



**EUROPEAN
CONGRESS**
SEVILLE
19-21 May 2025
Clean, resilient and
connected mobility.

Harmonisation and Standardisation of Mobility Data in Europe within the Framework of NAPCORE

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Federal Highway and Transport Research Institute (BASt)

SIS 9 Seamless and smarter mobility: unifying traffic data for NAPs & data spaces

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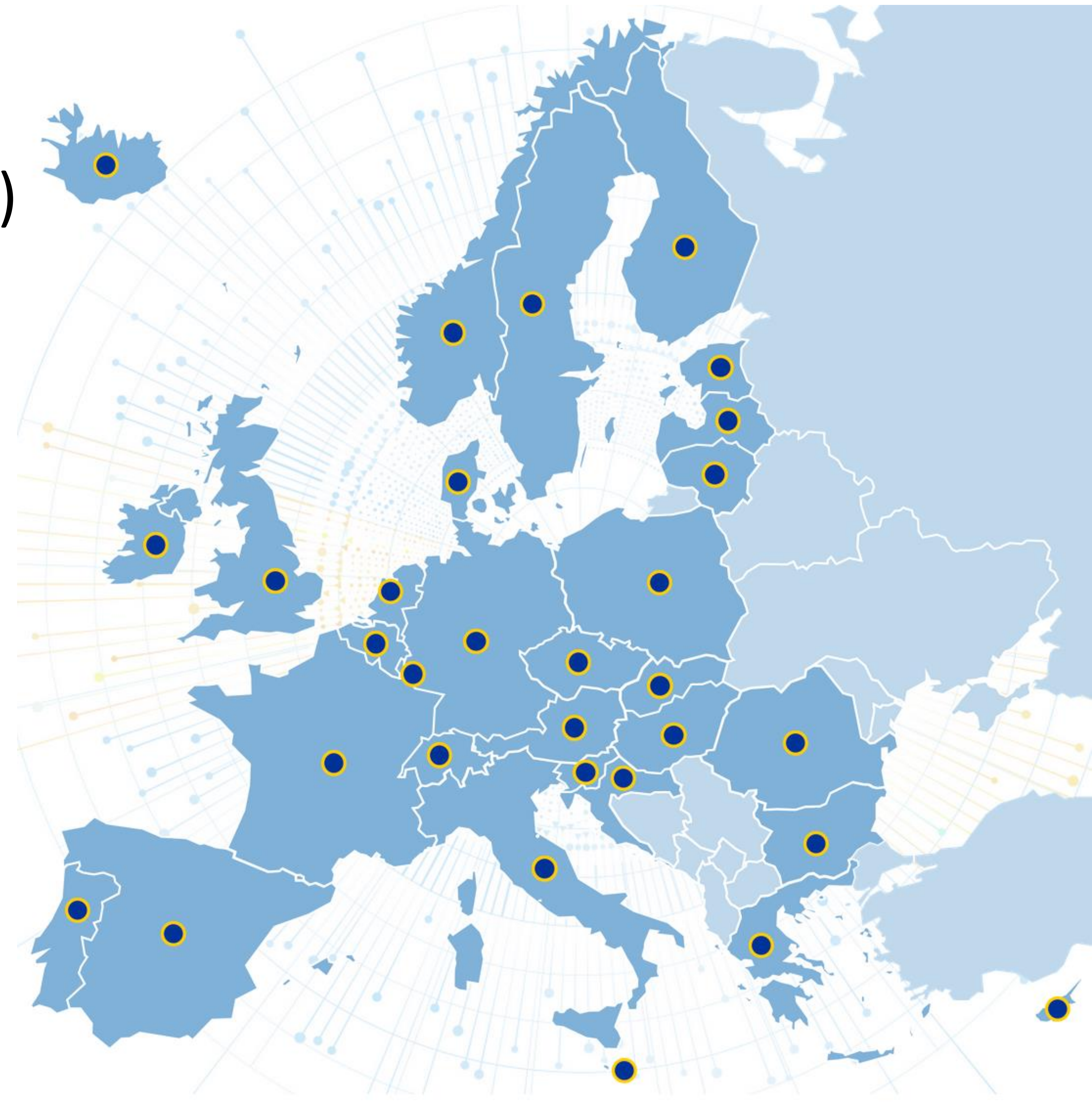
- Overview NAPCORE
- NAPCORE WG 4
- What is METR?
- METR – Example

Pan-European coordination on Mobility Data



NAPCORE is:

- a project/initiative/organisation (co-)funded (€ 21.5m) by the European Commission
- covering most of Europe (all EU MS + 6 countries)
- currently about to start the second phase, NAPCORE's first funding phase is ending in June
- the only pan-European project dealing with mobility **data for traveller information**
- working on **data standardisation** (DATEX II, TN-ITS, NeTEx, SIRI) and interoperability of National Access Points for harmonized mobility data access throughout Europe

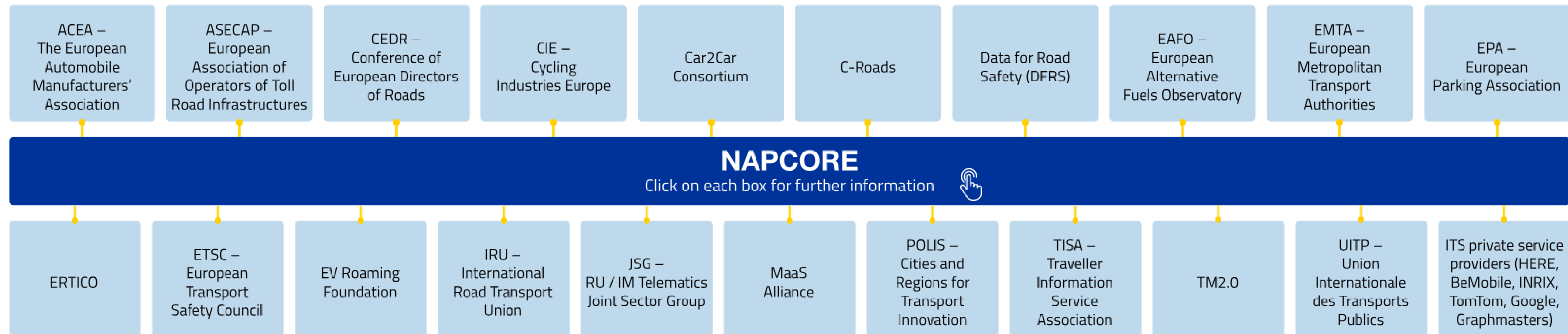


NAPCORE



NAPCORE has achieved in its first phase 2021-2025 (excerpt):

- Bringing Europe together with a governance and working structure
- Strong stakeholder engagement via Advisory Board (see graphic)



and Cooperation Agreements (with EPA, CIE, POLIS, C-Roads, DFRS)

- Created a first metadata catalogue specification for mobility data platforms (not only NAPs) to enable interoperable discoverability of data: mobilityDCAT-AP



