

# **SLOVENSKI STANDARD** SIST EN 55032:2015/oprAB:2025

01-februar-2025

Elektromagnetna združljivost večpredstavnostne opreme - Zahteve glede elektromagnetnega sevanja - Dopolnilo AB

Electromagnetic compatibility of multimedia equipment - Emission requirements

Elektromagnetische Verträglichkeit von Multimediageräten und -einrichtungen -Anforderungen an die Störaussendung

Compatibilité électromagnétique des équipements multimédia - Exigences d'émission

Ta slovenski standard je istoveten z: EN 55032:2015/prAB:2025

ICS:

33.100.10 Emisija Emission

33.160.60 Večpredstavni (multimedijski) Multimedia systems and

sistemi in oprema za

telekonference

teleconferencing equipment

SIST EN 55032:2015/oprAB:2025 en SIST EN 55032:2015/oprAB:2025

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#### **English Version**

## Electromagnetic compatibility of multimedia equipment - Emission requirements

Compatibilité électromagnétique des équipements multimédia - Exigences d'émission

Elektromagnetische Verträglichkeit von Multimediageräten und -einrichtungen - Anforderungen an die Störaussendung

This draft amendment prAB, if approved, will modify the European Standard EN 55032:2015; it is submitted to CENELEC members for enquiry.

Deadline for CENELEC: 2025-03-28.

It has been drawn up by CLC/TC 210.

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.

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

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## European foreword

- This document (EN 55032:2015/prAB:2025) has been prepared by CLC/TC 210 "Electromagnetic Compatibility
- 61 (EMC)".

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- 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) dav + 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) dav + 12 months

 latest date by which the national standards conflicting with this document have to be withdrawn dav + 36 months (to be confirmed or modified when voting)

64 EN 55032:2015/prAB:2025 introduces modifications to improve legal certainty for citation in the EU Official

(dow)

65 Journal.

- This document has been prepared under a standardization request addressed to CENELEC by the European
- 67 Commission. The Standing Committee of the EFTA States subsequently approves these requests for its
- 68 Member States.

69 For the relationship with EU Legislation, see informative Annex ZZ, which is an integral part of this document.

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### 1 Modification to Clause 1, "Scope"

71 Delete the note.

70

72 In six places replace the words "this publication" with "this document".

#### 73 **2 Modification to Clause 2, "Normative references"**

- 74 Replace all references with:
- 75 CISPR 16-1-1:2015, Specification for radio disturbance and immunity measuring apparatus and methods –
- 76 Part 1-1: Radio disturbance and immunity measuring apparatus Measuring apparatus
- 77 CISPR 16-1-2:2014,<sup>2</sup> Specification for radio disturbance and immunity measuring apparatus and methods –
- 78 Part 1-2: Radio disturbance and immunity measuring apparatus Coupling devices for conducted disturbance
- 79 measurements
- 80 CISPR 16-1-4:2019,<sup>3</sup> Specification for radio disturbance and immunity measuring apparatus and methods –
- 81 Part 1-4: Radio disturbance and immunity measuring apparatus Antennas and test sites for radiated
- 82 disturbance measurements
- 83 CISPR 16-1-5:2014,4 Specification for radio disturbance and immunity measuring apparatus and methods –
- 84 Part 1-5: Radio disturbance and immunity measuring apparatus Antenna calibration sites and reference test
- 85 sites for 5 MHz to 18 GHz
- 86 CISPR 16-1-6:2014, 5 Specification for radio disturbance and immunity measuring apparatus and methods –
- 87 Part 1-6: Radio disturbance and immunity measuring apparatus EMC antenna calibration
- 88 CISPR 16-2-1:2014,6 Specification for radio disturbance and immunity measuring apparatus and methods –
- 89 Part 2-1: Methods of measurement of disturbances and immunity Conducted disturbance measurements
- 90 CISPR 16-2-3:2016,7 Specification for radio disturbance and immunity measuring apparatus and methods –
- 91 Part 2-3: Methods of measurement of disturbances and immunity Radiated disturbance measurements
- 92 CISPR 16-4-2:2011,8 Specification for radio disturbance and immunity measuring apparatus and methods –
- 93 Part 4-2: Uncertainties, statistics and limit modelling Measurement instrumentation uncertainty
- 94 IEC 61000-4-6:2023, Electromagnetic compatibility (EMC) Part 4-6: Testing and measurement techniques –
- 95 Immunity to conducted disturbances, induced by radio-frequency fields
- 96 ISO/IEC 17025:2017, General requirements for the competence of testing and calibration laboratories

#### 97 3 Modifications to Clause 4, "Classification of equipment"

98 Replace the fourth paragraph with:

<sup>&</sup>lt;sup>1</sup> 4th edition (2015). This 4th edition has been replaced in 2019 by a 5th Edition CISPR 16-1-1:2019, Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring apparatus. But the listed edition applies, see

<sup>&</sup>lt;sup>2</sup> As impacted by CISPR 16-1-2:2014/AMD1:2017.

<sup>&</sup>lt;sup>3</sup> As impacted by CISPR 16-1-4:2019/AMD1:2020 and CISPR 16-1-4:2019/AMD2:2023.

<sup>&</sup>lt;sup>4</sup> As impacted by CISPR 16-1-5:2014/AMD1:2016.

<sup>&</sup>lt;sup>5</sup> As impacted by CISPR 16-1-6:2014/AMD1:2017 and CISPR 16-1-6:2014/AMD2:2022.

<sup>&</sup>lt;sup>6</sup> As impacted by CISPR 16-2-1:2014/AMD1:2017.

<sup>&</sup>lt;sup>7</sup> As impacted by CISPR 16-2-3:2016/AMD1:2019 and CISPR 16-2-3:2016/AMD2:2023.

<sup>&</sup>lt;sup>8</sup> As impacted by CISPR 16-4-2:2011/AMD1:2014 and CISPR 16-4-2:2011/AMD2:2018.

- 99 "The Class B requirements for equipment are intended to offer adequate protection to radio services within the
- 100 residential environment."
- 101 Replace the note with:
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- 103 NOTE Equipment meeting Class A requirements is not intended to offer adequate protection to radio services within a
- 104 residential environment."

#### 4 Modification to Clause 5, "Requirements"

Replace the words "this publication" with "this document".

#### 5 Modifications to subclause 6.1, "General"

- In the third paragraph, in two places, replace the words "this publication" with "this document".
- 109 Replace the last paragraph with:
- "If a single port satisfies the definition of more than one of the types of port defined in this document, it is subject
- 111 to the requirements for each of the port types that it satisfies. Where a port can support both screened and
- unscreened cables, the port shall be evaluated with both cable types."

#### 6 Modification to subclause 6.2, "Host systems and modular EUT"

- Replace the second, third and fourth paragraphs with the following:
- "Self-contained modules intended for use with a host shall be assessed in at least one representative host
- system. The modules may be internal, mounted, plug-in or external as illustrated in Figure 2. The port(s) of any
- 117 module being assessed shall be terminated in accordance with Annex D. The functions of the host device that
- are specific to the module being assessed shall be exercised during the measurements. The host and modules
- used during measurements shall be listed in the test report.
- 120 Modules whose functionality and connectivity allow them to be either, plug-in, internal, mounted and/or external
- shall be assessed in each of the applicable configurations to find the worst case to be measured.
- When the EUT is a host, it shall be configured with modules so that the resulting system is representative of
- 123 normal use."

#### 7 Modification to subclause 6.3, "Measurement procedure"

- 125 Replace the content of the subclause with the following:
- 126 "The arrangement for formal measurement shall be representative of a typical arrangement of the EUT, local
- 127 AE and associated cabling.
- 128 The measurement is performed with the EUT and/or AE arranged either as floor-standing equipment, table-top
- equipment or combinations thereof as defined in D.1.1 and illustrated in Figures D.2 to D.12.
- 130 Measurements shall be performed as follows:
- using the relevant measurement methods and procedures given in Table A.1, Table A.8 and Annex C, and
- the EUT exercised in accordance with Annex B;
- 133 with the EUT, local AE and associated cabling configured and arranged, and with ports loaded as shown
- in 6.2 and Annex D;
- 135 in accordance with supporting information and clarifications defined elsewhere within this document.

- For some products it is not always obvious how the EUT and/or AE should be arranged. This can be due to
- variations in the configurations of the EUT in practice, physical or practical limitations. Examples of these
- 138 arrangements include:
- 139 wall, ceiling or rack mounted,
- 140 hand-held,
- 141 body worn.
- 142 For example, a video projector can be positioned in various ways with respect to walls, ceiling or the floor of a
- 143 room. D.1.1 defines the additional information needed to configure the EUT to simulate these types of
- 144 arrangements.
- Prescan measurements may be performed in which the arrangement of the EUT, the arrangement of the local
- 146 AE and the placement of cables is varied within the range of typical and normal placement to attempt to
- 147 determine the cable arrangement giving the maximum emission level, as described in Annex D."

