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Intelligent transport systems - DATEX II data exchange specifications for traffic management and information - Part 6: Parking Publications

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/15

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Systèmes de transport intelligents - Spécifications DATEX II d'échange de données pour la gestion du trafic et l'information routière - Partie 6: Publication de parking

Intelligente Verkehrssysteme - Datex II Datenaustauschspezifikationen für Verkehrsmanagement und Verkehrsinformationen - Teil 6: Publikation von Parkinformationen

This Technical Specification (CEN/TS) was approved by CEN on 17 August 2015 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.

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European foreword

This document (CEN/TS 16157-6:2015) 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 [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

CEN/TS 16157 consists of the following parts, under the general title “Intelligent transport systems — DATEX II data exchange specifications for traffic management and information”:

- Part 1: Context and framework

- Part 2: Location referencing

- Part 3: Situation publication

The following parts are under development:

- Part 4: Variable message Sign publication

- Part 5: Measured & elaborated data publication

- Part 6: Parking publications

- Part 7: Traffic view publication

As a user of this Technical Specification, attention is drawn to the resources of www.datex2.eu. This web site contains related software tools and software resources that aid the implementation of CEN/TS 16157 DATEX II.

Other parts may be developed in the future.

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

Introduction

This Technical Specification defines a common set of data exchange specifications to support the vision of a seamless interoperable exchange of traffic and travel information across boundaries, including national, urban, interurban, road administrations, infrastructure providers and service providers. Standardisation in this context is a vital constituent to ensure that interoperability, reduction of risk, reduction of the cost base and promotion of open marketplace objectives are achieved that will lead to many social, economic and community benefits as a result of more informed travellers, network managers and transport operators.

Delivering European Transport Policy in line with the White Paper issued by the European Commission requires co-ordination of traffic management and the development of seamless pan European services. With the aim to support sustainable mobility in Europe, the European Commission has been supporting the development of information exchange mainly between the actors of the road traffic management domain for a number of 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 through the Euro-Regional projects. With this standardisation of DATEX II there is a real basis for common exchange between the actors of the traffic and travel information sector.

This Technical Specification includes the framework and context for exchanges, the modelling approach, data content, data structure and relationships and communications specification. Part one of this Technical Specification defines a methodology which is extensible.

The sixth part of the CEN/TS 16157- EN 16157 series (this Technical Specification) deals with the publication of parking information. It specifies the structures and definitions of information that may be exchanged to convey urban parking information or Truck Parking information.

A DATEX II profile for Truck Parking is specified in the normative Annex A, which is in accordance with [1] (further here within called “EU Truck Parking regulation”). The DATEX II profile for Truck Parking provided in this Technical Specification can be used to collect and provide the data required in Article 4 of the EU Truck Parking regulation. The informative Annex B shows how to do this.

Informative Annex C gives additional explanation to the Truck Parking profile for DATEX II, informative Annexes D and E present a comprehensive and a lean version of an urban parking profile.

Informative Annex F gives an overview about the Parking Publications model and its profiles.

In normative Annex G, the data dictionary for the Parking Publications is specified.

XML-Schemes to the Parking Publications model and the DATEX II Truck parking profile are provided in these annexes:

- normative Annex H: Referenced XML schema for Parking Publications model
- normative Annex I: Referenced XML schema for the Truck Parking profile

XML encoding examples can be found in informative Annex J.

The European Committee for Standardisation (CEN) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent concerning procedures, methods and/or formats given in this document.

CEN takes no position concerning the evidence, validity and scope of patent rights.

1 Scope

CEN/TS 16157 specifies and defines component facets supporting the exchange and shared use of data and information in the field of traffic and travel. The component facets include the framework and context for exchanges, the modelling approach, the data content, the data structure and relationships and the communications specification.

Part 6 of this Technical Specification is applicable to:

— Parking information – static and dynamic information about urban or interurban parking sites including Truck Parking information

It establishes specifications for data exchange between any two instances of the following actors:

— Traffic Information Centres (TICs),

— Traffic Control Centres (TCCs),

— Service Providers (SPs),

— Parking Operators.

Use of this Technical Specification may be applicable for use by other actors.

This Part of the Technical Specification includes the following type of information content:

— Parking information including static content (description and attribution of parking areas, parking sites and single parking spaces) and dynamic content (occupancy and vehicle measurement information). It covers urban parking information as well as Truck Parking information. It also covers a publication for information about specific parking vehicles.

Thus, this Part of CEN/TS 16157 specifies the informational structures, relationships, roles, attributes and associated data types required for publishing parking information within the DATEX II framework. This is specified as a DATEX II Parking Publications sub-model, which is part of the DATEX II platform independent model, but this Part excludes those elements that relate to location information which are specified in CEN/TS 16157-2.

2 Conformance

The Parking Publications model is a Level-B extension of the DATEX II platform independent data model defined in CEN/TS 16157-1.

Conformance with Part 1 shall require platform independent models from which platform specific models are generated to comply with the UML modelling rules defined in CEN/TS 16157-1 and with the following requirements of this sub-model that are expressed in this Part:

— comply with all stipulated minimum and maximum multiplicity requirements for UML elements and relationships

— comply with all definitions, types and ordering

— employ optional elements as specified

— comply with all expressed constraints.

It should be noted that conformance of a publication service with all the structural requirements stated above does not necessarily ensure that the informational content of that service will be semantically comprehensible.

3 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

CEN/TS 16157-1, *Intelligent transport systems — DATEX II data exchange specifications for traffic management and information – Part 1: Context and framework*

CEN/TS 16157-2, *Intelligent transport systems — DATEX II data exchange specifications for traffic management and information – Part 2: Location referencing*

CEN/TS 16157-3, *Intelligent transport systems — DATEX II data exchange specifications for traffic management and information – Part 3: Situation Publication*

ISO/IEC 19501:2005-04, *Information technology — Open Distributed Processing -— Unified Modeling Language (UML) Version 1.4.2*

ISO 639-2:1998, *Codes for the Representation of Names of Languages — Part 2: alpha-3 codes*

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