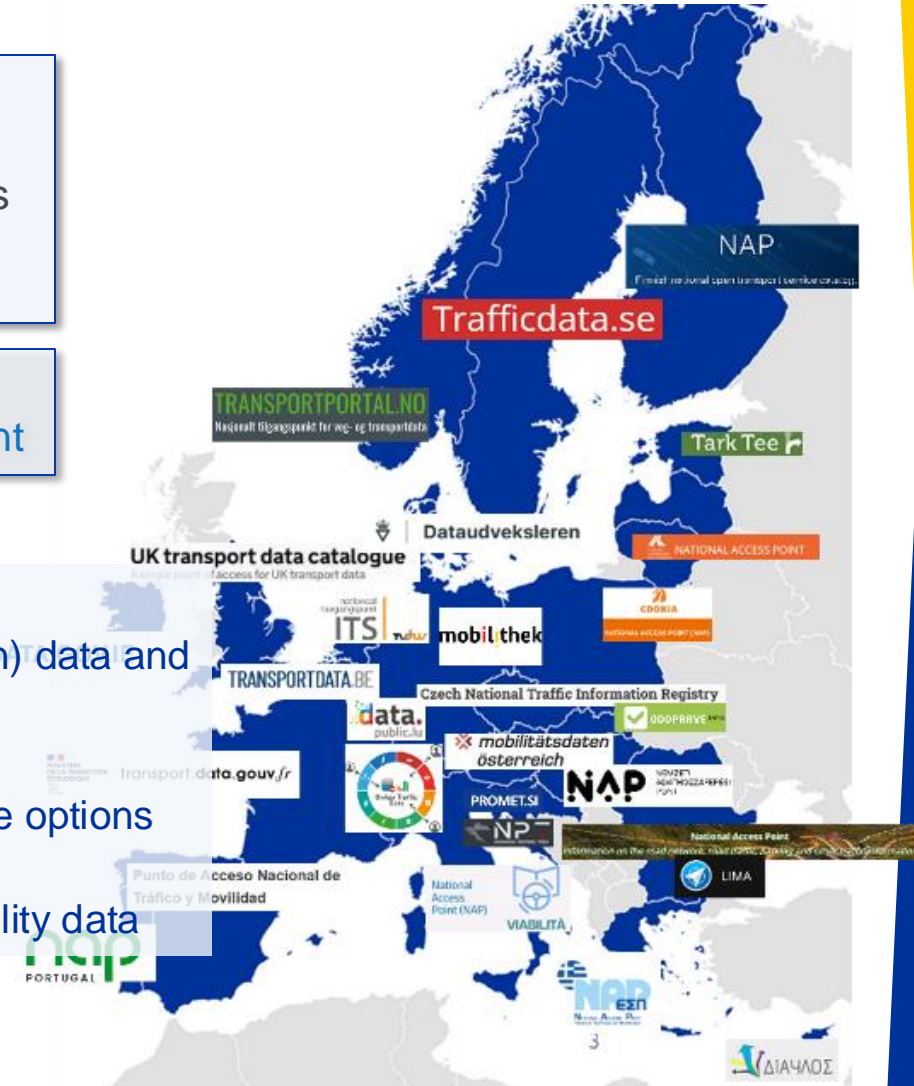


data categories
data standards
quality requirements
validity criteria
affected actors

Establishing a
National Access Point

Point of departure

- Each NAP provides (information on) data and data services differently
- Different NAP architectures
- Different data descriptions, (re-)use options and data quality
- No interoperability of NAPs & mobility data



NAPCORE – National Access Point Coordination Organisation for Europe

Objectives

- facilitate **EU-wide coordination of NAPs and NBs** for the harmonisation of the implementation of the European specifications on the ITS Directive
- **increase interoperability** by (further) establishing standards (esp. DATEX II, TN-ITS, NeTEx, SIRI) and recommendations for data exchange formats, content, access and data availability in the mobility domain in Europe
- empower the NAPs as the **backbone for ITS digital infrastructure** and mobility data exchange in Europe
- address existing and upcoming developments and challenges with a **joint European strategy, vision, and voice.**

Facts & Figures

- All Member States incl. Norway and Switzerland and 3 private organisations
- EC funded via Connecting Europe Facility (CEF), 2021 - 2024
- Budget: 14 Mio €
- <https://napcore.eu>



Future of NAPCORE

- Prolongment and follow-up funded project planned for the time 2025-2027/28
- Short term tasks (among others):
 - Further work on the Mobility Data Dictionary (focus MMTIS)
 - Roadmap for data exchange standards harmonization including a list of actions
 - Defining the role of NAPs in a European Mobility Data space
- Some adaptations are currently being discussed
 - Increase flexibility
 - Move from project setup to organization governance
 - Stronger multimodal focus
 - More work on MMTIS and MaaS topics
 - Partner setup change to include representation from the multimodal domain
 - *Continuation of DATA4PT tasks on data standardization..*

NAPCORE Mobility Data Days 2024



save-the-date

Mobility Data Days 2024

5-6-7 November – Turin (Italy)

