napcore

Implementations of Multimodal Travel Information Services and reflections on upcoming Multimodal Digital Services

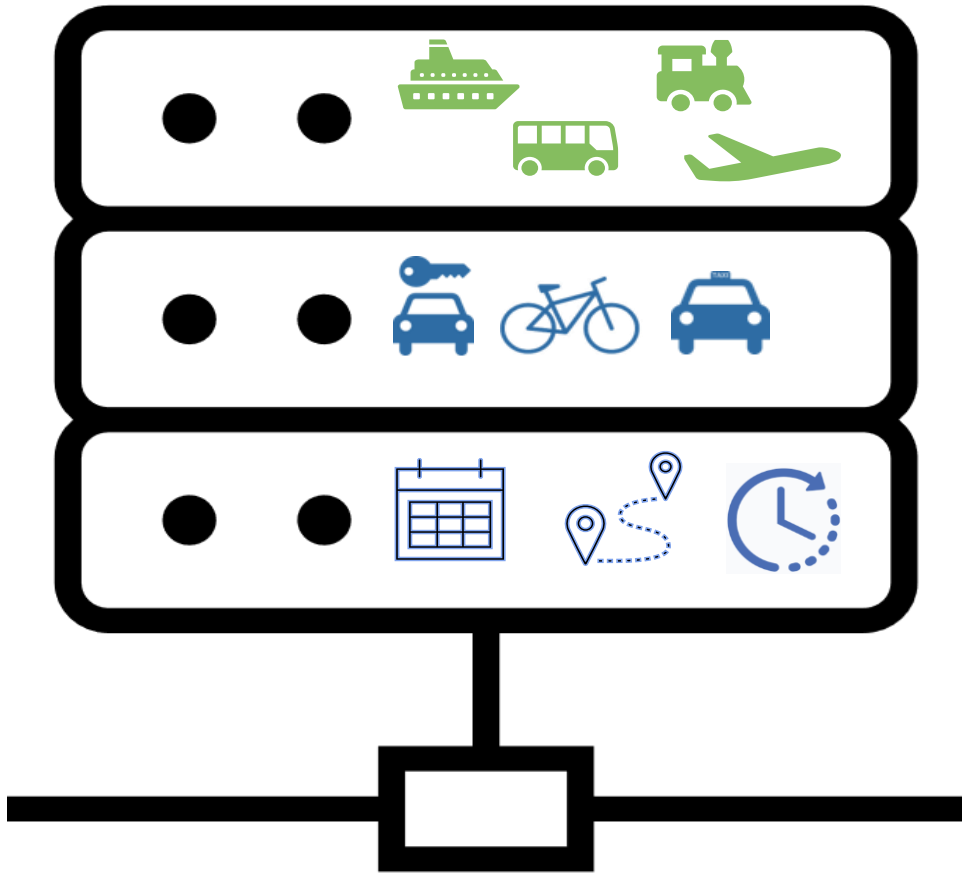
08/11/2023

Co-funded by
the European Union

Setting the scene

MMTIS DR 2017/1926

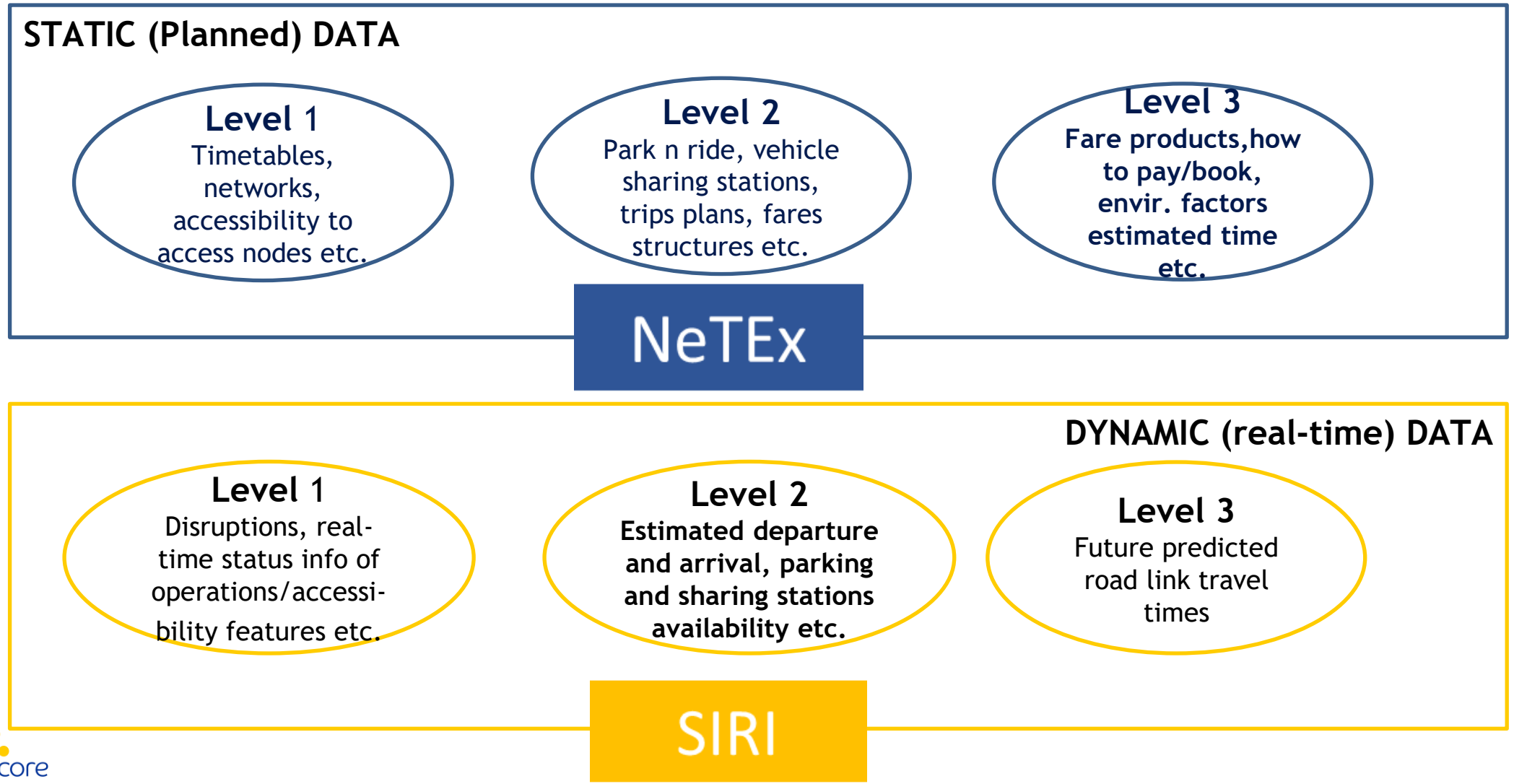
NATIONAL ACCESS POINTS (open data)



