

6 December, 2021

JASPERS Networking Platform Webinar on Data Management in Transport



mobilithek

- National Access Points for Traffic and Mobility Data
- European NAP harmonisation efforts
- Germany's Future National Access Point for Mobility Data

bast
Federal Highway Research Institute



Federal Ministry
of Transport and
Digital Infrastructure



National Access Points

Current German platform

landscape

Moving towards the Mobilithek

European Harmonisation



National Access Points

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National Access Points

What is a National Access Point (NAP)?

- A B2B data platform for transport/mobility data,
- in the form of a repository, registry, web portal or similar,
- installed by a EU Member State.



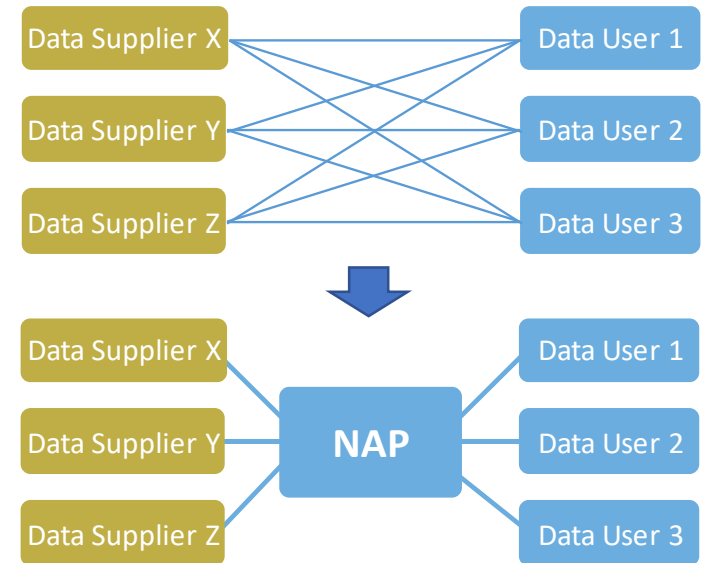
Trafficdata.se



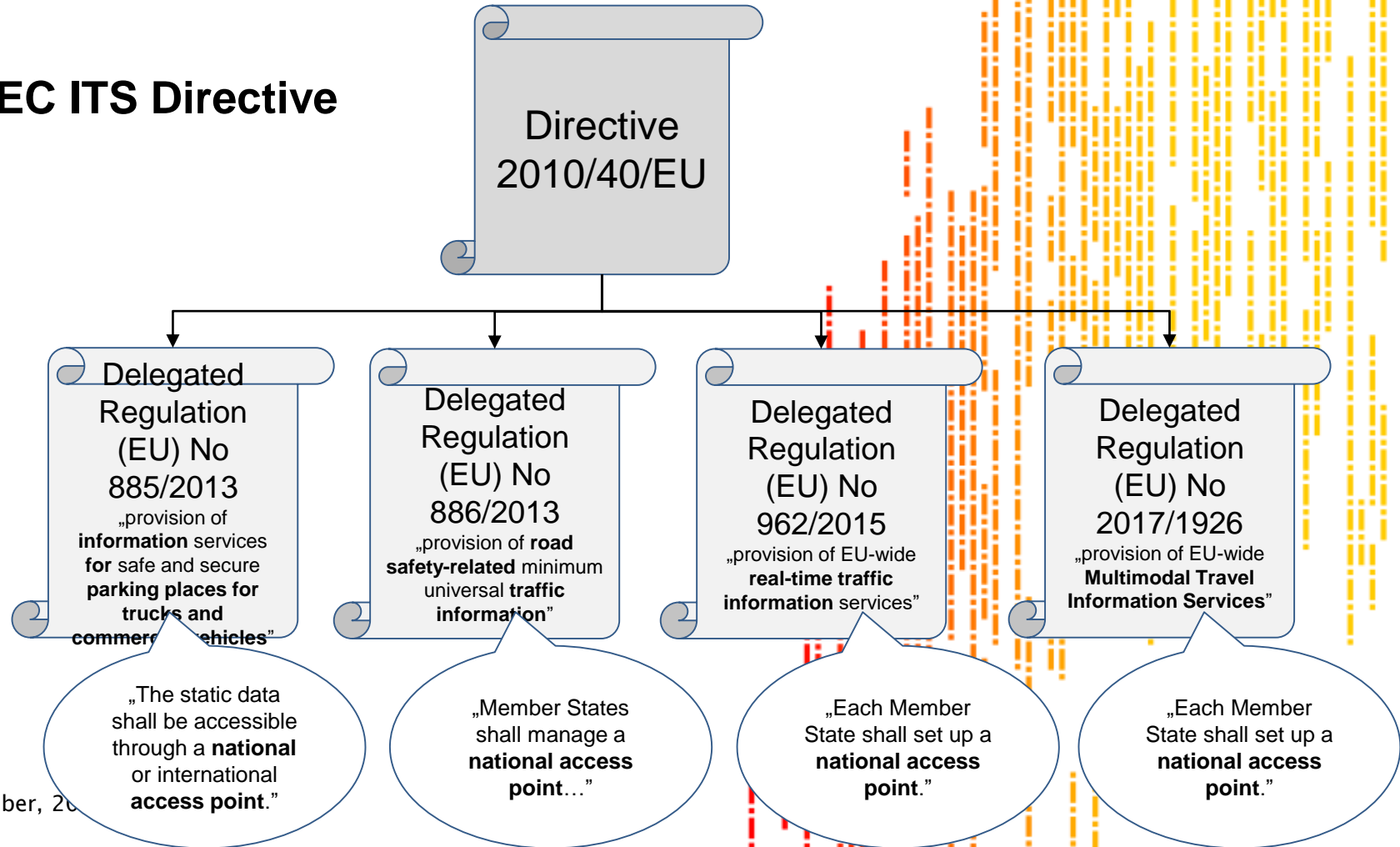
National Access Points

Why a NAP?

