POLIS
CITIES AND REGIONS FOR TRANSPORT INNOVATION
ANNUAL CONFERENCE 2019

27-28 November 2019, Brussels

An innovative solution to turn transport data into EU compliance

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EU Mission: seamless and attractive multimodal transport

Barriers

- Low accessibility of transport information
- Lack of interoperability

Key enablers

- Transport data sharing
- Interoperability through reference conceptual models and data conversion

EU Regulation 2017/1926: provision of EU-wide multimodal travel information services

Each EU Member State to set up a **National Access Point (NAP)**, for multimodal travel information for all **transport modes** (air, train, bus, ferry, metro, tram, car/bike-sharing, car-pooling, etc.)

WHO

- Transport authorities
- Transport operators
- Infrastructure managers

WHAT

- Static data
- Dynamic data

HOW

- Standard data formats
  - NeTEx
  - SIRI

The challenge of compliance

- In most cases, transport stakeholders use their **propriety data formats** or, when using “standards”, they adopt simple models (e.g., GTFS), while the required formats are rarely used and very complex
- The EU Regulation is seen as a burden and an **imposition** and transport stakeholders do not clearly perceive the return on investment for compliance
- Becoming compliant with the EU Regulation requires **data conversion** (from the currently adopted formats to the required ones) and dealing with standards’ **complexity**
- Enabling a holistic **interoperability** approach while taking care of the format conversion decrease the complexity and paves the way to **data integration** and **added value services**

The SNAP solution

- SNAP makes transport data **interoperable** and **compliant** with the EU Regulation
  - **Unique:** end-to-end conversion process, ready for market adoption
  - **Innovative**: data conversion with Semantic Web technologies
  - **Simple & Easy**: hides complexity of conversion process and target standards
  - **High Speed**: no previous knowledge required, reusable and adaptable

SNAP is a cooperative R&D project co-funded by EIT Digital, coordinated by Cefriel, with Universidad Politecnica de Madrid, Università di Genova, Engineering

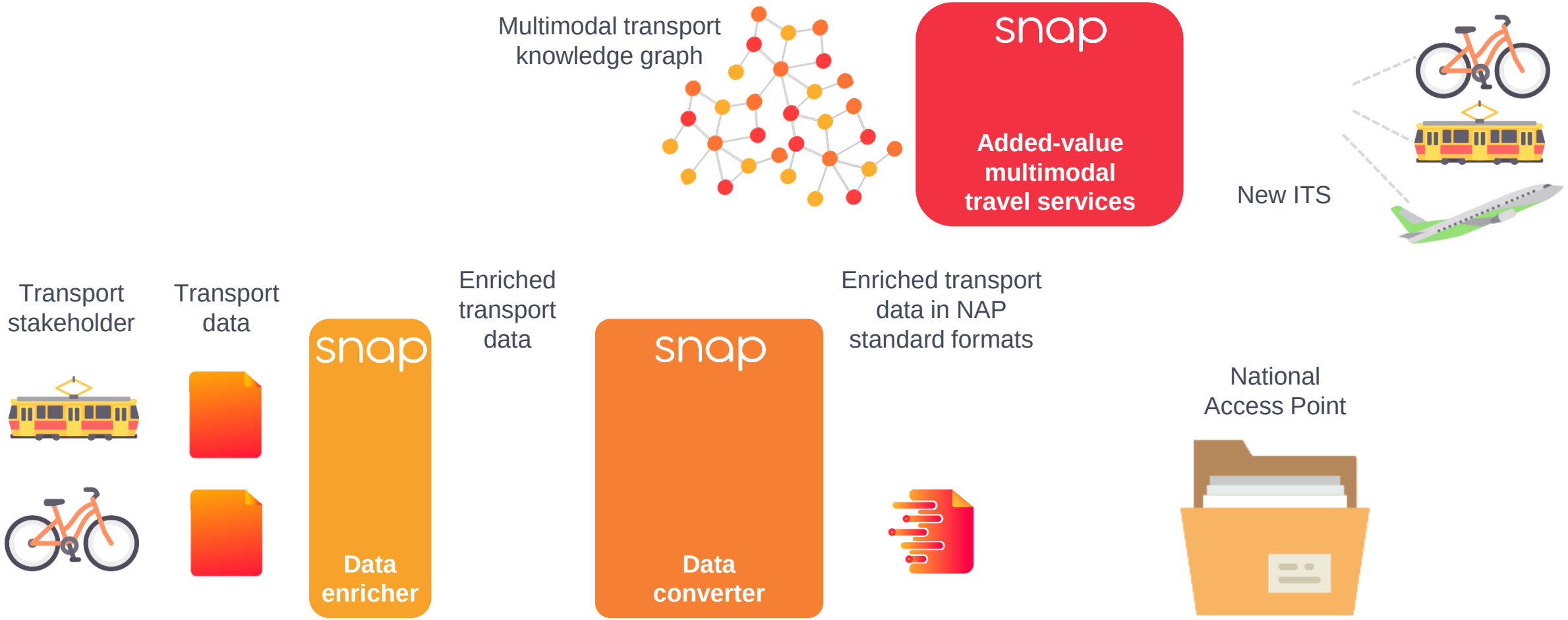
www.snap-project.eu

The SNAP building blocks

- A **reference conceptual model** (in the form of an ontology) derived from the CEN Transmodel
  → it enables a shared semantics to facilitate **interoperability** and simplifying **data integration**

- A two-step **conversion process** (*lifting* from the pre-existing format to Transmodel and *lowering* from Transmodel to the required standards) based on Semantic Web technologies
  → it serves the double objective of ensuring the **compliance** and enabling **value-added services**

A few more details on the SNAP solution



Validating the SNAP solution with transport stakeholders

- **Milano (I) – SEA Aeroporti**
  - *Stakeholder*: Infrastructure Manager
  - *Goal*: convert airport facilities information to NeTEx
  - *Challenge*: **proprietary format** of medium complexity
- **Madrid (E) – Consorcio Regional de Transportes de Madrid**
  - *Stakeholder*: Transport Authority
  - *Goal*: convert GTFS to NeTEx
  - *Challenge*: large scale data demanding for **scalability**
- **Genova (I) – Azienda Mobilità e Trasporti (AMT)**
  - *Stakeholder*: Transport Operator
  - *Goal*: improve/enrich GTFS + convert GTFS to NeTEx
  - *Challenge*: smart **pre-processing** and integration of input data

Be compliant with the EU Regulation in a SNAP!

- EU Member States are (slowly) adopting the Regulation by setting up the respective National Access Points
  - See the status report at www.its-platform.eu/filedepot_download/1971/6491

- Transport stakeholders still have issues in getting ready for data sharing and realizing all potential implications and advantages
  - Want to have your say? Survey at https://www.surveymonkey.com/r/SNAP-PROJECT

- We offer **SNAP as a market-ready solution** for transport stakeholders:
  1. **Compliance assessment service**: making sense and improving their data
  2. **Conversion service**: getting compliant with the required standards
  3. **Value-added service**: designing high-impact multimodal transport services

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