Transmodel

napcore

Setting the scene



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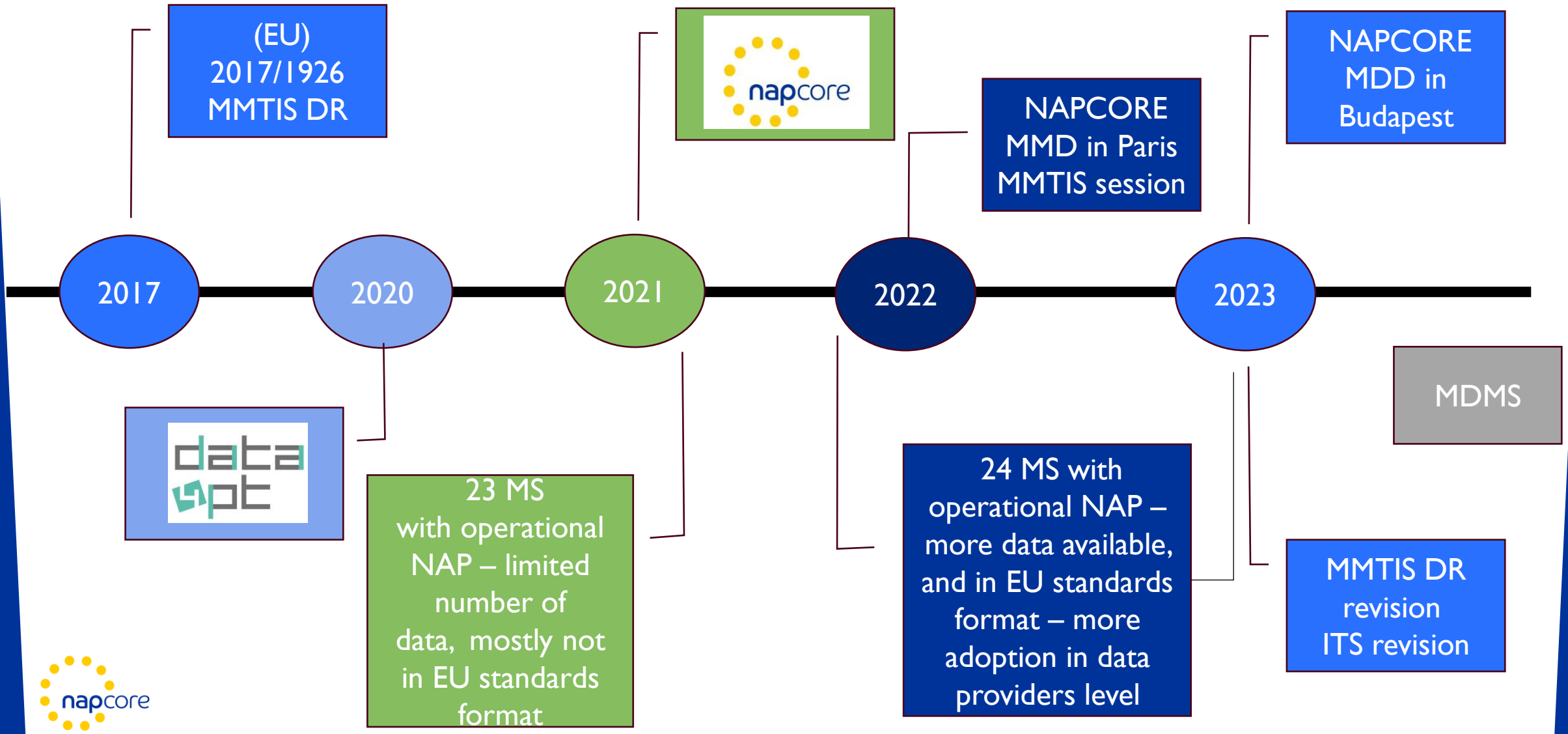
Setting the scene



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Agenda

1. **Updates on the revision of MMTIS and reflections on MDMS**, Petra Soderqvist (DG Move)
2. **MMTIS and MDMS - insights from the public transport sector,** Sabrina Ropp (UITP, Stadtwerke Wien (Vienna))
3. **MMTIS NAP implementation in Sweden**, Johan Hammar (Samtrafiken)
4. **MMTIS NAP implementation and synergies in Italy**, Fabrizio Arneodo (5T)
5. Q&A – Discussion

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NAPCORE MOBILITY DAYS

Implementations of multimodal travel information services (MMTIS) and reflections on upcoming multimodal digital services

Petra Soderqvist

DG MOVE – Unit B4

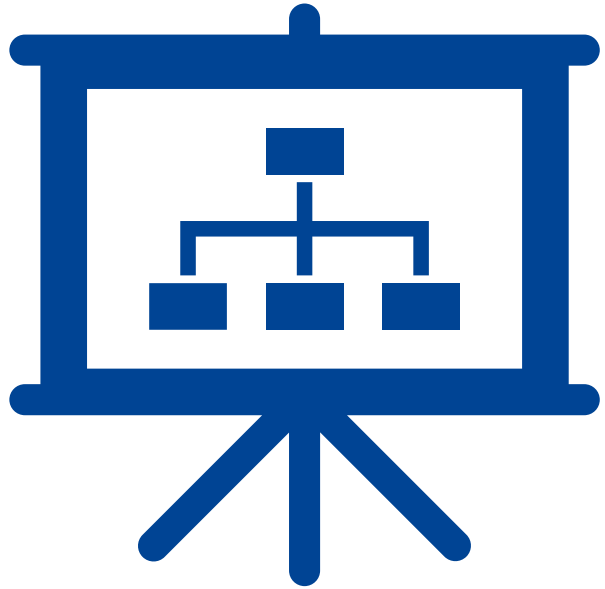
Budapest, 8 November 2023

MMTIS: Objective with the revision

- Enhance MMTIS and **improve the information service** for the passenger (ahead and during the journey)
- Increase **coherence** with other Delegated Regulations in particular RTTI Delegated Regulation
- Planned date for adoption 29 Nov 2023

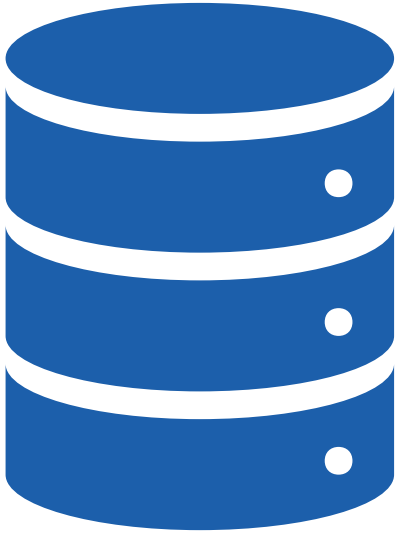
MMTIS: Overview of the main changes

- Mandating the accessibility of dynamic data
  - New time frame 1 Dec 2024 – 1 Dec 2028
- Adding new data types in the Annex:
  - Static, historic and observed data
  - Dynamic data
- Removing data types on tolls, recharging and refuelling stations (moved to DR RTTI)



MMTIS: New data types in the Annex

- **Static, historic and observed data**
  - Parking (Park & Drive stations, scooter parking, tariffs)
  - Historic data on delays
  - Observed data on delays and cancellations
  - Accessibility of the vehicle and on-board services, capacity for bicycles
- **Dynamic data**
  - Parking tariffs
  - Availability and location for scooter-sharing and other vehicle-sharing
  - Car parking spaces available (on and off-street)
  - Occupancy of the vehicle (opt-in for Member States)



MDMS: Objective and challenges

- Facilitate **seamless multimodal passenger mobility** to enhance efficiency and sustainability of the transport system
- **Support the development of MDMS** to enhance access / comparison of all tickets and mobility options for long-distance / regional services
- Address the hurdles in the ticketing market that hinder passengers from effectively **comparing and booking tickets**

- Lack of **harmonised standards** to facilitate technical integration
- Lack of **commercial incentives** to support sustainability goals
- Unwillingness to **cooperate fairly** with operators / MDMS

Thank you!

E-mail: petra.soderqvist@ec.europa.eu

European Commission

Insights from the Public Transport sector on implementations of MMTIS and reflections on upcoming MDMS

Sabrina Ropp, Deputy Head of Wiener Stadtwerke EU Affairs Office

Napcore Mobility Data Days – Budapest, 7-9 November 2023

International Level

Perspective of UITP

05.12.2023

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

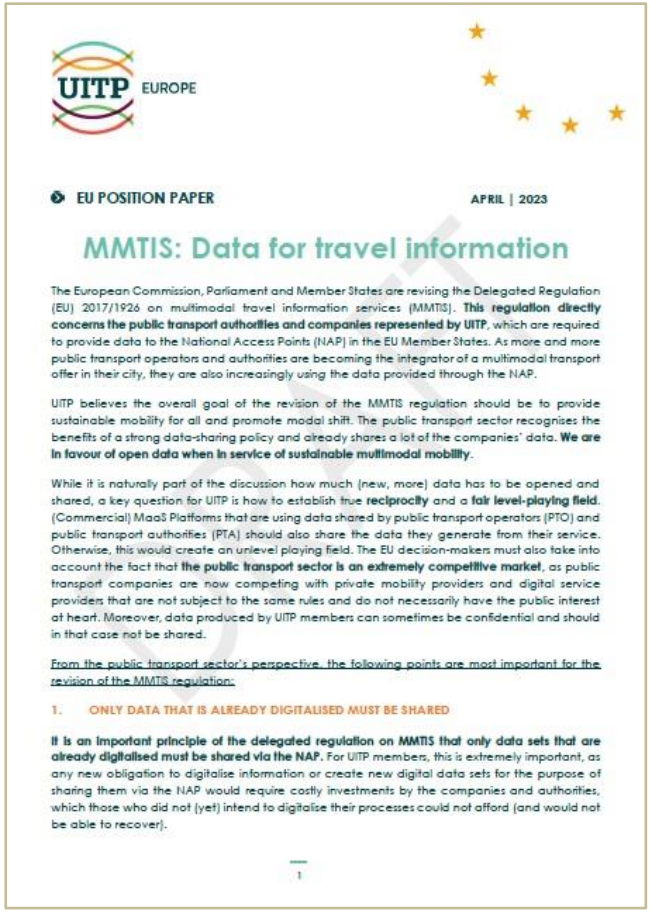
At UITP, we are working to **enhance quality of life** and economic well-being by supporting and promoting **sustainable transport** in **urban** areas worldwide

MOBILITY AS A SERVICE (MAAS)

Multimodal Travel Information Systems (MMTIS)

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.