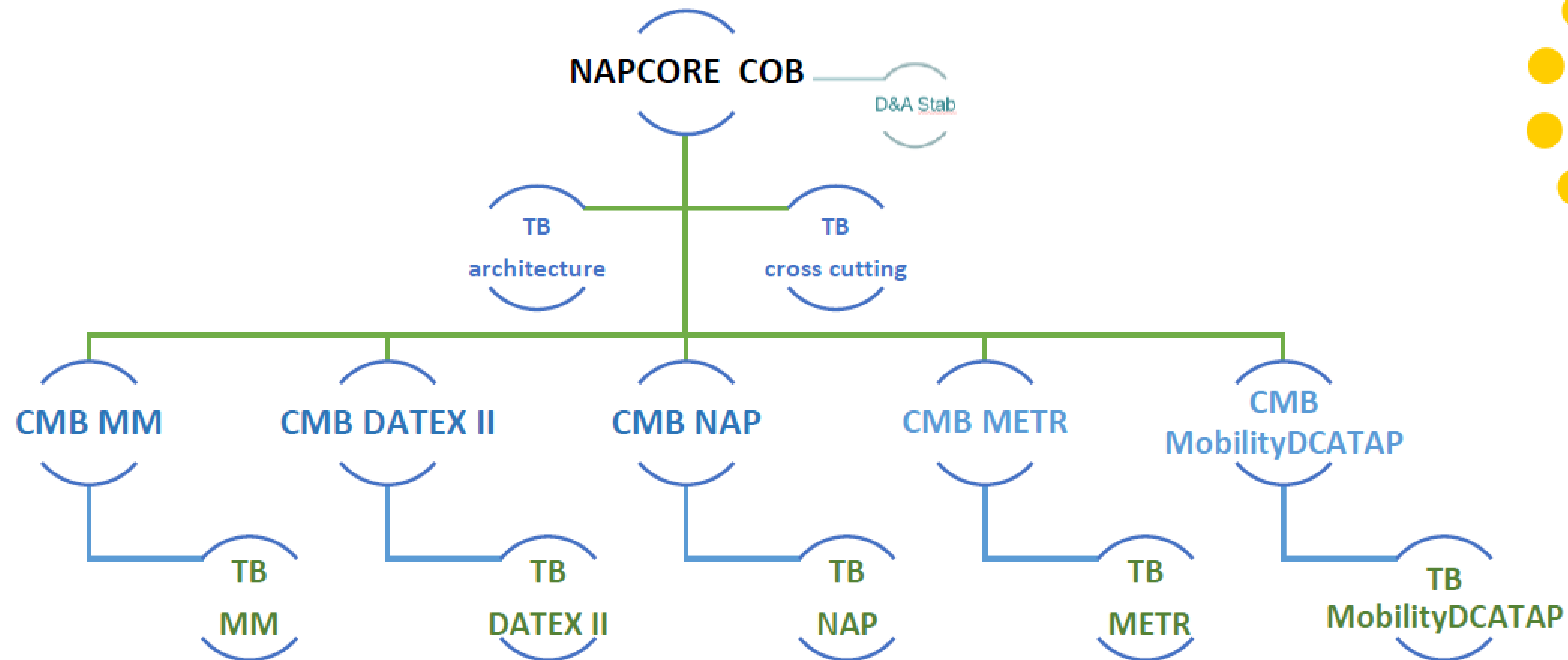
Achievements so far (cont'd)

- Joint Position Papers on the revisions of the ITS Directive and its delegated regulations
- Work on data standards included the merger of TN-ITS and DATEX II, a common harmonization roadmap, new versions of the standards
- First version of an ITS Data Dictionary to create a common understanding

Next steps in 2nd phase starting July 2025 until end of 2027

- Consortium of 77 partners from 33 countries, funded (85%) by DG MOVE
- Main goal: EU Member State coordination on ITS Directive data topics
- More focus on data and data standards for multimodal mobility
- More focus on community & domain management for stakeholder input and engagement to foster data provision and use
- Set up of a sustainable long-term governance for the time after 2027

NAPCORE WG 4 – Data Standards & Architecture



COB: change orchestration board

D&A Stab: data & architecture stakeholder advisory board

CMB: change management board

TB: technical board

MM: data standards for multimodal transport

NAP: national access point

METR: management of electronic traffic regulations

User domains:



