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TNI	**Správa o používaní noriem EN 45545-2 a EN 45545-5 pre elektronické zariadenia v dráhových vozidlách**	**TNI CLC/TR 50750** 28 2401

Report on the use of EN 45545-2 and EN 45545-5 for electronic equipment on board rolling stock

Táto technická normalizačná informácia obsahuje anglickú verziu CLC/TR 50750:2025.
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English Version

Report on the use of EN 45545-2 and EN 45545-5 for electronic equipment on board rolling stock

Rapport concernant l'utilisation de l'EN 45545-2 et de l'EN 45545-5 pour le matériel électronique à bord du matériel roulant

Bericht über die Verwendung von EN 45545-2 und EN 45545-5 für elektronische Einrichtungen an Bord von Bahnfahrzeugen

This Technical Report was approved by CENELEC on 2025-06-02.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (CLC/TR 50750:2025) has been prepared by CLC/TC 9X “Electrical and electronic applications for railways”.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC 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 committee. A complete listing of these bodies can be found on the CENELEC website.

Introduction

The design, verification and testing of electronic equipment on board rolling stock is standardized by EN 50155. This document refers to EN 45545-2 and EN 45545-5 in the clause “Fire behaviour requirements”.

However, the referred series deals with the electronic equipment in a generic and limited way:

— EN 45545-2:2020+A1:2023 deals with electronic equipment only in Table 2 – Requirements of listed products, at EL9 and EL10 entries.

— EN 45545-5:2013+A1:2015 states requirements only for electrical equipment without any explicit reference to electronic equipment.

As a consequence, the application of EN 45545-2 and EN 45545-5 to the case of electronic equipment on board of trains opens the door to very different interpretations.

The return of experience reports that designers, assessors, suppliers and customers sometimes reach different points of view; this results in problems which are difficult to resolve.

In order to overcome such situation, TC9X decided to set up the CLC TC9X WG29 with the task to prepare guidelines for the application of EN 45545-2 and EN 45545-5 in case of electronic equipment on board rolling stock.

This document has been prepared according to the decision 58/12 taken during the TC 9X plenary meeting and the following approved NWIP, see document CLC/TC9X/Sec1431/INF.

This document is not a standard, it is the reporting of the available experience and best practice in applying EN 45545-2 and EN 45545-5 to the case of electronic equipment on board rolling stock.

1 Scope

This document reports the experience of the users of EN 45545-2 and EN 45545-5, particularly when applying these standards to the design and compliance evaluation of electronic equipment on board of trains for their fire protection measures.

This document excludes any new requirements, considering only the requirements stated by the above listed standards.

However, since these requirements are generic and not specifically referred to electronic equipment, this document clarifies the application of EN 45445 to the complex case of electronic components and associated assemblies.

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 45545-1:2013, *Railway applications - Fire protection on railway vehicles - Part 1: General*