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Intelligent transport systems - ESafety - ECall minimum set of data

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15722:2020 sisaldab Euroopa standardi EN 15722:2020 ingliskeelset teksti.	This Estonian standard EVS-EN 15722:2020 consists of the English text of the European standard EN 15722:2020.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 26.08.2020.	Date of Availability of the European standard is 26.08.2020.
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ICS 03.220.20, 13.200, 35.240.60

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EUROPEAN STANDARD

EN 15722

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 03.220.20; 13.200; 35.240.60

Supersedes EN 15722:2015

English Version

Intelligent transport systems - ESafety - ECall minimum set of data

Systèmes de transport intelligents - ESafety - Ensemble minimal de données (MSD) pour l'eCall

Intelligente Transportsysteme - ESicherheit - Minimaler Datensatz für den elektronischen Notruf eCall

This European Standard was approved by CEN on 5 July 2020.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 4 November 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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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents	Page
European foreword	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Symbols and abbreviated terms	7
5 Requirements	8
5.1 Concepts and formats	8
5.1.1 MSD data concepts	8
5.1.2 Representation of MSD data concepts	8
5.1.3 Different versions of MSD data	9
5.1.4 Distribution of MSD data	9
5.1.5 Additional data	9
5.2 ISO Object identifier	10
5.3 Contents of the ‘Minimum Set of Data’ (MSD)	11
5.3.1 General	11
5.3.2 Basic contents of MSD version 3	11
5.3.3 Previous versions of MSD message	15
Annex A (normative) ASN.1 definition of MSD	20
A.1 ASN.1 definition of MSD	20
A.2 Syntax check of ASN.1 definition of MSD	24
A.3 Examples of ASN.1 encoded MSD	24
Annex B (informative) ASN.1 Data representation PER and BER explained	26
B.1 What is ASN.1	26
B.2 Encoding data using ASN.1	27
B.2.1 General	27
B.2.2 Basic Encoding Rules (BER)	27
B.2.3 Distinguished Encoding Rules (DER)	27
B.2.4 Packed Encoding Rules (PER/UPER)	27
B.2.5 XML Encoding Rules (XER)	28
B.3 Examples	28
B.3.1 General	28
B.3.2 ASN.1 example definition	28
B.3.3 Encoding using BER or DER	29
B.3.4 Encoding using PER	29
B.3.5 Encoding using XER and EXER	30

Annex C (informative) Formal XML format description (XSD) for the MSD	31
Annex D (informative) Explanation of rationale for MSD data concept elements	36
Annex E (informative) Object Identifiers (OID).....	38
E.1 Formal definition of OID	38
E.2 What is an object identifier?.....	38
E.3 Object Identifiers and ISO standards.....	38
E.4 OID for eCall data concepts	38
Bibliography	39

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European foreword

This document (EN 15722:2020) 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 EN 15722:2015.

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

- Correction of some typing errors;
- Added additional clarifications to solve frequently asked questions;
- Inclusion of recent locations mandatory to support more efficient dispatch of emergency services;
- MSD field “numberOfPassengers” replaced by “numberOfOccupants”;
- The number of vehicle categories supported by this standard has been expanded through revision of the enumeration values to enable support for additional categories of vehicles, which now covers the full UNECE categorization;
- Updated privacy requirements to include EU 2016/679 GDPR.

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 pan-European in-vehicle emergency call, 'eCall', is estimated to have the potential to save up to 2 500 fatalities annually in the EU when fully deployed, and furthermore to reduce the severity of injuries, to bring significant savings to the society in and to reduce human suffering.

Emergency calls made from vehicles or mobile telephones using wireless technologies, can assist with the objectives of significantly reducing road deaths and injuries, but drivers often have poor (imprecise) location awareness, especially on interurban roads or abroad. Additionally, in many situations the car occupants may not be in a position to call using a normal mobile phone.

The situation is worse for those travelling abroad. A high (and increasing) number of vehicles travelling outside their home country is thus also contributing to the need for automated emergency call system in vehicles. In EU there are over 100 million trips to another EU country per year, 65 % of the people feel less protected while abroad and most do not know which number to call in an emergency (in some countries over 60 %). Language problems are pertinent and may render proper communication difficult. Yet, in the most crucial cases, the victim(s) may not be able to call because they have been injured/trapped, do not know the local number to call, and in many cases, particularly in rural situations and late at night, there may be no witnesses who happen to have a mobile phone and a sense of community.

eCall, in the context of "Intelligent Transport Systems" or "ITS", (previously known as "Road Traffic and Transport Telematics") can be described as a "user instigated or automatic system to provide notification to public safety answering points, by means of wireless communications, that a vehicle has crashed, and to provide coordinates and a defined minimum set of data, and where possible a voice link to the PSAP".

The objective of implementing the pan-European in-vehicle emergency call system (eCall) is to automate the notification of a traffic accident, wherever in the European Union and associated countries, with the same technical standards and the same quality of services objectives of other emergency services (for example the TS12 emergency call of GSM/UMTS).

This document specifies the "Minimum Set of Data" (MSD) to be transferred by such an in-vehicle eCall system in the event of a crash or emergency.

NOTE The communications media and means of transferring the eCall MSD are not defined in this document. See list of referenced standards.

1 Scope

This document specifies the standard data concepts that comprise the "Minimum Set of Data" (MSD) to be transferred from a vehicle to a 'Public Safety Answering Point' (PSAP) in the event of a crash or emergency via an 'eCall' communication transaction.

Optional additional data concepts may also be transferred as part of the MSD.

The communications media protocols and methods for the transmission of the eCall message are not specified in this document.

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 16062, *Intelligent transport systems — ESafety — eCall high level application requirements (HLAP) using GSM/UMTS circuit switched networks*

EN 16102, *Intelligent transport systems — eCall — Operating requirements for third party support*

ISO/IEC 8825-2, *Information technology — ASN.1 encoding rules: Specification of Packed Encoding Rules (PER) — Part 2:*

NOTE Communications standards required for transmission of eCall using GSM/UMTS wireless communications networks are referenced in EN 16062 and EN 16072 [6].

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

3.1

ASN.1

Abstract Syntax Notation One

notation that describes rules and structures for representing, encoding, transmitting, and decoding data enabling representation of objects that are independent of machine-specific encoding techniques; see Annex B

3.2

eCall

emergency call generated either automatically via activation of in-vehicle sensors or manually by the vehicle occupants; when activated it provides notification and relevant location information to the most appropriate 'Public Safety Answering Point', by means of mobile wireless communications networks, carries a defined standardized 'Minimum Set of Data' notifying that there has been an incident that requires response from the emergency services, and establishes an audio channel between the occupants of the vehicle and the most appropriate 'Public Safety Answering Point'