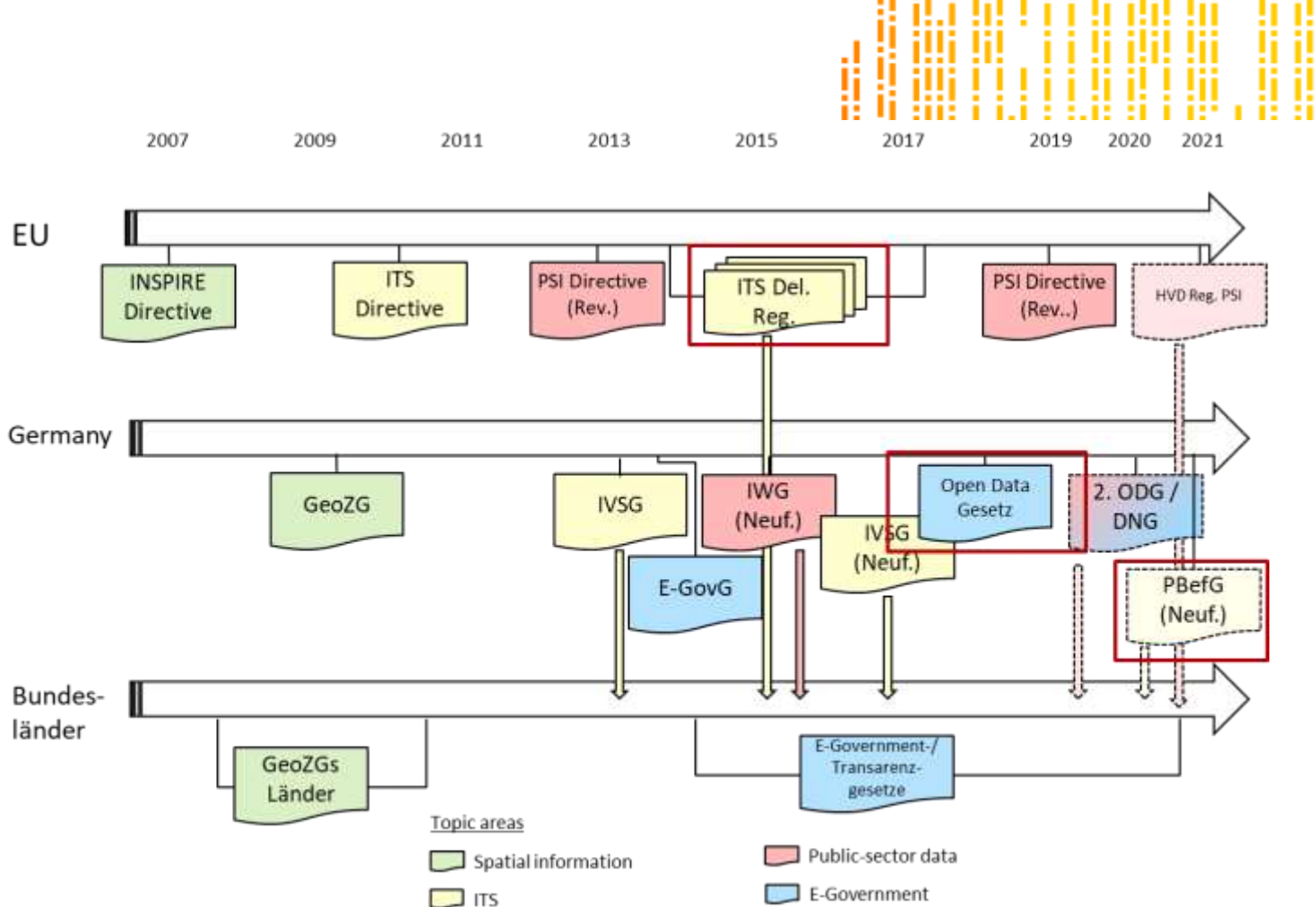
- Facilitate access, exchange and reuse of data
- Connect data suppliers and users
- Support EU-wide interoperable ITS services
- Mandated by European Commission via the ITS Directive



The EC ITS Directive



Legal context





National Access Points

**Current German platform
landscape**

**Moving towards the Mobilithek
European Harmonisation**

mCLOUD: the BMVI Open Data Portal

- **Direct data access** for data consumers in businesses, research and administration
- In 09/2021: over 7,800 **open data offers** (metadata), of which
 - > 1.000 open data offers from BMVI responsibilities and from BVVI research projects (mFUND)
- Established **harvesting mechanisms** with other public-sector data portals
- Contains also data from **municipalities, public transport** and **mobility providers**



MDM: the current NAP in Germany

- **Real-time traffic and mobility data** for exchange between the public and private sectors
- In regular **operations since 2014**
- Established as **NAP for all current Delegated Regulations** for the European ITS Directive
- **B2B application** with access control mechanisms, defined data formats, protocol specifications and service levels



MDM: the current NAP in Germany

- Functional levels:
 - **Portal function** (metadata directory):
Interactive website to offer / search / subscribe to data
 - **Broker function** (data distribution):
Online data-flow from the data supplier via the MDM to the data recipient



