



**NSAI**  
Standards

Irish Standard  
I.S. EN 15892:2011

# Railway applications - Noise Emission - Measurement of noise inside driver's cabs

## I.S. EN 15892:2011

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces:*

*This document is based on:*  
EN 15892:2011

*Published:*  
17 February, 2011

This document was published under the authority of the NSAI and comes into effect on:  
17 February, 2011

ICS number:  
45.060.10  
17.140.30

**NSAI**  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

**Sales:**  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

ICS 17.140.30; 45.060.10

English Version

## Railway applications - Noise Emission - Measurement of noise inside driver's cabs

Applications ferroviaires - Emission de bruit - Mesurage du  
bruit dans la cabine de conduite

Bahnanwendungen - Geräuschemission -  
Geräuschmessung im Führerraum

This European Standard was approved by CEN on 24 December 2010.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

**Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Contents

Page

Foreword.....	3
1 Scope .....	4
2 Normative references .....	4
3 Terms and definitions .....	4
4 Measurement quantities.....	6
5 Instrumentation and calibration .....	6
5.1 Instrumentation.....	6
5.2 Calibration .....	6
6 Tests when sounding the external warning horn.....	6
6.1 Test conditions .....	6
6.1.1 Environmental conditions.....	6
6.1.2 Vehicle conditions .....	6
6.1.3 Track conditions .....	7
6.2 Test procedure .....	7
7 Tests with the vehicle at maximum speed .....	8
7.1 Test conditions .....	8
7.1.1 Environmental conditions.....	8
7.1.2 Vehicle conditions .....	8
7.1.3 Track conditions .....	9
7.2 Test procedure .....	9
8 Test report .....	10
Annex A (informative) Guidance on the quantification of track quality for maximum speed testing .....	11
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC .....	13
Bibliography .....	15

## **Foreword**

This document (EN 15892:2011) 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 August 2011, and conflicting national standards shall be withdrawn at the latest by August 2011.

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/CENELEC/ETSI by the European Commission and the European Free Trade Association, and supports essential requirements of the Directive 2008/57/EC.

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard specifies a type test method to measure noise levels inside the driver's cabs of railway vehicles for assessing compliance with the relevant European legislation.

NOTE The relevant European legislation includes Directive 2003/10/EC of 6 February 2003 and the Commission Decisions of 23 December 2005 (Technical specification for interoperability relating to the subsystem 'rolling stock — noise' of the trans-European conventional rail system) and of 21 February 2008 (Technical specification for interoperability relating to the 'rolling stock' sub-system of the trans-European high-speed rail system).

This method is applicable to:

- the measurement of noise inside driver's cab resulting from the sounding of external warning horns when the vehicle is stationary;
- the measurement of noise inside the driver cab while the vehicle is running.

The method is not applicable to:

- complementary measurements that can be requested for acceptance tests, but which are not required by the TSIs referred to in this standard;
- the measurement of the noise from internal and external audible devices other than external warning horns;
- routine monitoring of the noise exposure of train crew.

The test procedures specified in this European Standard are of engineering grade (grade 2) with a precision of  $\pm 2$  dB, which is the preferred method for noise declaration purposes, as defined in EN ISO 12001.

## 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 15153-2, *Railway applications — External visible and audible warning devices for high speed trains — Part 2: Warning horns*

EN 60942:2003, *Electroacoustics — Sound calibrators (IEC 60942:2003)*

EN 61672-1:2003, *Electroacoustics — Sound level meters — Part 1: Specifications (IEC 61672-1:2002)*

EN 61672-2, *Electroacoustics — Sound level meters — Part 2: Pattern evaluation tests (IEC 61672-2:2003)*

EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:2005)*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-