SLOVENSKI STANDARD
SIST EN 50083-2:2003/A1:2006

01-januar-2006

Kabelska omrežja za televizijske in zvokovne signale ter interaktivne storitve – 2. del: Elektromagnetna združljivost za opremo

Cable networks for television signals, sound signals and interactive services -- Part 2: Electromagnetic compatibility for equipment

Kabelnetze für Fernsehsignale, Tonsignale und interaktive Dienste -- Teil 2: Elektromagnetische Verträglichkeit von Geräten

Réseaux de distribution par câbles pour signaux de télévision, signaux de radiodiffusion sonore et services interactifs -- Partie 2: Compatibilité électromagnétique pour les matériels

Ta slovenski standard je istoveten z: **EN 50083-2:2001/A1:2005**

ICS:

33.060.40	Kabelski razdelilni sistemi	Cabled distribution systems
33.100.01	Elektromagnetna združljivost na splošno	Electromagnetic compatibility in general

SIST EN 50083-2:2003/A1:2006 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50083-2/A1

July 2005

ICS 29.020; 33.060.40

English version

Cable networks for television signals, sound signals and interactive services
Part 2: Electromagnetic compatibility for equipment

Réseaux de distribution par câbles pour signaux de télévision, signaux de radiodiffusion sonore et services interactifs
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Kabelnetze für Fernsehsignale, Tonsignale und interaktive Dienste
Teil 2: Elektromagnetische Verträglichkeit von Geräten

This amendment A1 modifies the European Standard EN 50083-2:2001; it was approved by CENELEC on 2005-04-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This amendment exists 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 Central Secretariat has the same status as the official versions.

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

CENELEC
European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 50083-2:2001/A1:2005 E

Foreword

This amendment to the European Standard EN 50083-2:2001 was prepared by the Technical Committee CENELEC TC 209, Cable networks for television signals, sound signals and interactive services.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A1 to En 50083-2:2001 on 2005-04-01.

The following dates were fixed:

– latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2006-04-01
– latest date by which the national standards conflicting with the amendment have to be withdrawn	(dow)	2008-04-01

Contents

Add *new Subclauses 4.7 and 5.7 :*

4.7 Methods of measurement for telecom signal ports of multimedia network equipment

5.7 Performance requirements for telecom signal ports of multimedia network equipment

1.2 Specific scope of this Part 2

Replace *the text of the first indent by:*

- applies to the radiation characteristics and immunity to electromagnetic disturbance of EM-active equipment (active and passive equipment) for the reception, processing and distribution of television, sound and interactive multimedia signals as dealt with in the following parts of EN 50083 series:

Insert *after the fourth indent the following new text:*

Due to the fact that cable networks, the former cabled distribution systems for television and sound signals, are more and more used for interactive services, these networks may incorporate also equipment which carry besides the cable network equipment ports also one or more telecom signal port(s). This equipment shall be named as "multimedia network equipment".

The EMC behaviour of cable network equipment, telecommunication network equipment and multimedia network equipment may be described by the following port structure (Table 1):

Table 1 - Port structure of different network equipment

Port name	Cable network equipment	Telecommunication network equipment	Multimedia network equipment
Enclosure	X	X	X
Earth	X	X	X
AC/DC Power Supply	X	X	X
Control (e.g. alarm)	X	X	X
Antenna input port	X		X
RF network port	X		X
Telecom signal port		X	X

Table 1 shows that cable network equipment and telecommunication network equipment have four common ports and one respectively two individual port each. Multimedia network equipment carry besides the common ports an antenna input port and/or a RF network port as well as a telecom signal port.

The electromagnetic compatibility requirements for "telecommunication network equipment only" are standardised in EN 300 386 (mainly) and in EN 300 385, those for "cable network equipment only" are given in this EN 50083-2.

Equipment for multimedia networks of the above mentioned type has to work under the same EMC conditions as equipment which is falling under the cable network and the telecommunication network EMC-standards. Due to the fact, that this equipment has to work in close proximity, e.g. in the same operating room, the EMC environmental conditions for all three types of equipment are the same.

This means that multimedia network equipment has to fulfil the EMC requirements of one of the above mentioned standards and in addition the EMC requirements, laid down in the other EMC standard, for the additional port, by which it is connected to the other network.

By this procedure it is ensured that multimedia network equipment fulfils the EMC conditions of one of the above mentioned networks and will neither disturb the respective other system nor will be disturbed by the respective other system via the connecting port.