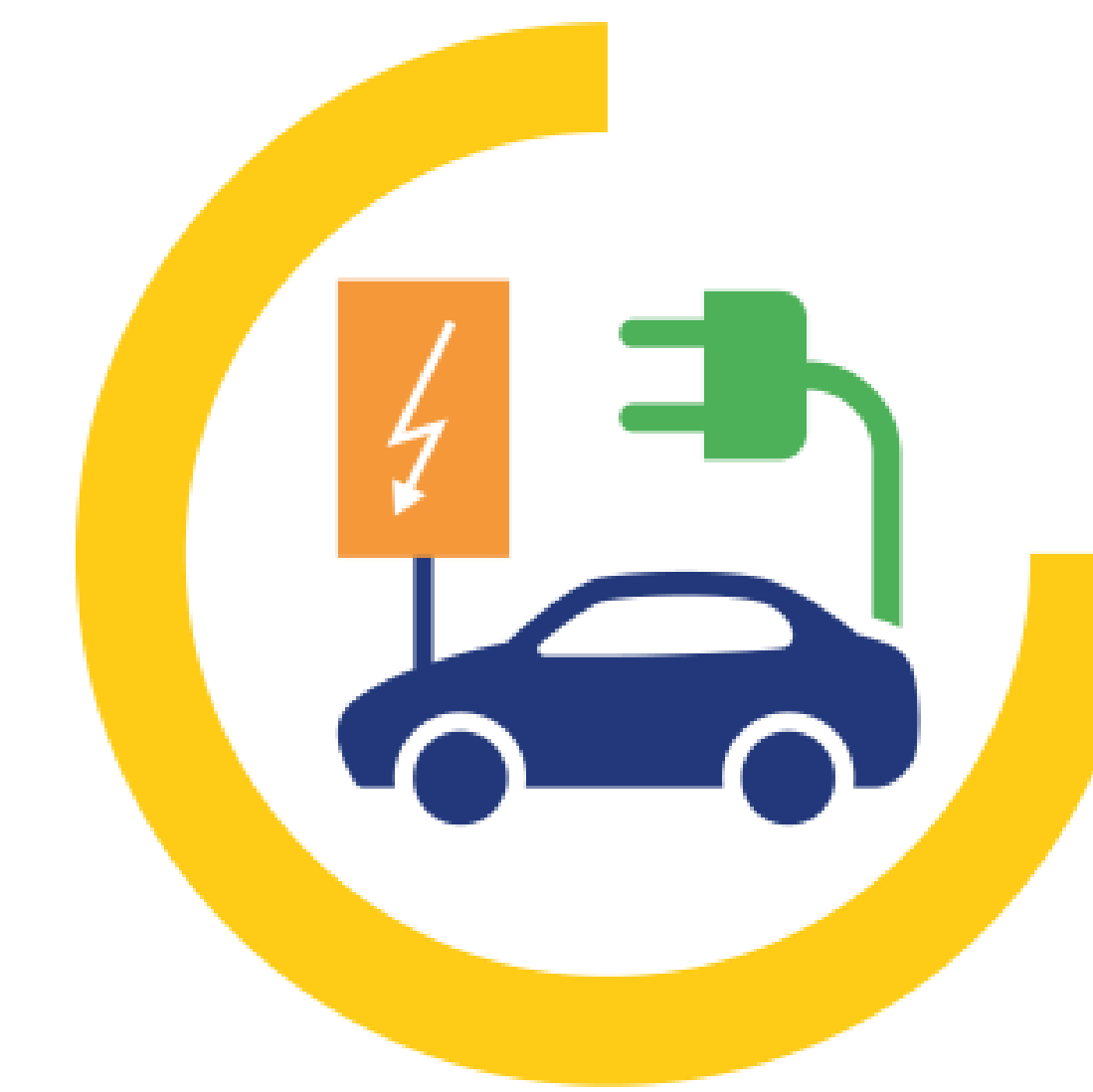
**Safety Related
Traffic Information
(SRTI)**



Parking



**Urban Vehicle
Access Regulations
(UVARs)**



EV Charging



**Traffic
Management /
Navigation**

Management for Electronic Traffic Regulations

What is METR?

