Introduction to TN-ITS and NAPCORE
PrepDSpace4Mobility workshop

ir Frank Daems

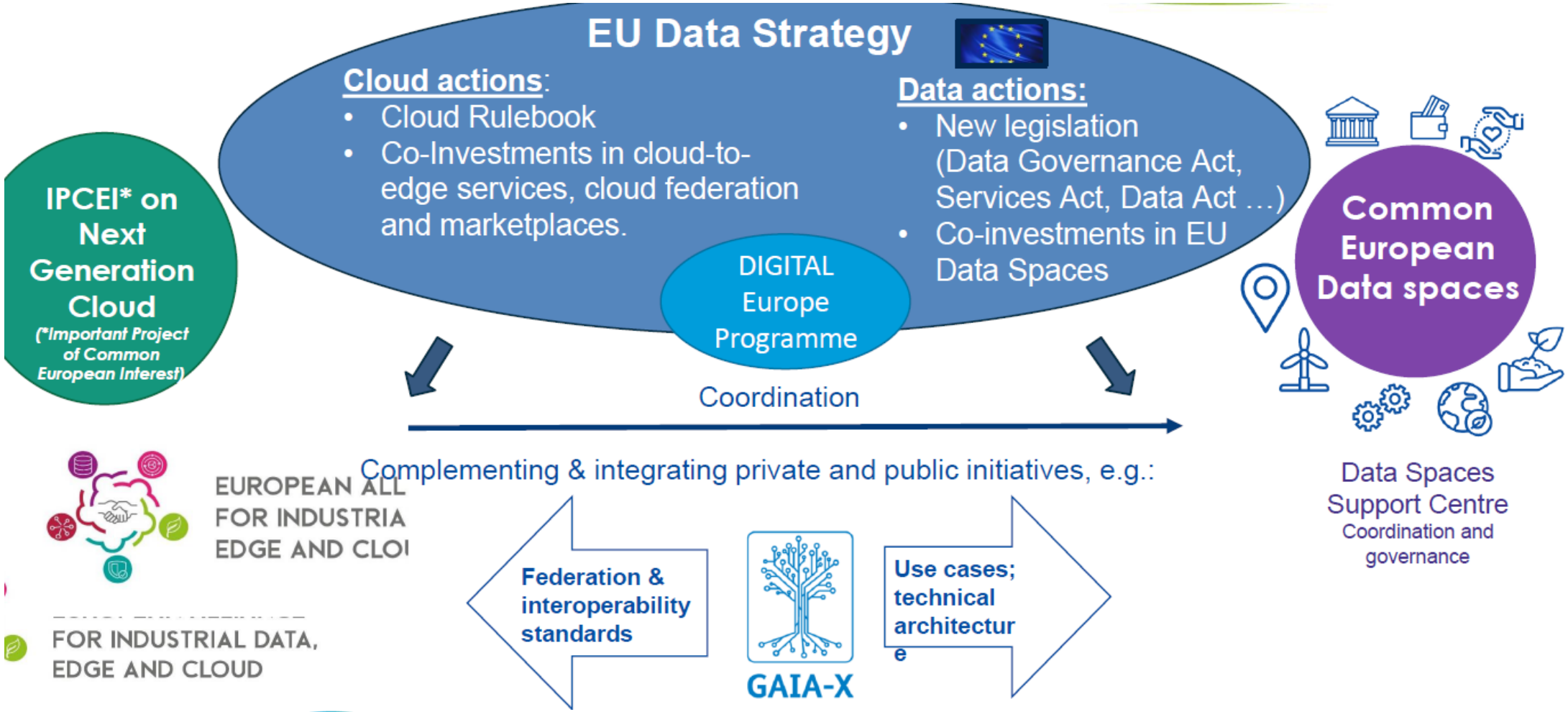
2023-05-10

Agenda

- EU data strategy
- ERTICO & TN-ITS
- TN-ITS in EU mobility data space
- NAPCORE

