

SLOVENSKI STANDARD

SIST-TS CEN/TS 16157-13:2025

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Intelligentni transportni sistemi - Specifikacije za izmenjavo podatkov DATEX II pri upravljanju prometa in informiranju - 13. del: Zahteve glede stanja, napak in kakovosti

Intelligent transport systems - DATEX II data exchange specifications for traffic management and information - Part 13: Status, fault and quality requirements

Intelligente Verkehrssysteme - Verkehrsmanagementsysteme - Status-, Fehler- und Qualitätsanforderungen

Systèmes de transport intelligents - systèmes de gestion du trafic - Exigences en matière d'état, de défauts et de qualité

Ta slovenski standard je istoveten z: CEN/TS 16157-13:2025

ICS:

35.240.60	Uporabniške rešitve IT v prometu	IT applications in transport
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CEN/TS 16157-13

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ICS

Supersedes CEN/TS 17241:2019

English Version

**Intelligent transport systems - DATEX II data exchange
specifications for traffic management and information -
Part 13: Status, fault and quality requirements**

Systèmes de transport intelligents - systèmes de
gestion du trafic - Exigences en matière d'état, de
défauts et de qualité

Intelligente Verkehrssysteme -
Verkehrsmanagementsysteme - Status-, Fehler- und
Qualitätsanforderungen

This Technical Specification (CEN/TS) was approved by CEN on 3 February 2025 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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European foreword

This document (CEN/TS 16157-13:2025) has been prepared by Technical Committee CEN/TC 278 “Intelligent transport systems”, the secretariat of which is held by NEN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

The CEN 16157 series consists of several parts under the general title “Intelligent transport systems — DATEX II data exchange specifications for traffic management and information”.

This document supersedes CEN/TS 17241:2019.

CEN/TS 16157-13:2024 includes the following significant technical changes with respect to CEN/TS 17241:2019:

- The status and faults model has been upgraded to improve fit with other parts in the CEN 16157 series, avoiding duplication, to add further functionality, and to clarify concepts.
- The illustration of quality and performance criteria included in CEN/TS 17241:2019 (as Clause 5) is not included here.
- The explicit ASN.1 specifications of CEN/TS 17241 are not included here (equivalent ASN.1 specifications can be derived from this CEN/TS).
- The annex on management of electronic traffic regulations is not included here.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

This document defines a common set of data exchange specifications to support the vision of a seamless interoperable exchange of road traffic and travel information across boundaries, including national, urban, interurban, road administrations, infrastructure providers and service providers. Standardization in this context is a vital constituent to ensure interoperability, reduction of risk, reduction of the cost base, promotion of open marketplaces and many social, economic and community benefits to be gained from more informed travellers, network managers and transport operators.

Deploying intelligent transport systems in line with European Sustainable and Smart Mobility Strategy as issued by the European Commission requires co-ordination of traffic management operation and development of seamless pan-European information services. These jointly aim at contributing to the transformation of the European transport system for the objectives of efficient, safe, sustainable, smart and resilient mobility.

In this context the European Commission has been supporting the development of information exchange between the actors of road traffic management and related services for several years. In the road sector, DATEX II has been long in fruition, with the European Commission being fundamental to its development through an initial contract and subsequent co-funding of the further evolution of the standard and user support ecosystem. With this standardization of DATEX II, there is a real basis for common exchange between the actors of the traffic and travel information sector both in the collaboration between traffic management organisations and their systems, as well as in coherent information provision to service providers. DATEX II supports the requirements of the stakeholder organisations involved in the road traffic and travel domain in compliance with the EU policy and legal frameworks aimed at the sector.

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1 Scope

This document specifies a data model for the status and faults of components of traffic management systems.

The data model is intended for use in system-to-system data exchanges for device status and fault management purposes.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 16157-1:2018, *Intelligent transport systems - DATEX II data exchange specifications for traffic management and information - Part 1: Context and framework*

EN 16157-2:2019, *Intelligent transport systems - DATEX II data exchange specifications for traffic management and information - Part 2: Location referencing*

EN 16157-7:2018, *Intelligent transport systems - DATEX II data exchange specifications for traffic management and information - Part 7: Common data elements*

ISO/IEC 8824-1, *Information technology — Abstract Syntax Notation One (ASN.1) — Part 1: Specification of basic notation*

ISO/IEC 9834-1, *Information technology — Procedures for the operation of object identifier registration authorities — Part 1: General procedures and top arcs of the international object identifier tree*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 16157-1:2018, EN 16157-2:2019, EN 16157-7:2018, ISO/IEC 8824-1, ISO/IEC 9834-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

device

logical object, realised by physical equipment, at a known location, that is desired to deliver a service

Note 1 to entry: the definition does not apply in the context of the term “physical device”.

Note 2 to entry: in the context of this document a device is a logical object which could be realized by different physical objects at different points in time, for example if a faulty item is replaced by a spare of the same type.

3.2

status

capability of a device or system to perform its functions at a given point in time, considering its inherent technical condition, the externally determined operational setting, and the state of any essential support systems