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Railway applications - Fire protection on railway vehicles - Part 7: Fire safety requirements for flammable liquid and flammable gas installations

Applications ferroviaires - Protection contre les incendies dans les véhicules ferroviaires - Partie 7: Exigences de sécurité incendie relatives aux installations de liquides inflammables et de gaz inflammables Bahnanwendungen - Brandschutz in Schienenfahrzeugen -Teil 7: Brandschutzanforderungen an Anlagen für brennbare Flüssigkeiten und Gase

This Technical Specification (CEN/TS) was approved by CEN on 8 June 2008 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN/CENELEC will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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Foreword

This document (CEN/TS 45545-7:2009) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

For relationship with EC Directive(s), see informative Annex ZA, which is an integral part of this document.

This series of Technical Specifications 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.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This part is based on 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 defined in CEN/TS 45545-1, the requirements laid down in this part take into account the current operating conditions for European public rail transport.

1 Scope

This part specifies requirements for flammable liquids and liquefied petroleum gas installations, e.g. for traction, auxiliary power units, heating or cooking, to cover the objectives defined in CEN/TS 45545-1. This part is not applicable to technical liquids themselves, e.g. hydraulic liquid, transformer oil, except where guidance is given as to dealing with spillages, leakage and spray generation.

The measures and requirements specified in this Technical Specification aim to protect passengers and staff in railway vehicles by preventing a fire from occurring and spreading by leakage of flammable liquids or gases.

It is not within the scope of this Technical Specification to describe measures for flammable gases, other than liquefied petroleum gases.

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

2 Normative references

The following referenced documents are indispensable for the application 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 10204, Metallic products — Types of inspection documents

CEN/TS 45545-1:2009, Railway applications — Fire protection of railway vehicles — Part 1: General

CEN/TS 45545-3, Railway applications — Fire protection of railway vehicles — Part 3: Fire resistance requirements for fire barriers

CEN/TS 45545-6, Railway applications — Fire protection of railway vehicles — Part 6: Fire control and management systems

EN 50153, Railway applications — Rolling stock — Protective provisions relating to electrical hazards

EN ISO 13943, Fire safety — Vocabulary (ISO 13943:2000)

ISO 11014-1, Safety data sheet for chemical products — Part 1: Content and order of sections