

SLOVENSKI STANDARD

oSIST prEN 50121-2:2025

01-september-2025

Železniške naprave - Elektromagnetna združljivost - 2. del: Sevanje celotnega železniškega sistema v okolje

Railway applications - Electromagnetic compatibility - Part 2: Emission of the whole railway system to the outside world

Bahnwendungen - Elektromagnetische Verträglichkeit - Teil 2 Störaussendungen des gesamten Bahnsystems in die Außenwelt

Applications ferroviaires - Compatibilité électromagnétique – Partie 2 Emission du système ferroviaire dans son ensemble vers le monde extérieur

Ta slovenski standard je istoveten z: prEN 50121-2:2025

<https://standards.itk.si/catalog/standard/1/it/7411-D-2708-4-02-h-3-a-5011-6551-2/prEN-50121-2-2025>

ICS:

33.100.10	Emisija	Emission
45.020	Železniška tehnika na splošno	Railway engineering in general

oSIST prEN 50121-2:2025

en

**EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM**

**DRAFT
prEN 50121-2**

August 2025

ICS 29.280; 33.100.10; 45.020

Will supersede EN 50121-2:2017

English Version

**Railway applications - Electromagnetic compatibility - Part 2:
Emission of the whole railway system to the outside world**

Applications ferroviaires - Compatibilité électromagnétique -
Partie 2 Emission du système ferroviaire dans son
ensemble vers le monde extérieur

Bahnanwendungen - Elektromagnetische Verträglichkeit -
Teil 2 Störaussendungen des gesamten Bahnsystems in
die Außenwelt S

This draft European Standard is submitted to CENELEC members for enquiry.
Deadline for CENELEC: 2025-10-24.

It has been drawn up by CLC/TC 9X.

If this draft becomes a European Standard, CENELEC 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 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, Türkiye and the United Kingdom.

[oSIST prEN 50121-2:2025](https://standards.cenelec.eu/draft-pr-en-50121-2-2025)

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

1 Contents

Page

2	European foreword	4
3	1 Scope	6
4	2 Normative references	6
5	3 Terms definitions and abbreviations	6
6	3.1 Terms and definitions	6
7	3.2 Abbreviations	7
8	4 Emission limits	7
9	4.1 Emission from the open railway system during train operation	7
10	4.2 Radio frequency emission from railway substations	8
11	5 Method of measurement of emission from moving rolling stock and substations	8
12	5.1 General and specific measurement parameters	8
13	5.1.1 General measurement parameters	8
14	5.1.2 Measurement locations	10
15	5.1.3 Measurement parameter for moving trains	11
16	5.1.4 Measurement parameter for railway substations	11
17	5.2 Acquisition method	12
18	5.3 Transients	12
19	5.4 Measuring conditions	12
20	5.4.1 Weather conditions	12
21	5.4.2 Railway system operating modes	12
22	5.4.3 Multiple sources from remote trains	12
23	5.5 Test report	12
24	Annex A (informative) Background to the method of measurement	18
25	A.1 Introduction	18
26	A.2 Requirement for a special method of measurement	18
27	A.3 Justification for a special method of measurement	18
28	A.4 Frequency range	19
29	A.5 Antenna positions	19
30	A.6 Conversion of results if not measured at 10 m	19
31	A.7 Measuring scales	19
32	A.8 Repeatability of results	20
33	A.9 Railway system conditions	20
34	A.9.1 Weather	20
35	A.9.2 Speed, traction power	20
36	A.9.3 Multiple sources from remote trains	20