

Irish Standard I.S. EN 15954-2:2013

Railway applications - Track - Trailers and associated equipment - Part 2: General safety requirements

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# **EUROPEAN STANDARD**

EN 15954-2

# NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

April 2013

ICS 45.060.20; 45.120

#### **English Version**

# Railway applications - Track - Trailers and associated equipment - Part 2: General safety requirements

Applications ferroviaires - Voie - Remorques et éléments associés - Partie 2 : Prescriptions générales pour la sécurité Bahnanwendungen - Oberbau - Anhänger und zugehörige Ausstattung - Teil 2: Allgemeine Sicherheitsanforderungen

This European Standard was approved by CEN on 10 February 2013.

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.

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

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### **Foreword**

This document (EN 15954-2:2013) 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of an identical text or by endorsement, at the latest by October 2013, and conflicting national standards shall be withdrawn at the latest by October 2013.

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 EU Directive(s).

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

EN 15954, Railway applications — Track — Trailers and associated equipment consists of the following parts:

- Part 1: Technical requirements for running and working;
- Part 2: General safety requirements (the present document).

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 15954-2:2013 (E)

# Introduction

This European Standard is a type C standard as stated in EN ISO 12100.

The trailers concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this European Standard.

When provisions of this type C standard are different from those which are stated in type B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for trailers that have been designed and built according to the provisions of this type C standard.

#### EN 15954-2:2013 (E)

### 1 Scope

This European Standard specifies the technical requirements to deal with the significant hazards, hazardous situations and events, common to trailers, as defined in the scope of EN 15954-1, including machinery, attachments and equipment permanently fixed to the trailer, intended for construction, maintenance and/or inspection of the railway infrastructure, emergency rescue and recovery.

This European Standard specifies the technical requirements to deal with the common hazards during transport, assembly and installation, commissioning, running on track, use (including setting, programming, and process changeover), operation, cleaning, fault finding, maintenance and de-commissioning of the trailers when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer; see Clause 4.

NOTE Specific measures for exceptional circumstances are not dealt with in this European Standard. They can be the subject of negotiation between manufacturer and the machine operator.

The common hazards dealt with include the general hazards presented by the trailers, as well as the hazards presented by the following specific trailer functions:

—	track renewal;
	rail maintenance;
	craning;
	catenary renewal / maintenance;
	maintenance of the components of the infrastructure;
	inspection and measurement of the components of the infrastructure;
—	tunnel inspection / ventilation;
	emergency rescue and recovery

during commissioning, use, maintenance and servicing.

This European Standard applies to trailers that are not intended to operate signalling and control systems. Other similar machines are dealt with in other European Standards; see Annex D.

It is assumed that a finished standard automotive chassis used as a host for a road-rail trailer will offer an acceptable safety level for its designed functions before conversion. This specific aspect is not dealt with in this European Standard.

This European Standard does not deal with:

- a) requirements with regard to the quality of work and the performance of trailers;
- b) specific requirements established by a railway infrastructure manager;
- c) negotiations between the manufacturer and the trailer operator for additional or alternative requirements;
- d) requirements for use and running of the trailer on public highway;
- e) hazards due to air pressure caused by the passing of high-speed trains at more than 200 km/h;
- f) requirements which could be necessary in case of use in extreme conditions, such as:

- 1) extreme ambient temperatures (below 20°C or above + 40°C);
- 2) highly corrosive or contaminating environment, e.g. due to the presence of chemicals;
- 3) potentially explosive atmospheres.

This European Standard applies to all trailers that are ordered one year after the publication date by CEN of this standard.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- EN 280, Mobile elevating work platforms Design calculations Stability criteria Construction Safety Examinations and tests
- EN 349, Safety of machinery Minimum gaps to avoid crushing of parts of the human body
- EN 474-1:2006+A1:2009, Earth-moving machinery Safety Part 1: General requirements
- EN 547-1, Safety of machinery Human body measurements Part 1: Principles for determining the dimensions required for openings for whole body access into machinery
- EN 547-2, Safety of machinery Human body measurements Part 2: Principles for determining the dimensions required for access openings
- EN 547-3, Safety of machinery Human body measurements Part 3: Anthropometric data
- EN 614-1, Safety of machinery Ergonomic design principles Part 1: Terminology and general principles
- EN 614-2, Safety of machinery Ergonomic design principles Part 2: Interactions between the design of machinery and work tasks
- EN 618, Continuous handling equipment and systems Safety and EMC requirements for equipment for mechanical handling of bulk materials except fixed belt conveyors
- EN 619, Continuous handling equipment and systems Safety and EMC requirements for equipment for mechanical handling of unit loads
- EN 620, Continuous handling equipment and systems Safety and EMC requirements for fixed belt conveyors for bulk materials
- EN 842, Safety of machinery Visual danger signals General requirements, design and testing
- EN 894-1, Safety of machinery Ergonomic requirements for the design of displays and control actuators Part 1: General principles for human interactions with displays and control actuators
- EN 894-2, Safety of machinery Ergonomics requirements for the design of displays and control actuators Part 2: Displays
- EN 894-3, Safety of machinery Ergonomics requirements for the design of displays and control actuators Part 3: Control actuators



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