Electronic traffic rules and regulations that machines can understand and trust.

ISO 24315 standardisation initiative

Why do we need METR?

- Road authorities are digitising their processes, including rules and regulations.
- EU legislation requires the provision of digital information on traffic regulations (Del. Regulation (EU) 2022/670 “Real-time traffic information”).
- In a pan-European environment, L3/L4 automated vehicles must also function safely across borders. The provision of directly machine-understandable rules would be very helpful here.

Long-term perspective: digital, binding order of traffic rules without the need for physical infrastructure.

METR - next steps

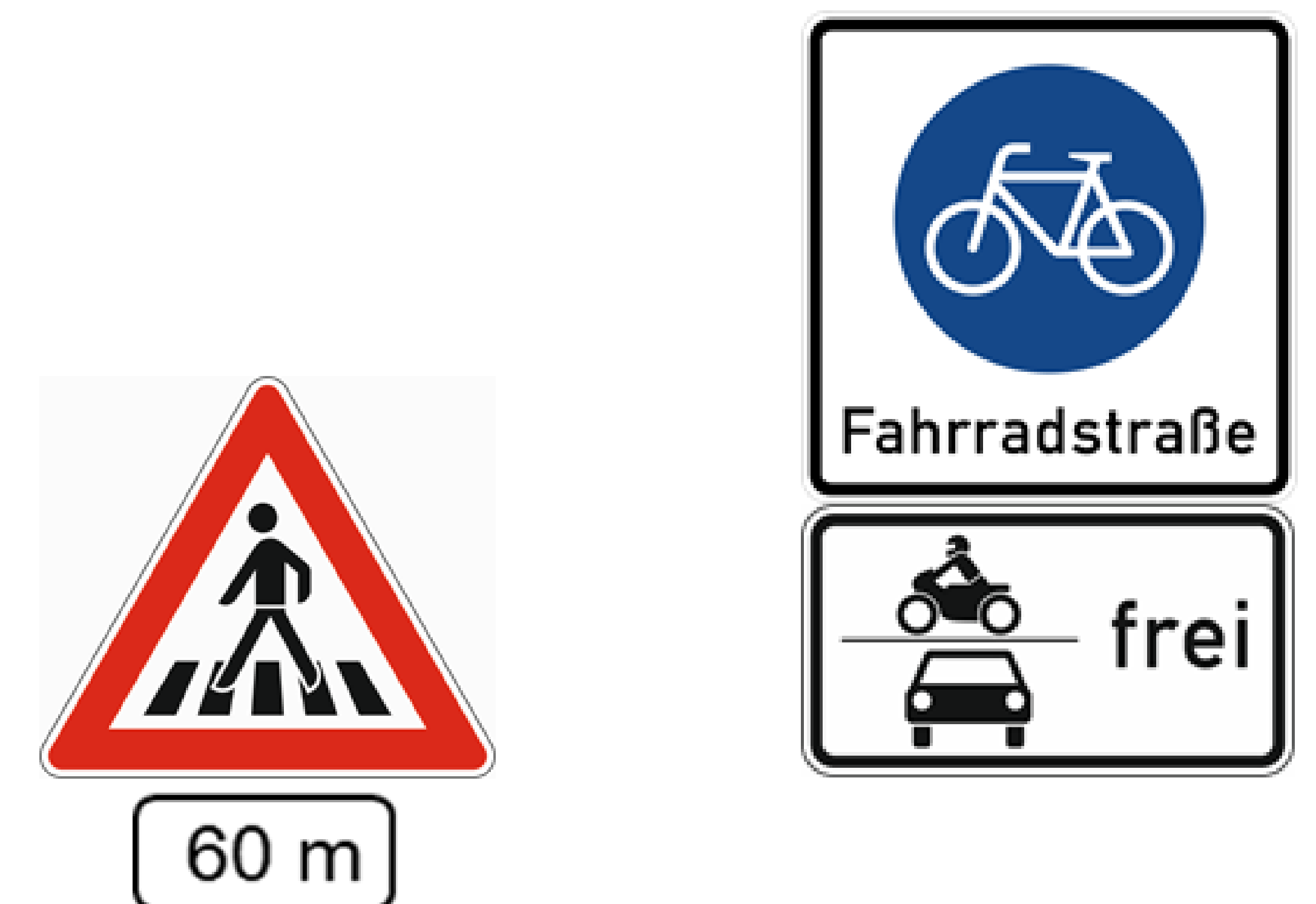
Some of the laws and regulations (behavioural law) are based on common sense, morals and ethics. This is difficult - often impossible - for machines to interpret.

