



**SLOVENSKI STANDARD**  
**SIST EN 14067-5:2007/kFprA1:2010**  
**01-julij-2010**

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**Železniške naprave - Aerodinamika - 5. del: Zahteve in preskusni postopki pri aerodinamiki v predorih - Dopnilo A1**

Railway applications - Aerodynamics - Part 5: Requirements and test procedures for aerodynamics in tunnels

Bahnanwendungen - Aerodynamik - Teil 5: Anforderungen und Prüfverfahren für Aerodynamik im Tunnel

Applications ferroviaires - Aérodynamique - Partie 5: Exigences et procédures d'essai pour l'aérodynamique en tunnel

**Ta slovenski standard je istoveten z: EN 14067-5:2006/FprA1**

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**ICS:**

45.060.01      Železniška vozila na splošno      Railway rolling stock in general

93.060          Gradnja predorov                      Tunnel construction

**SIST EN 14067-5:2007/kFprA1:2010      en,fr**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**EN 14067-5:2006**

**FprA1**

May 2010

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ICS 45.060.01; 93.060

English Version

## Railway applications - Aerodynamics - Part 5: Requirements and test procedures for aerodynamics in tunnels

Applications ferroviaires - Aérodynamique - Partie 5:  
Prescriptions et méthodes d'essai pour aérodynamique en  
tunnels

Bahnwendungen - Aerodynamik - Teil 5: Anforderungen  
und Prüfverfahren für Aerodynamik im Tunnel

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 256.

This draft amendment A1, if approved, will modify the European Standard EN 14067-5:2006. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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 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 14067-5:2006/FprA1:2010) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.

This document is currently submitted to the Unique Acceptance Procedure.

The "Recast" Directive 2008/57/EC of the European Parliament and of the Council on the interoperability of the rail system within the Community was published on 17<sup>th</sup> June 2008. The two previous EU Directives 96/48/EC and 2001/16/EC on the interoperability of the High Speed and Conventional rail systems within the Community will therefore be repealed with effect from 19<sup>th</sup> July 2010. At this date the harmonised standards for the railway field will have to refer to the new Directive.

Annex Z is amended to address this need.

## 1 Modification to the Foreword

*Replace the third and fourth paragraphs with the following:*

"This document has been prepared under a mandate given to CEN/CENELEC/ETSI by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2008/57/EC.

For relationship with EU Directive 2008/57/EC, see informative Annex ZA, which is an integral part of this document."

## 2 Modification to the Annex ZA

*Replace the Annex ZA with the following one:*

"

### **Annex ZA** (informative)

#### **Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC**

This European Standard has been prepared under a mandate given to CEN/CENELEC/ETSI by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the Directive 2008/57/EC<sup>1)</sup>.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the clauses of this standard given in Table ZA.1 for High Speed Rolling Stock, in Table ZA.2 for High Speed Infrastructure, in Table ZA.3 for Conventional Rail Locomotives and Passenger Rolling Stock and in Table ZA.4 for Conventional Rail Infrastructure confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

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1) This Directive 2008/57/EC adopted on 17 June 2008 is a recast of the previous Directives 96/48/EC 'Interoperability of the trans-European high-speed rail system' and 2001/16/EC 'Interoperability of the trans-European conventional rail system' and revisions thereof by 2004/50/EC 'Corrigendum to Directive 2004/50/EC of the European Parliament and of the Council of 29 April 2004 amending Council Directive 96/48/EC on the interoperability of the trans-European high-speed rail system and Directive 2001/16/EC of the European Parliament and of the Council on the interoperability of the trans-European conventional rail system'

**Table ZA.1 — Correspondence between this European Standard, the HS TSI RST published in the OJEU dated 26 March 2008 and Directive 2008/57/EC**

Clause/ sub-clauses of this European Standard	Chapter/§/annexes of the TSI	Corresponding text, articles/§/annexes of the Directive 2008/57/EC	Comments
<b>Clause 4</b> Methodologies for quantifying the pressure changes in order to meet the medical health criterion	4 Characteristics of the subsystem 4.2 Functional and technical specification of the subsystem 4.2.6 Environmental conditions § 4.2.6.4 Maximum pressure variations in tunnels	Annex III Essential requirements 1 General requirements Safety Clause 1.1.1 1.5 Technical compatibility 2 Requirements specific to each subsystem 2.4 Rolling stock 2.4.3 Technical compatibility §3	For parameter definitions, the TSI refers to the EN

**Table ZA.2 — Correspondence between this European standard, the HS TSI INF, published in OJEU dated 19 March 2008, and Directive 2008/57/EC**

Clause/ sub-clauses of this European Standard	Chapter/§/annexes of the TSI	Corresponding text, articles/§/annexes of the Directive 2008/57/EC	Comments
<b>Clause 4</b> Methodologies for quantifying the pressure changes in order to meet the medical health criterion	3 Essential requirements § 3.3.3 Meeting the essential requirements by the specifications of the Infrastructure domain. Health 4.Characteristics of the subsystem 4.2 Functional and technical specifications of the domain § 4.2.16 Maximum pressure variation in tunnels § 4.7 Health and safety conditions 6 Assessment of conformity and/or suitability for use § 6.2.6.5 Infrastructure Subsystem. Assessment of maximum pressure variation in tunnels	Annex III Essential requirements 1 General requirements 1.1 Safety Clause 1.1.1 1.5 Technical compatibility 2 Requirements specific to each subsystem 2.1 Infrastructure 2.1.1 Safety	

## EN 14067-5:2006/FprA1:2010 (E)

Table ZA.3 — Correspondence between this European Standard, the CR LOC and PASS RST TSI (final draft Rev 4.0 dated 24 November 2009) and Directive 2008/57/EC

Clause/ sub-clauses of this European Standard	Chapter/§/annexes of the TSI	Corresponding text, articles/§/annexes of the Directive 2008/57/EC	Comments
<b>Clause 4</b> Methodologies for quantifying the pressure changes in order to meet the medical health criterion	4 Characteristics of the subsystem 4.2 Functional and technical specification of the subsystem 4.2.6 Environmental conditions and aerodynamic effects § 4.2.6.2.4 Maximum pressure variations in tunnels	Annex III Essential requirements 1 General requirements Safety Clause 1.1.1 1.5 Technical compatibility 2 Requirements specific to each subsystem 2.4 Rolling stock 2.4.3 Technical compatibility §3	Sub-clause 4.2.6.2.4 remains an open point in the TSI

Table ZA.4 — Correspondence between this European Standard the CR TSI INF (Final draft Version 4.0 dated 18 September 2009), and Directive 2008/57/E

Clause/ sub-clauses of this European Standard	Chapter/§/annexes of the TSI	Corresponding text, articles/§/annexes of the Directive 2008/57/EC
<b>Clause 4</b> Methodologies for quantifying the pressure changes in order to meet the medical health criterion	4 Description of the Infrastructure Subsystem 4.2 Functional and technical specifications of subsystem 4.2.11 Health, safety and environment § 4.2.11.1 Maximum pressure variations in tunnels § 4.7. Health and safety conditions 6. Assessment of conformity of interoperability constituents and EC verification of the subsystems § 6.2.4.6. Infrastructure subsystem – Particular assessment procedures for subsystem - Assessment of maximum pressure variations in tunnels	Annex III Essential requirements 1 General requirements 1.1 Safety Clause 1.1.1 1.5 Technical compatibility 2 Requirements specific to each subsystem 2.1 Infrastructure 2.1.1 Safety

**WARNING** — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard."