
**Inteligentni transportni sistem - Vodenje elektronskih prometnih predpisov (METR)
- 2. del: Operativni koncepti (ConOps) (ISO/TR 24315-2:2025)**

Intelligent transport systems - Management of electronic traffic regulations (METR) - Part 2: Operational concepts (ConOps) (ISO/TR 24315-2:2025)

Intelligente Verkehrssysteme - Management von elektronischen Verkehrsregularien (METR) - Teil 2: Betriebskonzepte (ConOps) (ISO/TR 24315-2:2025)

Systèmes de transport intelligents - Gestion des règles de circulation sous forme électronique - Partie 2: Concepts opérationnels (ISO/TR 24315-2:2025)

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TECHNICAL REPORT

CEN ISO/TR 24315-2

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October 2025

ICS 03.220.20; 35.240.60

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Intelligent transport systems - Management of electronic traffic regulations (METR) - Part 2: Operational concepts (ConOps) (ISO/TR 24315-2:2025)

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Intelligente Verkehrssysteme - Management von elektronischen Verkehrsregularien (METR) - Teil 2: Betriebskonzepte (ConOps) (ISO/TR 24315-2:2025)

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European foreword

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Technical Report

ISO/TR 24315-2

Intelligent transport systems — Management of electronic traffic regulations (METR) —

Part 2: Operational concepts (ConOps)

*Systèmes de transport intelligents — Gestion des règles de
circulation sous forme électronique —*

Partie 2: Concepts opérationnels

**First edition
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Foreword

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Introduction

0.1 System overview

0.1.1 General

The ISO 24315 series is intended to provide users access to geo-specific, trustworthy, timely, authoritative, machine-interpretable, traffic and transport related rules enacted by jurisdictional entities, including those who define rules for campuses (i.e. private grounds). This is conceptually shown in [Figure 1](#).

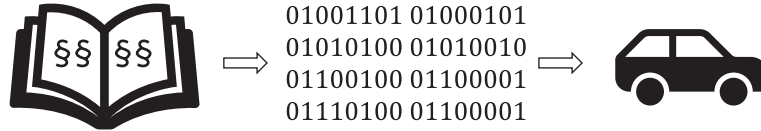


Figure 1 — METR concept

0.1.2 Purpose

Management of electronic traffic regulations (METR) is designed to assist developers and manufacturers of driving automation systems (i.e. automation levels 1-5) and driver information systems (including those at automation level 0) to electronically obtain traffic rules to better enable:

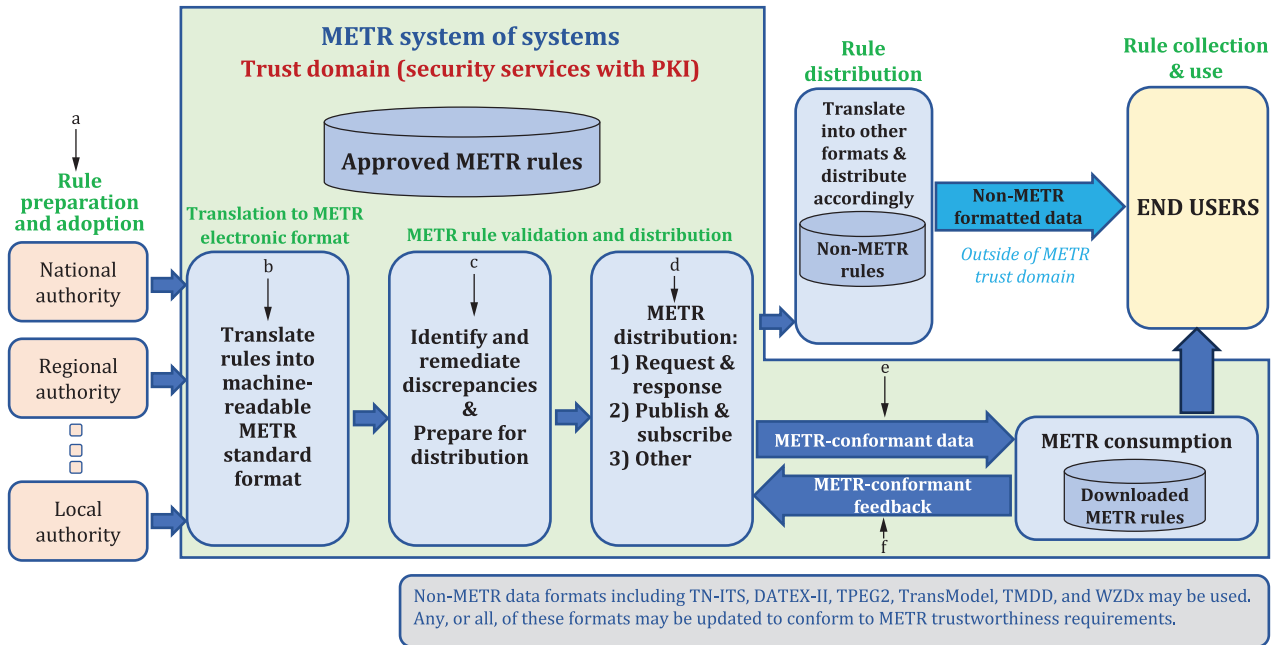
- a) interacting safely with other road users;
- b) following instructions from law enforcement organizations, and those authorized to direct traffic;
- c) maintaining smooth and safe flow of traffic;
- d) complying with other rules enacted to support legislative policies (such as environmental protection, noise, manage height and weight restrictions, and societal aspects such as market days, fiestas, pedestrian zones)^[8].