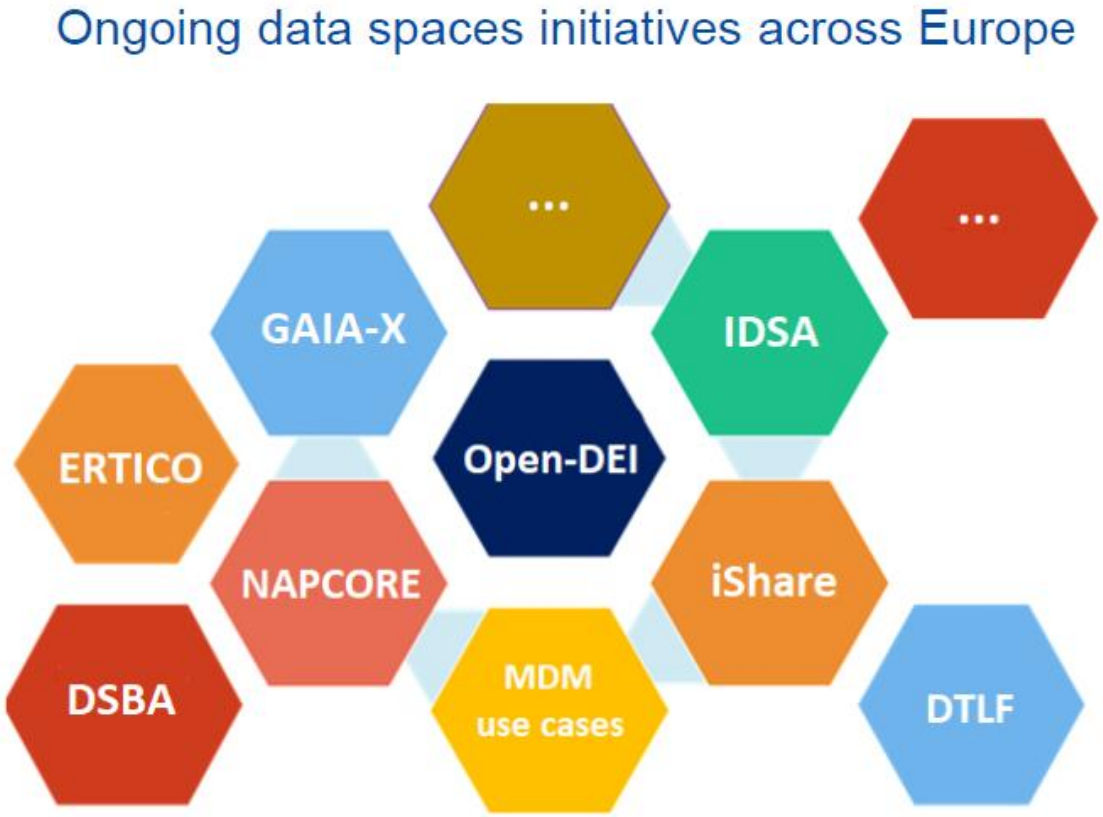
TN-ITS GO
Map Update Exchange

Helicopter view on the European data strategy



Helicopter view on the European data strategy

Converging guidelines worldwide



TN-ITS

TN-ITS

- Duality
  - EU Standard for data sharing of digital map attribute updates (‘static data’—RTTI DR 2022-670-CEN TC 278WG7) (14 MS implementations thanks to TN-ITS GO)
  - Multi stakeholder association as ‘innovation platform’ under ERTICO to maintain, disseminate, deploy and develop the standard

ERTICO ITS EUROPE

TN-ITS GO Map Update Exchange

TN-ITS Vision & Mission

Vision = Bringing fresher and trusted map data to intelligent transport services

Mission = Facilitate and foster the exchange of ITS-related spatial road data between road authorities as trusted data providers, and data users as map makers and other parties,

TN-ITS GO
Map Update Exchange

TN-ITS –MAPS –Why?

