FINAL DRAFT
Technical Specification

ISO/DTS 24315-3

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

Part 3: System of systems requirements and architecture (SoSR)

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

Partie 3: Exigences et architecture pour le système des systèmes

ISO/TC **204**

Secretariat: **ANSI**

Voting begins on:
2025-06-09

Voting terminates on:
2025-09-01

ISO/CEN PARALLEL PROCESSING

Reference number
ISO/DTS 24315-3:2025(en)

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Published in Switzerland

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Foreword

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This document was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC CEN/TC 278, *Intelligent Transport Systems,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 24315 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

0.1 System overview

The ISO 24315 series on the management of electronic traffic regulations (METR) 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 0-1.

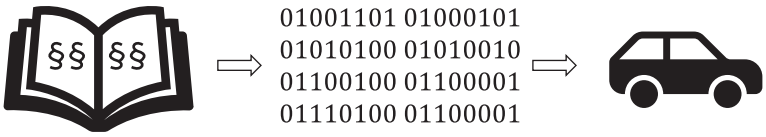


Figure 0-1 — METR concept

0.1.1 Purpose

METR is designed to assist developers and manufacturers of driving automation systems (i.e., automation Levels 1 to 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;

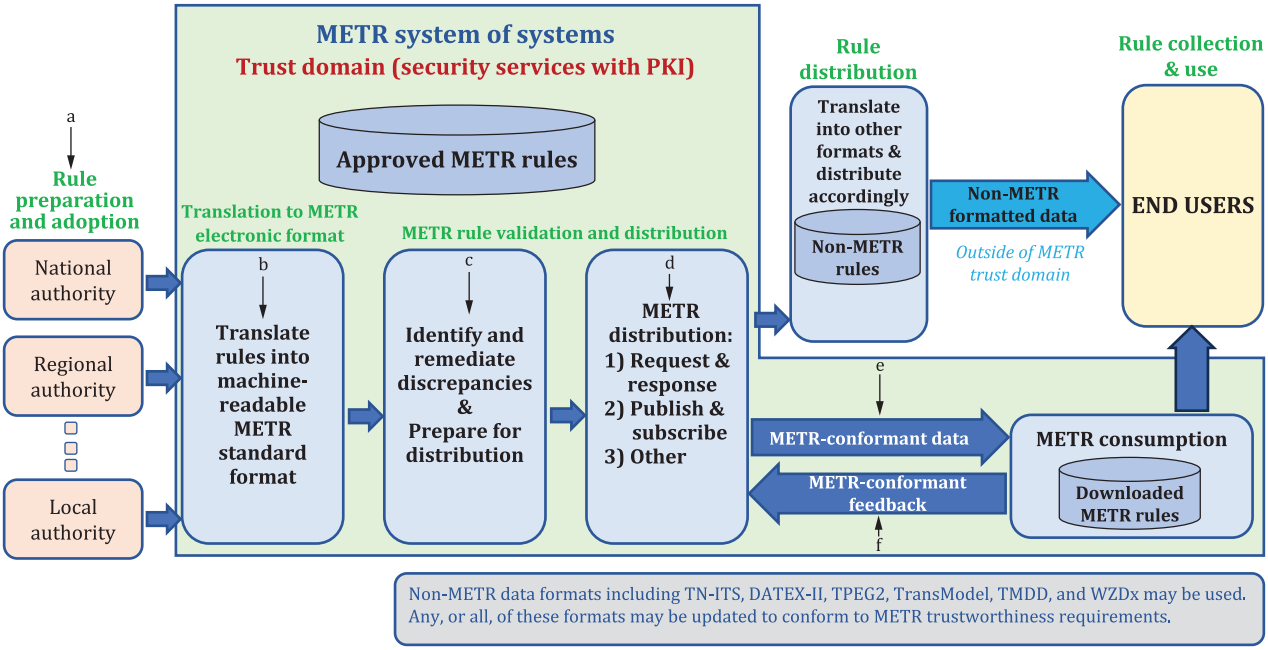
c) maintaining smooth and safe flow of traffic; and

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, etc.).[1]

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.

0.1.2 Flow of information

The general flow of METR information is illustrated in Figure 0-2 and subsequently described.



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 0-2 — METR flow of information

0.1.3 Graphical overview

Figure 0-3 provides an overview of the data and devices included within the scope of the METR environment.