Replace *the last but one paragraph by:*

Standardisation in the field of "Electromagnetic compatibility" for any broadcast terminals (e.g. tuners, receivers, decoders, etc.) is covered by the European Standards EN 55013 and EN 55020 and for multimedia terminals by EN 55022 and EN 55024.

2 Normative references

Add *the references:*

EN 55022 +A1 +A2	1998 2000 2003	Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement (CISPR 22:1997 + A1:2000 + A2:2002, mod.)
EN 55024 +A1 +A2	1998 2001 2003	Information technology equipment – Immunity characteristics – Limits and methods of measuremen (CISPR 24:1997 + A1:2001 + A2:2002, mod.)
EN 300385 V1.2.1	1999	Electromagnetic compatibility and Radio spectrum Matters (ERM) – ElectroMagnetic Compatibility (EMC) standard for fixed radio links and ancillary equipment
EN 300386 V1.3.2	2003	Electromagnetic compatibility and Radio spectrum Matters (ERM) – Telecommunication network equipment – ElectroMagnetic Compatibility (EMC) requirements – EMC for Telecommunication network equipment;

Update *the following normative reference:*

EN 50083-3	2002	Cable networks for television signals, sound signals and interactive services Part 3: Active wideband equipment for coaxial cable networks

Replace *the normative reference* EN 50083-6 *by:*

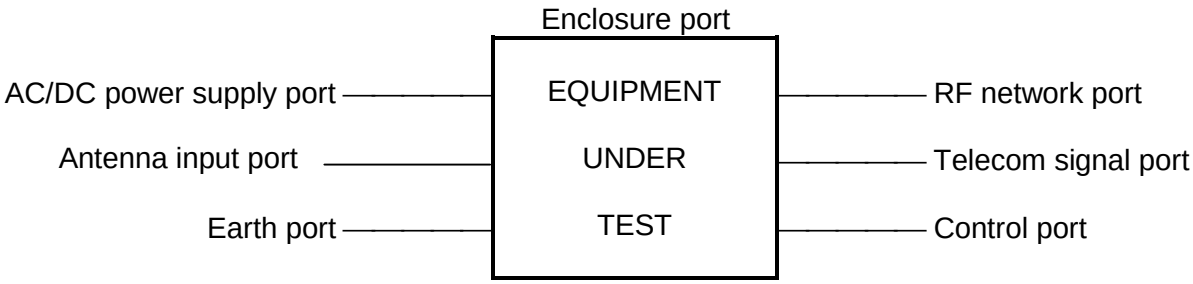
EN 60728-6	2003	Cable networks for television signals, sound signals and interactive services – Part 6: Optical equipment

Update *the following normative references:*

EN 50083-8	2002	Cable networks for television signals, sound signals and interactive services Part 8: Electromagnetic compatibility for networks
EN 55013 + A1	2001 2003	Sound and television broadcast receivers and associated equipment – Radio disturbance characteristics – Limits and methods of measurement (CISPR 13:2001 modified + A1:2003)
EN 55020 + A1	2002 2003	Sound and television broadcast receivers and associated equipment – Immunity characteristics – Limits and methods of measurement (CISPR 20:2002 + A1:2002)
EN 60966-2-4	2003	Radio frequency and coaxial cable assemblies – Part 2-4: Detail specification for cable assemblies for radio and TV receivers (Frequency range 0 to 3 000 MHz, IEC 61169-2 connectors) (IEC 60966-2-4:2003)
EN 60966-2-5	2003	Radio frequency and coaxial cable assemblies – Part 2-5: Detail specification for cable assemblies for radio and TV receivers (Frequency range 0 to 1 000 MHz, IEC 61169-2 connectors) (IEC 60966-2-5:2003)
EN 60966-2-6	2003	Radio frequency and coaxial cable assemblies – Part 2-6: Detail specification for cable assemblies for radio and TV receivers (Frequency range 0 to 3 000 MHz, IEC 61169-24 connectors) (IEC 60966-2-6:2003)
EN 61000-3-2	2000	Electromagnetic compatibility (EMC) – Part 3-2: Limits – Limits for harmonic current emissions (equipment input current up to and including 16 A per phase) (IEC 61000-3-2:2000, modified)
EN 61000-4-2 + A1 + A2	1995 1998 2001	Electromagnetic compatibility (EMC) – Part 4-2: Testing and measurement techniques – Electrostatic discharge immunity test (IEC 61000-4-2:1995 + A1:1998 + A2:2000)
EN 61000-4-3 + A1 + IS1	2002 2002 2004	Electromagnetic compatibility (EMC) – Part 4-3: Testing and measurement techniques – Radiated, radio-frequency, electromagnetic field immunity test (IEC 61000-4-3:2002 + A1:2002)
EN 61000-4-4 + A1 + A2	1995 2001 2001	Electromagnetic compatibility (EMC) – Part 4-4: Testing and measurement techniques – Electrical fast transient/burst immunity test (IEC 61000-4-4:1995 + A1:2000 + A2:2001)
EN 61000-4-6 + A1 + IS1	1996 2001 2004	Electromagnetic compatibility (EMC) – Part 4-6: Testing and measurement techniques – Immunity to conducted disturbances, induced by radio-frequency fields (IEC 61000-4-6:1996 + A1:2000)