...more info soon



Co-funded by
the European Union



NAP ROLE IN NORWAY

15.05.2024

Brede Dammen, ENTUR Norway



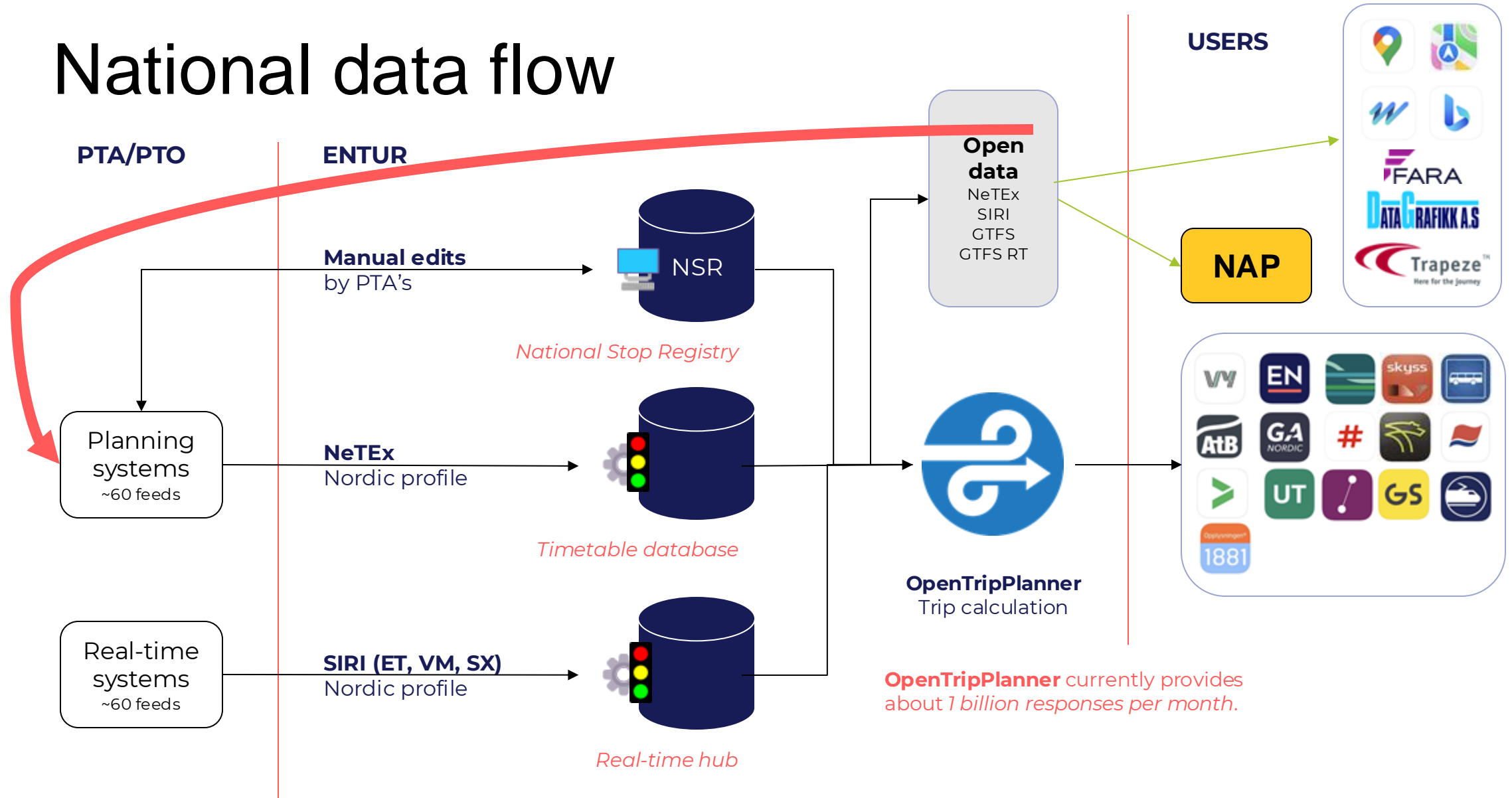


“Together we can go further”

Entur is a state-owned technology company that works to make it easier to choose sustainable mobility throughout Norway. We contribute to more for the money through joint digital solutions for the public transport sector, and collaboration in the industry.

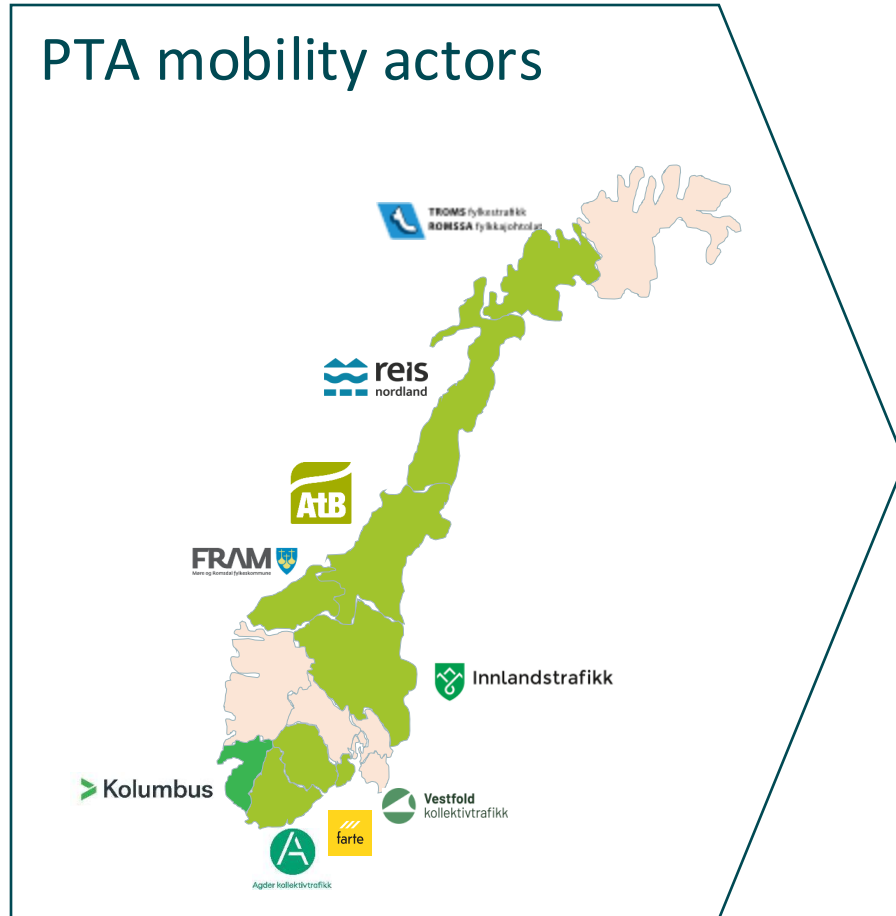
ENTUR

National data flow



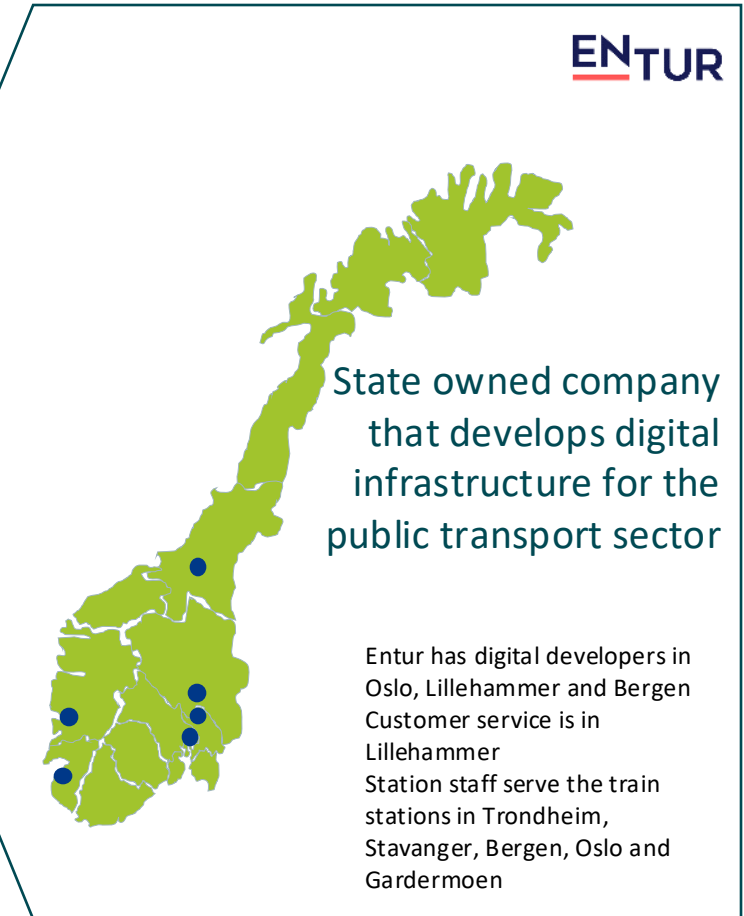
Several PTAs have joined together in Public Mobility Cooperation to develop future mobility solutions

PTA mobility actors



OMAS
Offentlig Mobilitetssamarbeid

ENTUR



Who develop – and who use it?