Sensor data - Why additional location intelligence is required

Not all sensor detections will result in an update, because…

Invalid Sensor detections, for example:

- Irrelevant detections (sticker on back of a truck, pre-warnings, etc.)
- Speed limit detections on main road for off-ramps – Figure 1
- Signboards that look like speed limits but are not – Figure 2
- Values on variable speed signs, in the static map only locations of the variable signs are included (not the values) – Figure 3
- Detections of speed limit signs for non-supported vehicle types (e.g., caravan) – Figure 4

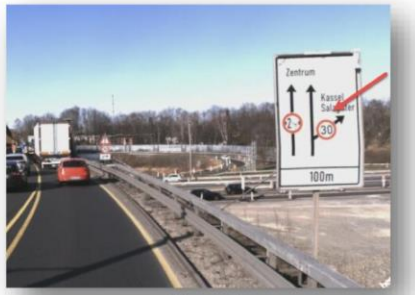


Figure 1

Figure 2

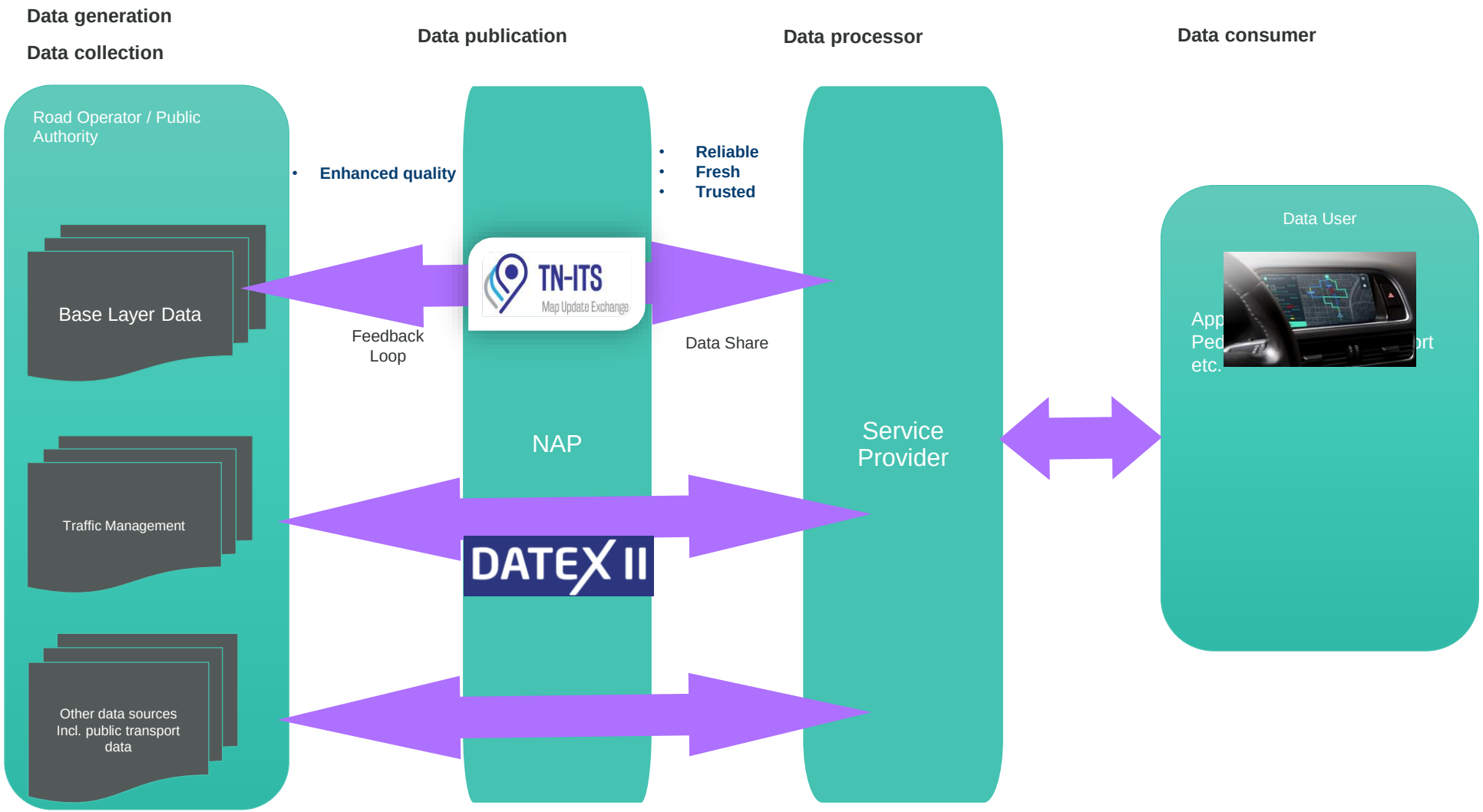
Figure 3

Figure 4

here

TN-ITS GO
Map Update Exchange

TN-ITS within the EU mobilty data Space



TN-ITS GO
Map Update Exchange

TN-ITS within the EU mobilty data Space

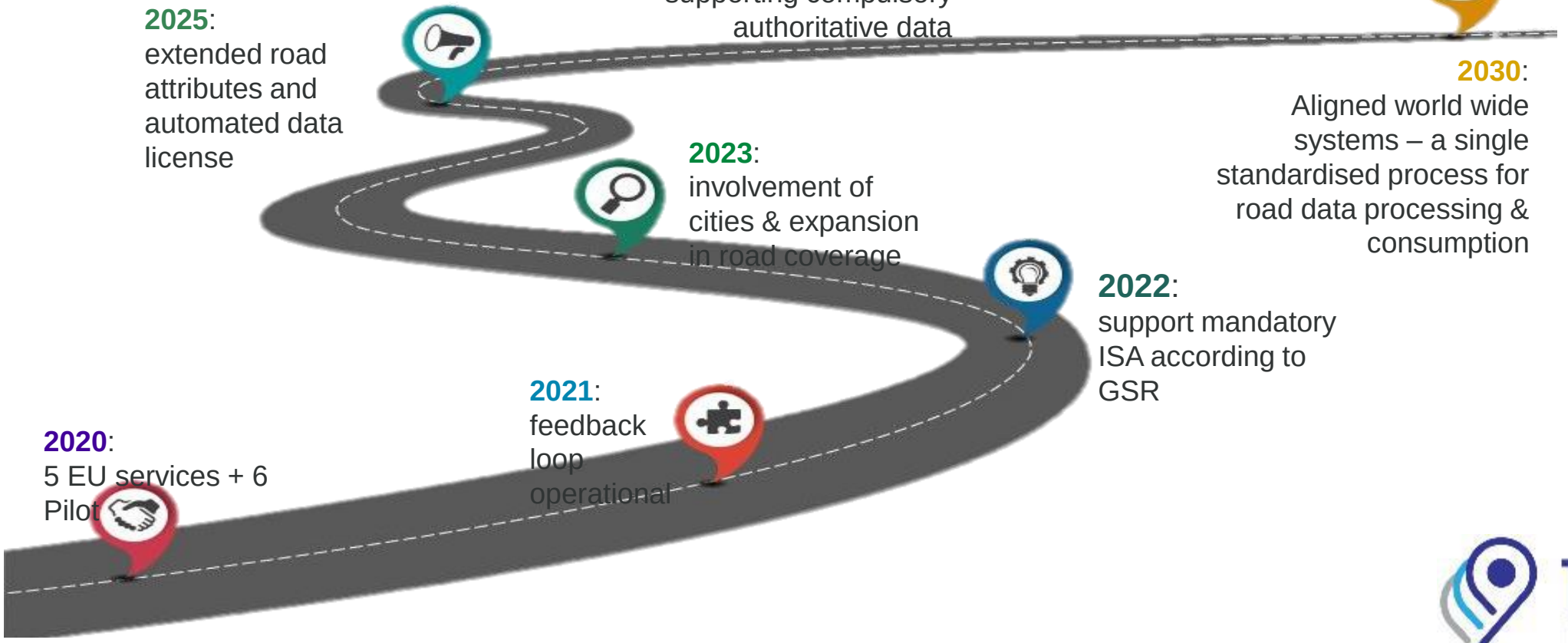
Reasons for MS road operators to implement TN-ITS interfaces in their mobility data space are therefore manifold:

- Services using the TN-ITS standard interface are market driven:
  - TODAY: There is a need for accurate maps
  - TOMORROW: A necessity to support applications like ISA
  - 2025+: Supporting Regulations for Automated drive, etc.

