



**Workshop at UITP Summit**  
**What does it mean to use EU**  
**standards for MaaS?**  
**The case in Italy**

**June 7<sup>th</sup> 2023, 13:05 – 13:15 CET**

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TECNOLOGIE  
TELEMATICHE  
TRASPORTI  
TRAFFICO  
TORINO



# Agenda

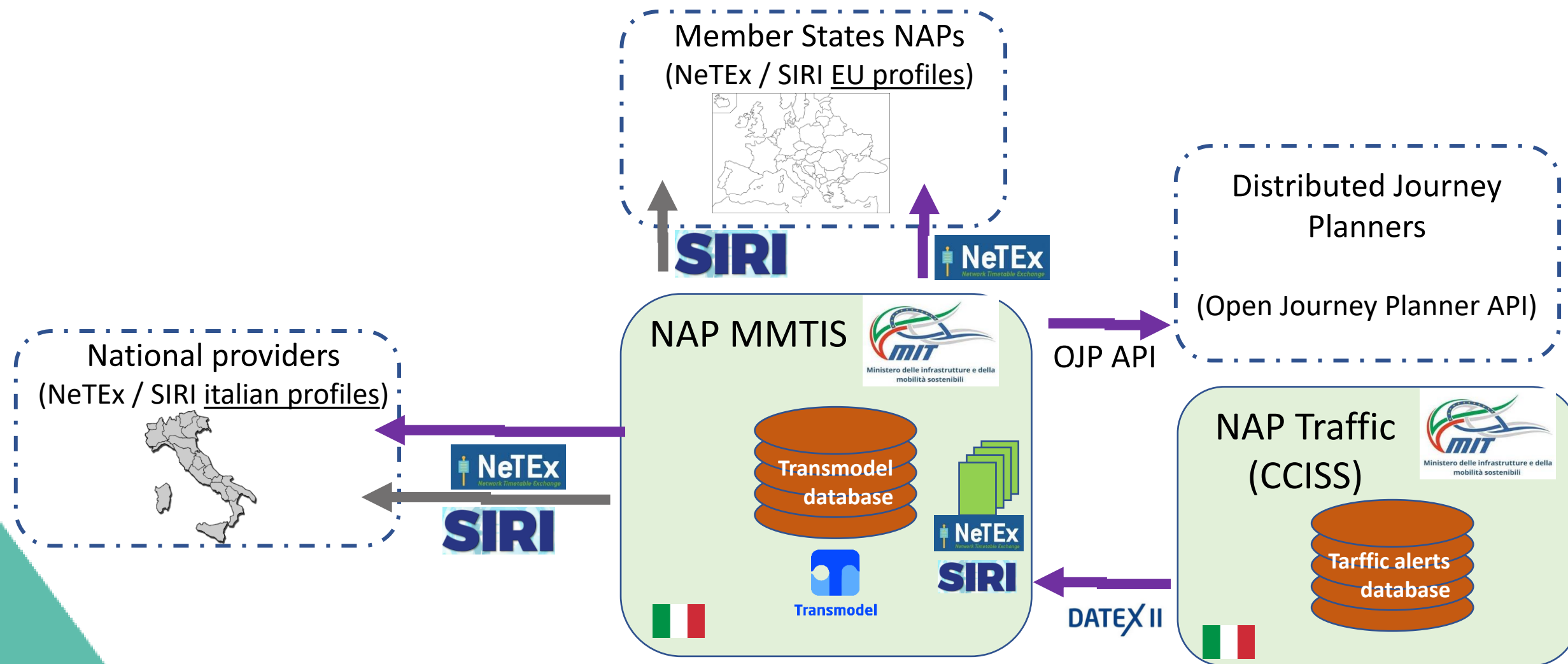


1. MMTIS NAP Italian Implementation
2. Italian EU standards Profiles
3. MMTIS NAP and MaaS Data produces
4. MaaS classification and standards
5. Use on EU standards in MaaS4Italy project



# NAP MMTIS Italian Implementation

## Data exchange





# Italian EU standards Profile

## NeTEx and SIRI Italian profiles



### NeTEx italian profile

L1	EPIP
L2	Contracts
L3	Fares
L4	Alternative Modes
L5	Accessibility



#### Multimodal Travel Information Services (MMTIS)

The National Access Point for Multimodal Mobility gathers information and data on different modes of transport, with the aim of facilitating the consultation of data and enabling their dissemination through a single portal, according to the European Directive Regulation 1303/2017.

