ISO/IEC SC25/WG3 Meeting

Buenos Aires: 6-10 February 2006

- Structured Cabling Systems -

report for IEEE 802.3 by Alan Flatman



Key Items:

- TR-24750 Installed Cabling to Support 10GBASE-T forwarded as a 2nd PDTR
- > ISO/IEC 11801 Ed. 2.1 incl. Class $E_A + F_A$ cabling forwarded as a 2nd FPDAM
- ISO/IEC 24764 Data Centre Cabling being forwarded as a CD
- expert group working on cable thermal issues in support of 802.3at PoEP
- Iiaison to request to 802.3an on 3 items:
- 1. replacement terms to reconcile differences with 802.3an
- 2. 802.3an verification of latest TR-24750 text
- 3. availability of TR-24750, ISO/IEC 11801 Ed.2.1 drafts

46 Participants

18 Nations

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

- > 1st PDTR failed; 16 nations in favour, 8 against
- replacement terms introduced to reconcile some differences with 802.3an (need to discuss)
- Planned to become a TR after Sep 2006 meeting
- > mirrors technical requirements of 802.3an D3.1
- > may differ from TIA/EIA TSB-155 on terminology

ISO/IEC 11801 Edition 2.1 (introducing Class $E_A \& Class F_A Cabling$)

- > 1st FPDAM failed; 11 nations in favour, 9 against
- > will specify channel, links, cords, components
- replacement terms introduced to reconcile some differences with 802.3an (need to discuss)
- > 10GBASE-T added to supported applications
- > requests for tighter connector DCR unbalance
- > planned to go to FDAM after Sep 2007 meeting
- captures technical requirements of 802.3an D3.1
- technically different to TIA "Cat 6 Augmented"

ISO/IEC 11801 Edition 2.1 Balanced Cabling EM Performance

- > comprehensive EM specifications being introduced
- coupling attenuation values increased by 10dB for all environmental classifications
- > TCL values modified slightly to fit measurements
- proposals to apply coupling attenuation + balance to both screened and unscreened cabling
 - cannot accurately measure balance above 100 MHz
 - > CA measurements up to 1GHz is useful EMC data
 - > need to compare UTP+STP as "apples with apples"
 - specification of coupling attenuation for UTP is "ffs" and balance for screened cabling is "ffs" to leave the door open

Cable Temperature Issues

- IEC SC46C cable group endorses new procedure for assessing current capacity vs. temperature (conductor temp, rather than outside cable temp)
 - developed by Jo Walling, Canadian expert
 - recommended to SC25 WG3 for evaluation
- IEC SC48B connector group evaluating test procedure for contact mating/unmating under load
- SC25 WG3 hopes to have guidance for 802.3at after its next meeting in Sep 2006

Future Meetings

| ISO/IEC SC25 WG3 | 18-21 Sep 2006 | Berlin |
|------------------|-------------------|--------|
| ISO/IEC SC25 WG3 | 26 Feb–2 Mar 2007 | TBA |
| ISO/IEC SC25 WG3 | ??? Sep 2007 | Korea |