- Services using the TN-ITS standard interface are a needed asset in the Mobility data space:
  - EU based: Delegated Regulation on RTTI (static data)
  - Standards: Strong co-operation with and member of CEN/TC 278 WG7
  - TRUST: Data originates from the public authority◊ A basis for TRUST: a unique feature of TN-ITS data

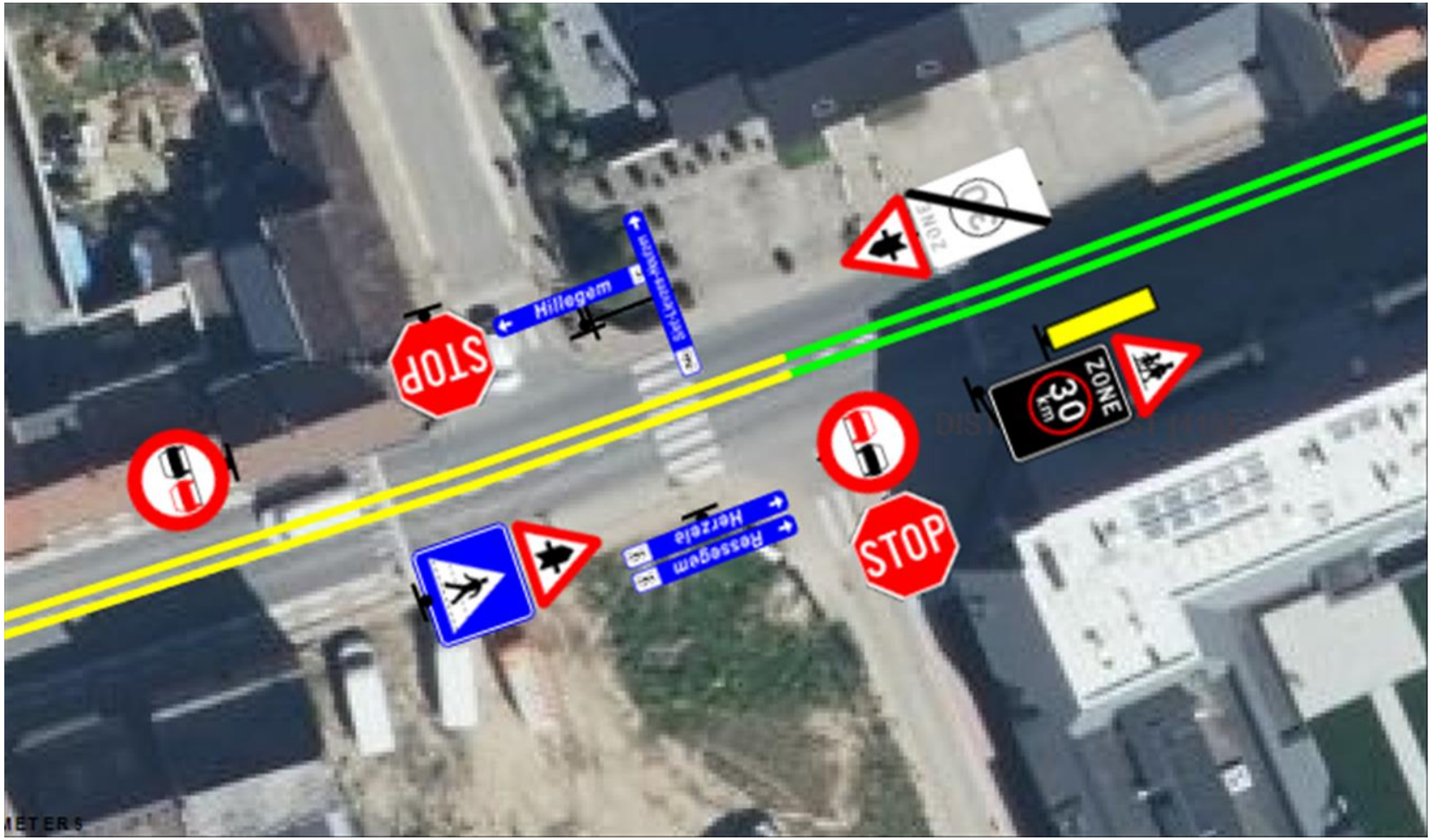
TN-ITS GO
Map Update Exchange

TN-ITS roadmap



TN-ITS GO
Map Update Exchange

TN-ITS implementation in Flanders



TN-ITS implementation in Flanders

Mobile app for updating the traffic sign database

- Add/Change/Delete/NoActionRequired

NAPCORE

CEF Program support action (3/2021 - 12/2024)

