TIA TR-42 Liaison to IEEE

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Vice-Chair, TR-42.7

February 2005
Santa Clara, CA
TIA TR-42.7 Meeting

- January 31 and February 1 and 2, 2005
- Mesa, AZ
- Reviewed IEEE 802.3an 10GBASE-T cabling needs
- Addressed revisions to TSB-155 and addendum 10 (augmented category 6) to ‘568-B.2
Summary of TIA TR-42 Output

- Liaison Letter
- Draft 1.3 of TSB-155: legacy category 6 cabling from 250 MHz up to 500 MHz
- Draft 1.4 of TIA-568-B.2-10: augmented category 6 cabling
- Documents are anticipated to be ready for committee ballot in June of 2005
"Thank you for your continued feedback on the 10GBASE-T cabling specifications.

TIA TR-42 is continuing the development work on TSB-155 addressing installed category 6 cabling and Addendum 10 of TIA 568-B.2 for augmented category 6 cabling. We would appreciate an update and background for the alien ELFEXT specifications."
**Status of TSB-155, ongoing**

PN-3-0134 (proposed TSB155): Additional Requirements for 4-Pair 100Ω Category 6 Cabling, draft 1.3

- Maximum frequency specified is 500 MHz
- All shall statements are removed
- Cabling insertion loss and return loss
- Cabling NEXT/PSNEXT loss
- Cabling ELFEXT/PSELFEXT loss
- Cabling PSANEXT
- Cabling Cabling Mitigation methods
- Level Ille field testers
Status of TSB-155, New items

PN-3-0134 (proposed TSB155): Additional Requirements for 4-Pair 100Ω Category 6 Cabling, draft 1.3

– Power sum Alien ELFEXT loss, 100 m channel
– Power sum Alien ELFEXT loss, 55 m channel
– Annex C: Alien crosstalk mitigation
Mitigation is one strategy to reduce alien crosstalk coupling for existing category 6 cabling plant. Mitigation includes:

- Use non-adjacent patch panel ports
- Separate equipment cords
- Use panels with improved PSNEXT margin (TBD)
- Unbundling cables
- Use of augmented category 6 components
- All of the above
**Status of ‘568-B.2-10, ongoing**

PN-3-4426-AD10 (augmented category 6): Additional Requirements for 4-Pair 100Ω Augmented Category 6 Cabling, draft 1.4

- Maximum frequency specified is 500 MHz
- Cabling and component insertion loss
- Cabling and component NEXT/PSNEXT loss
- Cabling and component ELFEXT/PSELFEXT loss (TBD)
- Cabling PSANEXT and component PSANEXT (TBD)
- Cabling and component AFEXT (TBD)
- Field tester requirements (TBD)
Status of ‘568-B.2-10, New items

PN-3-4426-AD10 (augmented category 6):
Additional Requirements for 4-Pair 100Ω Augmented Category 6 Cabling, draft 1.4

- Cable NEXT loss and PSNEXT loss
- Connecting hardware NEXT loss
- Channel Alien PSELFEXT
- Augmented category 6 may be referred to as “AC6” (TBD)
Next TIA Meeting

June 6 - 10, 2005
Montreal, Quebec, CAN
www.tiaonline.org
Thank you

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