Introduction to mobilityDCAT-AP
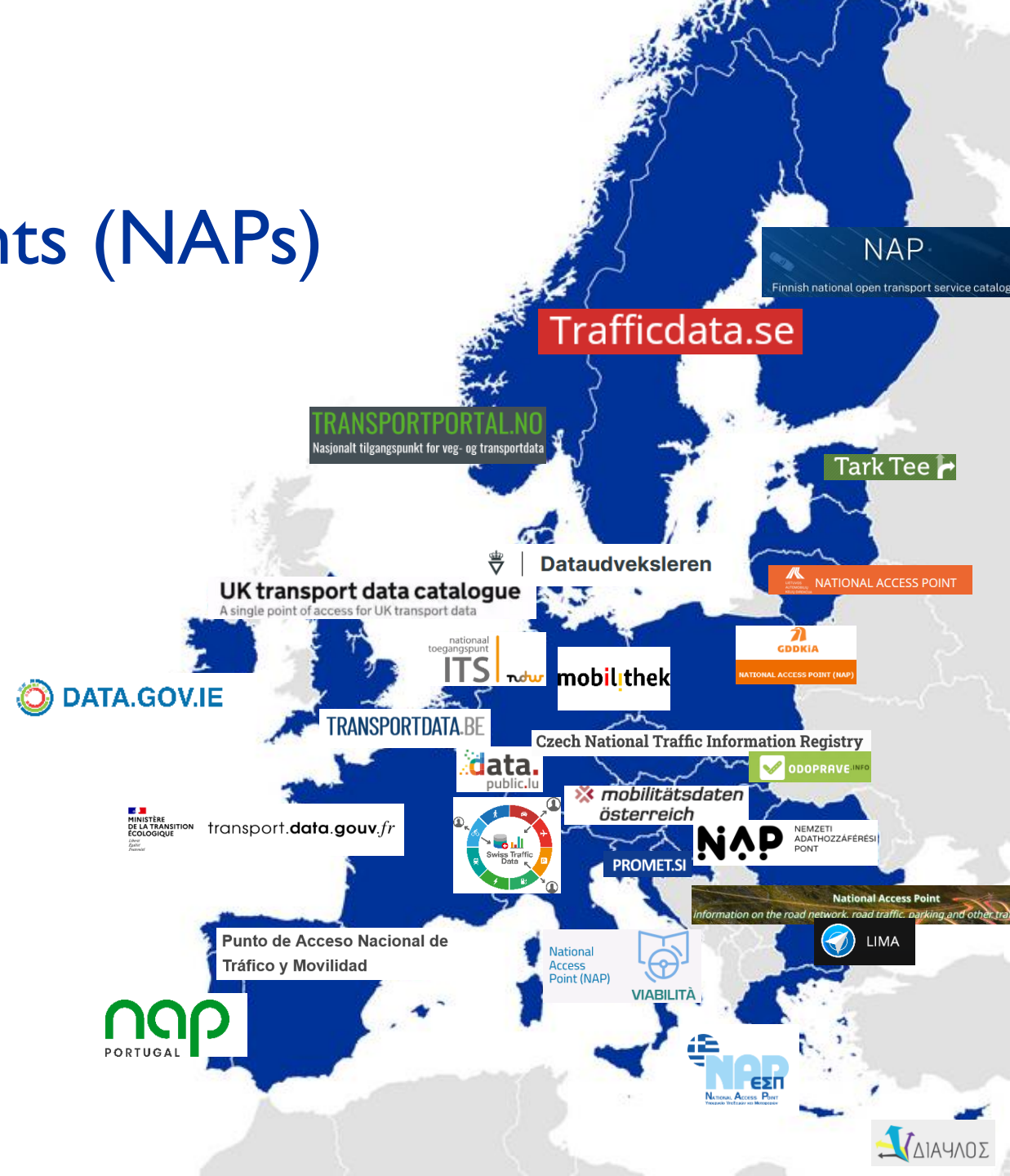
NAPCORE Mobility Data Days

November 8th, 2023

Co-funded by
the European Union

Agenda

1. Introduction *(Peter Lubrich, BASt)*
2. The baseline: Conceptual Model *(Benjamin Witsch, Austriatech)*
3. mobilityDCAT-AP: implementation & publication *(Mario Scrocca, Cefriel)*
4. mobilityDCAT-AP: contents, user support, deployment *(Peter Lubrich, BASt)*
5. Other SEMIC projects on metadata specifications *(Lina Teresa Molinas, Fraunhofer FIT)*

Context

- ● National Access Points (NAPs)

Context

- Metadata for search function in NAPs

Context

- Metadata for search function in NAPs

Context

- Metadata = Basis for data-search functionality in each NAP!

