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Electronic fee collection - System architecture for vehicle-related tolling - Part 3: Data dictionary (ISO 17573-3:2024)

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Elektronische Gebührenerhebung - Systemarchitektur für fahrzeugbezogene Maut - Teil 3: Datendefinition (ISO 17573-3:2024)

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European foreword

This document (EN ISO 17573-3:2024) has been prepared by Technical Committee ISO/TC 204 "Intelligent transport systems" in collaboration with Technical Committee CEN/TC 278 "Intelligent transport systems" the secretariat of which is held by NEN.

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International Standard

ISO 17573-3

Electronic fee collection — System architecture for vehicle-related tolling —

Part 3: Data dictionary

Perception de télépéage — Architecture de systèmes pour le péage lié aux véhicules —

Partie 3: Dictionnaire de données

**Second edition
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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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 278, *Intelligent transport systems*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 17573-3:2023), which has been technically revised.

The main changes are as follows:

- the `AlphabetIndicator` in the definition of a licence plate has been corrected to be encoded as a 6-bit value when using unaligned packed encoding rules;
- `AlphabetIndicator`, `DriverClass`, `TripPurpose` and vehicle-dimension-related parameters have been defined as separate data types.

A list of all parts in the ISO 17573 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

This document is a part of the ISO 17573 series which defines the system architecture for vehicle-related tolling. ISO 17573-1 gives a reference model for the system architecture. ISO/TS 17573-2 provides a collection of terms and definitions within the field of electronic fee collection (EFC) and road user charging that are used in the different documents published by ISO and CEN under the general title *Electronic fee collection*.

This document (ISO 17573-3) provides a data dictionary that contains the definitions of ASN.1 (data) types and the associated semantics.

The document is intended to be used as a reference by editors of ISO and CEN documents on EFC and in related areas of standardization (such as Intelligent transport systems, ITS).

It is foreseen that the library of ASN.1 (data) types contained in this document will be augmented with additional definitions as these become available.

Electronic fee collection — System architecture for vehicle-related tolling —

Part 3: Data dictionary

1 Scope

This document specifies the syntax and semantics of data objects in the field of electronic fee collection (EFC). The definitions of data types and assignment of semantics are provided in accordance with the abstract syntax notation one (ASN.1) technique, as specified in ISO/IEC 8824-1. This document defines:

- ASN.1 (data) types within the field of EFC;
- ASN.1 (data) types of a more general use that are used more specifically in standards related to EFC.

This document does not seek to define ASN.1 (data) types that are primarily related to other fields that operate in conjunction with EFC, such as cooperative intelligent transport systems (C-ITS), the financial sector, etc.

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.

ISO/TS 17573-2, *Electronic fee collection — System architecture for vehicle related tolling — Part 2: Vocabulary*

ISO 612, *Road vehicles — Dimensions of motor vehicles and towed vehicles — Terms and definitions*

ISO 1176, *Road vehicles — Masses — Vocabulary and codes*

ISO 3166-1, *Codes for the representation of names of countries and their subdivisions — Part 1: Country code*

ISO 4217, *Codes for the representation of currencies*

ISO/IEC 7812-1, *Identification cards — Identification of issuers — Part 1: Numbering system*

ISO/IEC 7812-2, *Identification cards — Identification of issuers — Part 2: Application and registration procedures*

ISO/IEC 8859-1, *Information technology — 8-bit single-byte coded graphic character sets — Part 1: Latin alphabet No. 1*

ISO/IEC 8859-2, *Information technology — 8-bit single-byte coded graphic character sets — Part 2: Latin alphabet No. 2*

ISO/IEC 8859-3, *Information technology — 8-bit single-byte coded graphic character sets — Part 3: Latin alphabet No. 3*

ISO/IEC 8859-4, *Information technology — 8-bit single-byte coded graphic character sets — Part 4: Latin alphabet No. 4*

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ISO/IEC 8859-5, *Information technology — 8-bit single-byte coded graphic character sets — Part 5: Latin/Cyrillic alphabet*

ISO/IEC 8859-6, *Information technology — 8-bit single-byte coded graphic character sets — Part 6: Latin/Arabic alphabet*

ISO/IEC 8859-7, *Information technology — 8-bit single-byte coded graphic character sets — Part 7: Latin/Greek alphabet*

ISO/IEC 8859-8, *Information technology — 8-bit single-byte coded graphic character sets — Part 8: Latin/Hebrew alphabet*

ISO/IEC 8859-9, *Information technology — 8-bit single-byte coded graphic character sets — Part 9: Latin alphabet No. 5*

ISO/IEC 8859-10, *Information technology — 8-bit single-byte coded graphic character sets — Part 10: Latin alphabet No. 6*

ISO/IEC 8859-11, *Information technology — 8-bit single-byte coded graphic character sets — Part 11: Latin/Thai alphabet*

ISO/IEC 8859-13, *Information technology — 8-bit single-byte coded graphic character sets — Part 13: Latin alphabet No. 7*

ISO/IEC 8859-14, *Information technology — 8-bit single-byte coded graphic character sets — Part 14: Latin alphabet No. 8 (Celtic)*

ISO/IEC 8859-15, *Information technology — 8-bit single-byte coded graphic character sets — Part 15: Latin alphabet No. 9*

ISO/IEC 8859-16, *Information technology — 8-bit single-byte coded graphic character sets — Part 16: Latin alphabet No. 10*

ISO/IEC 10646, *Information technology — Universal coded character set (UCS)*

ISO/IEC 646, *Information technology — ISO 7-bit coded character set for information interchange*

Indian standard (IS) 13194, *Indian script code for information interchange — ISCII*

Thai Industrial Standard (TIS) 620-2533, *Standard for Thai character codes for computers*

Vietnamese Standard (TCVN) 5712, *Information Technology — Standard 8-bit Vietnamese character code set for use in information exchange*

RFC 1489, *Registration of a Cyrillic Character Set*

RFC 2319, *Ukrainian Character Set KOI8-U*

Japan Industrial Standard (JIS) X 0213, *Japanese standard character set*

Chinese Standard (GB) 2312, *Code of Chinese graphic character set for information interchange — Primary set*

Chinese National Standard (CNS) 11643, *National Chinese standard interchange code*

Korean Standard (KS) X 1001, *Korean national standard for character encoding*

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