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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

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Foreword

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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

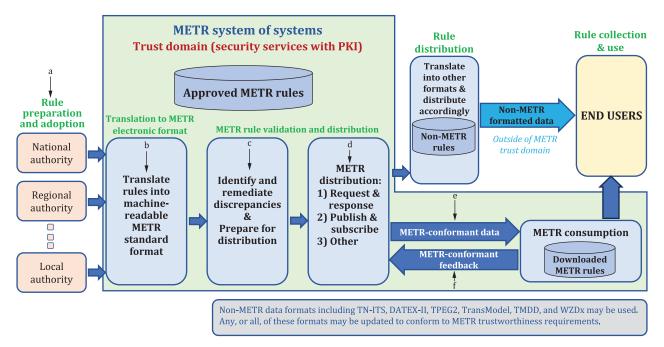
METR is designed to assist developers and manufacturers of driving automation systems (i.e., automation Levels 1 to 5) and driver information systems (including those at automation Level 0) to electronically obtain traffic rules to better enable:

- 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 an old safe flow of traffic; and an old safe flow of traffic; and safe flow of traffic flow of
- 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.