UITP EUROPE

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 unlevel 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:

1. 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).

UITP

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

2021

UITP

POLIS
CITIES AND REGIONS FOR TRANSPORT INNOVATION

EMTA
European Metropolitan Transport Authorities

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

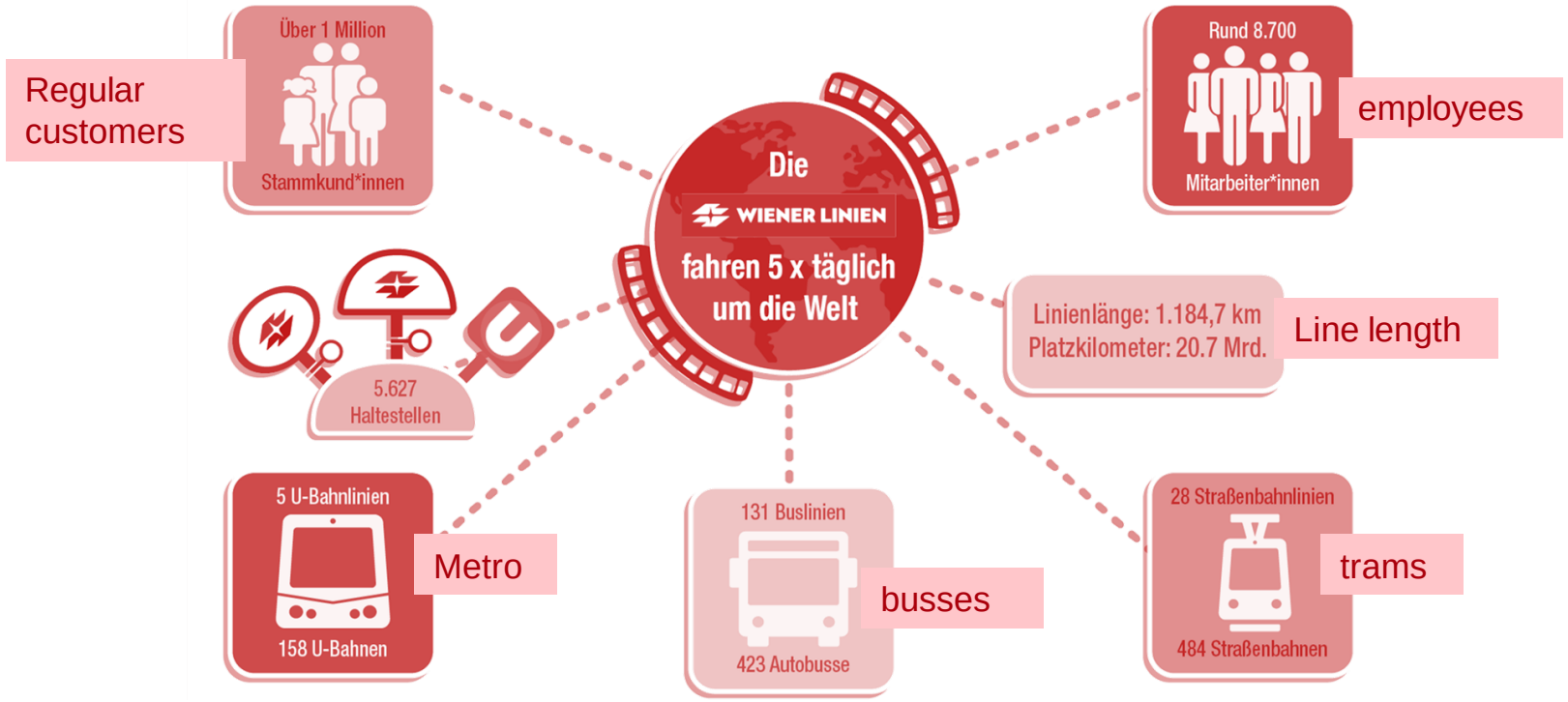
WIENER LINIEN

Local Level

Perspective of Wiener Linien

05.12.2023

Who we are



WIENER LINIEN

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)

Challanges

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

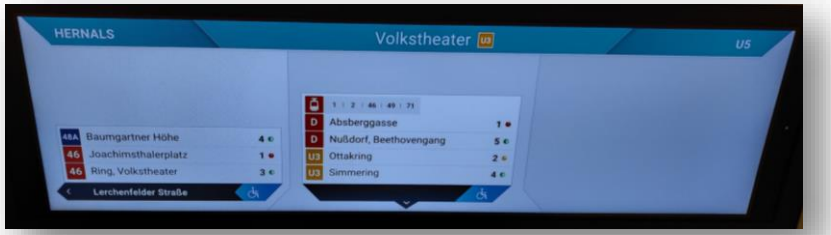
Collaboration with NAP:

- 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.

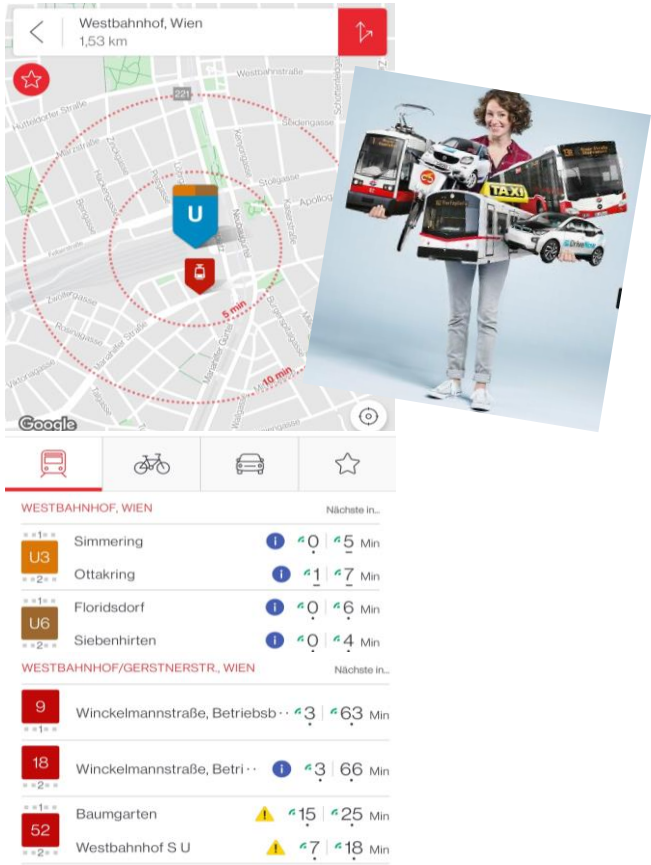
Examples

Digital Information Pillar (station)

Digital Passenger information and routing system (metro)



WienMobil App



WIENER LINIEN

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** (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

Let‘s connect!