MDM: the current NAP in Germany

- Number of available data publications: 2,100
- Number of data subscriptions served: 4,750
- Number of active users: 640
- Number of data subscribers: 330
- Volume of data deliveries per month: 9.8 TB
- Volume of data delivered per month: 43.4 TB
- Average latency per packet: 0.4 s



MDM: the current NAP in Germany

- **Stakeholder support and coordination** along the entire value chain of traffic information



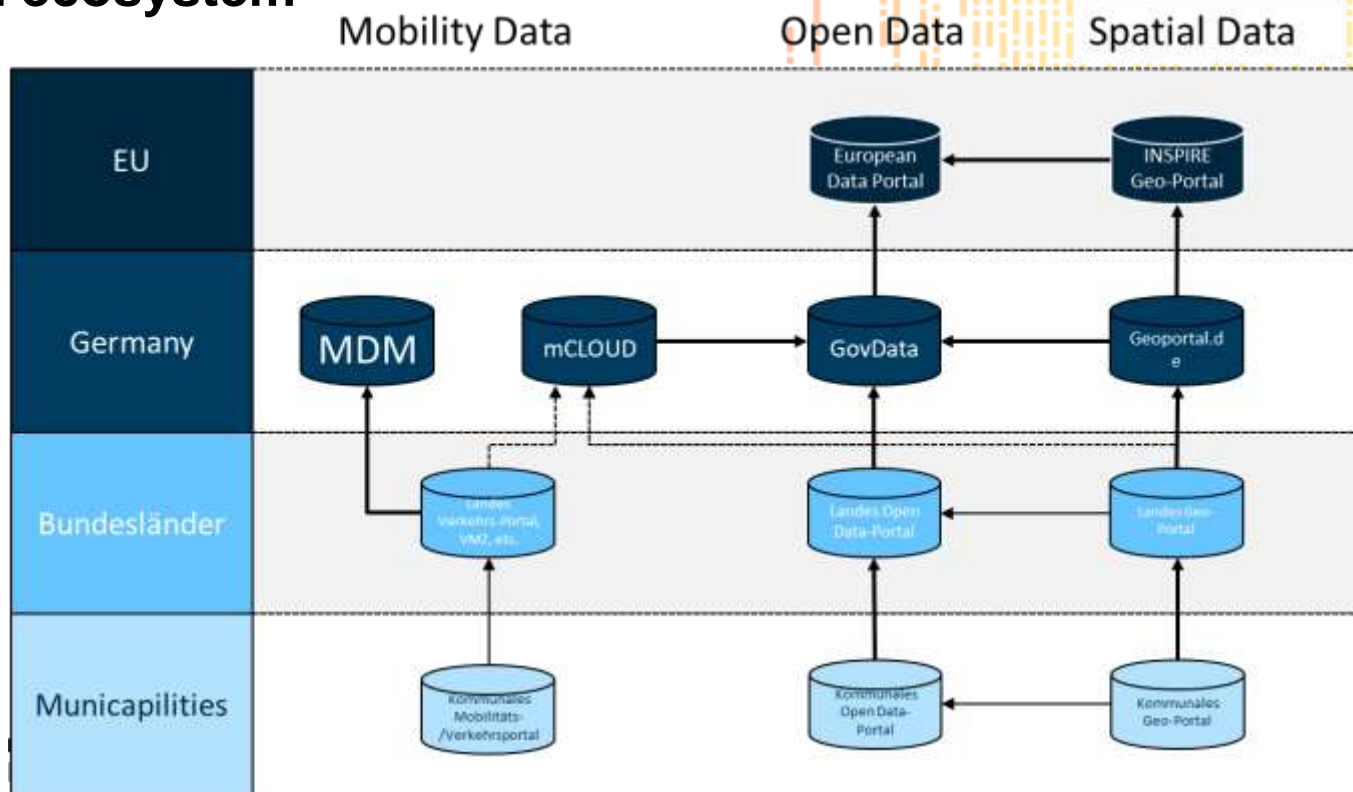


National Access Points
Current German platform
landscape

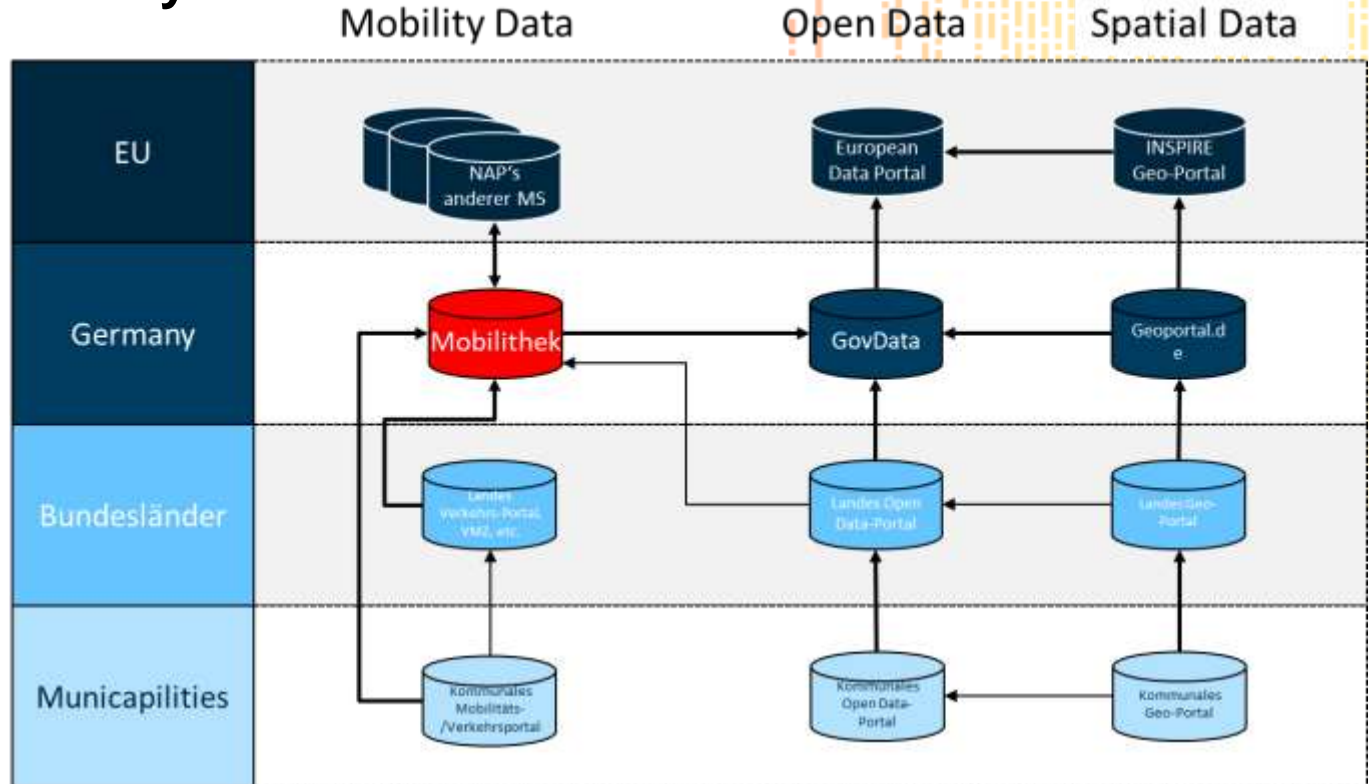
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Current platform ecosystem



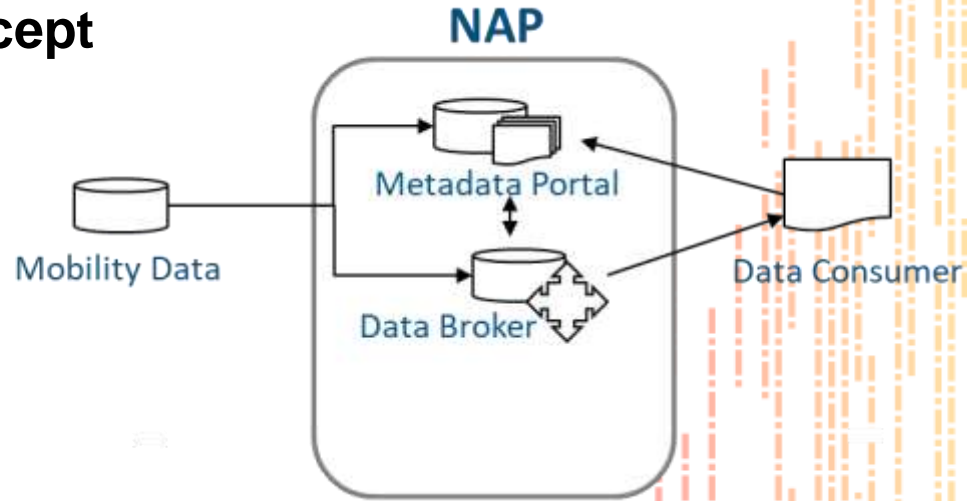
Planned platform ecosystem



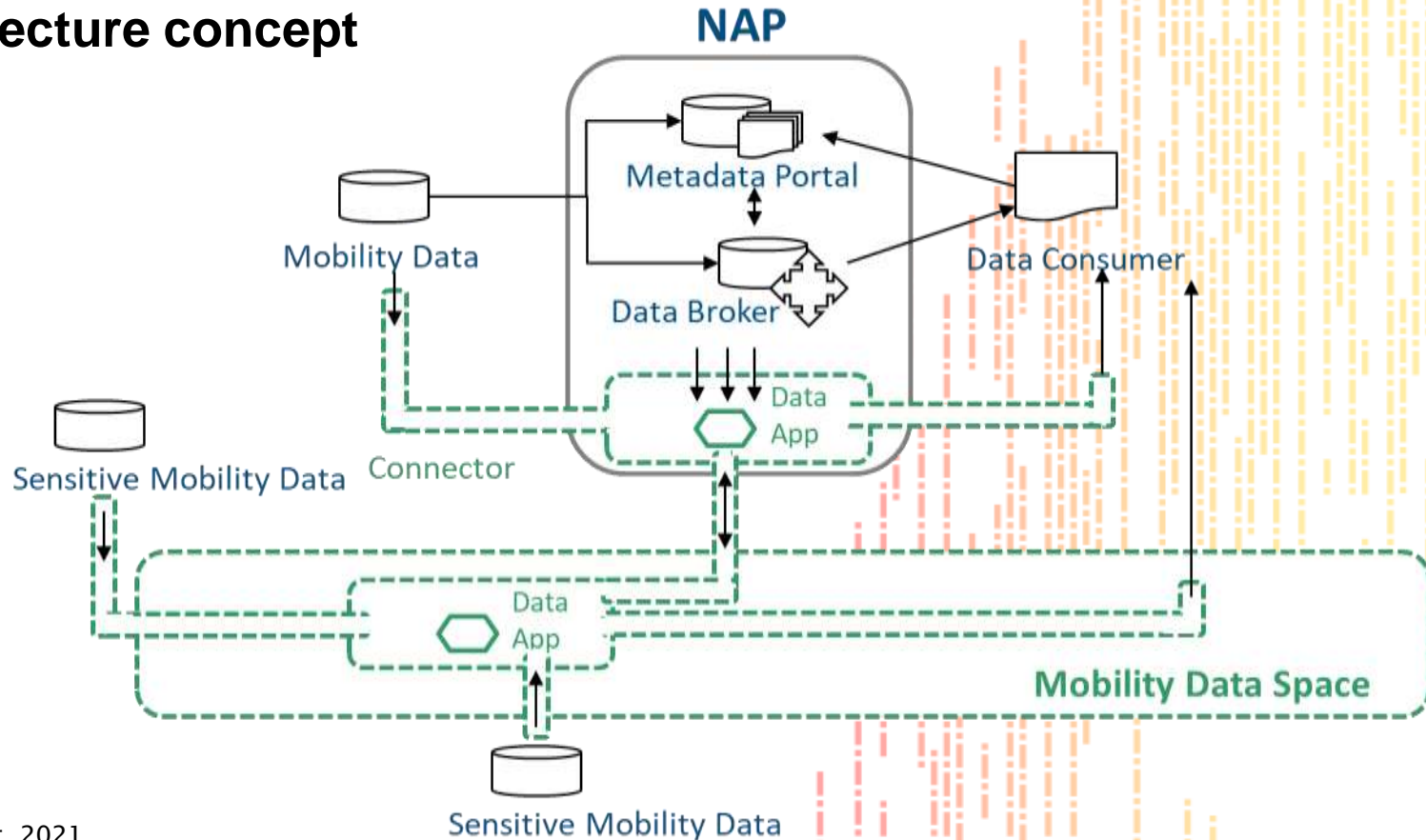
Why a new platform?

