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BSI Standards Publication

Intelligent transport systems — eSafety

Part 5: eCall for UNECE category L1 and L3 powered two-wheel vehicles

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee EPL/278, Intelligent transport systems.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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English Version

Intelligent transport systems - eSafety - Part 5: eCall for UNECE category L1 and L3 powered two-wheel vehicles

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Intelligente Verkehrssysteme - eSicherheit - Teil 5: eCall für motorisierte Zweiräder der UNECE-Fahrzeugklassen L1 und L3

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European foreword

This document (EN 17249-5:2025) 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of an identical text or by endorsement, at the latest by September 2025, and conflicting national standards shall be withdrawn at the latest by September 2025.

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 17249-5:2022.

EN 17249-5:2025 includes the following significant technical changes with respect to CEN/TS 17249-5:2022:

— updated parts of Clause 1, 2, 3, 4, 5, 6, 7.1, 7.2.1.2, 7.2.1.5, 7.2.2, 7.3, Table 1, 7.5, 8.1, 8.3.1, Bibliography;

— changed Figure 1;

— added 8.3.2.1, 8.3.2.2, 8.3.2.3;

— updated Annex A (Table A.1 added), Annex B (Table B.1, B.2 updated, Table B.3, B.4 added).

NOTE This document is complementary to EN 16072 and EN 15722 and presents adaptation requirements for the provision of eCall for powered two-wheel vehicles.

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.

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, Türkiye and the United Kingdom.

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Introduction

All new vehicle types of category M1/N1 will be equipped with *112-eCall* and all new vehicle types of category M1/N1 will support *112-eCall using IMS over packet switched networks*.

NOTE See Regulation (EU) 2015/758 [3] and Delegated Regulation (EU) 2024/1180 [4], which cover M1- and N1-category vehicles (cars and vans).

Powered two-wheel vehicle (vehicle mounted) 112-eCall systems, installed during the manufacture of the vehicle, present challenges to the eCall paradigm in that, in case of an accident, the rider is likely to be separated from the vehicle, usually by some distance. eCall equipment mounted on P2WVs is also subjected to far harsher environmental exposure than its in-car counterparts, and providing equipment, such as speakers, that will last and reliably operate for the lifetime of the vehicle, presents a significant challenge. This document takes these issues into account as a variation of the requirements specified for category M1 and N1 vehicles and, in particular, does not provide the requirement for two-way voice dialogue in all models. Other features that characterize eCall are maintained as optional. An optional additional data element (or, in the future, a specific bit in the MSD) that enables the PSAP to identify where voice communications are possible or not, is added.

NOTE See CEN/TR 17249-1:2018.

This document specifies the additional high-level service requirements for the provision of eCall to powered two-wheel vehicles of UNECE category L1 and L3 (vehicle mounted). As with the existing provisions for eCall for category M1/N1 vehicles, and other requirements in this series, these are specified within the paradigm of being OEM fit equipment supplied with new vehicles.

The provision of eCall for vehicles via the aftermarket (post sales and registration), and the operational requirements for any such aftermarket solution for vehicle will be the subject of other work, that shall use the requirements of this document as a principal reference point.

This document is based on and supersedes CEN/TS 17249-5:2022, following results achieved in sAFE project (sub-activity 3.5) [6] to obtain a specification allowing a more practical implementation of eCall for P2WVs.

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1 Scope

In respect of operating requirements specified in EN 16072, this document specifies adaptations to enable the provision of eCall for powered two-wheel vehicles.

As with the existing provisions for eCall for category M1/N1 vehicles, these are specified within the paradigm of being OEM-fit equipment supplied with new vehicles.

This document includes only the requirements for category L1 and L3 P2WV (vehicle based) with the exception of L1e-A (powered cycle), although other documents can subject other 'L' subcategories to use this document. Other documents can be prepared for other UNECE category 'L' variants.

The requirements herein relate only to the provision of pan-European eCall and does not provide requirements for third party service provision of eCall. Other than in the *112-eCall using IMS over packet switched networks* paradigm, which involves a direct call from the vehicle to the most appropriate PSAP, third party service provision involves the support of an intermediary third-party service provider before the call is forwarded to the PSAP.

The provision of eCall for vehicles via the aftermarket (post sales and registration), and the operational requirements for any such aftermarket solution, will be the subject of other work.

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 15722:2020, *Intelligent transport systems — ESafety — ECall minimum set of data*

EN 16072:—[1], *Intelligent transport systems — ESafety — Pan-European eCall operating requirements*

EN 17240, *Intelligent transport systems — ESafety — ECall end to end conformance testing for IMS packet switched based systems*

EN 17870:2023, *Intelligent transport systems — eSafety — eCall additional data concept for equipment limitations*

3 Terms and definitions

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

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

— IEC Electropedia: available at https://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp/

3.1
112
single European emergency call number supporting *Teleservice 12*

[SOURCE: ETSI TS 122 003 V14.0.0 (2017-03)]

[1] Under preparation. Stage at the time of preparation: FprEN 16072:2024.

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