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Annika DEGEN

annika.degen@uitp.org

MMTIS NAP in Sweden

Napcore Mobility Data Days – Budapest, 7-9 November 2023

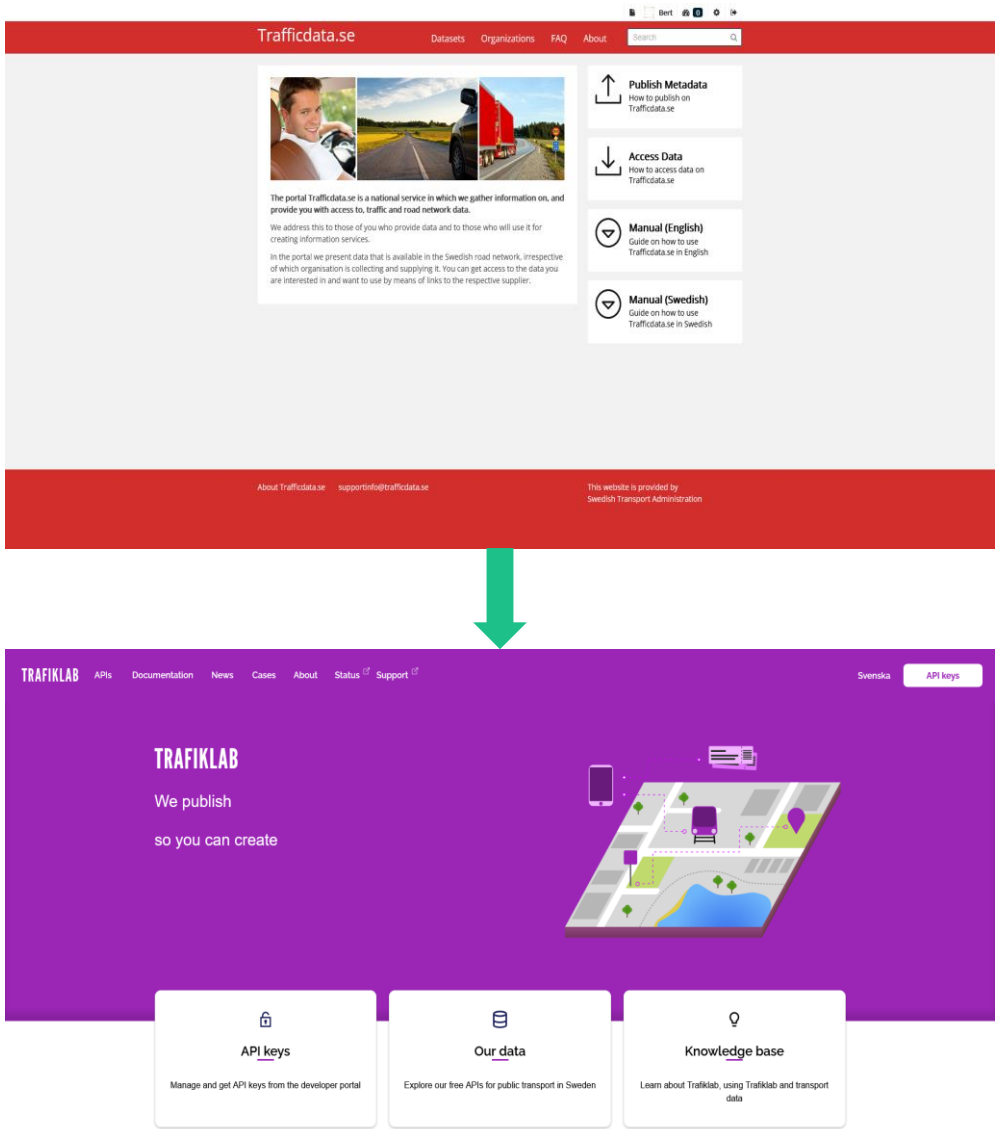
Johan Hammar - Samtrafiken i Sverige AB

Samtrafiken

Background

- 2011 – Assignemnt from Swedish Transport Authoroty to collect and publish all timetables in Sweden
- 2016 - Pre study initiated by the Swedish government
  - Find a common national goal for public transport data
  - Produce an actionplan
- 2017 – Directive 2010/40/EU
  - Commission Delegated Regulation 2017/1926 – MMTIS
- 2018 – Start of project Open Data
- 2022 – Open Data completed
- Continued work to publish more datasets with support from the DATA4PT project.

Sweden today



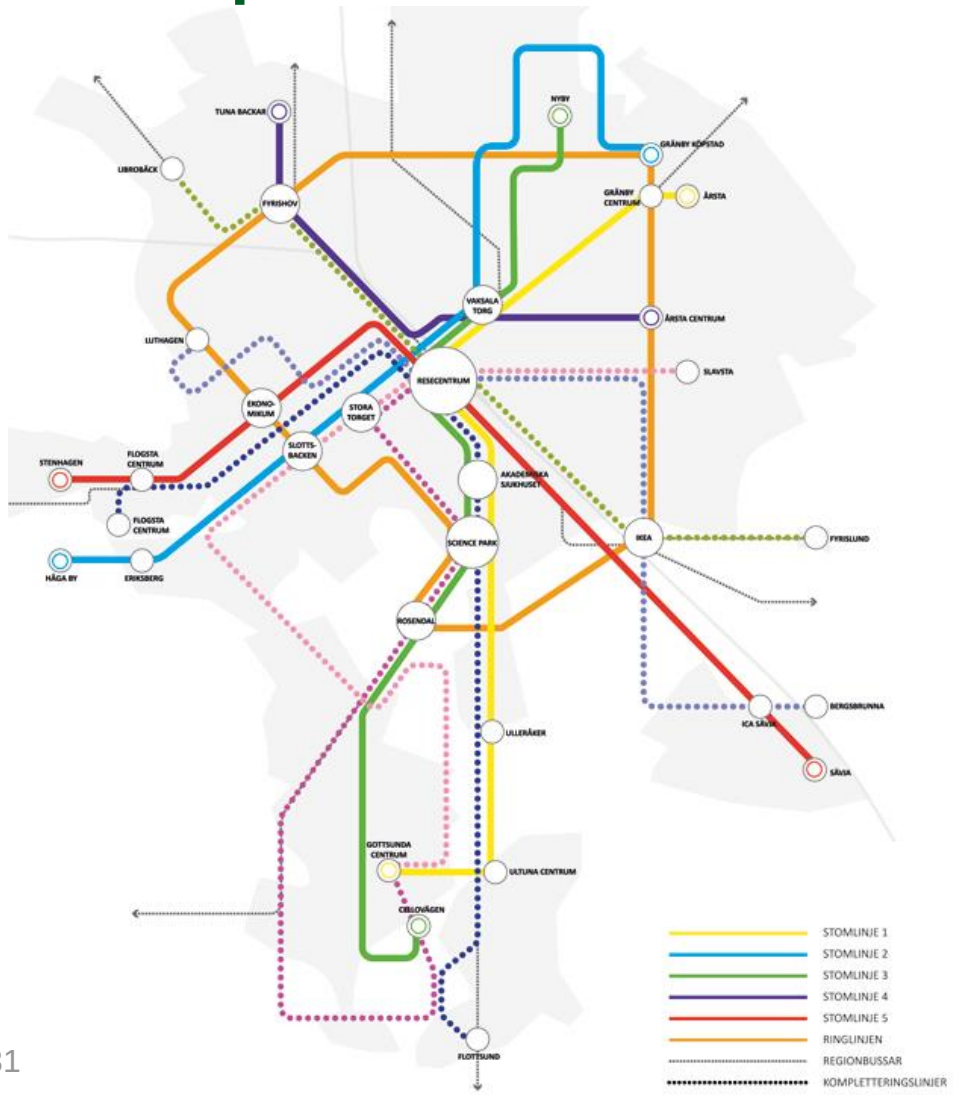
The National Access Point (NAP) is managed by Trafikverket. For public transport data it links to Trafiklab delivered by Samtrafiken.

