
Železniške naprave - Zgornji ustroj proge - Zagotavljanje varnosti med delom na progi - 3. del: Usposobljenost osebja za delo na progi ali ob njej

Railway applications - Track - Safety protection on the track during work - Part 3:
Competences of personnel related to work on or near tracks

Bahnanwendungen - Oberbau - Sicherungsmaßnahmen während Gleisbauarbeiten - Teil
3: Fachkenntnisse des Personals bei Arbeiten neben oder in Gleisen

Applications ferroviaires - Voie - Protection et sécurité durant des travaux sur la voie -
Partie 3: Compétences du personnel liées au travail sur ou à proximité de la voie ferrée

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This European Standard was approved by CEN on 6 August 2016 and includes Amendment 1 approved by CEN on 9 August 2021.

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 16704-3:2016+A1:2021) 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of an identical text or by endorsement, at the latest by April 2022, and conflicting national standards shall be withdrawn at the latest by April 2022.

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 A1 EN 16704-3:2016 A1.

This document includes Amendment 1 approved by CEN on 9 August 2021.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

A1 This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of this document. A1

This European Standard is one of the series EN 16704 “Railway applications – Track – Safety protection on the track during work” as listed below:

- *Part 1: Railway risks and common principles for protection of fixed and mobile work sites*
- *Part 2-1: Common solutions and technology – Technical requirements for Track Warning Systems (TWS)*
- *Part 2-2: Common solutions and technology – Technical requirements for barriers*
- *Part 3: Competences of personnel related to work on or near tracks*

A1 Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website. A1

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 16704-3:2016+A1:2021 (E)**Introduction**

Work on or near railway tracks can, if not executed with the proper package of measures related to safety, endanger the health and safety of personnel on work sites.

It is therefore essential that personnel involved in the work on or near the track are competent to carry out the activity or activities listed in this standard. As job descriptions can vary from country to country and from company to company this standard specifies the activities to be carried out. Job descriptions should specify the activities within the work.

The safety relevant requirements for operation determined in national regulations are mandatory. From the requirements in this EN no presumptions of conformity can be related to national regulations for safety at work.

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1 Scope

This European Standard defines activities related to work on or near the railway track and the associated competence profiles of persons who carry out these activities if one or more of the 5 significant risks described inside EN 16704-1:2016 arise as a result of their activities.


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 16704-1:2016, *Railway applications – Track – Safety protection on the track during work – Part 1: Railway risks and common principles for protection of fixed and mobile work sites*

3 Terms and definitions

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

 ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>



3.1

assessment

process by which the evidence generated, gathered and provided about a person is judged to determine the competence of this person

3.2

competence

ability to undertake responsibilities and to perform activities to a recognized standard on a regular basis

Note 1 to entry Competence is the combination of practical thinking skills, experience, individual responsibility, and knowledge, including a willingness to undertake work activities in accordance with agreed standards, rules and procedures.

3.3

track safety card

document that confirms that specific competence has been demonstrated by a person against the requirements of this standard

4 Competences

4.1 Competence level

To be deemed competent a person shall demonstrate a level of predefined competence of theoretical and practical ability as far as necessary for the activity in question as set out in Annex A.

EN 16704-3:2016+A1:2021 (E)**4.2 Requirements for assessment and maintenance of competence****4.2.1 General requirements**

The competence of persons who work on safety aspects shall be checked against the requirements set in this standard and a track safety card shall be issued after a positive evaluation by a competent body.

NOTE 1 A body complying with the requirements specified in EN ISO/IEC 17024 is deemed to be competent.

It is permissible that the competent body is part of a larger organization e.g. infrastructure company or trackwork company.

For determining the competence a checking of the medical aptitude is necessary. In case of absence of legal regulations of a country, the medical requirements in this standard are applicable on the initiative of the company doctor.

4.2.2 Maintenance of competence

Compliance with the medical requirements in 5.1 shall be checked at least once every five years and in case of a doubt. If there are concrete reasons for doubts about the health ability, the contractor shall arrange a medical examination of the employee in order to determine his competence.

Persons shall be considered to be complying with the requirements of 5.2 to 5.4 as long as they are pursuing their activity.

NOTE Regular practice is considered to be very important for keeping the competence at the required level.