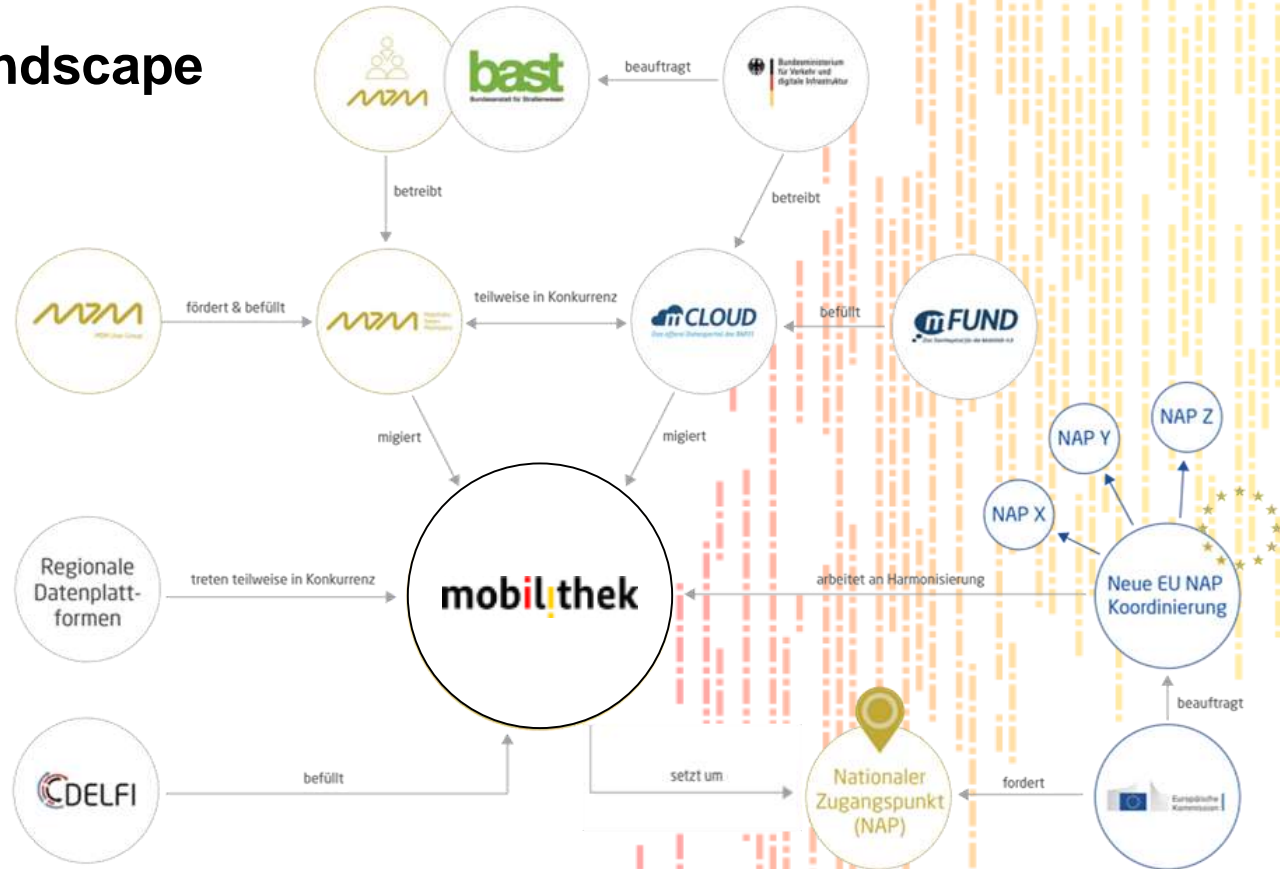
- New development necessary due to requirements for **scalability**, processing of **real-time data** and connection to **secure data environments**.
- Not recommended to build upon MDM or mCLOUD.
 - MDM: proprietary architecture, limited expansion options.
 - mCLOUD: designed as an information portal, not as a data broker
- Envisioned **functional levels**:
 - Portal function: metadata directory for searching and finding data offers
 - Broker function: data distribution between data providers and data consumers
 - Data app space: connection of apps for data processing in secure connectors

