



**SLOVENSKI STANDARD**  
**SIST EN 50317:2012/oprA1:2021**  
**01-julij-2021**

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**Železniške naprave - Sistemi za odjem toka - Zahteve in veljavnost meritev medsebojnih dinamičnih vplivov med odjemnikom toka in kontaktnim vodnikom**

Railway applications - Current collection systems - Requirements for and validation of measurements of the dynamic interaction between pantograph and overhead contact line

Bahnanwendungen - Stromabnahmesysteme - Anforderungen und Validierung von Messungen des dynamischen Zusammenwirkens zwischen Stromabnehmer und Oberleitung

Applications ferroviaires - Systèmes de captage de courant - Prescriptions et validation des mesures de l'interaction dynamique entre le pantographe et la caténaire

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**Ta slovenski standard je istoveten z: EN 50317:2012/prA1:2021**

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**ICS:**

29.280      Električna vlečna oprema      Electric traction equipment

**SIST EN 50317:2012/oprA1:2021      en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**EN 50317:2012**

**prA1**

May 2021

ICS

English Version

**Railway applications - Current collection systems -  
Requirements for and validation of measurements of the  
dynamic interaction between pantograph and overhead contact  
line**

Applications ferroviaires - Systèmes de captage de courant  
- Prescriptions et validation des mesures de l'interaction  
dynamique entre le pantographe et la caténaire

Bahnanwendungen - Stromabnahmesysteme -  
Anforderungen und Validierung von Messungen des  
dynamischen Zusammenwirkens zwischen Stromabnehmer  
und Oberleitung

This draft amendment prA1, if approved, will modify the European Standard EN 50317:2012; it is submitted to CENELEC members for enquiry.

Deadline for CENELEC: 2021-08-13.

It has been drawn up by CLC/SC 9XC.

If this draft becomes an amendment, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

This draft amendment was established by CENELEC in three official versions (English, French, German).

A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the 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.

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 Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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

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## European foreword

This document (EN 50137:2012/prA1:2021) has been prepared by SC 9XC, Electric supply and earthing systems for public transport equipment and ancillary apparatus (fixed installations), of Technical Committee CENELEC TC 9X, Electrical and electronic applications for railways.

This document is currently submitted to the Enquiry.

The following dates are proposed:

- latest date by which the existence of this document has to be announced at national level (doa) dor + 6 months
- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) dor + 12 months
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) dor + 36 months (to be confirmed or modified when voting)

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of this document.

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EN 50137:2012/prA1:2021 (E)

## 1 Modification to Clause 2, Normative references

Replace the content of Clause 2 by "There are no normative references in this document."

## 2 Modification to subclause 3.14, tension length

Replace "[SOURCE: EN 50119]" by "[SOURCE: IEC 60050 811:2017, 811-33-61]"

## 3 Modification to subclause 9.3, Adjustment of threshold for the measurement distance

Replace the Formula (3) with the following:

$$x = x_{ref} \times \frac{d_{ref}^2}{d^2}$$

## 4 Modification to Annex ZZ, Relationship between this European standard and the essential requirements of EU Directive 2016/797/EU [2016 OJ L138] aimed to be covered

Replace the Annex ZZ by the following:

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## Annex ZZ (informative)

### Relationship between this European Standard and the Essential Requirements of EU Directive (EU) 2016/797 aimed to be covered

This European Standard has been prepared under a Commission's standardization request "M/483 Mandate to CEN and CENELEC for Standardisation in the field of interoperability of the rail system" to provide one voluntary means of conforming to (parts of) Essential Requirements of Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on interoperability of the rail system (recast) as specified in the relevant technical specifications for interoperability (TSI).

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZZ.1 for "Locomotives and Passenger Rolling Stock", and Table ZZ.2 for "Energy" confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive as specified in the technical specifications for interoperability (TSI), and associated EFTA regulations.

**Table ZZ.1 — Correspondence between this European Standard, Commission Regulation (EU) N° 1302/2014 concerning the technical specification for interoperability relating to the 'rolling stock — locomotives and passenger rolling stock' subsystem of the rail system in the European Union\* and Directive (EU) 2016/797**

NOTE: The Technical Specification for Interoperability (TSI) can refer to other clauses of this standard making the application of those clauses mandatory. Possible references to such clauses are found in the Appendix J to the TSI.

Essential Requirements of Directive (EU) 2016/797	Clauses of the Annex to the Technical Specification for Interoperability (TSI)	Clause/ subclauses of this European Standard	Comments
Section 3 of the Annex to the TSI indicates the correspondence between the TSI clauses and the Essential Requirements of Directive (EU) 2016/797	4.2.8.2.9.5 Pantograph static contact force (IC level)	Clause 6 Clause 7	TSI Clause 4.2.8.2 is part of the interface to the Energy Subsystem
	4.2.8.2.9.6 Pantograph contact force and dynamic behaviour	Clause 6 Clause 7 Clause 8 Clause 9	
	5.3.10 Pantograph	Clause 6 Clause 7 Clause 8 Clause 9	
	6.1.3.7 Pantograph (Clause 5.3.10)	Clause 6 Clause 7 Clause 8 Clause 9	