#### 148 8 Modification to Clause 7, "Equipment documentation"

- 149 Replace the content of the clause with the following:
- 150 "This clause is not used in the European version of this document".

#### 151 9 Modification to Clause 8, "Applicability"

152 Delete the second paragraph.

# 153 10 Modifications to Clause 9, "Test report" ds.iteh.ai)

- 154 In the first sentence of the first paragraph, replace
- 155 "5.10 of ISO/IEC 17025:2005"
- 156 *with:*//standards.iteh.ai/catalog/standa

158

- 157 "7.8 of ISO/IEC 17025:2017".
- "No reporting is required if  $U_{cispr}$  is not defined for the relevant measurement type".

In the last set of bullet points, in the second bullet, delete

#### 160 11 Modifications to Clause 10, "Compliance with this publication"

- 161 Change the title to "Compliance with this document".
- 162 Replace the first and second paragraphs with:
- 163 "Compliance with this document requires that the EUT satisfies either the Class A or Class B requirements
- defined in Annex A, as appropriate.
- 165 Where this document gives options for measurement methods they are all equivalent and compliance may be
- shown using any of those measurement methods, together with the specified limits and any relevant restrictions.
- 167 NOTE 1 CISPR TR 16-4-5:2006+AMD1:2014+AMD2:2021 contains a methodology to verify equivalence between
- 168 alternative measurement methods and limits. The analysis in CISPR 16-4-5 makes use of inter-laboratory (round robin)
- measurement, theoretical calculations, comparisons with other established limits and methods etc.
- 170 NOTE 2 In any situation involving re-measurement of the equipment, reproducibility of results is best achieved if the
- 171 original measurement method is used.
- 172 In the fifth paragraph replace the words "this publication" with "this document".

173	Replace	the	last	naragra	nh	with:

- 174 "Compliance may be shown by measuring the EUT's emissions when operating its functions simultaneously,
- individually in turn, or any combination thereof."

#### 176 12 Modification to Clause 11, "Measurement instrumentation uncertainty"

- 177 Replace the content with:
- 178 "Instrumentation uncertainty of a measurement shall be calculated as specified in Clauses 5, 7 and 8 of
- 179 CISPR 16-4-2:2011 and reported as described in Clause 9. However, the disturbance limits specified in this
- document shall not be modified by the calculated measurement uncertainty when determining compliance with
- 181 this document."

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#### 13 Modifications to Clause A.1, "General"

- In paragraph 1 replace the words "this publication" with "this document".
- 184 *In paragraph 5 replace the words* "this publication" *with* "this document".
- 185 Replace point a) of the second bullet point with:
- 186 "a) supply voltage within the rated voltage range of the EUT".
- In the next to last bullet point replace the words "this publication" with "this document".

#### 14 Modifications to Clause A.2, "Requirements for radiated emissions"

- 189 In the first paragraph replace the words "this publication" with "this document".
- 190 In the footnote replace the words "this publication" with "this document".
- 191 In Table A.1, replace the text at the bottom of Table A.1 with:
- "The arrangement of the EUT is defined within Annex D of CISPR 32 and not that given in subclauses 6.4, 7.3.6,
- 193 7.4.2, 7.4.3, 7.5.4 and 7.6.3 of CISPR 16-2-3:2016. Requirements defined within CISPR 16-2-3:2016 that
- 194 conflict with or are in addition to the requirements of this document shall not be followed."

#### 195 15 Modifications to subclause A.3, "Requirements for conducted emissions"

- 196 In Table A.11 replace the last sentence with:
- 197 "Antenna ports that directly connect to an antenna without cable are excluded."
- 198 In Table A.12 replace the last sentence with:
- "Antenna ports that directly connect to an antenna without cable are excluded."

#### 200 16 Modification to subclause B.1, "General"

201 In the fifth paragraph replace the words "this publication" with "this document".

#### 17 Modification to subclause B.2.1, "Audio signals"

- 203 Replace the content of the subclause with:
- 204 "For EUTs that support audio signals, the signal used to exercise the EUT shall be a 1 kHz sinusoidal signal
- unless an alternative frequency is more appropriate to the operational acoustic frequency range of the EUT.
- The frequency used shall be recorded in the test report."