Architecture concept



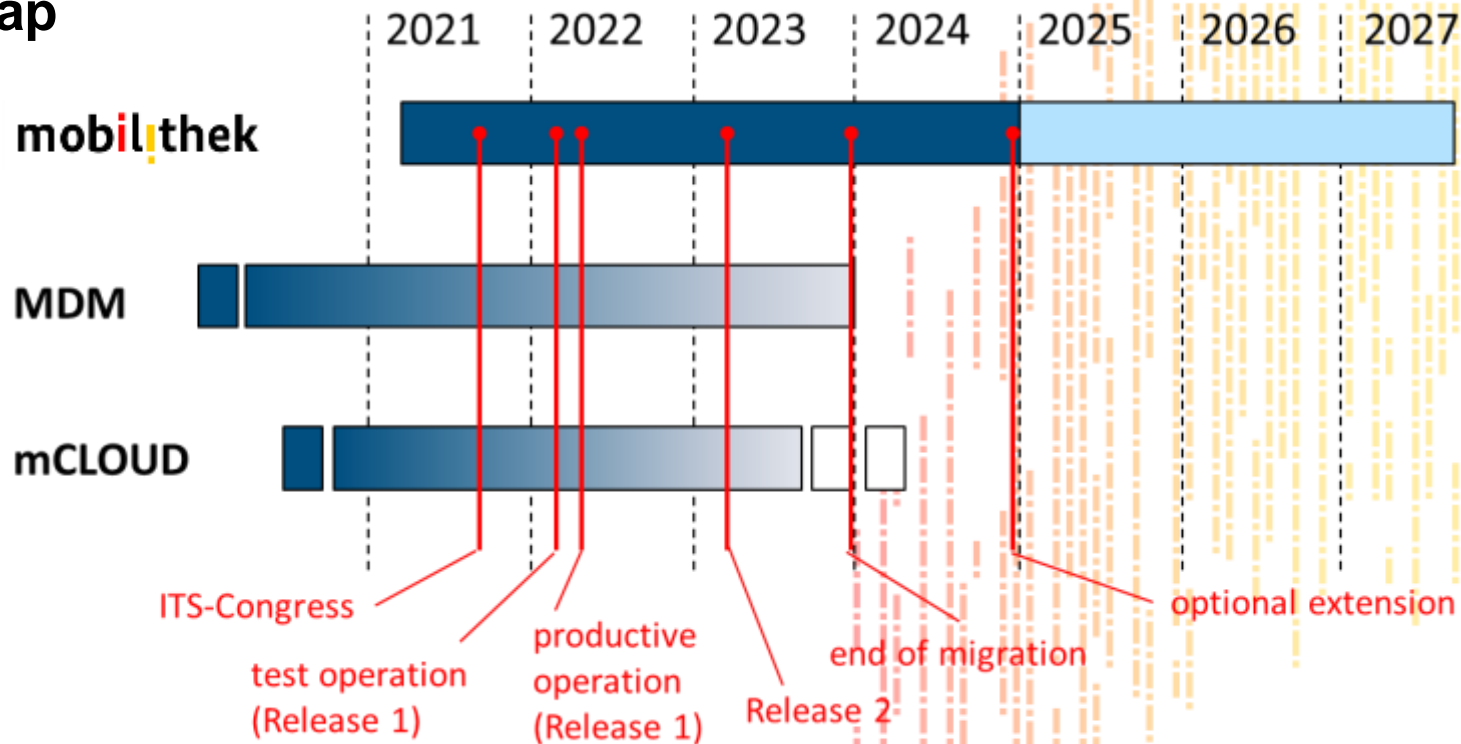
Architecture concept



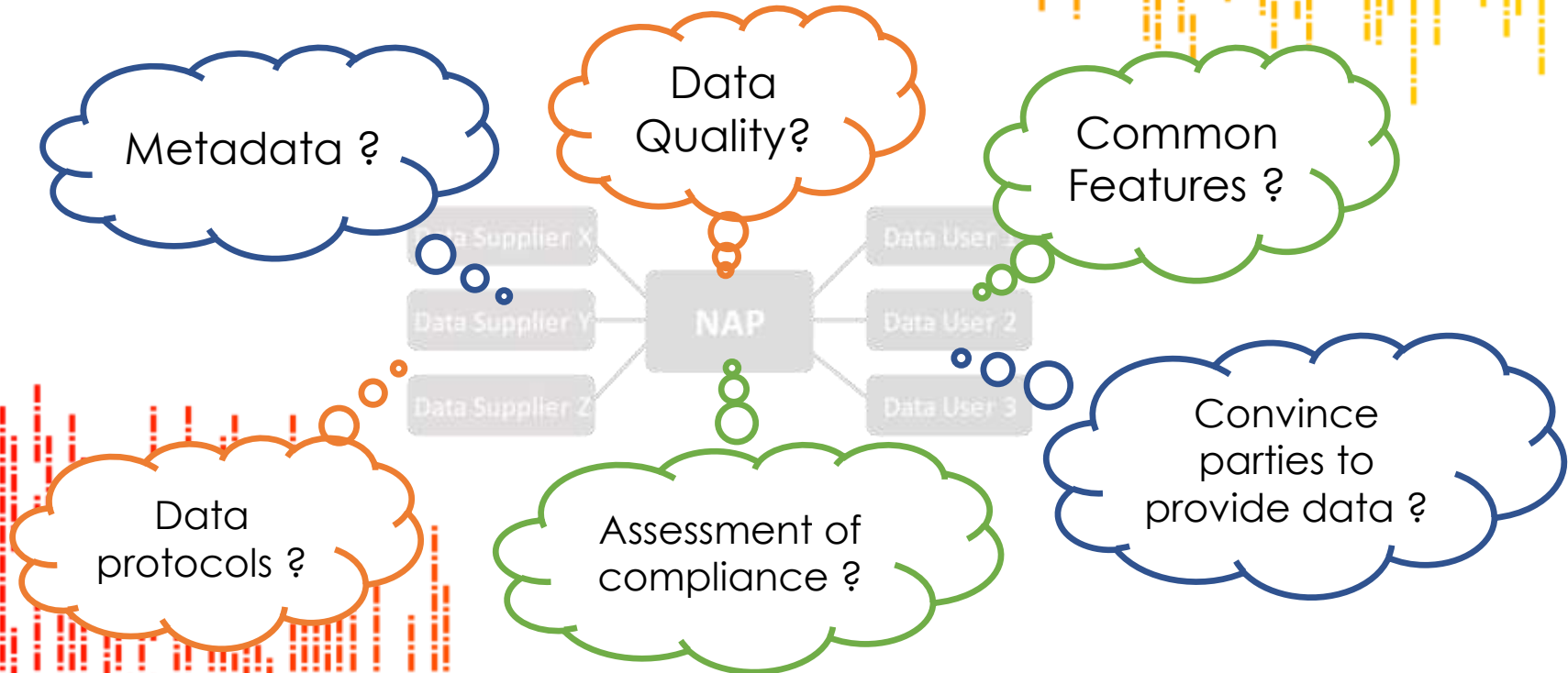


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Road map



Challenges





National Access Points

Current German platform landscape

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The National Access Point Coordination Organisation for Europe

NAPCORE Goals

NAPCORE is a project to coordinate the National Access Points (NAPs) and National Bodies (NBs) established under the ITS Directive. Its goals are to

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

Partners and Implementing Bodies of NAPCORE

1	Germany	Bundesanstalt für Straßenwesen
2	Germany	Die Autobahn GmbH des Bundes
3	Austria	BMK - Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie
3	Austria	AustriaTech - Gesellschaft des Bundes für technologiepolitische Maßnahmen GmbH
3	Austria	Autobahnen- und Schnellstraßen-Finanzierungs-Aktiengesellschaft (ASFINAG)
4	Belgium	Federal Public Service Mobility and Transport
4	Belgium	National Geographical Institute
5	Belgium	Flemish government
6	Bulgaria	Road Infrastructure Agency
7	Croatia	Ministry of the Sea, Transport and Infrastructure
7	Croatia	Croatian Roads Ltd
8	Cyprus	Ministry of Transport, Communications and Works
8	Cyprus	University of Cyprus - The KIOS Research and Innovation Centre of Excellence
9	Czech Republic	Ministry of Transport
9	Czech Republic	Roads and Motorway Directorate
10	Denmark	Danish Road Directorate
11	Estonia	Estonian Transport Administration
12	Finland	Traffic Management Company Fintraffic Ltd
12	Finland	Finnish Transport and Communications Agency Traficom
12	Finland	Finnish Transport Infrastructure Agency
13	France	Ministère des Transports

Partners and Implementing Bodies of NAPCORE