3.1 Terms and definitions

Replace *the figure in 3.1.26 by:*



Replace *Subclause 3.1.35 by:*

3.1.35
antenna input port
point at which the equipment under test is directly connected to the receiving antenna(s)

Add *new Subclauses 3.1.37 to 3.1.45:*

3.1.37
cable network equipment
equipment from which cable networks for television signals, sound signals and interactive services are built

NOTE Examples of typical cable network equipment could be found in Part 3 to Part 5 and in Part 10 of the EN 50083 series and in EN 60728-6.

3.1.38
telecom network equipment
equipment from which telecom networks are built

NOTE Telecommunication network equipment are operated under a licence granted by a national telecommunications authority and provides telecommunications between network termination points (NTPs) (i.e. excluding terminal equipment beyond the NTPs). This covers equipment such as switching equipment (e.g.: local telephone exchanges, remote switching concentrators, international switches, telex switches, network packet switches), non-radio transmission equipment and ancillary equipment [e.g.: multiplexers, line equipment and repeaters (Synchronous Digital Hierarchy (SDH), Plesiochronous Digital Hierarchy (PDH), Asynchronous Transfer Mode (ATM)), Digital Cross Connect systems, network terminations, transmission equipment used in the access network (like XDSL)], power supply equipment (central power plant, end of suite power supplies, uninterruptible power supplies, stabilised AC power supplies and other dedicated telecommunication network power supplies, but excludes equipment which is uniquely associated with or integrated in other equipment), supervisory equipment (network management equipment, operator access maintenance equipment, traffic measurement systems, line test units, functional test units).

3.1.39
multimedia network equipment
equipment containing broadcast and telecommunication functions

3.1.40
outdoor signal lines
lines leaving the building and being subjected to outdoor interference

3.1.41
indoor signal lines
lines which do not leave the building and which are protected by other equipment against outdoor interference (e.g. connections from switching to transmission equipment in the same building)

3.1.42
active equipment
equipment (e.g. amplifiers, converters, etc.), performing signal processing by means of external or internal power supply in a certain frequency range

3.1.43
Passive equipment
equipment (e.g. splitters, tap-offs, system outlets, etc.) not requiring a power supply in order to operate and/or not carrying out signal processing in a certain frequency range

3.1.44
EM-active equipment
all passive and active equipment carrying RF signals are considered as EM-active equipment because they are liable to cause electromagnetic disturbances or the performance of them is liable to be affected by such disturbances

3.1.45
telecom signal port
point at which a cable for the wanted telecom signal is connected to the equipment

3.3 Abbreviations

Add *a the following new abbreviations:*

NTP Network Termination Point
SDH Synchronous Digital Hierarchy
PDH Plesiochronous Digital Hierarchy
ATM Asynchronous Transfer Mode
XDSL x Digital Subscriber Line ("x" stands for different versions)

4 Methods of measurements

Replace *in Subclause 4.1.1.2, paragraph Presentation of results* "Table 1" *by* "Table 2".

Replace *in Subclause 4.1.3, paragraph Presentation of the results* "Table 2" *by* "Table 3".

Replace *in Subclause 4.2.2.1, paragraph Presentation of the results* "Table 3" *by* "Table 4".

Replace *in Subclause 4.2.2.2, paragraph Presentation of results* "Table 3" *by* "Table 4".

Replace *in Subclause 4.2.2.3, paragraph Presentation of the results* "Table 3" *by* "Table 4".

Replace *in Subclause 4.2.2.4, paragraph Presentation of the results* "Table 4" *by* "Table 5".

Replace *in Subclause 4.3.1.1, paragraph Test conditions* "Table 5a" *by* "Table 6".

Replace *in Subclause 4.3.1.1, paragraph Presentation of the results* "Table 5a" *by* "Table 6".

Change *the print type in Subclause 4.3.1.2, paragraph Test frequencies for the wording* “Equipment with nominal frequency ranges <950 MHz for AM applications” *to bold.* (English version only)