

STN	Železnice Požiarna ochrana železničných vozidiel Časť 6: Požiarny dohľad a systémy riadenia	STN EN 45545-6+A1 28 2401
------------	--	---

Railway applications - Fire protection on railway vehicles - Part 6: Fire control and management systems

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. 09/26

Obsahuje: EN 45545-6:2024+A1:2026

Oznámením tejto normy sa ruší

STN EN 45545-6 (28 2401) z februára 2025

143144

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2026

Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 45545-6:2024+A1

July 2026

ICS 13.220.20; 45.060.01

English Version

**Railway applications - Fire protection on railway vehicles -
Part 6: Fire control and management systems**

Applications ferroviaires - Protection contre les
incendies dans les véhicules ferroviaires - Partie 6 :
Systèmes de gestion et de contrôle des incendies

Bahnanwendungen - Brandschutz in
Schienenfahrzeugen - Teil 6: Brandmelde- und
Brandbekämpfungseinrichtungen und begleitende
Brandschutzmaßnahmen

This European Standard was approved by CEN on 26 August 2024 and includes Amendment 1 approved by CEN on 25 March 2026.

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.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 45545-6:2024+A1:2026 (E)

Contents	Page
European foreword	3
Introduction	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	6
4 General requirements	6
5 Requirements for systems used in automatically initiated processes.....	7
5.1 General.....	7
5.2 Fire detection	7
5.3 Response to automatic detection	9
5.3.1 General.....	9
5.3.2 Local alarm	9
5.3.3 Remote alarm	9
5.4 Specified responses to automatic alarms.....	9
5.4.1 General.....	9
5.4.2 Selective shut down of energy.....	9
5.4.3 Held-open fire barrier doors	11
5.4.4 Fixed fire fighting equipment.....	11
6 Requirements for systems used in manually initiated processes.....	12
6.1 Passenger alarm systems.....	12
6.2 Response to passenger activated alarm	12
6.2.1 Braking system	12
6.2.2 Staff alarm	13
6.2.3 Voice contact.....	13
6.3 Fire fighting – mobile or portable equipment.....	13
6.3.1 General.....	13
6.3.2 Fire extinguishing media	13
6.3.3 Placement of extinguishers	13
6.3.4 Specific locations for extinguishers	14
7 Function of systems under fire conditions	14
8 Evaluation of conformity.....	14
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive (EU) 2016/797 aimed to be covered	15
Bibliography	17

European foreword

This document (EN 45545-6:2024+A1:2026) has been prepared by Technical Committee CEN/TC 256 “Railway applications”, the secretariat of which is held by DIN.

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 January 2027, and conflicting national standards shall be withdrawn at the latest by January 2027.

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 includes Amendment 1 approved by CEN on 25 March 2026.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

This document supersedes A1 EN 45545-6:2024 A1.

This series of European Standards *Railway applications — Fire protection on railway vehicles* consists of:

- Part 1: General;
- Part 2: Requirements for fire behaviour of materials and components;
- Part 3: Fire resistance requirements for fire barriers;
- Part 4: Fire safety requirements for railway rolling stock design;
- Part 5: Fire safety requirements for electrical equipment including that of trolley buses, track guided buses and magnetic levitation vehicles;
- Part 6: Fire control and management systems;
- Part 7: Fire safety requirements for flammable liquid and flammable gas installations.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

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.

EN 45545-6:2024+A1:2026 (E)**Introduction**

EN 45545-6 has been developed from existing fire safety regulations for railway vehicles from the International Union of Railways (UIC) and different European countries.

In using the operation and design categories specified in EN 45545-1:2013, the requirements laid down in this part take into account the current operating conditions for European public rail transport.

1 Scope

This document specifies requirements for fire detection, alarm systems, equipment shutdown, information and communication systems, emergency brake systems and fire fighting systems to cover the objectives specified in EN 45545-1:2013.

The measures and requirements specified in this document aim to protect passengers and staff in railway vehicles in the event of a fire on board by alerting staff and passengers to a fire, delaying the fire development and controlling the movement of smoke.

It is not within the scope of this document to describe measures that ensure the preservation of the railway vehicles in the event of a fire.

This document is applicable to railway vehicles specified in EN 45545-1:2013.

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 2:1992,¹ *Classification of fires*

EN 3-7:2004+A1:2007, *Portable fire extinguishers - Part 7: Characteristics, performance requirements and test methods*

EN 3-8:2021, *Portable fire extinguishers - Part 8: Requirements for the construction, pressure resistance and mechanical tests for extinguishers with a maximum allowable pressure equal to or lower than 30 bar, which comply with the requirements of EN 3-7*

EN 3-9:2006,² *Portable fire extinguishers — Part 9: Additional requirements to EN 3-7 for pressure resistance of CO₂ extinguishers*

EN 3-10:2009, *Portable fire extinguishers - Part 10: Provisions for evaluating the conformity of a portable fire extinguisher to EN 3-7*

EN 54-3:2014+A1:2019, *Fire detection and fire alarm systems - Part 3: Fire alarm devices - Sounders*

EN 54-23:2010, *Fire detection and fire alarm systems - Part 23: Fire alarm devices - Visual alarm devices*

EN 1869:2019, *Fire blankets*

EN 16334-1:2014+A1:2022, *Railway applications - Passenger Alarm System - Part 1: System requirements for mainline rail*

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

EN 45545-2:2020+A1:2023, *Railway applications - Fire protection on railway vehicles - Part 2: Requirements for fire behaviour of materials and components*

¹ As impacted by EN 2:1992/A1:2004.

² As impacted by EN 3-9:2006/AC:2007.

EN 45545-6:2024+A1:2026 (E)

EN 45545-3:2024, *Railway applications - Fire protection on railway vehicles - Part 3: Fire resistance requirements for fire barriers*

EN 50553:2012,³ *Railway applications — Requirements for running capability in case of fire on board of rolling stock*

EN 61310-1:2008, *Safety of machinery - Indication, marking and actuation - Part 1: Requirements for visual, acoustic and tactile signals*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

³ As impacted by EN 50553:2012/AC:2013, EN 50553:2012/A1:2016 and EN 50553:2012/A2:2020.