- Consistent and harmonised Metadata across all EU NAPs

→ make data search easier

→ make NAPs interoperable!

This is why we harmonise Metadata!

Context

- ## EC Del. 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)

(13) In order to allow the successful and cost-efficient use of national access points, it is necessary to properly describe the content and structure of the relevant travel and traffic data by using the appropriate metadata (¹).

_____
(¹) EU EIP SPA Coordinated Metadata Catalogue.

(6) 'access point' means a digital interface where at least the static travel and historic traffic data together with the corresponding metadata are made accessible for reuse to users, or where the sources and metadata of these data are made accessible for reuse to users;

How to describe mobility data?
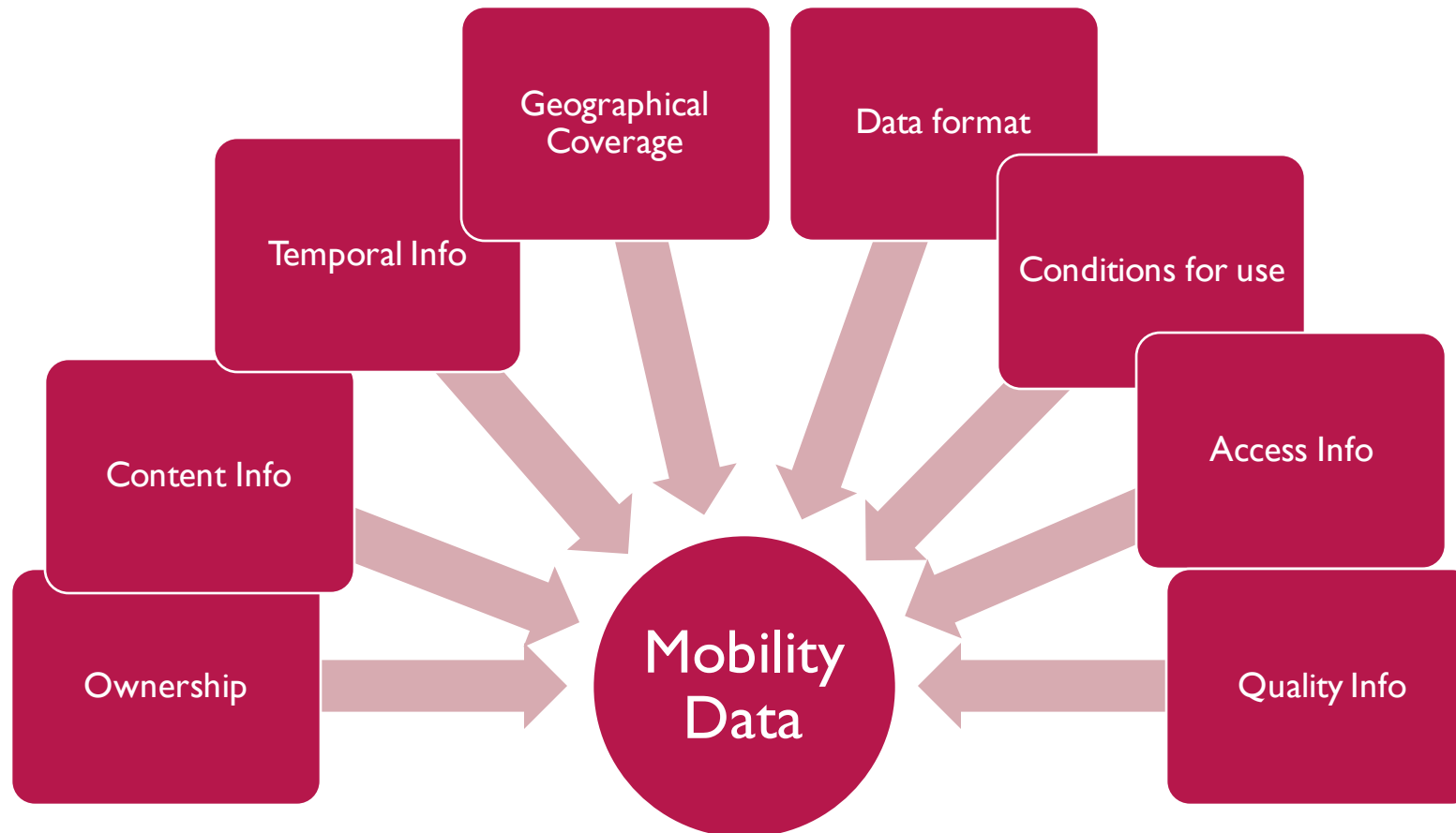
How to describe mobility data?
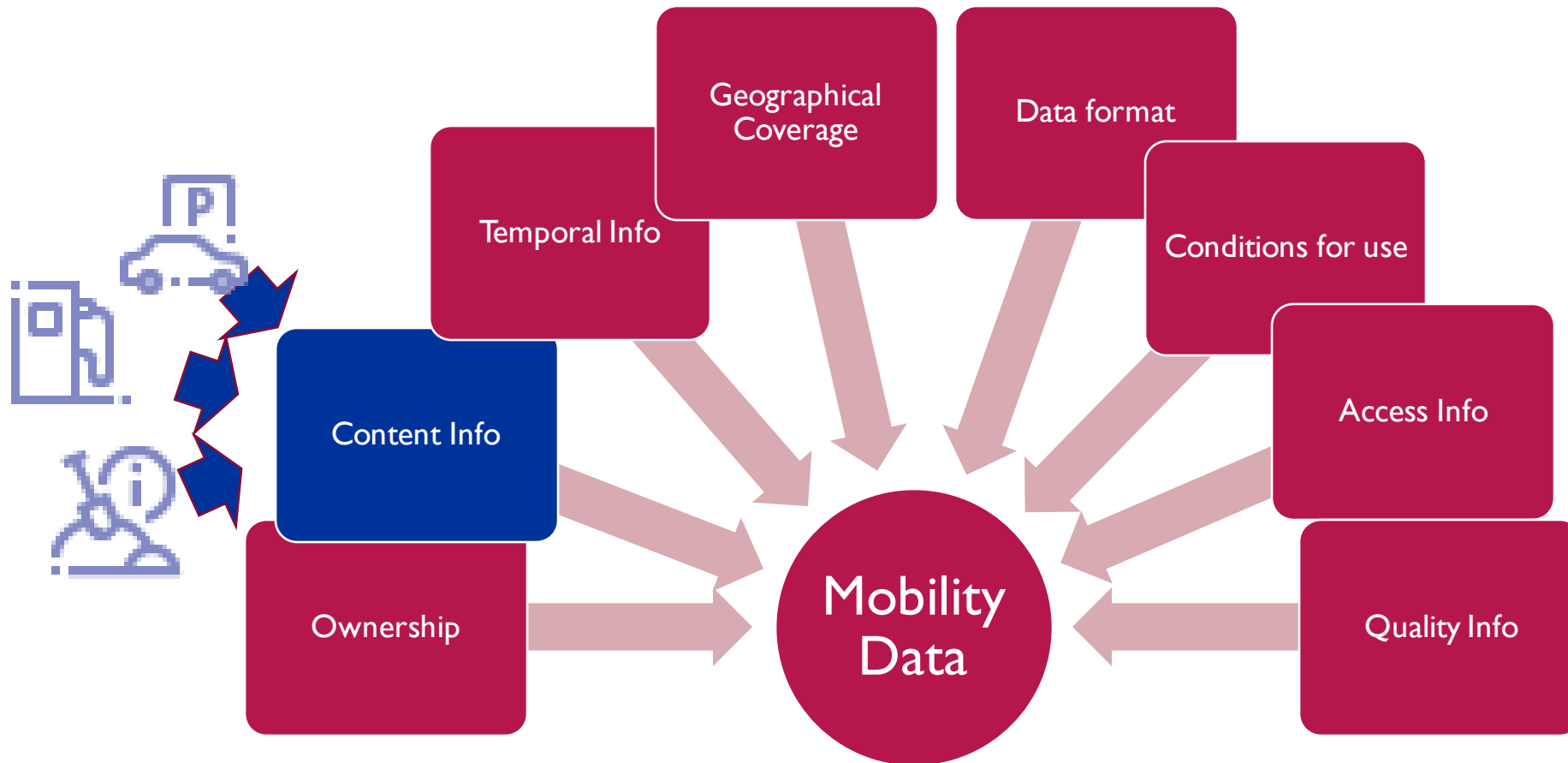
How to describe mobility data?
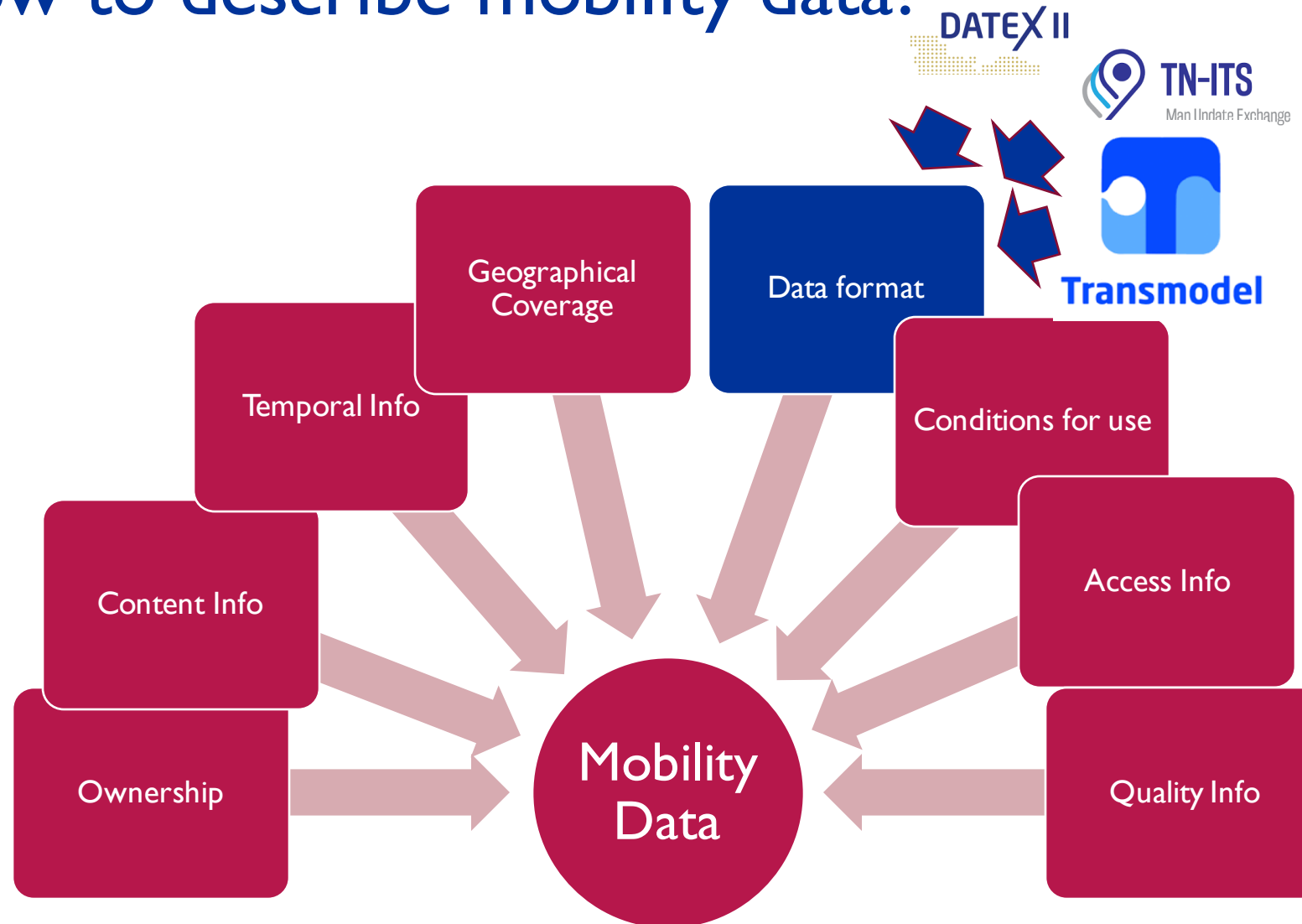
DCAT-AP framework