Develop ↓

Use →



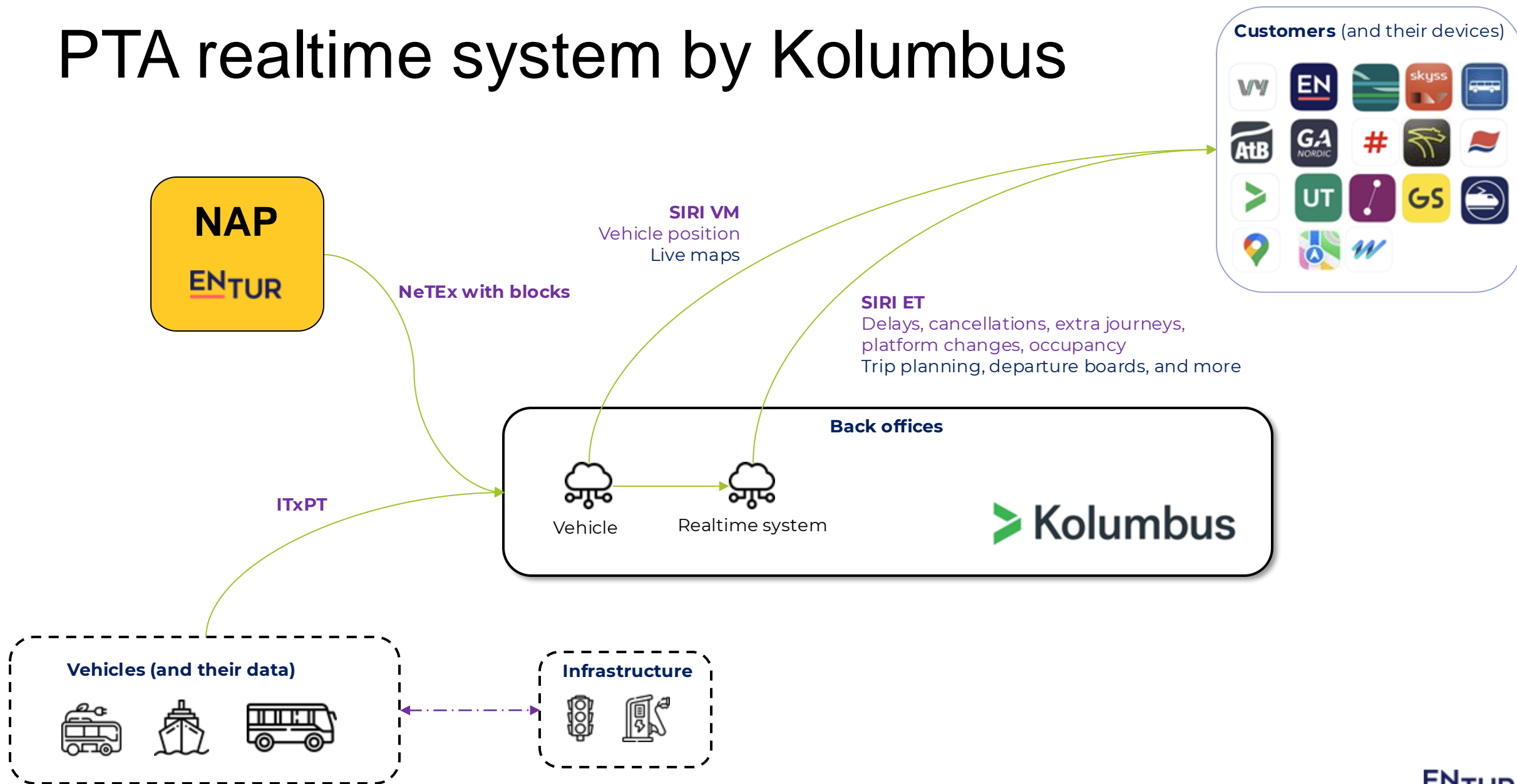
Kolumbus



	App	✓	✓	✓		✓			
	Nettbutikk	✓	✓	✓		✓			✓
	Skoleskyss	✓	✓	✓					
	Reisesøk på web						✓	✓	✓
	Ombordssalg Buss	Bring into the collaboration a real time system for PTA's						✓	✓
	Ombordssalg Båt							✓	✓
	Trygg overgang							✓	✓
	Profilering app og nettbutikk							✓	✓
	Ombordvalidering QR+NFC		✓	✓		✓	✓	✓	✓
	Bestillingstransport	✓		✓	✓				
	Bestillingstransport skoleskyss				✓				
	Salg, billettering, betaling, kontroll	✓	✓	✓		✓			✓
	Sørvis, kundeservice-system	✓	✓			✓	✓	✓	✓
	Plassreservasjon båt/ferge	✓	✓			✓			

✓ In production Januray 2024
✓ Planned

PTA realtime system by Kolumbus





NAP ROLE IN ITALY

15.05.2024

Fabrizio Arneodo (5T)

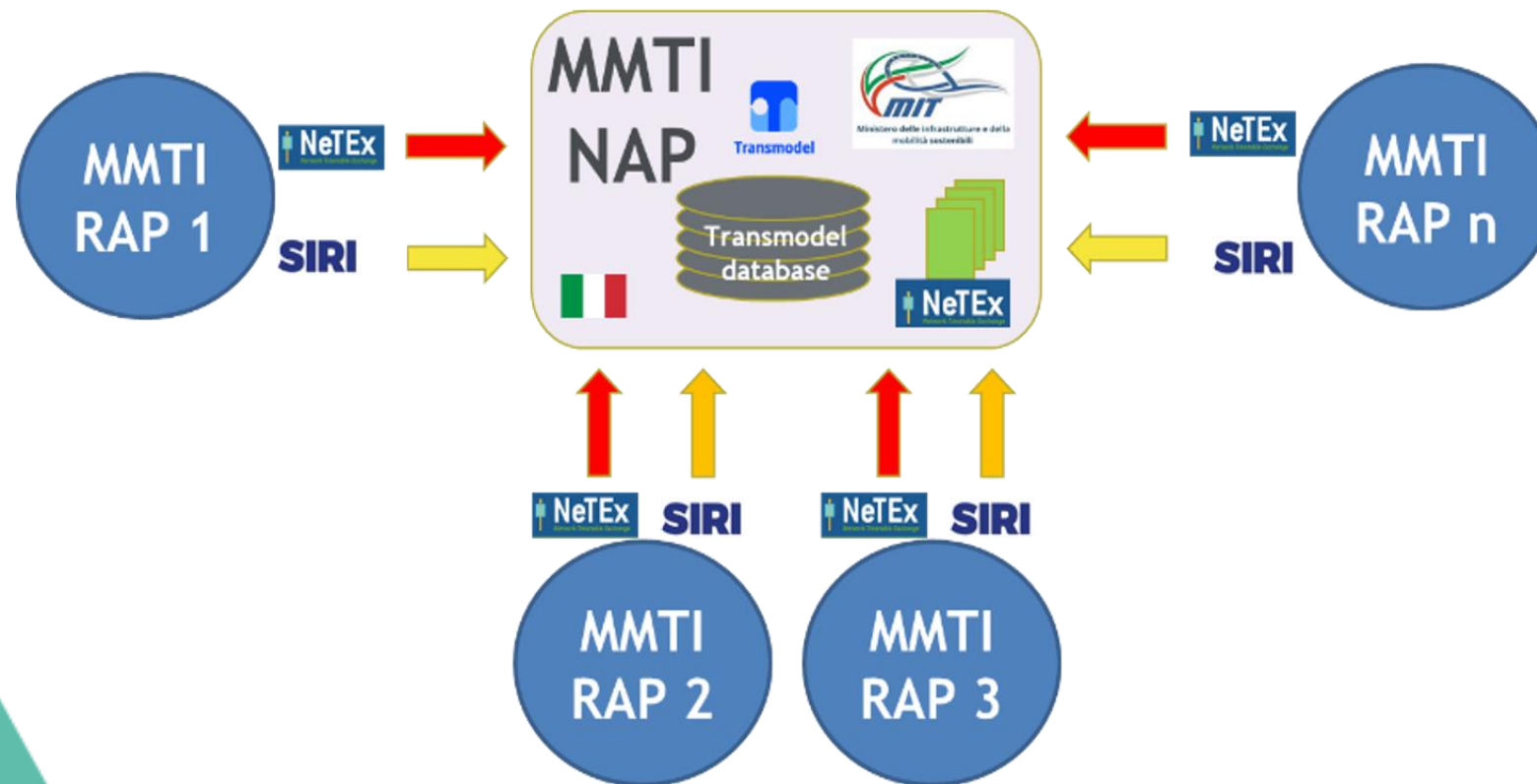
Andrea Napoleoni (MIT)



