ISO/IEC JTC 1/SC 25 N 2204

Date: 2013-10-08

Replaces: N/A

ISO/IEC JTC 1/SC 25
INTERCONNECTION OF INFORMATION TECHNOLOGY EQUIPMENT
Secretariat: Germany (DIN)

DOC TYPE:	**Out going Liaison report**
TITLE:	**Liaison report from ISO/IEC JTC 1/SC 25 to IEEE 802.3 regarding information from IEC/SC 46C relevant to IEEE P802.3bp**
SOURCE:	**SC 25 /WG3** **3Kis_058**
PROJECTs:	**25.03.16**
STATUS:	**approved liaison report**
ACTION ID:	**FYI**
REQUESTED ACTION:	**To IEEE 802.3 for consideration** **to SC 25 for information**
DUE DATE:	**N/A**
MEDIUM:	**Open**
No of Pages:	2 (including cover)
DISTRIBUTION:	ITTF, JTC 1 Secretariat P-, L-, O-Members of SC 25, **to IEEE 802.3**

Secretary - ISO/IEC JTC 1 / SC 25 - Dr.-Ing. Walter P. von Pattay
Member of ZVEI FV 7 & FV 8, Germany
Tel.: +49/89/923 967 57¸ Tfx.: +49/89/923 967 59 (only on request)
EM: Walter@Pattay.com

ISO/IEC JOINT TECHNICAL COMMITTEE 1

SUBCOMMITTEE No.25: INTERCONNECTION OF
INFORMATION TECHNOLOGY EQUIPMENT
WORKING GROUP 3: CUSTOMER PREMISES CABLING

55th Meeting of WG 3
Kista, Sweden, 2013-09-30/10-03

To: David Law; Chair, IEEE 802.3 (david_law@ieee.org)
CC: Alan Flatman, Liaison between ISO/IEC JTC1/SC25 WG3 & IEEE 802.3

Liaison statement to IEEE 802.3 regarding information from IEC/SC 46C relevant to IEEE P802.3bp

Dear Mr Law,

At the meeting of ISO/IEC JTC 1/SC 25/WG 3 in September 2013, we received information from IEC/SC 46C regarding their work on EMC and coupling attenuation of twisted pair cabling, which may be of use for project IEEE P802.3bp on Reduced Twisted Pair Gigabit Ethernet (RTPGE).

Below please find the pertinent information from IEC/SC 46C:

Quote:

Generally, the product standards IEC 61156-5 and -6 are applicable also to cables with less than four pairs and can be used for evaluation and comparison of different cable designs. As typical lengths and frequency ranges for RTPGE might be different from premise cabling, separate standards describing respective cables might be needed. IEC/TC 46/SC 46C is currently working on standards for Cat8 cables and related measurement methods which are also characterised by shorter length and higher frequencies. IEC/TC 46/SC 46C would be glad to offer this experience to develop suitable standards for RTPGE.
For this project that has new and more challenging EMC requirements than 1000BASE-T, IEC/TC 46/SC 46C is pleased to recommend using the following standard for basic definitive information on specific EMC characteristics for twisted-pair cabling:

- IEC/TS 62153-4-1 Ed. 1.0, Electromagnetic compatibility (EMC) - Part 4-1: Introduction to electromagnetic (EMC) screening measurements: this Technical Standard provides a comprehensive overview covering basic shielded cabling component EMC characteristics, theory, and measurements. The current edition has limited information related to twisted-pair components; however the draft new edition, which has been upgraded from technical report to technical standard, includes new information for the application of coupling attenuation measurements and methods to twisted-pair components.

The current, relevant referenced test procedures, which are suitable for twisted-pair cabling, are given in the series test procedures:

- IEC 62153-4-12 Ed. 1.0, Metallic communication cable test methods - Part 4-12: Electromagnetic compatibility (EMC) - Coupling attenuation or screening attenuation of connecting hardware - Absorbing clamp method

- IEC 62153-4-13 Ed. 1.0, Metallic communication cable test methods - Part 4-13: Electromagnetic compatibility (EMC) - Coupling attenuation of links and channels (laboratory conditions) - Absorbing clamp method

- IEC 62153-4-14 Ed. 1.0, Metallic communication cable test methods - Part 4-14: Electromagnetic compatibility (EMC) - Coupling attenuation of cable assemblies (Field conditions) absorbing clamp method

We thank you for conveying to the “IEEE 802.3bp Reduced Twisted Pair Gigabit Ethernet (RTPGE)” project, this information that, we hope, will be helpful to them.

Unquote

ISO/IEC JTC 1/SC 25/WG 3 will be happy to forward any feedback IEEE P802.3bp may have on this topic to our partners in IEC/SC 46C.