
EMC Standards Development CISPR 32 and CISPR 35



Richard Worley
Global Regulations & Standards

Multimedia Equipment (MME)

Once upon a time...

Technology products were designed and developed to serve a specific purpose. In the past, when we described the function and expected use environment of a television, a music player, a radio receiver, a gaming machine, or a telephone, the single word, like "telephone" was sufficient to understand or visualize what we were taking about.

With the convergence of technology this is no longer the case. Today's common laptop combines many technologies into a single product that does more than ITE functionality. A laptop can incorporate a TV tuner and receive direct broadcast, it can also via LTE or WiMax receive video broadcast content, A laptop with an optical drive (CD or DVD) can be a high quality music or video player, the laptop can convert analog or digital audio content to more transportable formats such as MP3. A laptop with VOIP and Skype a laptop can place or receive telephone calls and have a telephone number assigned. With integrated cameras and microphones a laptop can provide video conferencing and broadcast quality ENG capabilities. Laptops also provide great platforms for gaming.



Multimedia Equipment (MME)

Because of this convergence of technology it has become necessary to change the standards and align them with the technology. Rather than expect a product such as a laptop to be evaluated to multiple standards because the laptop has functionality of several types of products, the goal is to develop a common single standard that covers most of today's technologies. This new family of product standards is called Multimedia equipment (MME).

These new MME standards are new work (NP) under the IEC and the Working Groups (WG) have been instructed to develop new MME standards. While the WG have the bodies of the prior standards as a starting place, differences in test methods, limits, and definitions need to be resolved. While not completely starting over there is expectation that all text in the new MME standards are the result of international consensus of EMC experts.

There are two WGs for the new MME standards under CISPR I, WG 2 Emissions and WG 4 immunity.

3

Global Regulations & Standards



Multimedia Equipment (MME)

- **Multimedia Equipment (MME)**

Equipment that is Information Technology Equipment (ITE), Audio equipment, Video equipment, Broadcast receiving equipment, Entertainment lighting control equipment or combinations of these.

- **Information Technology Equipment (ITE)**

Any equipment which has a primary function of either (or a combination of) entry, storage, display, retrieval, transmission, processing, switching, or control of data and/or telecommunication messages and which may be equipped with one or more ports typically operated for information transfer.

- **Audio equipment**

Equipment which has a primary function of either (or a combination of) generation, input, storage, play, retrieval, transmission, reception, amplification, processing, switching or control of audio signals.

4

Global Regulations & Standards



Multimedia Equipment (MME)

- **Video equipment**

Equipment which has a primary function of either (or a combination of) input, storage, display, play, retrieval, transmission, reception, amplification, processing, switching, or control of video signals.

- **Broadcast receiver equipment**

Equipment containing a tuner that is intended for the reception of broadcast and similar services for terrestrial, satellite and/or cable transmission.

- **Entertainment lighting control equipment**

Equipment generating or processing electrical control signals for controlling the intensity, colour, nature or direction of the light from a luminaire, where the intention is to create artistic effects in theatrical, televisual or musical productions and visual presentations



Multimedia Equipment (MME)

- **Timeline**

- The CISPR 1 WG 2 and WG 4 began their standard development process between 2001 and 2003.
- The IEC provides 5 years to complete a work program and reach an approval stage (FDIS). These two projects have not been able to complete the task within the 5 year timeframe and the work (clock) has been restarted.



IEC CISPR 32 Timeline

Project : CISPR 32 Ed. 1.0

History [Working groups](#)

Committee : CIS11 **Current document : CIS11255CD** **Current status : A2CD** — Approved for 2nd Committee Draft

Forecast publication date : 2010-11

Title :
Information technology, multimedia equipment and receivers - Radio disturbance characteristics - Limits and methods of measurement

History of the project :

Stage	Document	Decision date	Target date
PNW	CIS11250NP	2007-11-02	
ANW	CIS11259RN	2008-02-15	2008-03-31
1CD	CIS11255CD	2009-03-20	2008-10-31
CDM	CIS11200CC	2009-07-10	2009-07-31
A2CD	CIS11200ACC	2010-02-25	2009-11-30
CCDV		2010-04-30	

Return to [top](#)