- Planned data from all operators in Sweden (public and private)
  - NeTEx and GTFS
- Real time data and vehicle positions from 11 operators
  - SIRI and GTFS Real Time
- Occupancy data from 2 operators
  - SIRI and GTFS Real Time

https://www.trafiklab.se

European Commission

Examples of use of NAP



- Data is used by national travel planners (Resrobot, SJ etc.)
- Apple and Google source the NAP-data to show public transport on their maps
- Data is used by service providers as Veridict LiveLine™, Swiftly and Flowmapper.
- The NAP NeTEx data will be used to enable combined ticketing in the new National Distribution Service

Our thoughts about MMTIS future

- We display today, as open data
  - Static timetable data in NetEx and GTFS
  - Real time in SIRI and GTFS-RT
  - Historical time table data in GTFS
  - Historical real time data in GTFS-RT
- Future
  - Static occupancy data based on statistics
  - Static product data, BoB translated to OSDM static/offline or NetEx Part 3
  - Static price data (when applicable), BoB translated to OSDM static/offline or NetEx Part 3
  - Dynamic occupancy data based on AI

Our thoughs about MDMS future

- We follow the MDMS initiative with interest as it will open new possibilities

- How will it affect the investments already made in ticketing interoperability?
- How will it incorperate long distance tickets (mostly booked rail travels) with local tickets (mostly zone and time based travels)?

Thank you!

Johan Hammar, Samtrafiken

johan.hammar@samtrafiken.se

Links:

Samtrafiken – https://www.samtrafiken.se/

Trafiklab – https://www.trafiklab.se/

Public transport data in Europe: https://www.trafiklab.se/api/other-apis/public-transport-europe/

Noptis to GTFS/NeTEx mapping: https://samtrafiken.atlassian.net/wiki/spaces/SamtrafikenOpenData

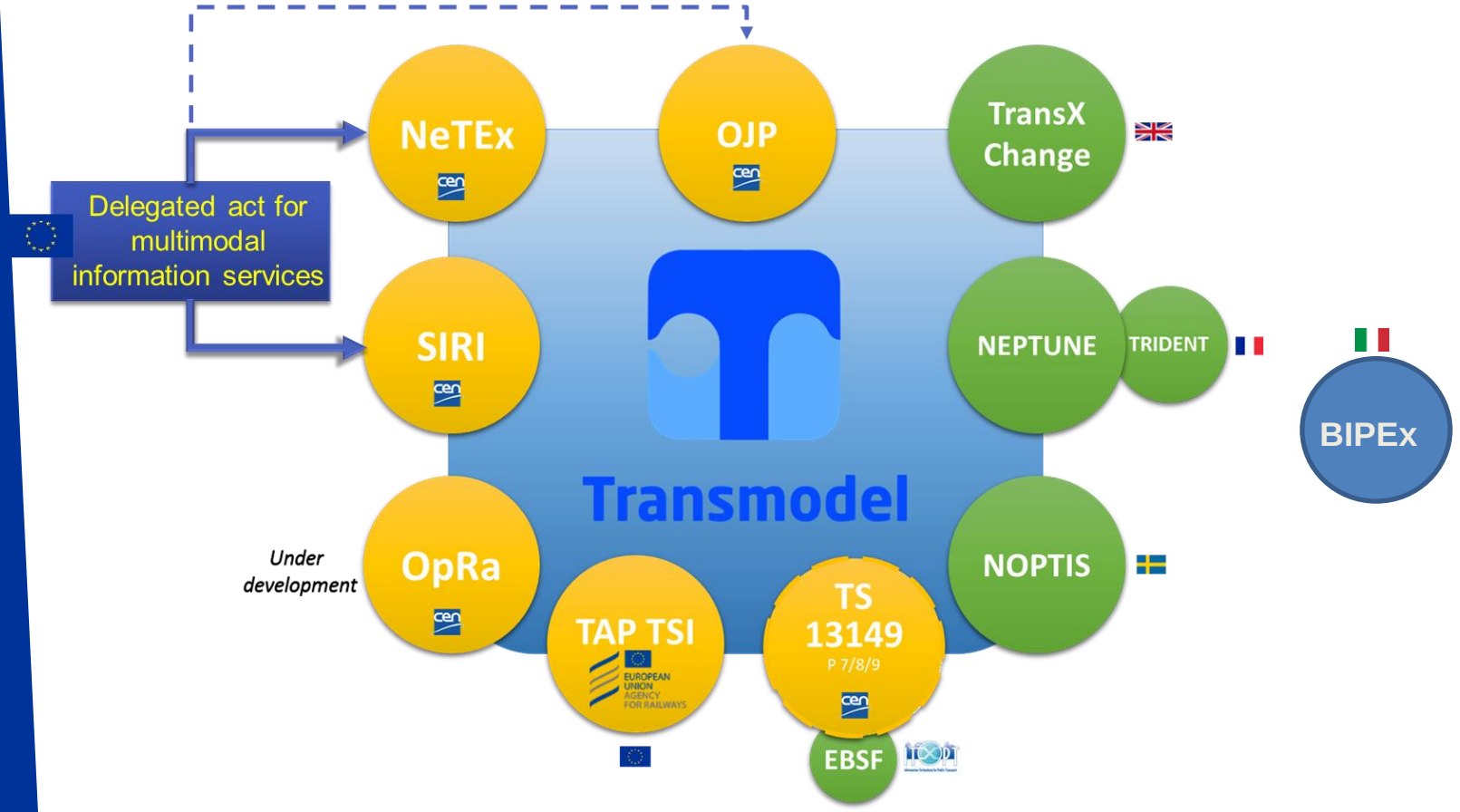
Nordic NeTEx profile – https://enturas.atlassian.net/wiki/spaces/PUBLIC/overview

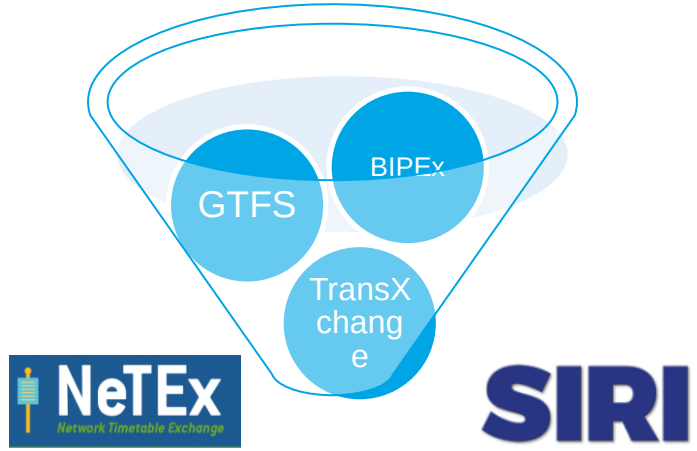
Samtrafiken

NAP implementation and synergies in Italy

Budapest, 08/11/2023

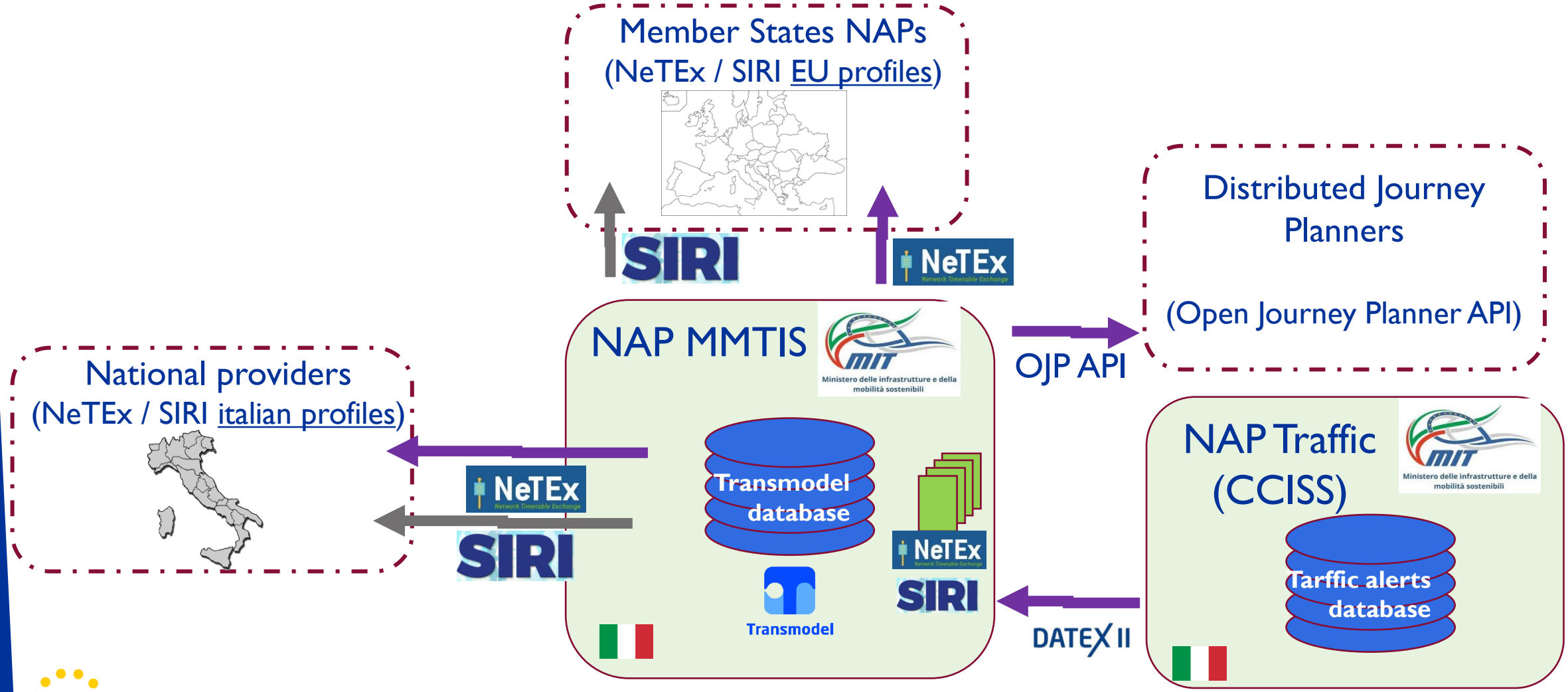
CEN NeTEx and SIRI standard
Italian adoption – Del. Reg. 1926/2017