- Mapping of basic NAP elements
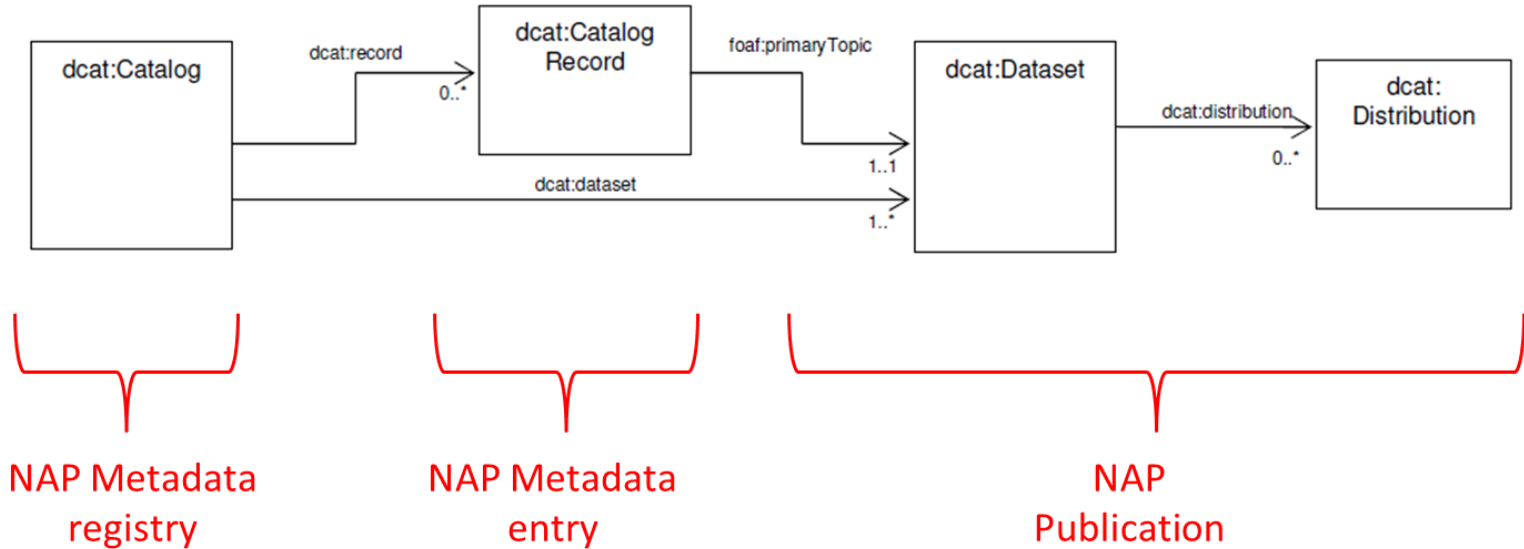
DCAT-AP framework
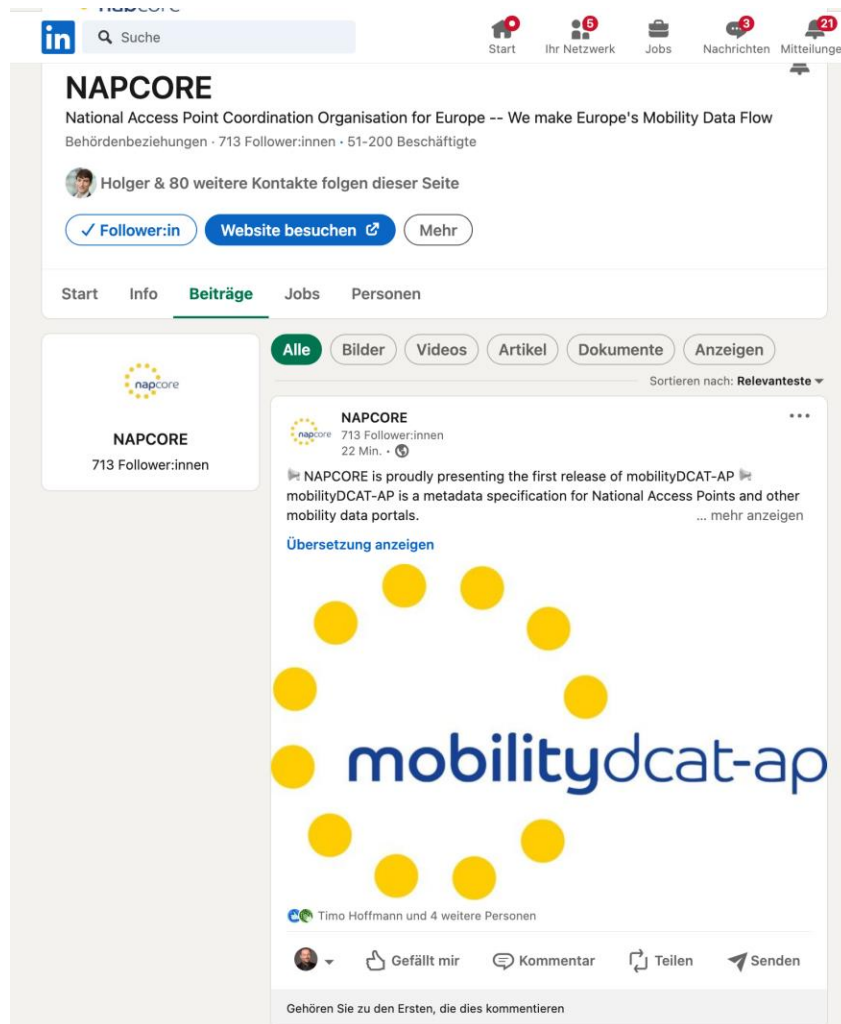
- Idea: a DCAT-AP extension for mobility data

```
                    ┌──────────────┐
                    │              │
                    │   DCAT-AP    │
                    │              │
                    └──────────────┘