→ **Therefore first step:**
digitalisation of locally imposed regulations

Important in the future for driver assistance systems (Intelligent Speed Assistance!) and automated driving functions.

In the EU project NAPCORE, a dedicated standard for machine-interpretable traffic regulations was developed under German leadership: **CEN/TS 16157-11**

DATEX II



METR – Example digital local regulations

Regulatory signs:

Maximum permitted speed and no overtaking



METR – Example digital local regulations

Regulatory signs:

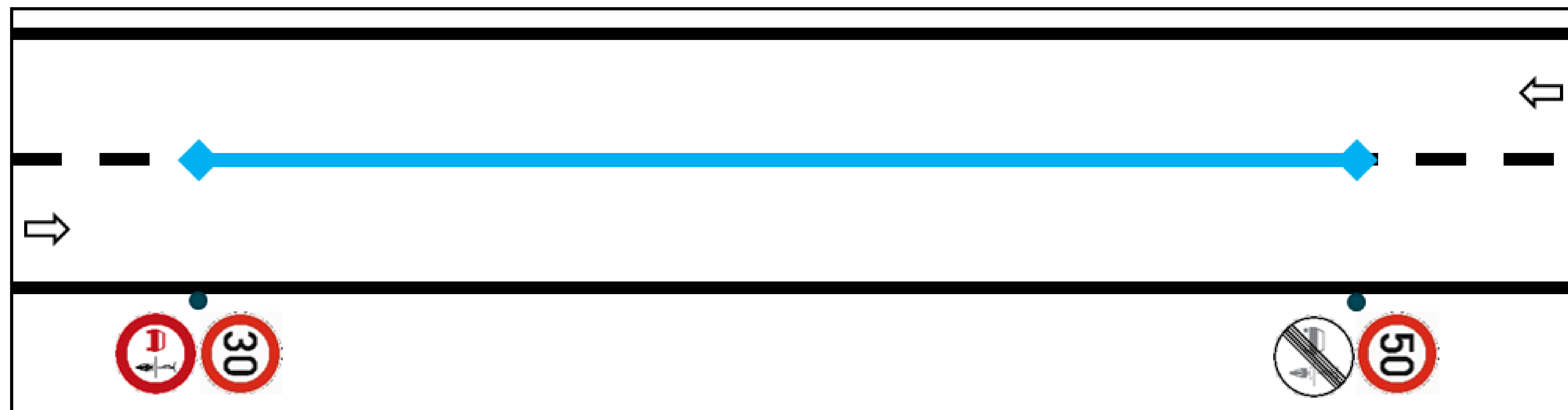
Maximum permitted speed and no overtaking of two-wheelers

Sign 274 (German Road Traffic Act):

Anyone driving a vehicle may not drive faster than the maximum speed indicated. If the sign authorises certain speeds above 50 km/h within urban areas, this applies to vehicles of all types.

Sign 277.1:

Anyone driving a multi-track motor vehicle is not permitted to overtake single and multi-track vehicles.



METR – Example digital local regulations

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Maximum permitted speed and no overtaking of two-wheelers

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Sign 277.1:

Anyone driving a multi-lane motor vehicle is not permitted to overtake single and multi-lane vehicles.

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THANK YOU!



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