Static mobility data, for the different modes of transport, are provided to the multimodal MMTIS transport authorities, transport operators, infrastructure managers or on-demand transport service providers through Regional Access Points (RAPs) using the European standard NeTEx (EN 15434), by means of its Italian profile (NeTEx Italian Profile), which is based on the conceptual reference model Transport (EN 15434).

The Multimodal NAP provides users with search services for the required data using the content of the corresponding metadata and the visualization of this content. The data categories are those specified in detail in the Annex to European Directive Regulation 1303/2017, such as, for example:

- The planned LPT service (timetables);
- LPT transport network topology and routes/lines;
- Cycling and pedestrian network;
- Park & ride stops;
- Bike sharing stations;
- Common and special fare products.

#### Data suppliers

The National Access Point for Multimodal Mobility receives data in NeTEx and SIRI format from RAPs (Regional Access Point) and transport system operators.



#### Partner

The National Access Point for Multimodal Mobility uses the collaboration of a group of partners.



**SIRI-ET: Estimated Timetable service**

**SIRI-SX: Situation Exchange service: Allows**

**SIRI-FM: Facility Monitoring service**



#### RAP Piemonte - NeTEx Livello 1

**Description**  
Data from the Local Public Transport Service and the network topology of the Regione Piemonte in NeTEx level 1 format. In particular, the dataset makes available information relating to: Operating calendar, Network topology and itineraries/lines, Transport operators, Operating hours, Stop access nodes.

**Tag:** NeTEx

**Data format:** NeTEx

**Italian profile level:** Level 1

**NeTEx category:**

Access modes of the stops

Operational calendar

Network topology and routes / lines

Hours of operation

Transport operators

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IT NeTEx Profile datasets with metadata

