ISO/IEC SC25/WG3 Meeting

Berlin: 18-21 September 2006

- Customer Premises Cabling -

50 Participants **19 Nations**

Highlights:

- **ISO TR-24750 Installed Cabling to Support 10GBASE-T being forwarded as DTR**
- **ISO 11801 Ed.2 Am.1 forwarded as a 3rd FPDAM**
- **ISO 24702 Industrial Cabling standard approved**
- **ISO 14763-3 FO testing standard approved**
- **802.3at liaison requests answered in part**
- **NWIP to be raised for TR on PoE cabling issues**

ISO/IEC TR-24750
Installed Class E/F to Support 10GBASE-T

- 2nd PDTR passed; 17 nations in favour, 3 against
- 90 national comments received/resolved at mtg.
- DTR to be issued and should be approved soon
- mirrors technical requirements of IEEE 802.3an

ISO/IEC 11801 Ed.2 Amendment

- introduction of Class E_A & F_A plus EM parameters
- split into channel (Am. 1.1) plus link/component specs (Am. 1.2) in order to expedite development
- some discomfort related to splitting specifications

ISO/IEC 11801 Ed.2 Amendment 1.1

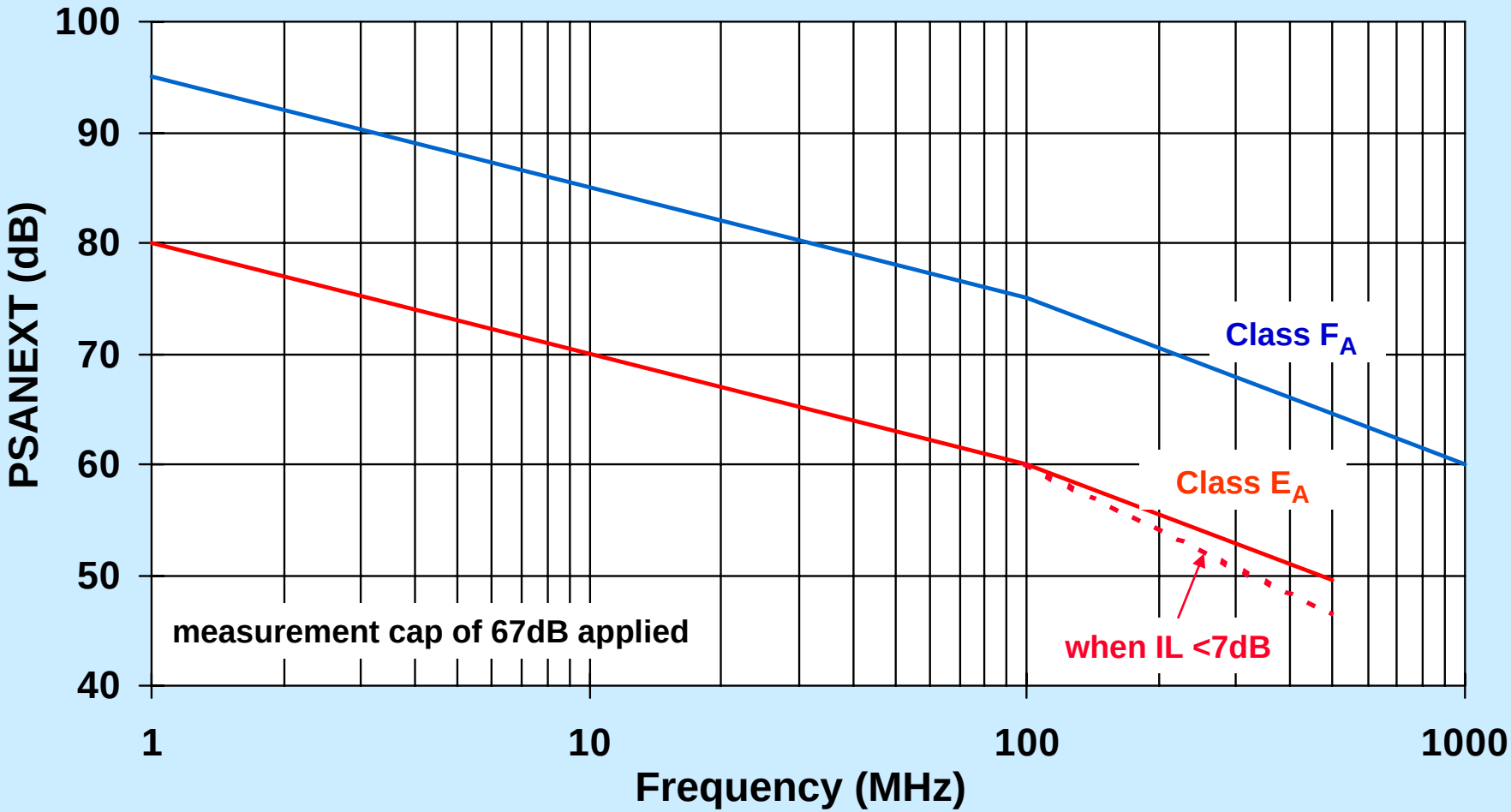
- contains conformance/channel requirements only
- 2nd FPDAM failed; 7 nations in favour, 12 against
- 216 national comments received/resolved at mtg
- 3rd FPDAM being prepared/comments at next mtg.
- captures technical requirements of IEEE 802.3an
- technically different to TIA Cat 6A regarding NEXT

ISO/IEC 11801 Ed.2 Am 1.1 2nd FPDAM Decisions

1. agreed to reduce RL lower bound from 8dB to 6dB for Class E_A.
2. proposed to delete “normalisation” as a means of calculating AFEXT from lengths (IL) of disturbing and disturbed channels, as it was not generic. It was decided to retain “normalisation” for Class E_A as UTP would not otherwise comply.
3. agreed to add escape clause to accommodate non compliance of PSANEXT above 100 MHz for short lengths of Class E_A UTP:

   3*(f-100)/400 dB when channel IL <7dB @ 100MHz

Channel PSANEXT Requirements



ISO/IEC 11801 Ed.2 Amendment 1.2

- contains link/cords/components/other material
- 264 comments to be addressed at next meeting
- agreed to adopt a MathCad model proposed by Germany to evaluate link NEXT, IL, RL & FEXT
- much work remains to be done in this area

ISO/IEC 11801 Ed.2 Am 1.2 WD
Decisions

1. agreed to adopt LC duplex as the default optical connector
2. agreed to introduce OS2 to support 10km channels

ISO/IEC 24702
Industrial Premises Cabling

- **FDIS was approved; 23 nations in favour, 0 against**
- **MICE now identical to TIA 1005 Industrial Cabling**
- **Japan plans to issue a NWIP to introduce POF**
- **MICE concept to be extracted & issued separately to allow its application in other market sectors**

Remote Powering Issues:
Input to IEEE 802.3at

- **DCLR of old Class D = 40ohm @ 20deg.C, although high proportion will meet new Class D = 25ohm**
- **cabling current capacity limits still under study**
- **reduction in connector DCR unbalance not possible**
- **60deg.C is max operating temperature for IEC 61156**
- **reasonable to assume that cables can operate at ambient + heating temperature (SC46C to confirm)**
- **DCR of stranded cords may be up to 50% higher than horizontal cabling – SC46C to advise on capacity**
- **unmating under electrical load should be <u>prevented</u> for PoEP systems to maintain connector life. A new generation of connectors required if this not possible.**

Future Meetings

ISO/IEC SC25 WG3	**26 Feb–2 Mar 2007**	**USA**
ISO/IEC SC25 WG3	**03-07 Sep 2007**	**Korea**