Remarks :
This project CISPR 32 is re-started.
Project plan: CDV 2009-10 FDIS 2010-06

Return to [top](#)

Working groups :

- WG2 Project Leader: Ronald Storms

Return to [top](#)

Web page generated 24 March 2010

IEC CISPR 35 Timeline

Project : CISPR 35 Ed. 1.0

History [Working groups](#) [Associated documents](#)

Committee : CIS11 **Current document : CIS11220CQ** **Current status : PNW** — Potential new work item

Title :
Electromagnetic Compatibility (EMC) - Immunity standard for multimedia products

History of the project :

Stage	Document	Decision date	Target date
PNW	CIS11131BE	2004-05-28	
ANW	CIS11133RN	2004-12-03	2004-10-15
1CD	CIS11225CD	2007-04-13	2007-03-31
CDM	CIS11236CC	2007-07-20	2007-08-15
A2CD	CIS11236ACQ	2008-06-20	2008-03-31
ZCD	CIS11270CQ	2008-06-27	2008-06-30
PNW		2008-12-03	
A3CD		2008-11-15	

Return to [top](#)

Remarks :
CD: 2005-10 IS: 2009-10 - Prolongation of the target date for CD at the meeting of CIS11 - 2006-09 - Target date for CD has been approved at the SMB meeting-128-2007-02-15 - Extension of the target date for CD following decisions taken at the SMB meeting in Paris - 2007-10 - This project has been put in PNW following the meeting in Osaka

Return to [top](#)

Working groups :

- WG4 Project Leader: John Davies

Return to [top](#)

CISPR 32

- New multimedia EMC emissions standard replacing CISPR 13 and CISPR 22.
- Multiple test methods, preferred method in case of dispute.
- Next WG 2 meeting scheduled for late May in Netherlands. Next CISPR I meeting scheduled for October during IEC General meeting in Seattle.
- Outcome from the Seattle meeting is best case expected to result in a CDV with high probability of obtaining enough passing votes. Realistically, the Seattle meeting may only produce another committee draft for review and comment by the national committees.
- I expect the first public version of CISPR 32 is possible during 2012.

9

Global Regulations & Standards



CISPR 35

- New multimedia EMC immunity standard replacing CISPR 20 and CISPR 24.
- IEC WG4 meeting was held in Stuttgart Germany in Feb 2010 to complete review of standard annex and prepare for IEC General meeting.
- Multiple test methods, preferred method in case of dispute.
- Next meeting scheduled for October during IEC General meeting in Seattle.
- Outcome from the Seattle meeting is best case expected to result in a CDV with high probability of obtaining enough passing votes. First version of CISPR 35 may be published in 2011 which will withdraw CISPR 20 and CISPR 24.

10

Global Regulations & Standards



CISPR 35

- New multimedia EMC immunity standard replacing CISPR 20 and CISPR 24.
- IEC WG4 meeting was held in Stuttgart Germany to complete review of standard annex and prepare for IEC General meeting.
- Multiple test methods, preferred method in case of dispute.
- Next meeting scheduled for October during IEC General meeting in Seattle.
- Outcome from the Seattle meeting is best case expected to result in a CDV with high probability of obtaining enough passing votes. First version of CISPR 35 may be published in 2011 which will withdraw CISPR 20 and CISPR 24.

11

Global Regulations & Standards



Global Impact

- Most nations currently base their EMC standards for ITE and Audio Visual products on CISPR 13, 20, 22 and 24.
- The withdraw of those CISPR international standards will create a need for transition to the new CISPR replacements 32 and 35. Every country will adopt new standard and assign name to their version, national deviations, and time-line to transition products placed on their markets to the new standard. This will impact every product in every market.
- If CISPR 32 and 35 are not simultaneously released we could have a situation where compliance will be assessed to CISPR 32, 20 and 24.
- The international roll-out to these new standards will likely create more problems for manufacturers that the technical details of the standards.

12

Global Regulations & Standards



Global Impact

- Test labs and manufacturers need to start to monitor threads, bulletins, articles and presentation about CISPR 32 and 35. Concerns or questions should be sent to your IEC NC representative or they may be sent to Richard_Worley@dell.com