NeTEx and SIRI unique formats for NAP MMTIS

NAP MMTIS Italian Implementation



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NeTEx and SIRI italian Profiles

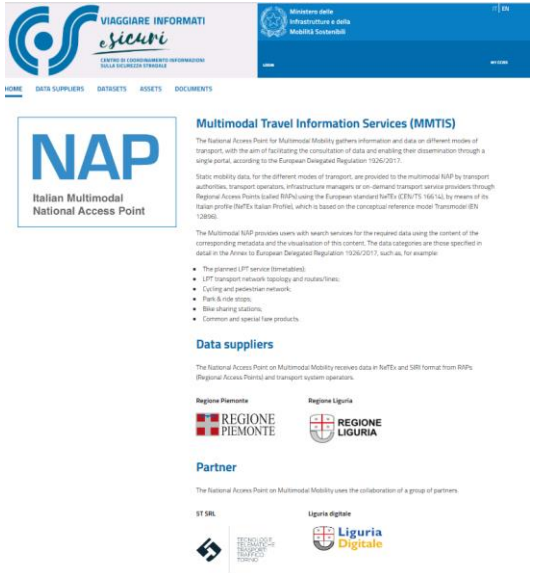
NeTEx italian profile	
L1	EPIP
L2	Contracts
L3	Fares
L4	Alternative Modes
L5	Accessibility

SIRI

SIRI-ET: Estimated Timetable service

SIRI-SX: Situation Exchange service: Allows

SIRI-FM: Facility Monitoring service



IT NeTEx Profile datasets with metadata

Inputs for italian Profiles definition

II

(Non-legislative acts)

REGULATIONS

COMMISSION DELEGATED REGULATION (EU) 2017/1926

of 31 May 2017

supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to the provision of EU-wide multimodal travel information services

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to

Having regard to ... framework for ... other modes of ...

Whereas:

(1) Article 3(... information ...

(2) Article 5 ... Directive ... right of ...

(3) These ... particular ... Regulation ... No 454/2 ...

(4) As regard ... Parliament ... the Union ... establishe ... the rules ...

(*) OJ L 207, 6.8.20 ...
(*) Commission D ... Parliament and ... universal traffic ...
(*) Commission D ... Parliament and ...
(*) Commission Re ... telematics appli ...
(*) Directive 2003/9 ... (OJ L 345, 31.12 ...

ANNEX

DATA CATEGORIES

(as referred to in Articles 3, 4, 5, 6, 8 and 10)

Partition of transport modes by type, such as:

Scheduled

Air, rail including high speed rail, conventional rail, light rail, long-distance coach, maritime including ferry, metro, tram, bus, trolley-bus.

Demand-responsive

Shuttle bus, shuttle ferry, taxi, car-sharing, car-pooling, car-hire, bike-sharing, bike-hire.

Personal

Car, motorcycle, cycle.

1. **The types of the static travel data**

1.1. *Level of service 1*

(a) Location search (origin/destination):

(i) Address identifiers (building number, street name, postcode)

(ii) Topographic places (city, town, village, suburb, administrative unit)

(iii) Points of interest (related to transport information) to which people may wish to travel

(b) Trip plans:

Operational Calendar, mapping day types to calendar dates

(c) Location search (access nodes):

(i) Identified access nodes (all scheduled modes)

(ii) Geometry/map layout structure of access nodes (all scheduled modes)

(d) Trip plan computation — scheduled modes transport:

(i) Connection links where interchanges may be made, default transfer times between modes at interchanges

(ii) Network topology and routes/lines (topology)

(iii) Transport operators

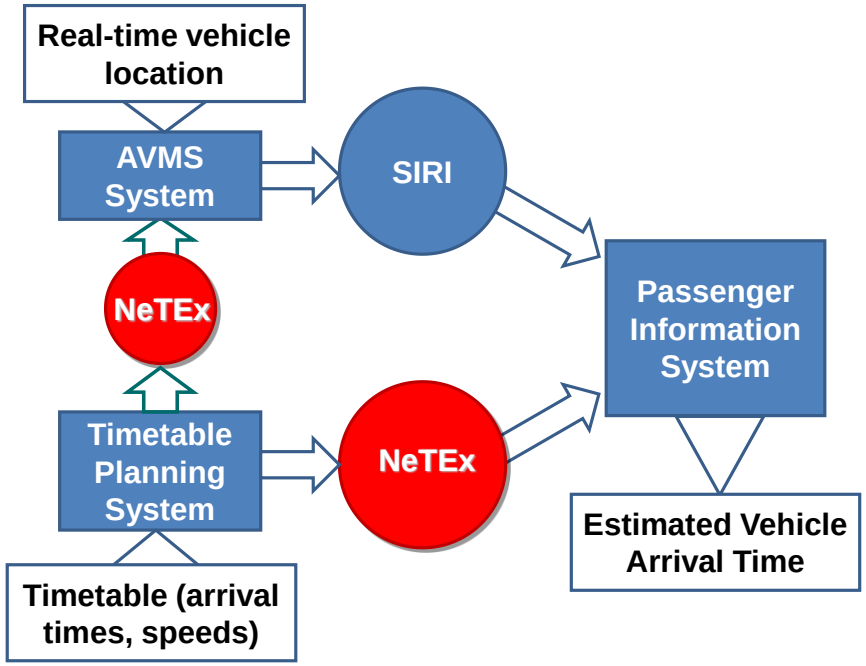
(iv) Timetables

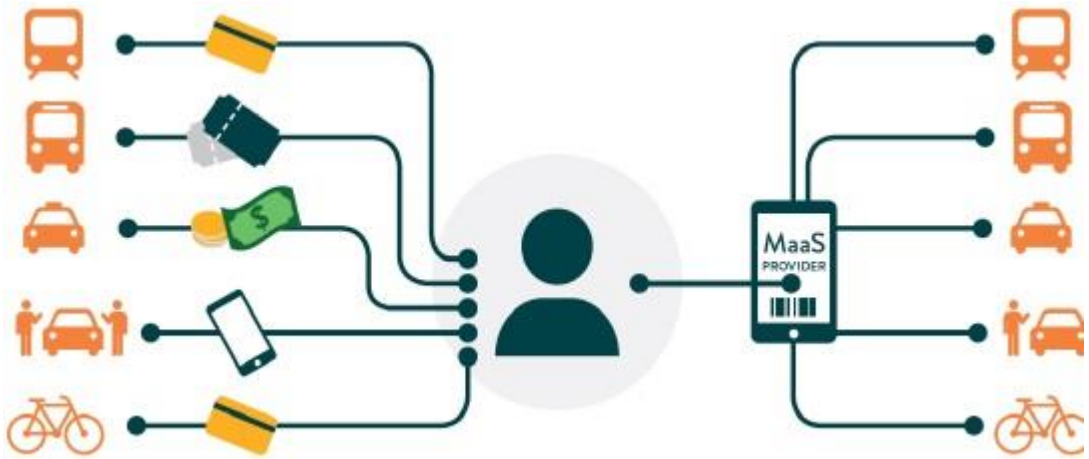
(v) Planned interchanges between guaranteed scheduled services