- Federation of NAPS
- National Access Points: Single URL per Member State
- Link to the authentic data sources
- Mainly authoritative, trusted data, but also data from private instances

Objective

- Sets up a long-term governance structure
- Harmonise NAPs
- Design and development of common tools
- Plan and coordinate data collection initiatives
- Harmonise assessment of compliance

NAPCORE Goal of the action

- to empower the National Access Points (NAPs) as the **backbone for ITS digital infrastructure**

- facilitating national & EU wide operational coordination for the **harmonisation and implementation of the European specifications**

Objectives

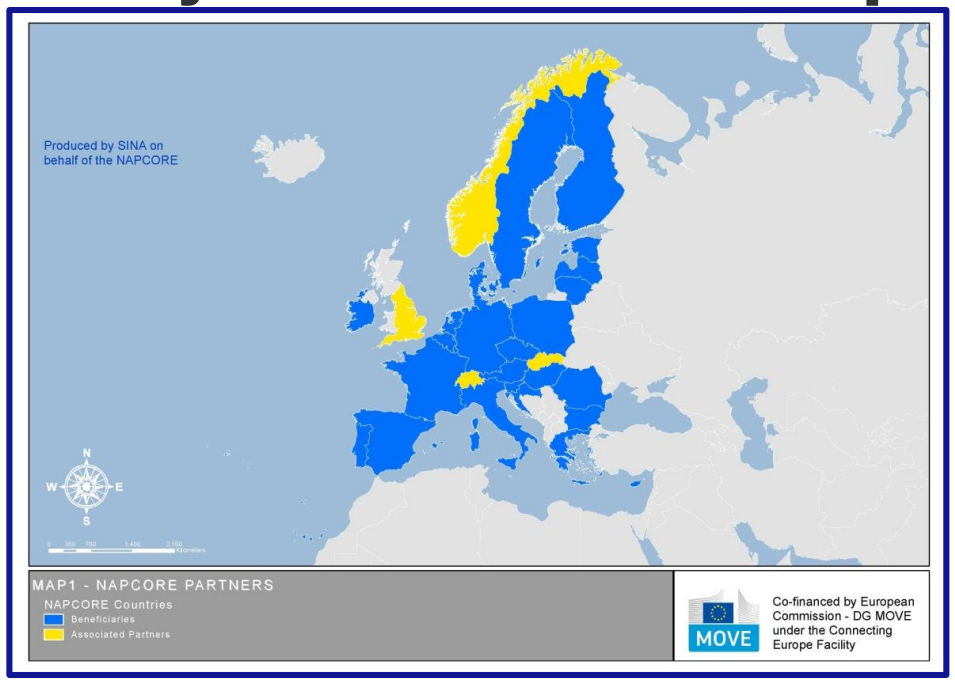
- The European data strategy enables the European Union to become **a leading player in a data-driven society**

- The creation of **a single market for data** will allow the free movement of data within the EU and between sectors, to the benefit of citizens and travellers across Europe, businesses, researchers and public administrations

- Data-based technologies will also make it possible to **limit the impact of the transport sector on the environment**

- Indeed, **data are the fuel for technological development** in the transport sector and the digital transformation of infrastructure

Project & Partnership



- 36 participants (incl Notified bodies)
- 29 Beneficiaries
- 26 EU Member States
- 1 Beneficiary no-EU Member State
- 3 International organizations (ERTICO, ITxPT and UITP)
- 3 Associated partners

- Starting date of the action: 1st April 2021
- Completion date: 31st December 2024
- Grant is 11,999,999 € 85% of the eligible costs 14,117,642 € (w/o overhead)

