

SLOVENSKI STANDARD oSIST prEN 15016-2:2022

01-junij-2022

Železniške naprave - Tehnična dokumentacija - 2. del: Kosovnice

Railway applications - Technical documents - Part 2: Parts lists

Bahnanwendungen - Technische Dokumente - Teil 2: Stücklisten

Applications ferroviaires - Documents techniques - Partie 2 : Nomenclatures

PREVIEW

Ta slovenski standard je istoveten z: prEN 15016-2 (Standard S.Iteh.a)

oSIST prEN 15016-2:2022

https://standards.iteh.ai/catalog/standards/sist/c6fa76b3-

01.110 Tehníčňa dokumentácija žalby Technical product-2-2022

izdelke documentation

45.020 Železniška tehnika na Railway engineering in

splošno general

oSIST prEN 15016-2:2022 en,fr,de

oSIST prEN 15016-2:2022

iTeh STANDARD **PREVIEW** (standards.iteh.ai)

oSIST prEN 15016-2:2022 https://standards.iteh.ai/catalog/standards/sist/c6fa76b3faf4-433c-bcd7-d0952f3db9fb/osist-pren-15016-2-2022

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

DRAFT prEN 15016-2

April 2022

ICS 01.100.01; 45.020

Will supersede EN 15016-2:2004

English Version

Railway applications - Technical documents - Part 2: Parts lists

Applications ferroviaires - Documents techniques - Partie 2 : Nomenclatures

Bahnanwendungen - Technische Dokumente - Teil 2: Stücklisten

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 256.

If this draft becomes a European Standard, 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.

This draft European Standard 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-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.

Recipients of this draft are invited to submit with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation, ai/catalog/standards/sist/c6fa76b3-

 $\frac{faf4-433c-bcd7-d0952f3db9fb/osist-pren-15016-2-2022}{\text{Warning}: This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.}$



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

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

Conte	ents	Page			
Europe	ean foreword	3			
	uction				
1	Scope	5			
2	Normative references				
3	Terms and definitions				
4	Symbols and abbreviated terms				
5 5.1	Characteristic features of parts lists	6			
5.1 5.2	General				
5.3	Size				
5.4 5.5	Border				
5.6	Centring marks	7			
5.6.1 5.6.2	Optical density	7			
5.6.2 5.6.3	Characteristics of lettering	`/			
6	Specification (standards.iteh.ai)	7			
6.1	Title block	7			
6.2 6.3	Columns and lines Data fields General https://standards.iteh.ai/catalog/standards/sist/c6fa76b3- Item reference faf4-433c-bcd7-d0952f3db9fb/osist-pren-15016-2-2022	8			
6.3.1	General https://standards.iteh.ai/catalog/standards/sist/c6fa76b3-	8			
6.3.2 6.3.3	Quantity, number of pieces	8 o			
6.3.4	Unit				
6.3.5	Title, designation, name of item				
6.3.6 6.3.7	Item number, standard code designation Material, technical data				
6.3.8	Mass / unit				
6.3.9	Remark				
	Copyright and exploitation right Intellectual property				
7	Entry rules				
Annex	A (normative) Title block				
A.1	Presentation				
A.2	Contents				
A.3	Description of title block fields				
	B (normative) General layout				
Annex C (informative) Example of a multilingual parts list20					
Riblio	granhy	22			

European foreword

This document (prEN 15016-2:2022) 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 CEN Enquiry.

This document will supersede EN 15016-2:2004.

In comparison with the previous edition, the following technical modifications have been made:

The references to standards, the clause "Terms and definitions" have been updated. The clause "Symbols and abbreviated terms" have been added. Microcopying has been deleted. In Table 3 "Entry rules" the case "Software" has been added. In Table 2 "Data fields" and Annex A references to the Data Model of Part 4 have been incorporated to show the relation between the data fields of the parts lists respectively the fields of the title blocks of technical documents and the data fields for data exchange.

This document is part of the standard series "Railway applications —" Technical documents" which consists of the following parts:

- EN 15016-1: General principles;
- EN 15016-2: Parts lists: **iTeh STANDARD**
- EN 15016-3: Handling of modifications of technical documents;
- EN 15016-4: Data exchange. (standards.iteh.ai)

Annex A and Annex B are normative. Annex C is informative.

oSIST prEN 15016-2:2022

https://standards.iteh.ai/catalog/standards/sist/c6fa76b3-faf4-433c-bcd7-d0952f3db9fb/osist-pren-15016-2-2022

Introduction

In railway business, the customer very often requires, as part of a contract, technical documents in a certain form. In order to support co-operation and effective exchange of information between customers, suppliers and partners, it is necessary to have the document requirements precisely defined.

This document refers to EN, ISO or IEC standards dealing with technical drawings. In cases where ISO or IEC standards are not sufficiently precise, this standard gives specific details. These additions to ISO and IEC standards facilitate the exploitation and the administration of the drawings.

These requirements have been drawn up in order to accommodate:

- the large variety of users;
- ease of transfer of documents;
- any specific series of documentation related to the railway material they define.

Special consideration has been given to those producing drawings by computer and their reproduction without loss of quality.

NOTE The range of documents covers documents such as specifications, conditions for acceptance or further technical specifications which cannot be graphically represented. This is meant to highlight the difference between "graphical representation" and "verbal description". Teh STANDARD

PREVIEW (standards.iteh.ai)

oSIST prEN 15016-2:2022 https://standards.iteh.ai/catalog/standards/sist/c6fa76b3-faf4-433c-bcd7-d0952f3db9fb/osist-pren-15016-2-2022

1 Scope

This document specifies the requirements for the preparation and reproduction of design parts lists for railway applications.

This document specifies the design parts list and describes the basic principles, their structure and the minimum requirements of a design parts list.

The document applies throughout the total life span of the parts list. This document applies to all the railway organisations and partners concerned with the design parts list, and to suppliers preparing parts list on behalf of network users.

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 15016-1, Technical drawings — Railway applications — Part 1: General Principles

EN 17343:2020, Railway applications — General terms and definitions

EN 61355-1:2008, Classification and designation of documents for plants, systems and equipment — Part 1: Rules and classification tables

EN ISO 216:2007, Writing paper and certain classes of printed matter — Trimmed sizes — A and B series, and indication of machine direction (ISO 216:2007)

EN ISO 10209:2012, Technical product documentation — Vocabulary — Terms relating to technical drawings, product definition and related documentation (ISO 10209:2012)

OSIST prEN 15016-2:2022

ISO 639-1, Codes for the representation of names of languages der Part 11:/Alpha 22code faf4-433c-bcd7-d0952f3db9fb/osist-pren-15016-2-2022

ISO 80000-1, Quantities and units — Part 1: General

ISO 4882, Office machines and data processing equipment — Line spacings and character spacings

ISO 16016, Technical product documentation — Protection notices for restricting the use of documents and products

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 17343:2020 and EN ISO 10209:2012 apply.

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

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

3.1

parts list

list of elements of an object

Note 1 to entry: The parts list is complete as regards to specific purpose and containing all the necessary documents and articles appertaining thereto, giving their name, item number, quantity and unit. Only those summaries are designated in the parts lists which relate to the quantity 1 of an object.

Note 2 to entry: The parts list is the main document to describe an object, independent of the hierarchy in which the object is situated in the product structure

Note 3 to entry: There is no difference between an assembly and detail parts list.

[SOURCE: ISO 10209:2012, 11.120, modified — Note 1, 2 and 3 to entry have been added.]

3.2

design parts list

parts list created in the design phase where the final product is defined

Note 1 to entry: It defines the design and is neutral with respect to workshop.

4 Symbols and abbreviated terms

OEM

original equipment manufacturer

iTeh STANDARD

5 Characteristic features of parts lists EVIEW

5.1 General

(standards.iteh.ai)

A parts list can be presented as follows:

- as a separate document without drawing SIST prEN 15016-2:2022
 - https://standards.iteh.ai/catalog/standards/sist/c6fa76b3-
- as a separate document with relation to a drawing (separate parts list): 16-2-2022
- entered on a drawing.

Any sheet of parts lists shall bear an identification number. When more sheets together form an entity, it shall be clearly indicated on the first sheet which and how many sheets form the entity.

All pages of the parts list should correspond with the specimen shown in Annex B.

Requirements for copying and scanning are to be defined.

5.2 Base

Parts list as a separate document shall preferably be printed on white paper with a minimum weight of 70 g/m^2 . In case of entering parts lists on drawing sheets, see EN 15016-1.

5.3 Size

Separate parts lists shall be to A4 size in accordance with EN ISO 216:2007, series A.

5.4 Border

The border is shown in Annex B.

5.5 Centring marks

Reference marks for centring required for the adjustment of the position of the parts list on the setting plane of the photographic copying device, appear in the margin at the locations defined in Annex B.

5.6 Characteristics of lines and entries

5.6.1 Optical density

All lines and entries including those added during revision should have a contrast of at least 0,7 with respect to base according to EN ISO 6428.

5.6.2 Line wideness of separate parts lists

Printed parts lists shall fulfil the same requirements as parts lists on drawings for scanning suitability. For fulfilling these requirements, it is recommended to use line wideness according to Table 1.

Wideness
(mm)

Borderlines 0,7
Main lines 0,35
Other lines 0,25

Standards iteh ai

Table 1 — Line widenesses

5.6.3 Characteristics of lettering

Separate parts lists shall be printed with lettering having height between 2,3 mm and 2,6 mm and a width of 2,5 mm to ensure scanning legibility. The line and character spacing shall be in accordance with ISO 4882.

Entries in parts list on drawings shall be in accordance with EN 15016-1.

6 Specification

6.1 Title block

A title block, intended for taking the necessary headings for identification and use, shall appear on all parts lists.

It is recommended to use the same title block format on all pages of the parts list. It is permissible to use a reduced version on the pages following page 1; this block shall as a minimum have the same identification zone as shown in Annex A.

The mandatory requirements of the title block are defined in Annex A.

6.2 Columns and lines

The parts list consists of eight columns for the entry of various data describing the items required for analysis and interpretation of the drawing.

The columns are separated from each other by a continuous line of at least 0,35 mm wideness.

The layout of separate parts list is given in Annex B.

6.3 Data fields

6.3.1 General

The data fields of the parts lists are given in Table 2 (see also Annex B).

Table 2 — Data fields

Column	Column text	Character type	Text	Language	EN 15016-4
			alignment	dependency	Table-Field no. ^a
1	Item number	alphanumerical	right	No	C-7
2	Quantity, no. of pieces	alphanumerical	right	No	C-9
3	Unit	alphanumerical	centre	No	C-10
4	Title, designation,	alphanumerical	left	Yes	D-12
	name of item				D-13
5	Item number,	alphanumerical	left	No	C-5, D-23, D-24
	standard code designation	iTeh S7	CANDA	ARD	
6	6 Material/ a technical data	alphanumerical	EVleftEV	Yes	D-25, D-26, D-27, D-28,
					D-29, D-30
7	Mass/unit	numerical 2	r Centre te	h.ab)	D-18/D-19
8	Remark	alphanumerical	left	Yes	C1-2

^a The naming of the fields in EN 15016-4 differs partly from the naming in EN 15016-2 because of the different use (for data model). Instead of harmonising the names, a reference is made to the corresponding fields in EN 15016-4. The reference consists of <Data Table>-<Field Number> as defined in EN 15016-4:2004, Annex A.

6.3.2 Item reference

Identical parts shown in the same assembly should have the same item reference.

The item reference is a number which is added as a serial characteristic to objects listed in parts lists and shown on drawings. The reference number shall be rising graded.

If a revision causes an item to be removed from a parts list, the remaining items retain their numbers, thus reducing the need to revise the drawing and other associated documentation.

The field "Item number" may be left empty in the parts list section for a single part.

6.3.3 Quantity, number of pieces

The column shows the total number of that particular item necessary for one complete assembly (see ISO 7573).

If reference to a document shall be given in this column, a capital cross (X) shall be entered (see Annex C).

When the quantity needed cannot be specified at the design stage or if it is not necessary to specify, the capital letter N (meaning: not defined) shall be given in the field "Quantity".

6.3.4 Unit

Refers to the unit of measure for the quantity. The SI units according to ISO 80000-1 including their multiples shall be used.

6.3.5 Title, designation, name of item

The identification of the specified item or document, wherever possible, shall be the same as the description given on the main document for the item. When referring to standards, the standardized designation for the relevant items shall be used.

6.3.6 Item number, standard code designation

Contains the identification number of the item. In case the item has not a specified parts list identification number, the field should contain the following:

- drawing identification number of the specified item; or
- parts list identification number; or
- document identification number, e.g. references to standards, working documents, etc.;
- standard components which are defined in international or national standards shall use designations as defined in those standards;
- when specifying raw material, a reference should be given to a standard and to the dimensions of the item.

6.3.7 Material, technical data (standards.iteh.ai)

This field contains informative data for an item identified with its identification number in the field "Item number, standard code designation". The purpose is to improve the understanding of which material is specified. Where there is no identification number, the material quality is specified in this field. Wherever possible, material designations according to international (exceptionally to national) standards shall be used. If there are no appropriate standards, designations according to established practice or well-known trade names shall be used.

6.3.8 Mass / unit

In this field, the finished mass per item is to be indicated in kg per unit. Indication of weight is not necessary for items the weight of which is already listed in ancillary parts lists. Decimal figures may be written with a comma indicating the decimal marker and indicated to a maximum number of three decimal places.

6.3.9 Remark

This field is for any additional text information.

For items represented in circuit diagrams, the item reference designation (apparatus) should be entered in this field.

If there is not sufficient space for explanatory remarks, an asterisk (*) or number is to be entered in this field and the remark is to be detailed over the entire width of the parts list block.

6.3.10 Copyright and exploitation right

The designation shall be in accordance with ISO 16016. Exploitation rights shall be declared. The name of the legal owner or the creator of the parts list shall be written in the title block. Information concerning the copyright can be added outside the parts list frame (see Annex B and Annex C).

Information concerning exploitation right is given in the parts list field.