(vi) Hours of operation

(vii) Stop facilities access nodes (including platform information, help desks/information points, ticket booths, lifts/stairs, entrances and exit locations)

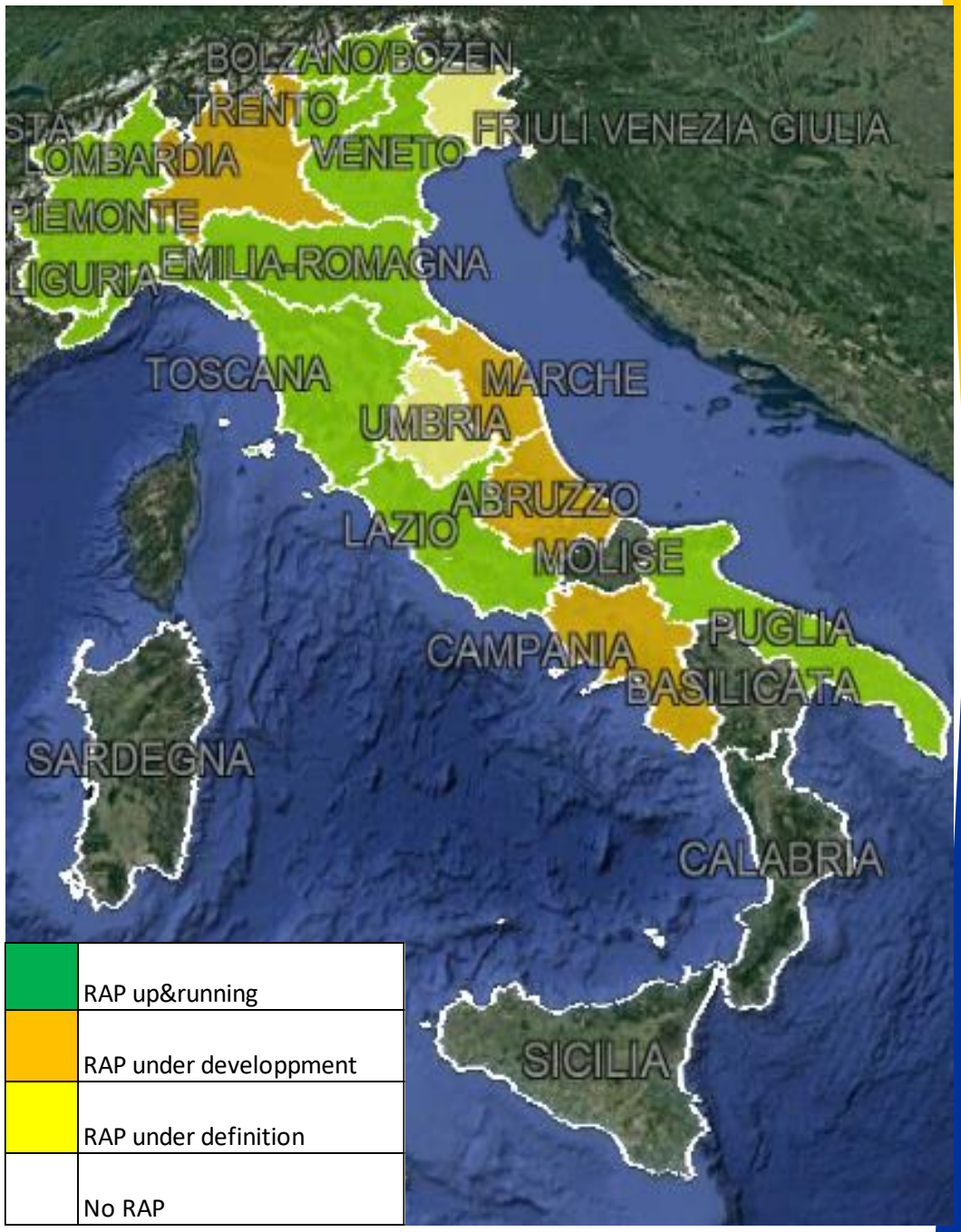
(viii) Vehicles (low floor, wheelchair accessible.)



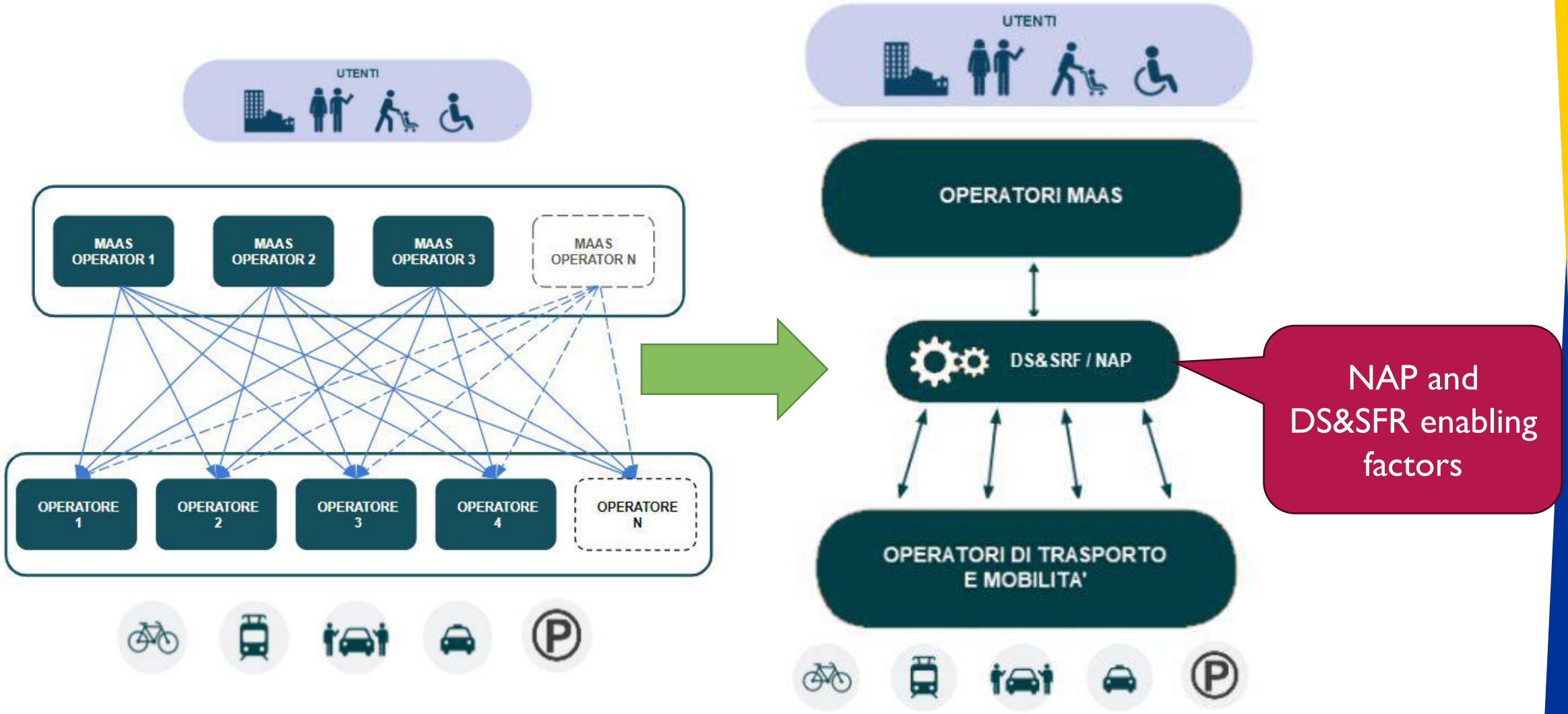


Italian NAP MMTIS data gathering

1. Data Aggregators at Regional Level called “**Regional Access Points (RAPs)**”
2. Data gathered in several ways using GTFS, GBFS, MDS, BIPEx, etc. then “converted” in NeTEx Italian profile towards NAP MMTIS