4.3 Withdrawal of track safety card

A track safety card should be withdrawn for the following reasons in particular:

- making a decision resulting in a major breach of safety;
- taking action that endangers the safety of self or others;
- person demonstrates a history of poor safety behaviours;
- the medical details have expired and there is no record that a renewal has taken place;
- the failure and/or refusal of a Drugs and Alcohol Screening.

On withdrawal of the track safety card the reasons shall be recorded.

It shall be decided in relation to the reason for the competence being withdrawn how long the person shall be prevented from being re-issued with the track safety card.

5 Competence requirements**5.1 Medical requirements****5.1.1 General vision**

The following vision requirements shall be met:

- aided or unaided distance visual acuity: minimum of 0,8 (right eye + left eye – measured separately); minimum of 0,3 in worse eye;
- intermediate and near vision: sufficient whether aided or unaided;
- contact lenses are allowed;

- vision field: normal (absence of any abnormality affecting the task to be performed);
- vision for both eyes: present;
- binocular vision: present;
- contrast sensitivity: normal;
- absence of progressive eye disease.

NOTE Measurement of visual acuity is defined in EN ISO 8596.

5.1.2 Colour vision

Normal colour vision shall be assessed using a recognized test, such as the Ishihara test, complemented by another recognized test as required.

5.1.3 Hearing

Sufficient hearing confirmed with tone audiogram that person's hearing is good enough to hear warning signals, to keep a phone conversation going and able to hear alert tones and radio messages.

Hearing loss should not exceed 30 dB averaged over frequencies of 0,5 kHz, 1 kHz and 2 kHz in either ear.

There shall be no evidence of medical condition likely to cause a sudden or unpredictable change in hearing.

5.1.4 Basic fitness

Persons shall not be suffering from medical conditions, or taking any medical treatment, likely to cause in particular:

- sudden loss of consciousness;
- impairment of awareness or concentration;
- sudden incapacity;
- visual impairment of a temporary or transient nature;
- impairment of balance or co-ordination;
- significant limitation of mobility.

Persons shall have physical capabilities e.g. to lift up to 25 kg, to negotiate steps and to step over obstructions such as rails.

5.2 Psychological requirements

The aim of psychological assessment is to support the appointment of staff who demonstrate the cognitive, psychomotor, behavioural aptitudes and personality factors required to perform their roles to the standard required.

Assessment tools that are chosen shall be reliable, validated and consistently applied.

NOTE There are no internationally recognized testing procedures for psychological requirements.

To assess the cognitive, psychomotor, behavioural aptitudes and personality factors required, psychological assessments shall take into account the following criteria:

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- Attention and concentration (Ability to attend and acknowledge different sources of information/stimuli at the same time and collect and manage selected information/stimuli either under time pressure and/or while being presented with other sources of information/stimuli);
- Memory (Ability to learn and store job related details and relationships in appropriate time limits);
- Perceptive capability (Ability to anticipate, recognize and correctly interpret stimuli);
- Reasoning (Ability to exhibit flexible thinking and find relationships and essential cues in basic, technical and practical fields to make correct decisions);
- Speed of reaction (React to acoustic and /or visual signals in a timely and defined way);
- Gestured co-ordination (Appropriate and controlled movements in response to any complex stimuli);
- Emotional self-control (Ability to control oneself, in particular one's emotions and desires, especially in difficult situations);
- Behavioural reliability (Consistently demonstrates the required level of performance, quality and safety by exhibiting the behavioural aptitudes to undertake the role to the standard required);
- Autonomy (Ability to work effectively in an independent manner);
- Conscientiousness (Wishing to do one's work or duty well and thoroughly).

5.3 Communication requirements (standards.iteh.ai)**5.3.1 Reading/writing**

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The following levels of competence shall be applied:

- a) Level 1: Can read and demonstrate understanding of basic written instructions in the language, or languages, in which the railway infrastructure operates.
- b) Level 2: Can read and demonstrate understanding of complex written instructions and write basic records of actions taken in the language, or languages, in which the railway infrastructure operates.
- c) Level 3: Can read and demonstrate understanding of complex written instructions and write complex records and instructions in the language, or languages, in which the railway infrastructure operates.

5.3.2 Verbal communication

The following levels of competence shall be applied in the language, or languages, required by the infrastructure manager:

- a) Level 1:
 - can demonstrate understanding of basic verbal instructions;
 - can communicate basic safety related information;
 - can cope with practical situations involving an unforeseen element;
 - can describe;
 - can keep a simple conversation going.