13	France	Cerema
13	France	IGN
13	France	Association des Sociétés Françaises d'Autoroutes
14	Greece	Ministry of Infrastructure and Transport - Independent Agency of Road Tolls
14	Greece	Centre for Research and Technology Hellas - Hellenic Institute of Transport
14	Greece	National Technical University of Athens
15	Greece	Egnatia Odos S.A.
16	Hungary	Ministry for Innovation and Technology
16	Hungary	Hungarian Public Roads
17	Ireland	Department of Transport
17	Ireland	Transport Infrastructure Ireland
17	Ireland	National Transport Authority
18	Italy	Ministero delle infrastrutture e della mobilità sostenibili
18	Italy	SINA S.p.A.
18	Italy	Aiscat Servizi S.r.l.
18	Italy	Autostrada del Brennero S.p.A.
18	Italy	Autostrade per l'Italia S.p.A.
18	Italy	Autostrade TECH S.p.A.
18	Italy	Cefriel S.c.a.r.l.
18	Italy	QMap S.r.l.
18	Italy	Sinelec S.p.A.

Partners and Implementing Bodies of NAPCORE

18	Italy	S.p.A. Autovie Venete
18	Italy	ST S.r.l.
19	Latvia	Latvian State Roads
20	Lithuania	State Enterprise Lithuanian Road Administration
21	Luxemburg	Ministry of Mobility and Public Works
22	Netherlands	Ministerie van Infrastructuur en Waterstaat / Rijkswaterstaat (RWS)
22	Netherlands	DOVA
22	Netherlands	Dienst Wegverkeer
22	Netherlands	CROW
23	Malta	Authority for Transport
24	Poland	General Directorate for National Roads and Motorways
25	Portugal	Ministry of Infrastructures and Housing
25	Portugal	IMT - Institute for Mobility and Transport
25	Portugal	Armis
25	Portugal	TIS
26	Romania	Ministry of Transport and Infrastructure (MTI)
26	Romania	National Company of Road Infrastructure Administration (NCRIA)
26	Romania	Romanian Road Authority (RRA)
26	Romania	ITS Romania
26	Romania	Electronic solutions (ELSOL)
27	Slovenia	Ministry of Infrastructure (MIS)