         ┌───────────┬──────┴──────┬───────────┐
  ┌────────────┐ ┌────────────┐ ┌────────┐ ┌────────────┐
  │ Extension  │ │ Extension  │ │        │ │ Extension  │
  │  "DCAT-    │ │ „GeoDCAT-  │ │   …    │ │    for     │
  │   AP.de"   │ │   AP"      │ │        │ │ mobility?  │
  └────────────┘ └────────────┘ └────────┘ └────────────┘
```
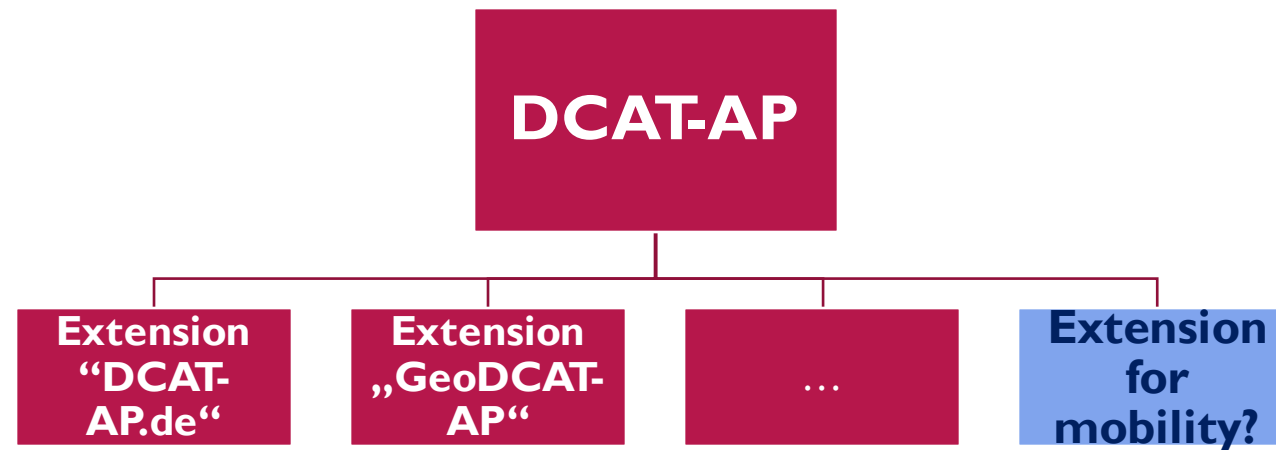
A new Metadata specification

