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Railway applications - Track - Road-rail machines and associated equipment - Part 3: Technical requirements for running

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

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## Railway applications - Track - Road-rail machines and associated equipment - Part 3: Technical requirements for running

Applications ferroviaires - Voie - Machines rail-route et équipements associés - Partie 3 : Prescriptions pour la circulation

Bahnanwendungen - Oberbau - Zweiwege-Maschinen und zugehörige Ausrüstungen - Teil 3: Technische Anforderungen an das Fahren

This European Standard was approved by CEN on 5 May 2019.

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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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**EN 15746-3:2020 (E)****European foreword**

This document (EN 15746-3:2020) 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of an identical text or by endorsement, at the latest by June 2021, and conflicting national standards shall be withdrawn at the latest by June 2021.

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 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 15746, *Railway applications — Track — Road-rail machines and associated equipment*, is currently composed with the following parts:

- *Part 1: Technical requirements for travelling and working;*
- *Part 2: General safety requirements;*
- *Part 3: Technical requirements for running;*
- *Part 4: Technical requirements for running, travelling and working on urban rail.*

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, Turkey and the United Kingdom.

## Introduction

This European Standard was prepared to meet the essential requirements of EU Directives to facilitate an open market for goods and services.

This document is the third of a series of four parts of the European Standard, *Railway applications — Track — Road-rail machines and associated equipment*, dealing with railway specific risks of the road-rail machines when running, travelling and working on railway infrastructures:

- Part 1 covers the technical requirements for the machines in travelling and working modes, and is applicable for all machines.
- Part 2 covers the safety requirements for the machines in travelling and working modes; this is a document harmonized with the European Machinery Directive 2006/42/EC.
- Part 3 covers the essential requirements for the machines that have a running mode and run on tracks within the scope of the Railway Directive 2007/58/EC; this is a document harmonized with the Railway Interoperability Directive 2008/57/EC and its associated Technical Specifications for Interoperability (TSI).
- Part 4 covers the technical requirements for the machines intended to have running, travelling and/or working mode on urban rail.

Part 1 defines requirements for approval of the machine for use on the railway. Depending on the decision of the Infrastructure Manager or National rules the assessment of conformance could be by the Infrastructure Manager concerned, by a third party assessor or declaration of conformity by the manufacturer.

Part 2 defines requirements for the machine to be declared conformant by the manufacturer, except in the case of machines classified under Annex 4 of the Machinery Directive, which require a conformity check in conjunction with a notified body.

Part 3 defines requirements for running on the European railway network. Assessment of conformity is by a notified body as prescribed in the Railway Interoperability Directive.

Part 4 defines requirements for approval of the machine for use on urban rail. Depending on the decision of the controller of the network or National rules the assessment of conformance could be by the Urban Rail Manager concerned, by a third party assessor or declaration of conformity by the manufacturer.

The risks which exist in all mechanical, electrical, hydraulic, pneumatic and other components of machines and which are dealt with in the relevant European Standards are not within the scope of this European Standard. Where necessary, references are made to appropriate standards of this type.

**EN 15746-3:2020 (E)**

## 1 Scope

### 1.1 General

This document deals with the technical requirements to minimize the specific railway hazards of self-propelled road-rail machines, as defined in EN 15746-1:2020, 3.1, henceforward referred to as machines, when designed and intended for running on European railways within the scope of European Directive 2007/58/EC.

The running mode is an option designed by the manufacturer which permits the use of the machine on a specified railway infrastructure without the need for special operational rules.

NOTE 1 The use of special track safety equipment (i.e. part of automatic train protection systems) does not necessarily mean that the machine has a running mode; some Infrastructure Managers use such equipment as means of protection for machines in travelling and/or working modes.

NOTE 2 This document is written for 1 435 mm nominal track gauge; special requirements can apply for running on infrastructures with narrow gauge or broad gauge lines.

Urban rail and railways utilizing other than adhesion between the rail and wheels are not included in this document.

This document does not apply to the following:

- the specific requirements established by the machine operator for the use of machines, which will be the subject of negotiation between the manufacturer and the Infrastructure Manager;
- travelling and working both on and off rails;
- running on urban rail.

For a road-rail machine it is assumed that an EU road permissible host vehicle will offer an accepted safety level for its designed basic functions before conversion. Unless explicitly stated otherwise in a particular clause this specific aspect is not dealt with in this European Standard.

### 1.2 Validity of this document

This document applies to all machines which are within the scope of the Commission Regulation (EU) No 1302/2014 for locomotives and passenger rolling stock.

## 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 12663-1:2010+A1:2014, *Railway applications — Structural requirements of railway vehicle bodies — Part 1: Locomotives and passenger rolling stock (and alternative method for freight wagons)*

EN 12663-2:2010, *Railway applications — Structural requirements of railway vehicle bodies — Part 2: Freight wagons*

EN 14033-1:2017, *Railway applications — Track — Railbound construction and maintenance machines — Part 1: Technical requirements for running*

EN 14033-2:2017, *Railway applications — Track — Railbound construction and maintenance machines — Part 2: Technical requirements for travelling and working*

EN 14363:2016+A1:2018, *Railway applications — Testing and Simulation for the acceptance of running characteristics of railway vehicles — Running Behaviour and stationary tests*

EN 15153-1:2020, *Railway applications — External visible and audible warning devices for trains — Part 1: Head, marker and tail lamps*

EN 15273-2:2013+A1:2016, *Railway applications — Gauges — Part 2: Rolling stock gauge*

EN 15437-1:2009, *Railway applications — Axlebox condition monitoring — Interface and design requirements — Part 1: Trackside equipment and rolling stock axlebox*

EN 15437-2:2012, *Railway applications — Axlebox condition monitoring — Interface and design requirements — Part 2: Performance and design requirements of on-board systems for temperature monitoring*

EN 15528:2015, *Railway applications — Line categories for managing the interface between load limits of vehicles and infrastructure*

EN 15746-1:2020, *Railway applications — Track — Road-rail machines and associated equipment — Part 1: Technical requirements for travelling and working*

EN 15746-2:2020, *Railway applications — Track — Road-rail machines and associated equipment — Part 2: General safety requirements*

EN 50617-2:2015, <sup>1</sup> *Railway applications — Technical parameters of train detection systems for the interoperability of the trans-European railway system — Part 2: Axle counters*

EN 62625-1:2013,<sup>2</sup> *Electronic railway equipment — On board driving data recording system — Part 1: System specification (IEC 62625-1:2013)*

EN ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100:2010)*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**

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<sup>1</sup> As impacted by EN 50617-2:2015/AC:2016.

<sup>2</sup> As impacted by EN 62625-1:2013/A11:2017.