Partners and Implementing Bodies of NAPCORE

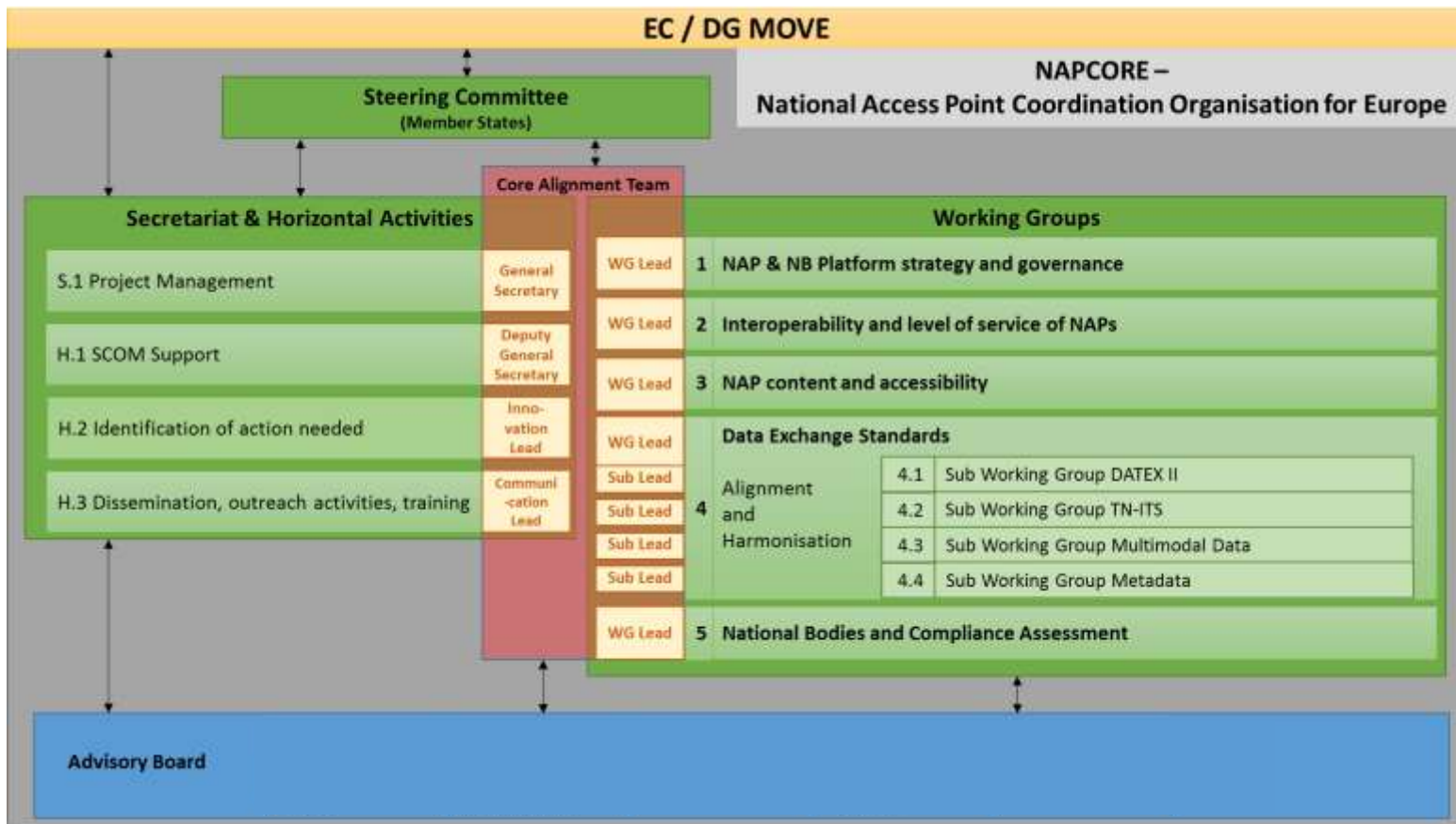
28	Spain	Dirección General de Tráfico (DGT)
29	Sweden	Swedish Transport Administration
29	Sweden	Swedish Transport Agency
30	UK	National Highways Limited
31	-	ERTICO
32	-	Information Technology for Public Transport (ITxPT)
33	-	Union Internationale des Transports Publics
34	Norway	Norwegian Public Roads Administration <i>[Associated Partner]</i>
35	Switzerland	FEDRO Switzerland <i>[Associated Partner]</i>
36	Slovak Republic	Ministry of Transport and Construction of the Slovak Republic <i>[Associated Partner]</i>

➤ 33 Partners, 37 Implementing Bodies, 3 Associated Partners

Covering:

- Member States / National Road Authorities
- Road Operators
- International Organisations

Governance and Working Structure



Conclusion

- NAPCORE improves interoperability of mobility related data in Europe
 - with mobility data standard harmonisation and alignment
- NAPCORE increases access and expands availability to mobility related data
 - by improved interoperability and better harmonisation of NAPs
- NAPCORE empowers National Access Points & National Bodies
 - by defining and implementing common procedures and strategy

Get involved!

- Via “your” national NAPCORE partner(s)
- Join our [NAPCORE LinkedIn Group!](#)
- Visit our Website [napcore.eu!](http://napcore.eu)
- Reach out to us at [NAPCORE@bast.de!](mailto:NAPCORE@bast.de)
- Become active as expert in expert groups / in the Advisory Board



More Information

For info or further questions on this webinar please contact the JASPERS Networking Platform team:

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www.jaspersnetwork.org

JASPERS Website:
jaspers.eib.org