A new Metadata specification

https://www.linkedin.com/posts/napcore_napcore-is-proudly-presenting-the-first-activity-7127220996587053058-rN31

A new Metadata specification

mobilityDCAT-AP - Version 1.0.0

A mobility extension for the DCAT application profile for data portals in Europe

NAPCORE Recommendation 16 October 2023

This version:
https://w3id.org/mobilitydcat-ap/releases/1.0.0/

Latest published version:
https://w3id.org/mobilitydcat-ap/releases/

Latest editor's draft:
https://w3id.org/mobilitydcat-ap/drafts/latest/

Previous version:
https://w3id.org/mobilitydcat-ap/drafts/1.0.0-draft-0.1/

Latest Recommendation:
https://w3id.org/mobilitydcat-ap/releases/1.0.0/

Editors:
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Mario Scrocca [iD] (Cefriel)

Author:
NAPCORE Sub-Working Group (SWG) 4.4 (NAPCORE (National Access Point Coordination Organisation for Europe) Organization)

Behind the scenes

- The baseline: Conceptual Model
    Benjamin Witsch, Austriatech

- Hosting solution
    Mario Scrocca, Cefriel

Work done so far

- Preparatory actions : Requirement Analysis, RoadMap, Conceptual Model, Mapping to DCAT-AP elements
  - https://napcore.eu/providing-a-baseline-for-a-new-metadata-scheme-for-european-naps/
- Draft and review of mobilityDCAT-AP
- Intensified exchange with DCAT-AP/SEMIC group

The final product

- October 16th 2023: official release of mobilityDCAT-AP v1.0 specification
  - A set of documentation and technical artefacts
  - https://w3id.org/mobilitydcat-ap/releases/

mobilityDCAT-AP: Key facts

- 2 additional classes
- 48 additional properties (some of them analogue to geoDCAT-AP)
- Several obligation levels changed
- Several usage notes refined
- Some controlled vocabularies added

mobilityDCAT-AP: UML model
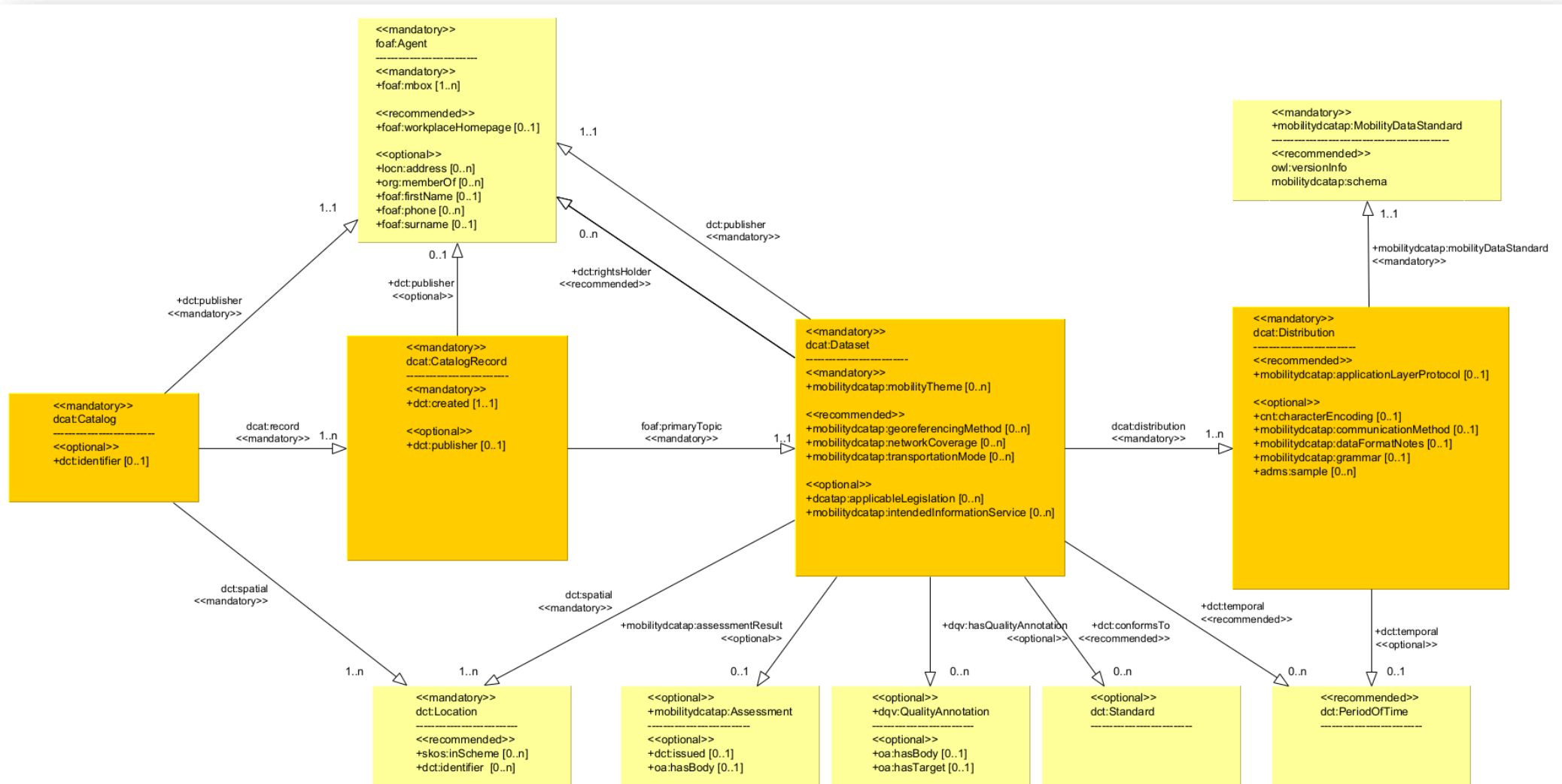
Conversion of existing metadata