TN-ITS/WG 4/Sub-WG 2

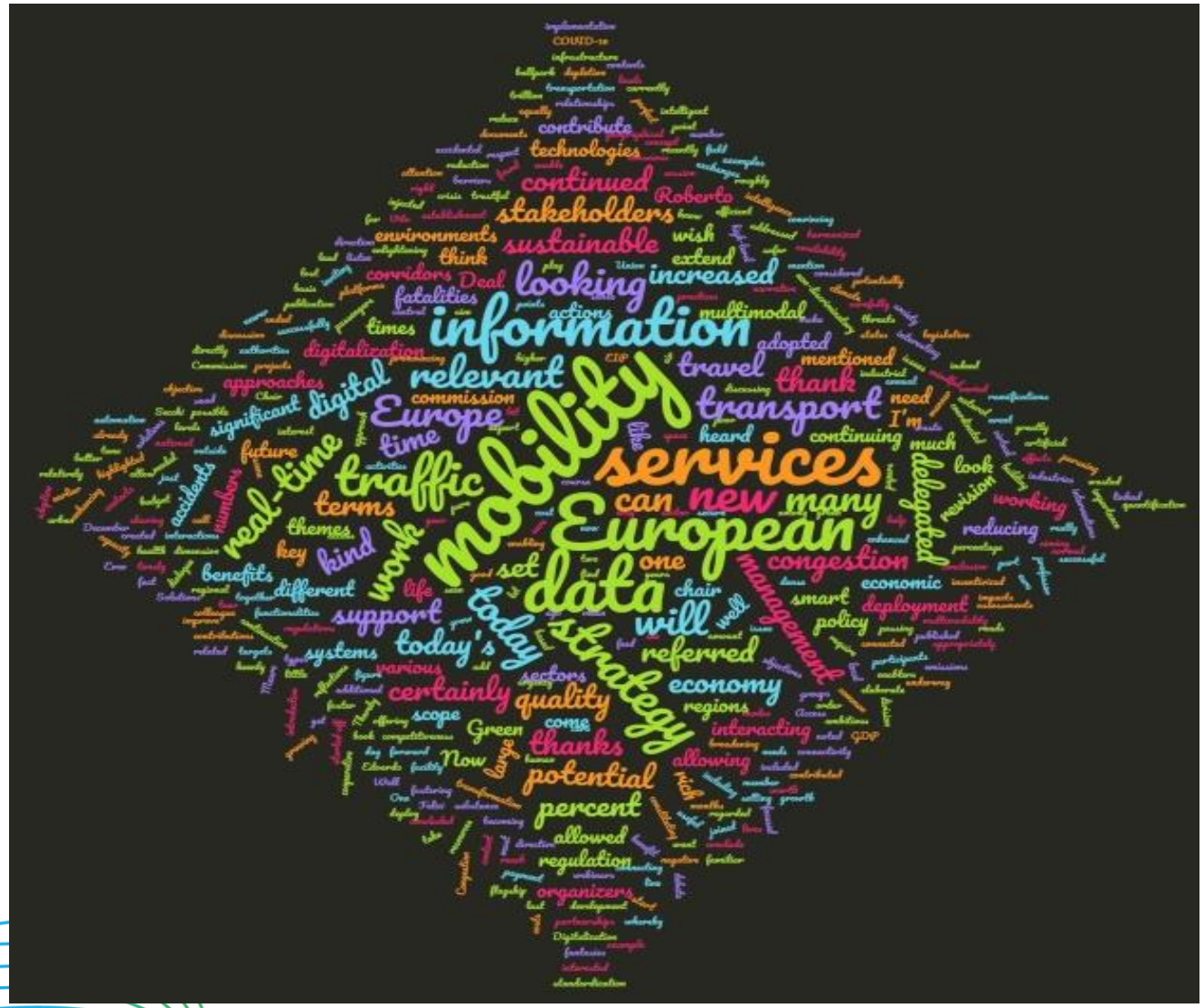
Main objective of TN-ITS/WG 4/Sub-WG 2:

- Establish common insights, requirements, alignment and implementation on methodologies to come to real 'regulated' data status
- Create Full EU Awareness , traction and engagement of TN-ITS benefits and implementation possibilities
- Full alignment , acceptance, integration into the NAPCORE mechanisms

Tasks to carry out the TN-ITS/WG 4/Sub-WG2 for 2022:

- 4.2.1 Alignment and harmonisation
- 4.2.2 Management and coordination
- 4.2.3 Specifications
- 4.2.4 Enhancements in data sharing supply chain
- 4.2.5 Engage the EU NAPCORE MS community
- 4.2.6 Communication and dissemination

NAPCORE keywords



Innovation for tomorrow’s journey.

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