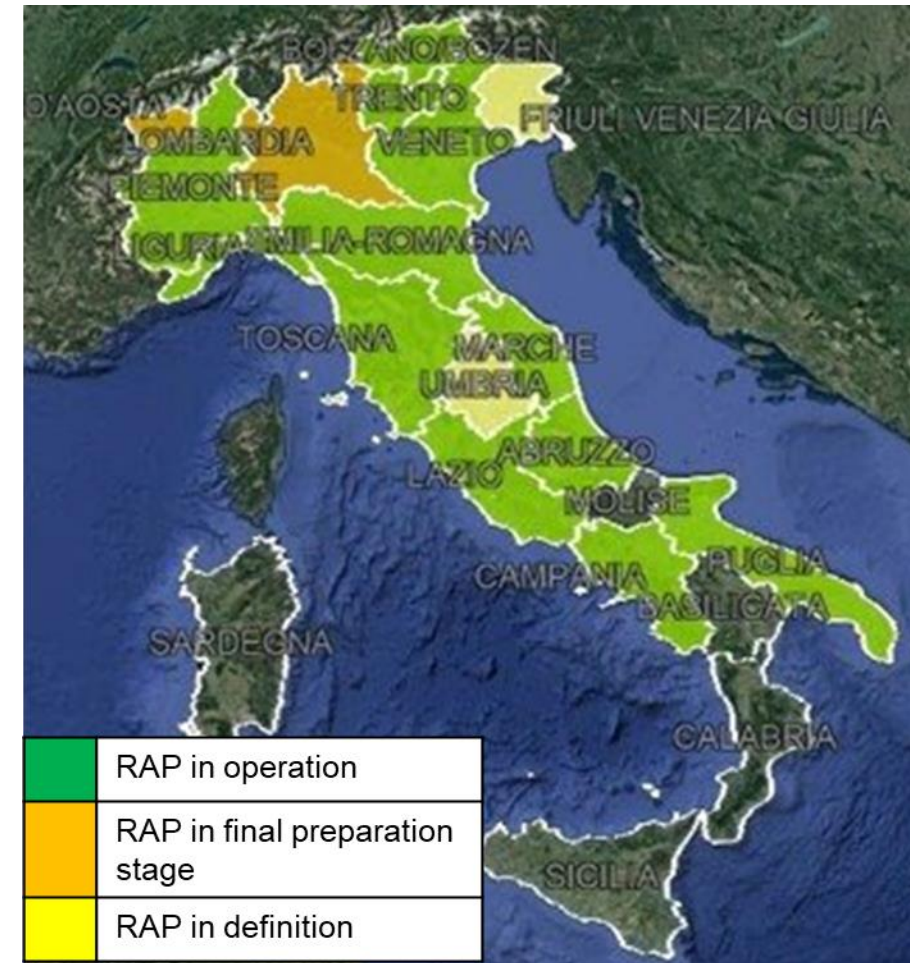
TECNOLOGIE
TELEMATICHE
TRASPORTI
TRAFFICO
TORINO



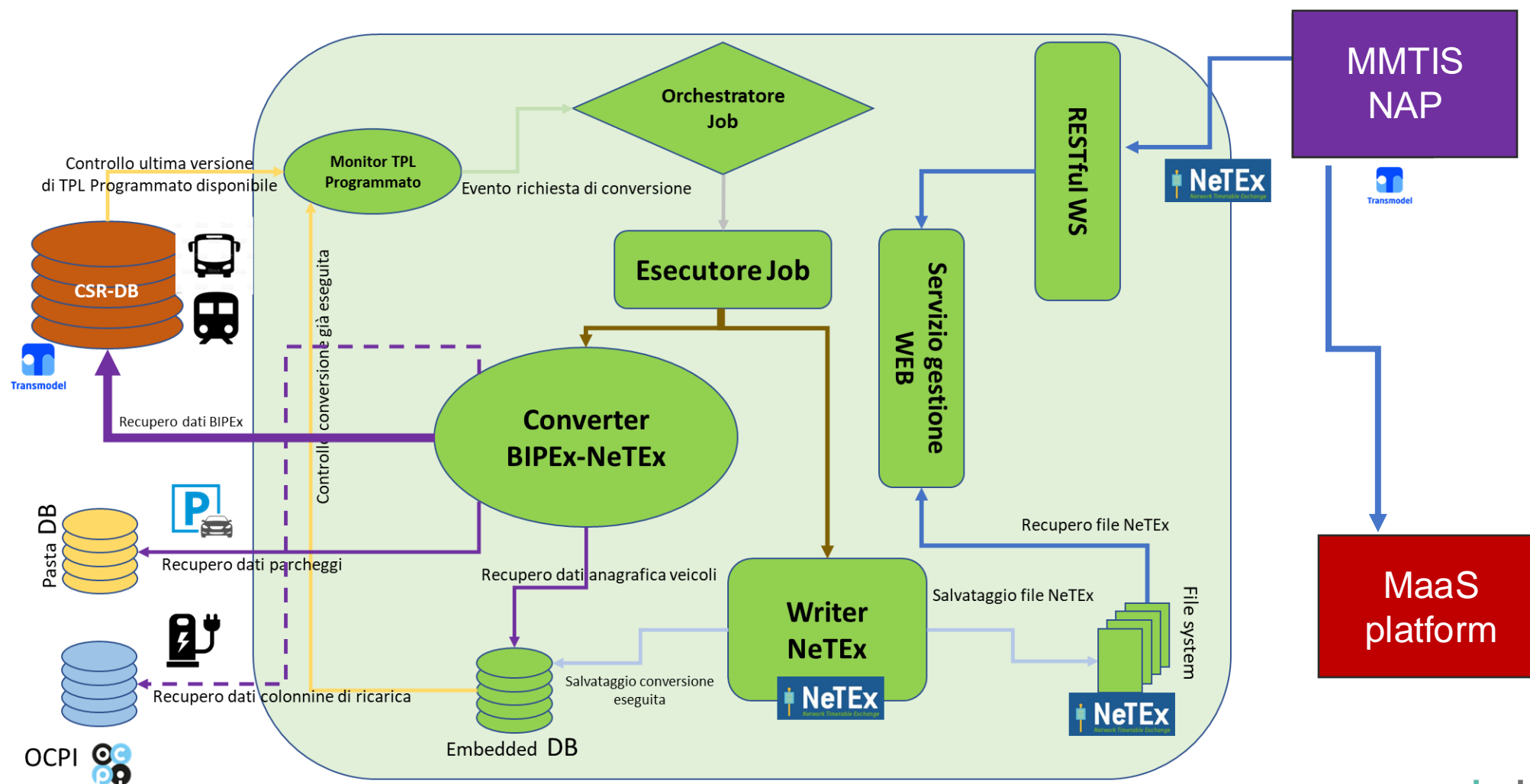
Italian MMTIS NAP Architecture in National level



