

MULTIMEEDIASEADMETE ELEKTROMAGNETILINE  
ÜHILDUVUS. IMMUUNSUSNÕUDED

Electromagnetic Compatibility of Multimedia  
equipment - Immunity Requirements

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 55035:2017 sisaldab Euroopa standardi EN 55035:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 55035:2017 consists of the English text of the European standard EN 55035:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

## Electromagnetic compatibility of multimedia equipment - Immunity requirements (CISPR 35:2016 , modified)

Compatibilité électromagnétique des équipements  
multimédia - Exigences d'immunité  
(CISPR 35:2016 , modifiée)

Elektromagnetische Verträglichkeit von Multimediageräten -  
Anforderungen zur Störfestigkeit  
(CISPR 35:2016 , modifiziert)

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

The text of document CISPR/I/522/FDIS, future edition 1 of CISPR 35:2016, prepared by CISPR SC I "Electromagnetic compatibility of information technology equipment, multimedia equipment and receivers" of CISPR "International special committee on radio interference" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 55035:2017.

A draft amendment, which covers common modifications to CISPR 35:2016 (CISPR/I/522/FDIS), was prepared by CLC/TC 210 "Electromagnetic Compatibility (EMC)" and approved by CENELEC.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2018-01-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-07-28

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in CISPR 35:2016 are prefixed "Z".

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This document has been prepared under mandate(s) 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) and the standardization request(s), see informative Annexes ZZA and ZZB, which are integral parts of this document.

## Endorsement notice

The text of the International Standard CISPR 35:2016 was approved by CENELEC as a European Standard with agreed common modifications.

### COMMON MODIFICATIONS

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

**Add** the following new paragraph after the sentence "MME within the scope of CISPR 20 or CISPR 24 is within the scope of this document.":

For MME that falls within the scope of EN 300 386 or any part(s) of EN 301 489 series, the requirements within these product specific/product family standards take precedence over the requirements within this document.

#### 2 Modification to Clause A.4 "Modified test levels and performance criteria"

In Table A.2 "Modified test levels for performance criterion A for the broadcast reception function", **replace** the following:

The tuned channel  $\pm 0,5$  MHz (lower edge frequency - 0,5 MHz up to the upper edge frequency + 0,5 MHz of the tuned channel) is excluded from testing.

by the following:

Except for DVB-C, the tuned channel  $\pm 0,5$  MHz (lower edge frequency - 0,5 MHz up to the upper edge frequency + 0,5 MHz of the tuned channel) is excluded from testing. For DVB-C, the disturbance levels are 3 V/m or 3 V, except in the tuned channel  $\pm 0,5$  MHz (lower edge frequency - 0,5 MHz up to the upper edge frequency + 0,5 MHz of the tuned channel), where the disturbance level is 1 V/m.

#### 3 Modification to Annexes

**Add** the following new annexes.

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## INTRODUCTION

This CISPR document establishes uniform requirements for the electromagnetic immunity of multimedia equipment. The test methods are given within this document or in referenced basic EMC immunity standards. This document specifies applicable tests, test levels, product operating conditions and assessment criteria.

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# ELECTROMAGNETIC COMPATIBILITY OF MULTIMEDIA EQUIPMENT – IMMUNITY REQUIREMENTS

## 1 Scope

NOTE Blue coloured text within this document indicates text aligned with CISPR 32. CISPR 32 contains the appropriate emission requirements above 150 kHz for the equipment within the scope of this document.

This document applies to multimedia equipment (MME) as defined in 3.1.24 and having a rated AC or DC supply voltage not exceeding 600 V.

MME within the scope of CISPR 20 or CISPR 24 is within the scope of this document.

MME with a broadcast reception function is within the scope of this document, see Annex A. MME with non-broadcast wireless interfaces is also within the scope of this document, however, compliance with this document does not require the assessment of the performance of these interfaces.

MME intended primarily for professional use is within the scope of this document.

MME for which immunity requirements in the frequency range covered by this document are explicitly formulated in other CISPR documents (except CISPR 20 and CISPR 24) are excluded from the scope of this document.

The objectives of this document are:

- to establish requirements which provide an adequate level of intrinsic immunity so that the MME will operate as intended in its environment in the frequency range 0 kHz to 400 GHz;
- to specify procedures to ensure the reproducibility of tests and the repeatability of results.

Due to technology convergence of the functions of MME, the performance criteria have been determined on a function-orientated basis rather than on an equipment-orientated basis.

## 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.

CISPR 16-1-2:2014, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-2: Radio disturbance and immunity measuring apparatus – Coupling devices for conducted disturbance measurements*

IEC 61000-4-2:2008, *Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test*

IEC 61000-4-3:2006, *Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test*

IEC 61000-4-3:2006/AMD 1:2007

IEC 61000-4-3:2006/AMD 2:2010

IEC 61000-4-4:2012, *Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test*

IEC 61000-4-5:2005, *Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test*<sup>1</sup>

IEC 61000-4-6:2008, *Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields*<sup>2</sup>

IEC 61000-4-8:2009, *Electromagnetic compatibility (EMC) – Part 4-8: Testing and measurement techniques – Power frequency magnetic field immunity test*

IEC 61000-4-11:2004, *Electromagnetic compatibility (EMC) – Part 4-11: Testing and measurement techniques – Voltage dips, short interruptions and voltage variations immunity tests*

IEC 61000-4-20: 2010, *Electromagnetic compatibility (EMC) – Part 4-20: Testing and measurement techniques – Emission and immunity testing in transverse electromagnetic (TEM) waveguides*

IEC 61000-4-21:2011, *Electromagnetic compatibility (EMC) – Part 4-21: Testing and measurement techniques – Reverberation chamber test methods*

ISO 9241-3:1992, *Ergonomic requirements for office work with visual display terminals (VDTs) – Part 3: Visual display requirements*

IEEE Standard 802.3, *IEEE Standard for Ethernet, Section Three*

### 3 Terms, definitions and abbreviations

#### 3.1 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>

NOTE Terms and definitions related to EMC and to relevant phenomena are given in IEC 60050-161. Attention is drawn to the fact that a common set of definitions has been written for both CISPR 32 and CISPR 35. It is noted that some terms and definitions will only be used in one of these two documents but for purposes of consistency they are intentionally included in both.

##### 3.1.1

#### AC mains power port

port used to connect to the mains supply network

Note 1 to entry: Equipment with a DC power port which is powered by a dedicated AC/DC power converter is defined as AC mains powered equipment.

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<sup>1</sup> 2nd edition (2005). This 2nd edition has been replaced in 2014 by a 3rd Edition IEC 61000-4-5:2014, *Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test*.

<sup>2</sup> 3rd edition (2008). This 3rd edition has been replaced in 2013 by a 4th Edition IEC 61000-4-6:2013, *Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields*.