

<b>STN</b>	<b>Železnice</b> <b>Vonkajšie vizuálne a akustické výstražné zariadenia</b> <b>Časť 2: Výstražné húkačky pre železničné dráhy</b>	<b>STN</b> <b>EN 15153-2</b>  73 6321
------------	---	--

Railway applications - External visible and audible warning devices - Part 2: Warning horns for heavy rail

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/20

Obsahuje: EN 15153-2:2020

Oznámením tejto normy sa ruší  
STN EN 15153-2 (73 6321) z júla 2013

**131095**

EUROPEAN STANDARD

**EN 15153-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2020

ICS 45.060.10

Supersedes EN 15153-2:2013

English Version

## Railway applications - External visible and audible warning devices - Part 2: Warning horns for heavy rail

Applications ferroviaires - Dispositifs externes  
d'avertissement optiques et acoustiques - Partie 2 :  
Avertisseurs sonores pour systèmes ferroviaire lourds

Bahnanwendungen - Optische und akustische  
Warneinrichtungen - Teil 2: Signalhörner für  
Eisenbahnfahrzeuge

This European Standard was approved by CEN on 6 October 2019.

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

<b>Contents</b>	<b>Page</b>
<b>European foreword</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>4</b>
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Terms and definitions</b> .....	<b>6</b>
<b>4 Symbols and abbreviations</b> .....	<b>7</b>
<b>5 Requirements</b> .....	<b>7</b>
<b>5.1 General</b> .....	<b>7</b>
<b>5.2 Acoustic requirements</b> .....	<b>7</b>
<b>5.3 Operation</b> .....	<b>8</b>
<b>5.4 Energy supply</b> .....	<b>8</b>
<b>5.5 Impact protection</b> .....	<b>8</b>
<b>6 Test requirements</b> .....	<b>9</b>
<b>6.1 Environmental test conditions</b> .....	<b>9</b>
<b>6.2 Test equipment</b> .....	<b>9</b>
<b>6.3 Test procedure</b> .....	<b>10</b>
<b>6.4 Data processing</b> .....	<b>10</b>
<b>6.5 Test report</b> .....	<b>11</b>
<b>Annex A (normative) Contractual statements - Information and requirements to be agreed and documented</b> .....	<b>12</b>
<b>Annex B (informative) Summary of testing requirements</b> .....	<b>13</b>
<b>Annex C (informative) Test of the horn under snow conditions</b> .....	<b>14</b>
<b>Annex D (informative) Lateral sound pressure tests</b> .....	<b>15</b>
<b>Annex E (informative) A-deviation</b> .....	<b>16</b>
<b>Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2016/797/EC aimed to be covered</b> .....	<b>17</b>
<b>Bibliography</b> .....	<b>20</b>

## European foreword

This document (EN 15153-2:2020) 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 July 2020, and conflicting national standards shall be withdrawn at the latest by July 2020.

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 supersedes EN 15153-2:2013.

The main changes with respect to the previous edition are:

- a new frequency option (c) in 5.2.1;
- clarification of the test site requirements (Figure 1) in 6.1;
- addition of Annex A (list of contractual agreements);
- revision of Annex ZA.

This series of documents *Railway applications — External visible and audible warning devices* consists of the following parts:

- Part 1: *Head, marker and tail lamps for heavy rail*;
- Part 2: *Warning horns for heavy rail (this document)*;
- Part 3: *Visible warning devices for urban rail*;
- Part 4: *Audible warning devices for urban rail*.

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 2016/797/EC.

For relationship with EU Directive 2016/797/EC, see informative Annex ZA, which is an integral part of this 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, 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.

**EN 15153-2:2020 (E)****Introduction**

This document was produced following the creation of EN 15153-4 for urban rail vehicles.

This document was re-named to make a clear distinction between heavy rail and urban rail.

Additionally, Annex ZA was updated for the current status of TSIs.

## 1 Scope

This document defines warning horn requirements that deliver the required audibility of approaching heavy rail vehicles. The requirements of this document do not apply to urban rail systems.

NOTE 1 The requirements for exterior audible warning devices for urban rail vehicles are found in EN 15153-4.

In the case of shunting heavy rail vehicle formations, the requirements of this document do not apply to the pushed vehicle(s).

For this purpose, the following requirements are included:

- functional and technical requirements of the warning horn as a component,
- functional and technical requirements of the integration of warning horns into the vehicle, and
- test requirements.

Operational requirements and maintenance requirements for warning horns are excluded.

NOTE 2 The requirements for the control of warning horns can be found in EN 16186-2.

## 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 16186-2:2017, *Railway applications — Driver's cab — Part 2: Integration of displays, controls and indicators*

EN 61672-1:2013, *Electroacoustics — Sound level meters — Part 1: Specifications (IEC 61672-1:2013)*

EN 61672-2:2013+A1:2017, *Electroacoustics — Sound level meters— Part 2: Pattern evaluation tests (IEC 61672-2:2013/A1:2017)*

EN IEC 60942:2018, *Electroacoustics — Sound calibrators (IEC 60942:2017)*

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