RAP: Regional Access Point

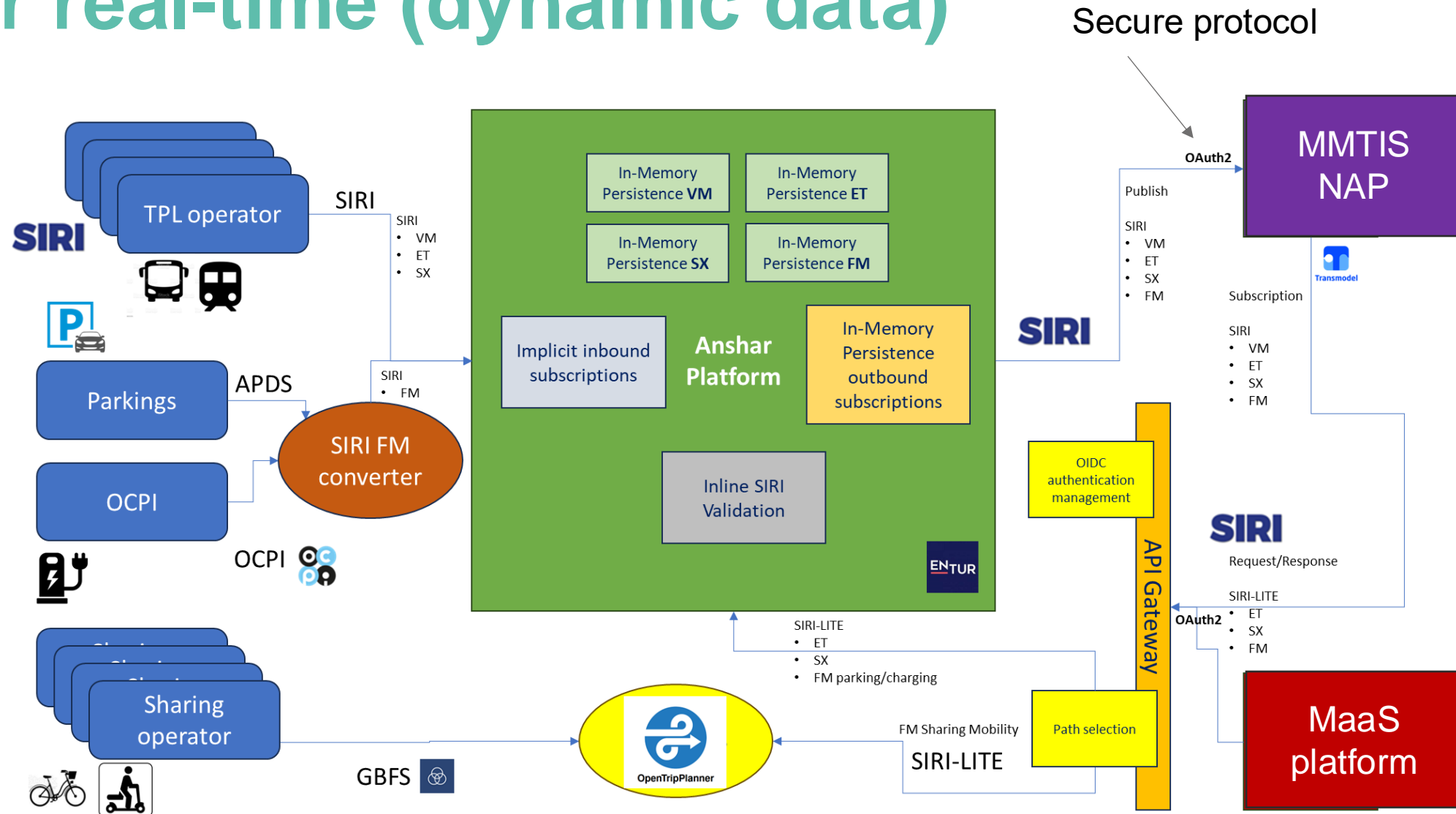


Architecture in regional level (RAP) for planned data (static)



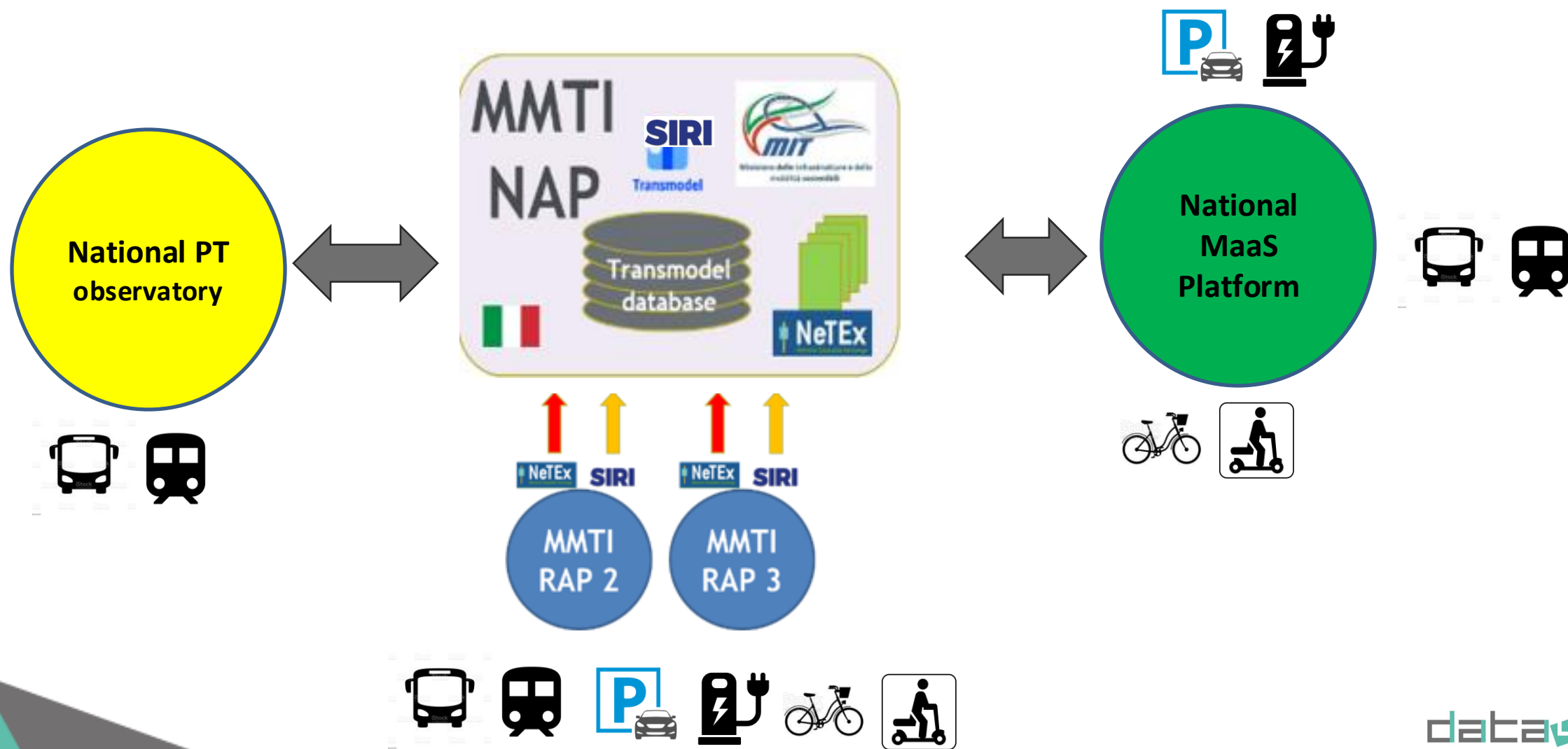


Architecture in regional level (RAP) for real-time (dynamic data)



Italian NAP MMTIS implementation

NAP role for multimodality





Italian NAP MMTIS implementation

Italian NeTEx and SIRI Profiles



NeTEx italian profile

L1	EPIP
L2	Contracts
L3	Fares
L4	Alternative Modes
L5	Accessibility



SIRI Italian Profile

Real – time timetables
Real Time vehicle positions
Alert / Disruption messages
Feature monitoring

(Available documentation: https://netex-cen.eu/?page_id=237#italian-documents-download).



NAP ROLE IN CZECH REPUBLIC

15.05.2024

Zuzana Švédová, CVD Czech Republic





New NAP in Czech Republic

The process of preparing a **new version of the NAP** for the Czech Republic is ongoing.

- Objectives are:
 - Inclusions all delegated acts.
 - Improve the existing services provided to users and data providers.
 - Optimization and streamlining of existing processes.
 - Supporting data providers in standards implementation.

Especially implementing MMTIS raises a lot of organizational issues concerning technical challenges regarding NeTEX and SIRI format. Specifically financial obstacles within implementation of new format for PTO infrastructure.



Preparation steps of new version of NAP

- Creation of working group consisting of stakeholders, standard experts, PTOs and data providers to stimulate tailored solutions to meet multiple and different needs.
- Active dialogue with PTOs to inform them of upcoming changes, obligations and BENEFITS.
- Preparation of tools to support increased NAP usage.

Tools are: Clear guidelines for data providers, data catalogue, Data4PT validations tool for MMTIS formats, other validations tool for Datex II format, NeTex profile for timetables (EPIP), guidelines for data provisions etc.



Challenges

The challenges of innovating a CIS JŘ (national timetable information system for all (PTOs) encompass a variety of technical, regulatory, and operational issues. These challenges are outlined as follows

- Data Integration and standardisation.
- Quality data check.
- User Accessibility and Usability.

Addressing these challenges requires:

- an integrated approach that combines technical expertise, strategic planning, and user-centric design
- continuous collaboration among various stakeholders
- participation in projects NAPCORE and Data4T helps significantly to increase knowledge and transfer good practice.



NAP ROLE IN FRANCE

15.05.2024

Jorge Gonzalez (DGITM)



TECNOLOGIE
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Data4PT has received funding from the European Union's DG for Mobility and Transport under grant agreement
No MOVE/B4/SUB/2019-104/CEF/PSA/SI2.821136



French national access point to transport data

Gather all french mobility data

Search data for a region, a city, a network...

ex : Nouvelle-Aquitaine

You can also



[Use the map](#)



[Use our APIs](#)



[See newly added
datasets](#)