METR is designed to provide a reference framework for the trustworthy distribution of electronic versions of legal traffic rules, however content and application of the traffic rules is outside of the scope of the METR standards and specifications.

0.1.3 Flow of information

The general flow of METR information is illustrated in [Figure 2](#) and subsequently described.

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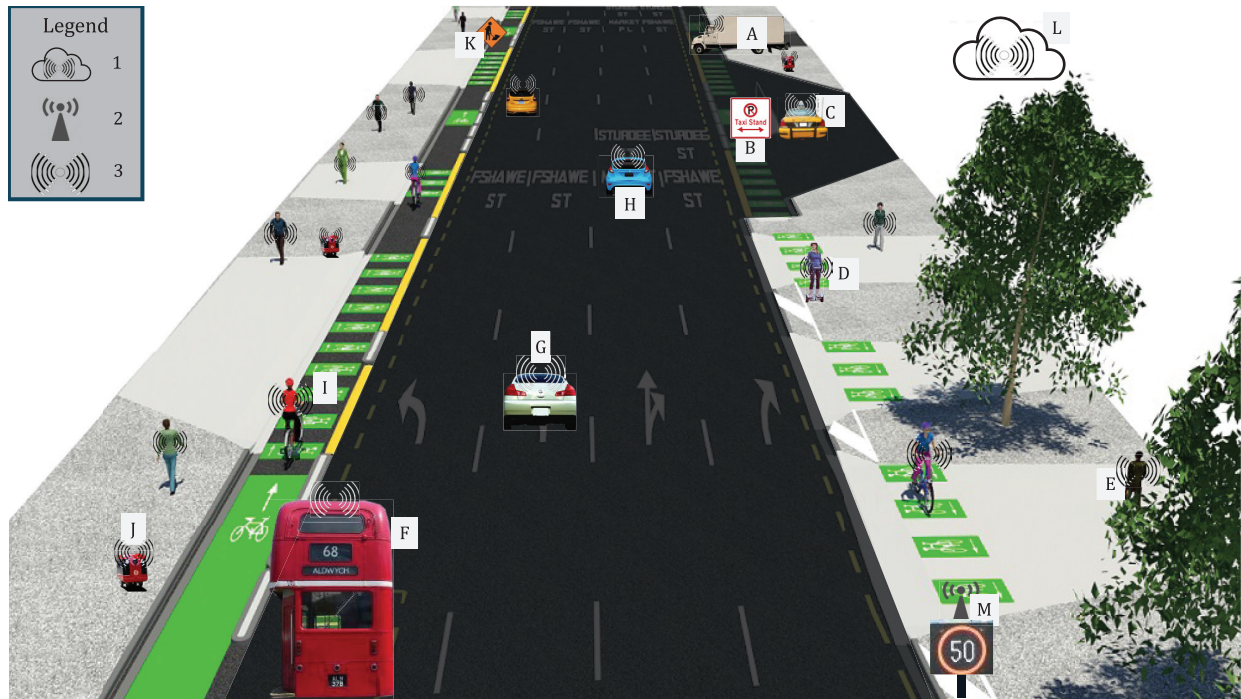
**Key**

- a METR starts with rule makers defining and enacting rules that are relevant to transport users.
- b Each legal rule is translated into a METR rule, which is a secure, standardized electronic representation that includes a digital signature of the rule signing organization.
- c METR rules are collected for a geographic area(s) and specific scope(s).
- d Rules are distributed to METR users based on their needs.
- e METR users become aware of the METR rules, verify their authenticity, and respond appropriately.
- f As needed, METR users can submit discrepancy reports to a discrepancy handler for investigation and correction.