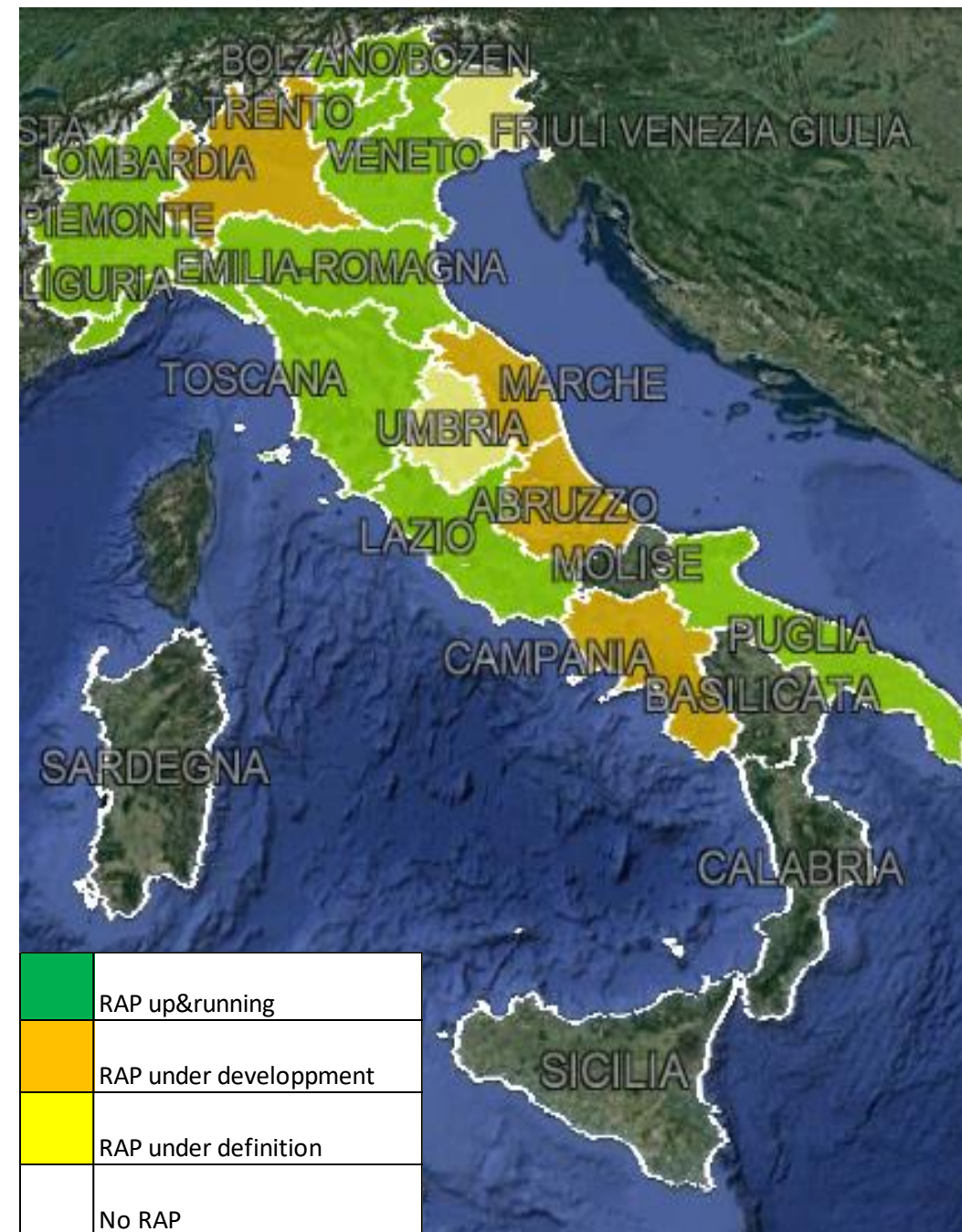




# Italian NAP MMTIS and MaaS

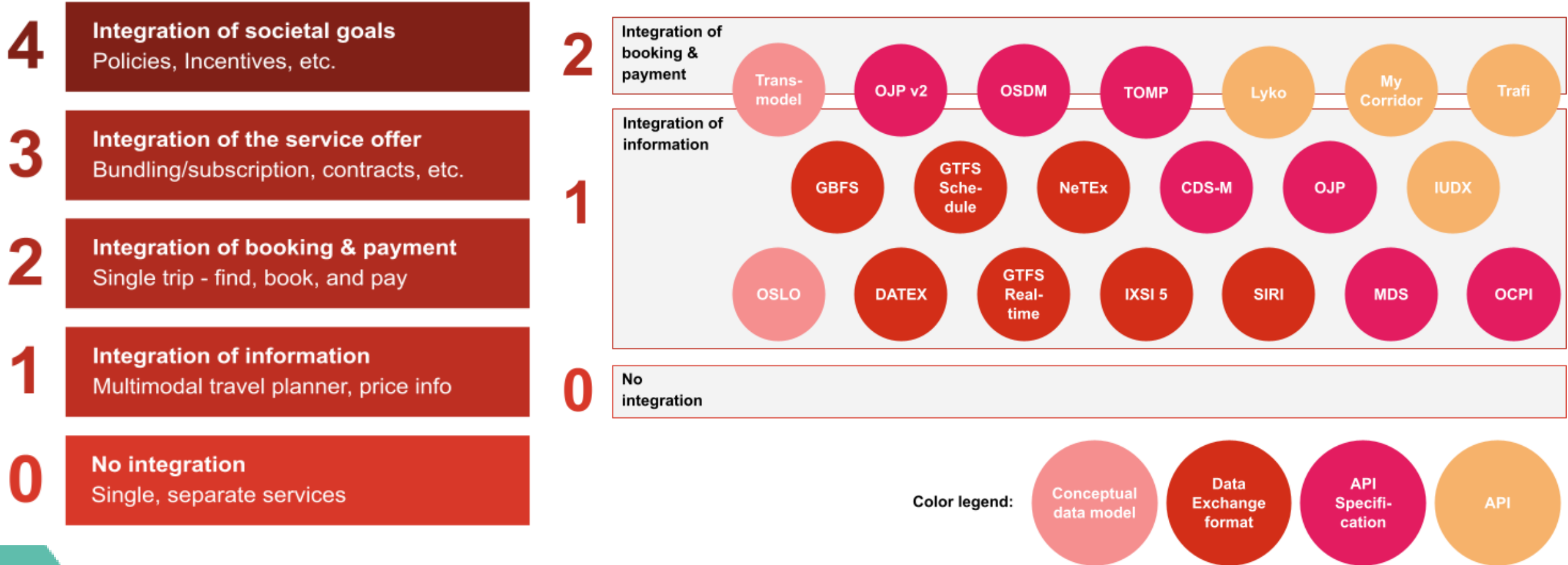
Data producers

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



# Mobility as a Service

## Service level classification and standards (\*)



(\*) From MaaS Alliance White Paper





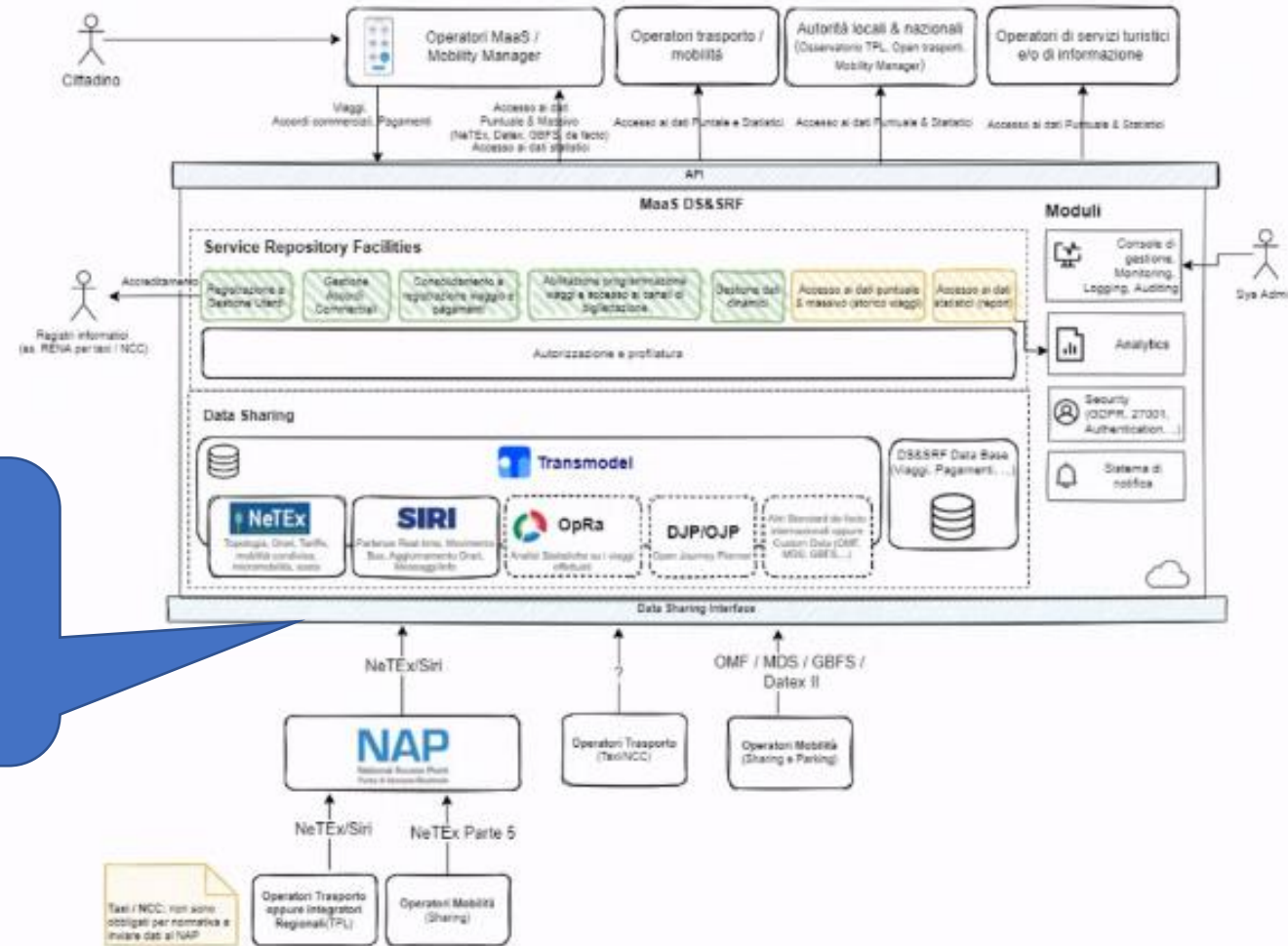
## Use on EU standards in MaaS4Italy project



NAP and  
DS&SRF enabling  
factors

## Use on EU standards in MaaS4Italy project

### 4 Domain model del DS&SRF





# THANK YOU

See You Next Time

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## WEB

[https://data4pt.org/wiki/Main\\_Page](https://data4pt.org/wiki/Main_Page)



Dr. Fabrizio Arneodo has Computer Science degree at Sciences at the University of Turin, with 20+ years of experience in the management of complex software development projects; he currently holds the role of CTO of the 5T company, where he oversees all the technological aspects in the application domain of intelligent transport systems.

For 10+ years he has been working as an expert recognized by UNI in the field of standardization of technologies applied to Public Transport and represents Italy in the steering committee of CEN TC278 / WG3 "ITS for Public Transport", with the role of Chairman of the Standardization Group. European OpRa (Operating Raw Data and statistics exchange).

He has more than 20 publications in national and international scientific journals in the field of vehicular traffic, public transport, infomobility, ticketing and intelligent transport systems solutions.