transport.data.gouv.fr

NAP current data availability

0 – 25 %

25 – 50 %

50 – 75 %

75 – 100 %



Urban and regional Public Transport
480 networks



Long-distance bus
3 companies



Train
TGV, Transilien, TER, IC



Air travel
3 companies

SERVICES – Static data



Parkings
826 points



Carpooling stations
15 790 points



Charging stations for EV
100 971 points



Low emission zone
14 territories



Biking networks
National database



Biking parkings
National database



Railroad crossings
National database



Carpooling lines
Coming soon

INFRASTRUCTURES – Static data



Urban and regional Public Transport
220 networks



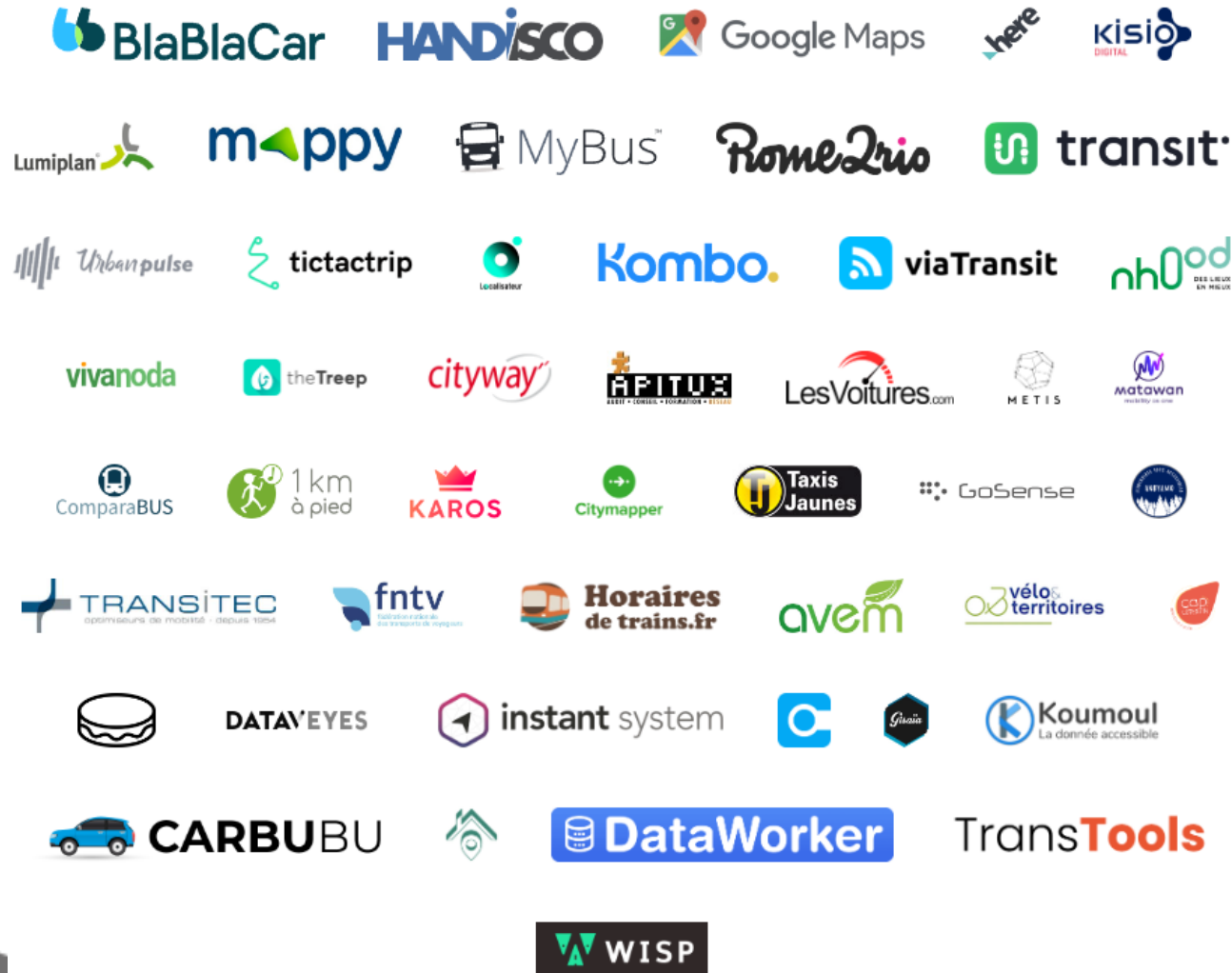
Free-floating bikes and scooters
48 networks



Carpooling services
Coming soon

SERVICES – dynamic data

Some NAP data consumers



500+ consumers

90% datasets consumed

3 M PT users informed every week

1 M shared-mobility users

NAP current status

- 9-people impact-driven team (4 devs - 4 support/business devs - 1 manager)
- **Main features:**
 - Validation tools
 - Collection tools
 - Producer & consumer spaces
 - Statistics, dashboards
- **Main activities:**
 - Stop registry
 - Fare information
 - Accessibility information
 - Charging stations for electric vehicles
 - Carpooling lines, real-time...
 - Communication
- **Main goal:**
**improve quality
of the data
already available**

NAP & NeTEx

- NeTEx fares: « Titre unique » project will boost production
- NeTEx parking: FNMS will encourage adoption
- NeTEx accessibility: Data collection tool « Accèslibre mobilité » will be available soon
- EnRoute NeTEx validator is going to be tested sep-dec 2024
- GTFS->NeTEx converter will be abandoned in a few years



Panel Discussion

Can National Access Points (NAPs) be the driver for multimodality and interoperability?



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SUSTAINABILITY AND GOVERNANCE

15.05.2024

Ferdinand Burgersdijk, FRCB B.V./UITP





What DATA4PT offered so far

Training & Capacity building

Knowledge base
Wiki page...



Technical support
Validation Tools



Exchange of experiences and best practices

Stakeholders fora ...



