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| STN | Inteligentné dopravné systémy Elektronická bezpečnosť eCall koncept dodatočných dát pre zariadenia s obmedzeniami | STN EN 17870 01 8635 |
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Intelligent transport systems - eSafety - eCall additional data concept for equipment limitations

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. 09/23

Obsahuje: EN 17870:2023

137386

EUROPEAN STANDARD

EN 17870

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2023

ICS 03.220.20; 13.200; 35.240.60

English Version

Intelligent transport systems - eSafety - eCall additional data concept for equipment limitations

Systèmes de transport intelligents - eSafety - concept de données supplémentaires d'eCall pour limitations de l'équipement

Intelligente Verkehrssysteme - eSicherheit - eCall zusätzliches Datenkonzept für Ausrüstungsbeschränkungen

This European Standard was approved by CEN on 30 April 2023.

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EN 17870:2023 (E)

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European foreword

This document (EN 17870:2023) 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of an identical text or by endorsement, at the latest by December 2023, and conflicting national standards shall be withdrawn at the latest by December 2023.

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.

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.

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EN 17870:2023 (E)**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.

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 installation of eCall is mandatory for each new type of passenger vehicle car which is approved after March 2018 and the system has already proven to be beneficial. Expansion to other vehicle categories and the possibility to retrofit equipment to existing vehicles is imminent and additional standards are devised to support this. Such standards are needed because the existing (core) standards are focussed on mandatory, in-factory installation in specific categories of vehicle (UNECE Category M1/N1). Projects like HeERO, iHeERO, sAFE and others have shown that sometimes not all requirements laid out in the core standards can be met, due to physical or other limitations related to the vehicle category or type of installation.

Although such limitations are known at the sending side, the receiving side (i.e. the PSAP) currently does not (always) have means to determine those. There is, to name one example, based on the core standards, no way a PSAP can determine whether the eCall equipment in the vehicle is installed in-factory, retrofit or even a user installed after market solution. The lack of this knowledge can interfere with the emergency process and cost valuable time.

Part of eCall is (the sending of) a “Minimum Set of Data” (MSD) which is specified in EN 15722. That standard makes a provision for additional data that can be embedded in the MSD assuming that it follows a(nother) standard. This document is such standard and it describes an additional data concept that can and is expected to be used to inform the PSAP about limitations to the equipment. Such limitations are only allowed if supported by one or more standard(s) applicable to that specific application of eCall. If and when a standard endorses a limitation, the use of the additional data concept described in this document is mandatory.

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

1 Scope

This document specifies an additional data concept that can be transferred as the 'optional additional data' part of an eCall MSD, see EN 15722, that can be transferred from a vehicle to a PSAP in the event of a crash or emergency via an eCall communication session.

The purpose of this document is to provide means to notify the PSAP of any limitations to the sending equipment that are endorsed by other standards, but not (immediately) apparent to the receiver. Lack of knowledge about these limitations can hamper the emergency process. This document describes an additional data concept which facilitates the inclusion of information about such limitations in a consistent and usable matter.

This document can be seen as an addendum to EN 15722; it contains as little redundancy as possible.

NOTE 1 The communications media protocols and methods for the transmission of the eCall message are not specified in this document.

NOTE 2 Additional data concepts can also be transferred, and it is advised to register any such data concepts using a data registry as specified in EN ISO 24978 [1]. See www.esafetydata.com for an example.

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 15722, *Intelligent transport systems - ESafety - ECall minimum set of data*

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

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