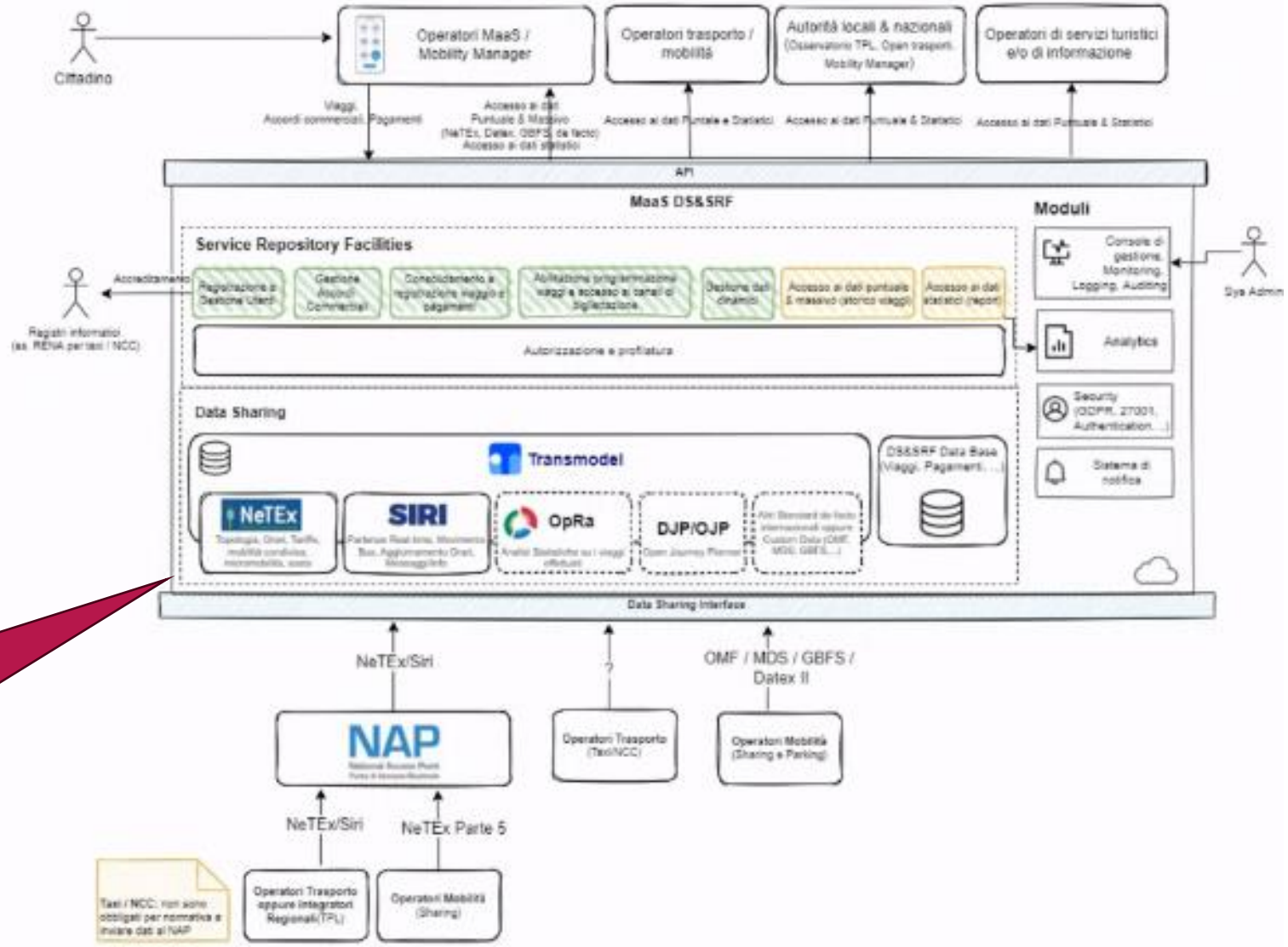


NAP for new Digital Services



From MMTIS to MDMS

4 Domain model del DS&SRF



Transmodel ecosystem adopted

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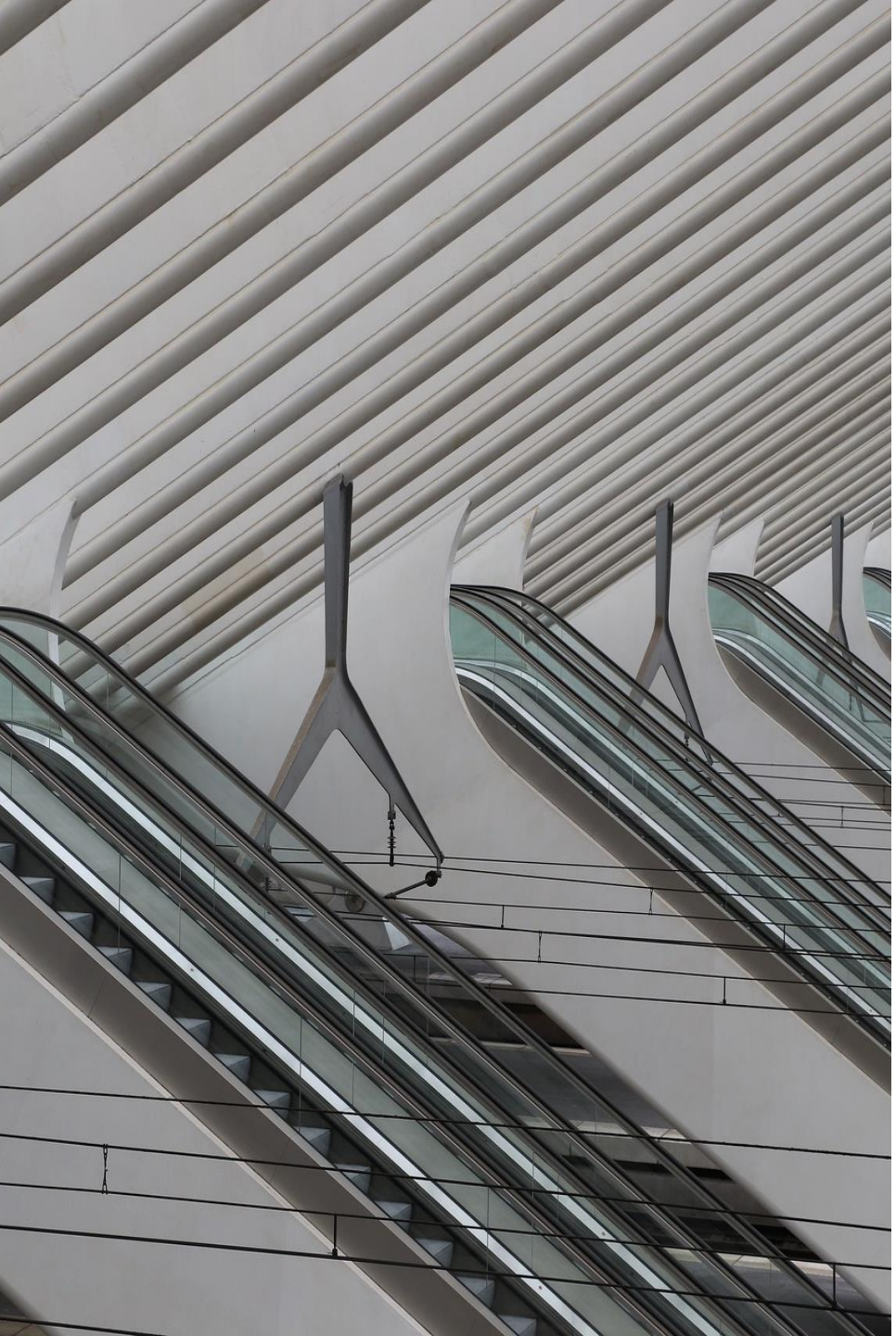

THANK YOU

See You Next Time

EMAIL Fabrizio.Arneodo@5t.Torino.it

francesco.devito@mit.gov.it

WEB https://data4pt.org/wiki/Main_Page