ISO/IEC SC25/WG3 Meeting

Barcelona: 18-22 February 2008

- Customer Premises Cabling -

60 Participants 23 Nations

Highlights:

- participants included observers from 802.3
- ISO 11801 Ed.2 Am.1 now technically stable
- ISO 11801 Ed.2 Am.2 could take ~ 2 years
- ISO TR 29125 NWI to guide on PoE cabling
- current capacity limits proposed for 802.3at
- SC86A requested to standardise OM4 fibre with copy forwarded to 802.3 and FC group

ISO/IEC 11801 Ed.2 Amendment

- introduction of Class E_A and Class F_A plus electromagnetic performance requirements:
  - balance for unscreened cabling
  - coupling attenuation for screened cabling
- split into channel (Am.1) plus link/component specs (Am.2) in order to expedite amendment

ISO/IEC 11801 Ed.2 Amendment 1

- contains copper cabling channel specifications
- FDAM approved; 19 nations in favour, 2 against
- 67 national comments received/resolved at mtg
- final draft being forwarded to IEC for publication
- captures technical requirements of IEEE 802.3an
- many technical differences Class E_A & TIA Cat 6_A

ISO/IEC 11801 Ed.2 Amendment 2

- **contains link/cords/components/other material**
- **2nd PDAM failed; 10 nations in favour, 11 against**
- **566 comments received but majority postponed until model is defined to reconcile components, links and channels (planned for Oct 2008)**
- **processing of 2nd PDAM delayed until Oct 2008, when it will either become 3rd PDAM or FPDAM**
- **most optimistic date for Am.2 approval Sep 2009**

ISO/IEC TR 29125
Cabling Guidelines for Remote Powering of DTEs

- **NWI approved for a TR to provide guidance on current capacity & safety for PoE applications**
- **IEC SC48B have issued a TR that characterises the behaviour of modular connectors breaking under electrical load**
- **request made to SC48B to define test to qualify modular connectors for 802.3at applications**
  - **SC48B has already defined a generic test for connectors breaking under electrical load**
  - **suppliers may optionally use new connectors on PoE equipment**

Current Capacity Recommendations

- forwarded to IEEE 802.3 as liaison doc 3N364
- detailed analysis received to establish temp. rise in cable bundles with all pairs energised
  - wide variety of cable types measured
  - correlates well with existing studies
- following worst case current capacity limits recommended to IEEE 802.3at:

Temperature Rise	Current per pair	
5.0deg.C	420 mA	100 cable bundles of Cat 5 UTP
7.5deg.C	550 mA	
10.0deg.C	600 mA	
12.5deg.C	680 mA	
15.0deg.C	720 mA	

OM4 Specification

- SC86A requested to develop standard for OM4 fibre with following target performance values:
  - 1,500 MHz.km OFL @ 850nm
  - 4,700 MHz.km EMB @ 850nm
  - 500 MHz.km OFL @ 1300nm
- IEEE 802.3 and FC groups copied with 3N869
- could be introduced to ISO/IEC 11801 Edition 3

Future Meetings

ISO/IEC SC25 WG3	**20-23 Oct 2008**	**France**
ISO/IEC SC25	**24 Oct 2008**	**France**
ISO/IEC SC25 WG3	**23-27 Mar 2009**	**Mexico**