



NSAI
Standards

Irish Standard
I.S. EN 16157-5:2020

Intelligent transport systems - DATEX II
data exchange specifications for traffic
management and information - Part 5:
Measured and elaborated data publications

I.S. EN 16157-5:2020

Incorporating amendments/corrigenda/National Annexes issued since publication:

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NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

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National Foreword

I.S. EN 16157-5:2020 is the adopted Irish version of the European Document EN 16157-5:2020, Intelligent transport systems - DATEX II data exchange specifications for traffic management and information - Part 5: Measured and elaborated data publications

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EUROPEAN STANDARD

EN 16157-5

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2020

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Supersedes CEN/TS 16157-5:2014

English Version

Intelligent transport systems - DATEX II data exchange specifications for traffic management and information - Part 5: Measured and elaborated data publications

Systèmes de transport intelligents - Spécifications Datex II d'échange de données pour la gestion du trafic et l'information routière - Partie 5 : Publications de données mesurées et de données calculées

Intelligente Verkehrssysteme - DATEX II Datenaustauschspezifikation für Verkehrsmanagement und Verkehrsinformation - Teil 5: Gemessene und ausgearbeitete Datenveröffentlichungen

This European Standard was approved by CEN on 29 June 2020.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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EN 16157-5:2020 (E)

European foreword

This document (EN 16157-5:2020) has been prepared by Technical Committee CEN/TC 278 “Intelligent transport systems”, the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2021, and conflicting national standards shall be withdrawn at the latest by February 2021.

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.

This document supersedes CEN/TS 16157-5:2014.

In comparison with the previous edition, the following technical modifications have been made:

- application of the modelling methodology defined in EN 16157-1,
- correction of bugs,
- addition of requested features,
- removal of redundancy between elaborated and measured data publications.

A list of all parts in the EN 16157 series 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 implement this European Standard: 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, Turkey and the United Kingdom.

Introduction

The EN 16157 series 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. 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.

Delivering European Transport Policy in line with the White Paper issued by the European Commission requires co-ordination of traffic management and 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 standardization of DATEX II, there is a real basis for common exchange between the actors of the traffic and travel information sector.

EN 16157 includes the framework and context for exchanges, the modelling approach, data content, data structure and relationships.

It supports a methodology that is extensible.

This document deals with the publication sub-models within the DATEX II model that support the exchange of measured and elaborated information. These publications are intended to support the exchange of information from the organization having the measured data and creating elaborated data to other organisations providing ITS services or onward information exchange. It also includes the exchange of static information about measurement sites.

EN 16157-5:2020 (E)

1 Scope

This document is the fifth part of the DATEX II European Standard which deals with the publication sub-models within the DATEX II model that support the exchange of measured and elaborated information.

These publications are intended to support the exchange of informational content from the organization having the measured data and creating elaborated data to other organisations providing ITS services or onward information exchange. It also includes the exchange of static information about measurement sites.

This is specified in three sub-models, a DATEX II Measurement Site Table Publication sub-model, a DATEX II Measured Data Publication sub-model and a DATEX II Elaborated Data Publication sub-model.

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, *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*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 16157-1, EN 16157-7, EN 16157-2, and the following apply.

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

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

3.1 elaborated data

data which is derived/computed from one or more measurements over a period of time

Note 1 to entry: It can be a current value or a forecast value predicted from historical measurements.

3.2 measured data

quantitative data measured against a quantified scale (possibly using standard units of measure)

Note 1 to entry: In comparison to elaborated data, measured data can be considered to represent more directly observed measurements.

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