- Example from SE NAP

```
<dcat:keyword>Act  B</dcat:keyword>
<dcat:keyword>Datex</dcat:keyword>
<dcat:keyword>Speed  limits</dcat:keyword>
```

```
<ext:networkcoverage
rdf:resource="http://trafficdata.se/definitions/networkcoverage/mo
torways""/>
```

Traffic signs expressing traffic regulations and identifying dangers, Speed limits

Data and Resources

Datex
Datex is the Swedish Transport Administration resource for Traffic signs...

Explore

Act B   Datex   Speed limits

Additional Info

Field	Value
Description	Traffic signs expressing traffic regulations and identifying dangers from the Swedish Transport Administration. Datex
Metadata date	2019-12-04
Dataset language	English
Update frequency	On occurrence
Publisher email address	datex@trafikverket.se
Publisher website	www.trafikverket.se
Contact Point Organisation	Trafikverket
Contact Point email address	datex@trafikverket
Quality indicator	Best effort
Area covered	Sweden
Network Coverage	• Motorways • Arterial roads
Transportation modes covered	
Conforms to	
Category	Traffic signs expressing traffic regulations and identifying dangers - Act B-Speed limits

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Conversion of existing metadata

- Example from SE NAP

```
<deat:keyword>Act  B</deat:keyword>
<dcatap:applicableLegislation
rdf:resource="http://data.europa.eu/eli/reg_del/2022/670/oj">

<deat:keyword>Datex</deat:keyword>
 <mobilitydcatap:mobilityDataStandard
rdf:resource="https://w3id.org/mobilitydcat-ap/mobility-data-standard/datex-II"/>

<deat:keyword>Speed  limits</deat:keyword>
 <mobilitydcatap:mobilityTheme  rdf:resource="https://w3id.org/mobilitydcat-
ap/mobility-theme/dynamic-speed-limits">
```

```
<ext:networkcoverage
rdf:resource="http://trafficdata.se/definitions/networkcoverage/motorways""/>
 <mobilitydcatap:networkCoverage  rdf:resource="https://w3id.org/mobilitydcat-
ap/network-coverage/motorways"/>
```

Traffic signs expressing traffic regulations and identifying dangers, Speed limits

Data and Resources

Datex
Datex is the Swedish Transport Administration resource for Traffic signs...

[Explore]

(Act B) (Datex) (Speed limits)

Additional Info

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Quality indicator	Best effort
Area covered	Sweden
Network Coverage	• Motorways • Arterial roads
Transportation modes covered	
Conforms to	
Category	Traffic signs expressing traffic regulations and identifying dangers - Act B-Speed limits

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Upcoming tasks

- **mobilityDCAT-AP governance & maintenance concept**
  December 2023

- **Accompanying Guidelines as additional user support**
  January 2024

- **WG 2 Metadata demonstrator as Proof-of-concept for mobilityDCAT-AP** *April 2024*

SubWG 4.4: Facts & Figures

- Participants = 21
- Time plan = mid 2021 until end 2024
- Budget = 450.000 EUR
- Tasks = 4
- Milestones = 4

SubWG 4.4: Participants

AT	BE	BE-FL	BG	HR	CY	CZ	DK	EE	FI	HE	UITP
A	F			F	F	A	F		F		

FR	DE-BASt	DE-AB	GR	GR-EG	HU	IE	IT	LV	LT	ERTICO	ITxPT
F	L		A		F		A				

LU	NL	MT	PL	PT	RO	SK	SI	ES	SE	NPRA	FEDRO
	A	F	F	F	A		F		A	A	F

L = leading ; A = active ; F = following

Thank you!

Peter Lubrich

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