Long term support – future projections

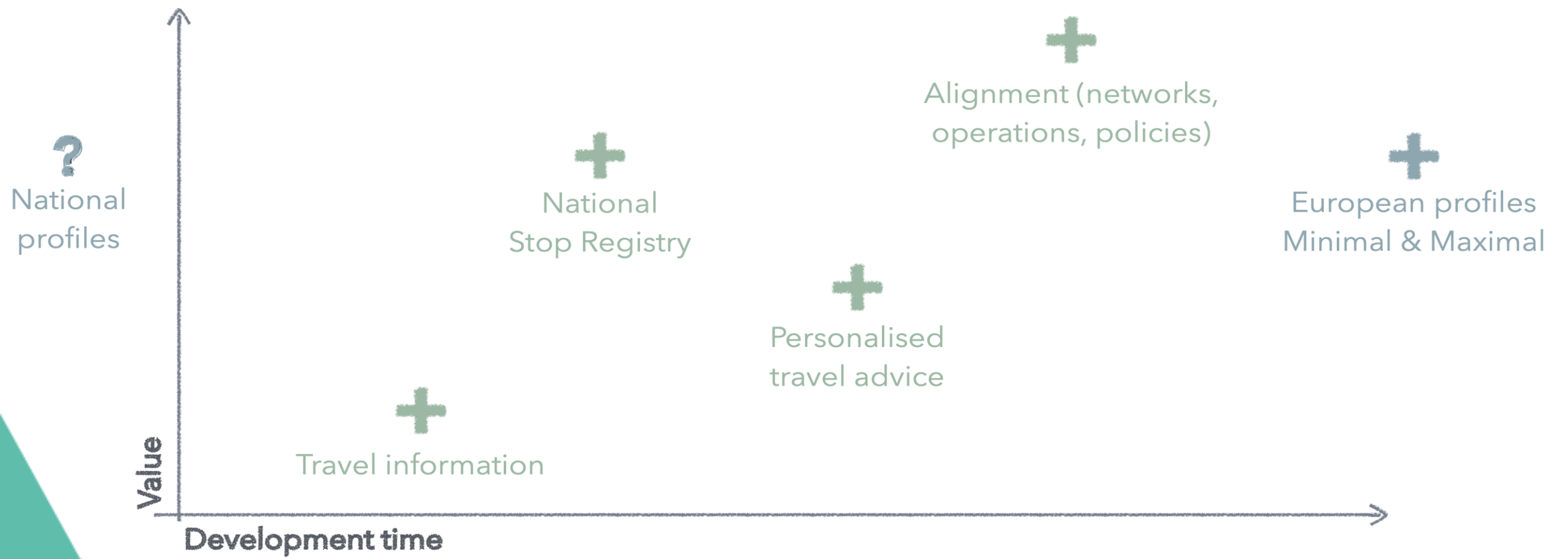


data4pt



Use (or value) cases

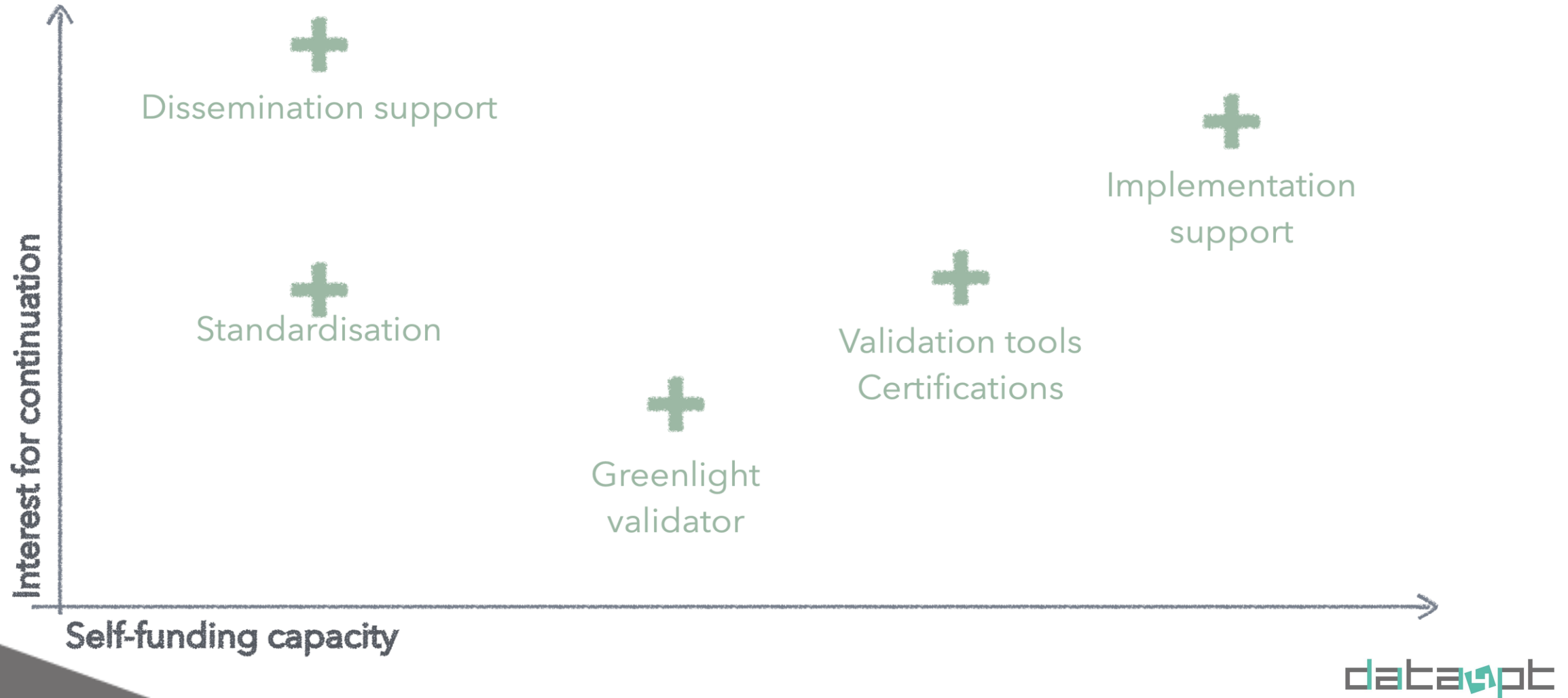
Where can value be found in standardised data in public transport





Sustainability

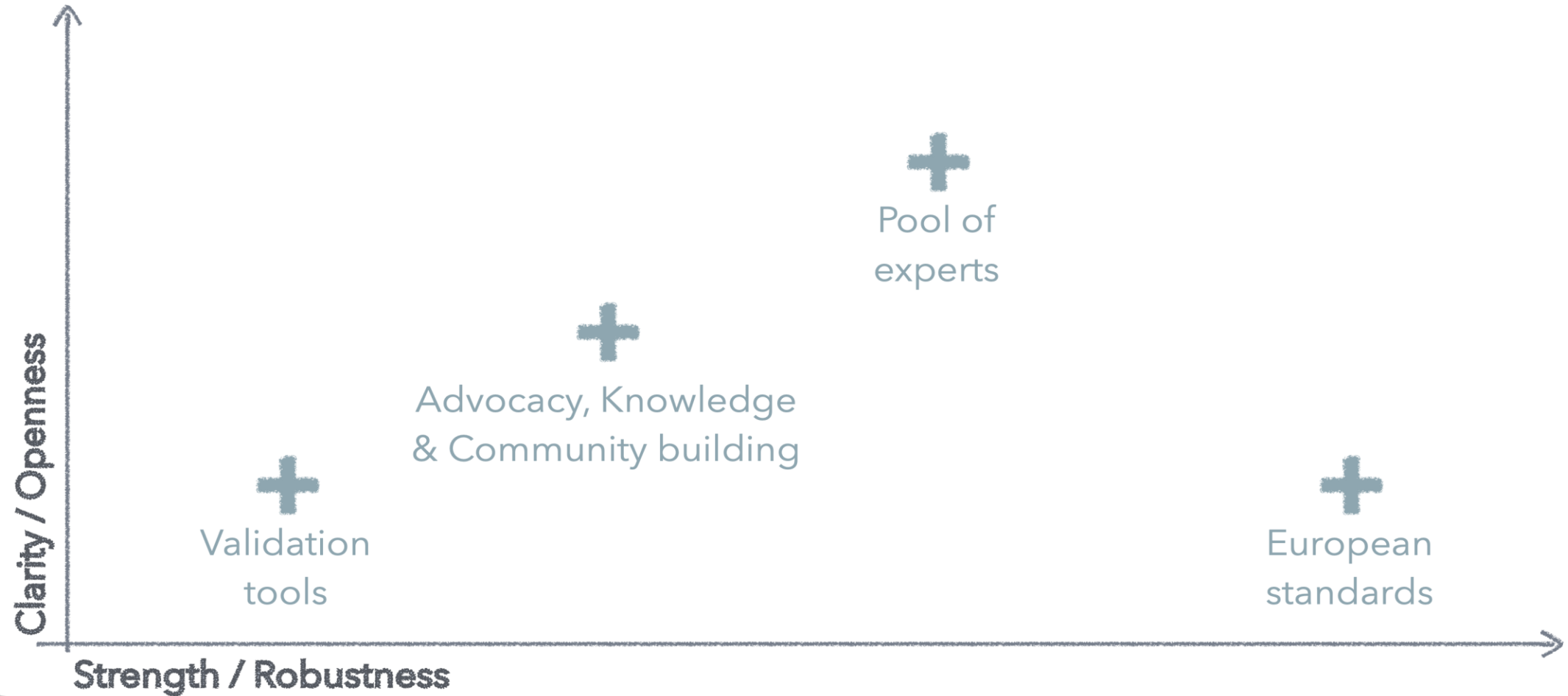
Which activity or deliverable can live and be self-funded?





Governance

Do we have the right pilot(s) at the helm?





Designing the way forward

Clarification needed

- Expectation of Member States already involved in the project and future participation of UITP and ITxPT
- Capacity of other Members States to join the activities
- Funding capacity of EU & Member States

Content

- Activities: from dissemination, to technical support/expertise, to development and validation tools
- Governance of activities and appropriate vessels and funding
- Projections from short to long-term



Thank for your attention!!



@Data4PT



info@data4pt-project.eu



[ITxPT/DATA4PTTools](https://github.com/ITxPT/DATA4PTTools)



company/data4pt-project/



data4pt-project.eu