Figure 2 — METR flow of information**0.1.4 Graphical overview**

[Figure 3](#) provides an overview of the data and devices included within the scope of the METR environment.

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**Key**

- A freight rules
- B kerbside usage rules
- C ride sharing rules
- D micromobility rules
- E VRU rules
- F public transport rules
- G rules for automated driving systems
- H driving rules
- I lane use rules
- J public-area mobile robot rules
- K road work rules
- L pre-announced rules with subset of emergent rules and/or supporting data
- M emergent rules and/or supporting data
- 1 various communications and network infrastructure
- 2 roadside communication unit
- 3 METR user system

Figure 3 — METR streetscape**0.1.5 Rule distribution**

Electronic traffic rules and their distribution have three orthogonal characteristics that are often confused with one another.

- a) Electronic rules can be pre-announced (i.e. known and publicized well in advance of the user's need) or emergent (i.e. publicized and needed while previously obtained pre-announced rules are still considered fresh).
- b) Electronic rules can be distributed through a wide-area distribution mechanism or a local distribution mechanism.

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- c) Electronic rules can be pulled by users well in advance of their need or pushed to users as special conditions necessitate.

It is expected that the characteristics of METR users and the limitations on data capacities for local distribution mechanisms mean that virtually all persistent rules will be pre-announced and distributed from a wide-area distribution source, likely using a pull mechanism. However, any emergent rule that is activated while previously distributed pre-announced rules are still considered fresh will require a push mechanism, often from a local distribution source. It is important to note that those two combinations are only typical use cases and that METR supports every possible combination of these three characteristics and addresses how discrepancies can be reported and resolved.

In addition, supporting data may provide context to the rules and can be transmitted by wide-area communication systems, roadside units, other vehicles, or on-board devices.

The rules cover virtually any rule related to surface transport systems; the graphic depicts rules for freight vehicles, kerbside usage, ride sharing, micromobility operations, vulnerable road users (VRUs), public transport usage, driving (i.e. human-in-the-loop, including driver support systems, which represent levels 1 and 2 of automation), automated driving systems (ADS, i.e. automation levels 3-5), lane usage, public-area mobile robots (PMRs), and road works. This information needs to be available and conveyed to all transport users including nomadic devices, PMRs, and vehicles equipped with driving automation systems (i.e. levels 1-5 of automation). Although not shown in the diagram, METR is also intended to be flexible enough to support rules relating to the use of ferries, passenger rail (e.g. trams, subways, and inter-city rail), and off-road environments.

0.2 Framework adaptation

METR is defined through the ISO 24315 series, which provides a comprehensive framework for the interoperable digitalization, distribution, and management of electronic traffic regulations. This framework will be defined at a relatively high-level and will support both regional adaptation and customization, as well as the use of non-METR protocols and data formats, as depicted in [Figure 4](#).

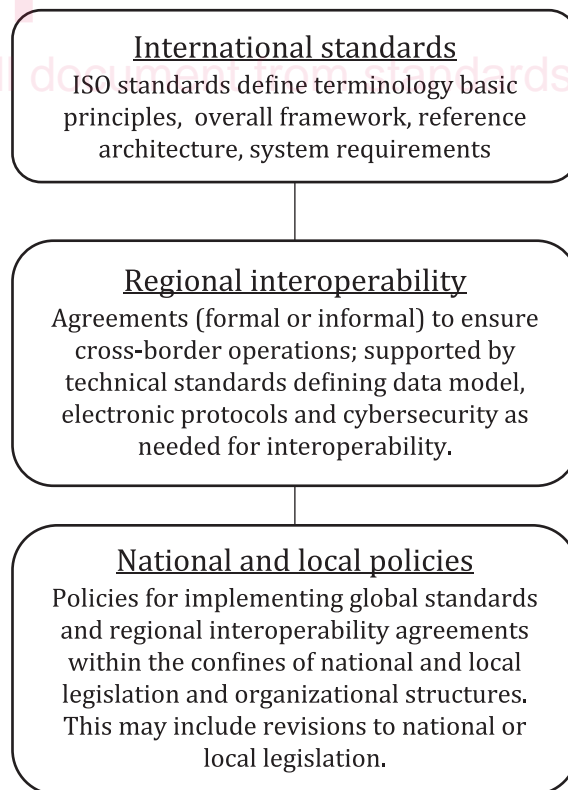


Figure 4 — METR three-tier framework