TIA TR-42 Liaison to IEEE 802.3

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July, 2008
Denver, CO
**Introduction to TIA**

- Telecommunications Industry Association
- www.tiaonline.org
- TR-42: Defines mechanical and transmission requirements for copper twisted-pair and optical fiber cabling and components
Agenda and Meeting Overview

- June 2 - 6 in Providence, RI
- Review TR-42 sub-committee activities
- Review TR-42 liaison to IEEE 802.3 regarding current carrying capacity and new project initiative
- Update on ‘568-C development
TR-42 Activities

- **TR-42.1 (Commercial Building Cabling):**
  - New project: Addendum 2 to TIA-942 (Data Centers) to address “Additional Media and Guidelines”

- **TR-42.2 (Residential Infrastructure):**
  - TIA-570-B-1 “Requirements for Residential Broadband Coaxial Cabling” Standard approved for publication
TR-42 Activities

• TR-42.3 (Pathways and Spaces):
  – New project: Revision of TIA-569-B, “Telecommunications Pathways and Spaces” opened
  – New project: Addendum to TIA-569-B (Pathways and Spaces) to address “Temperature and Humidity Requirements for Space” opened
  – TR-42.3.1 (Grounding and Bonding) elevated to subcommittee level
TR-42 Activities

- **TR-42.5 (Outside Plant):**
  - Subcommittee will reactivate in October
- **TR-42.5 (Terms and Symbols):**
  - Dictionary development ongoing
- **TR-42.6 (Infrastructure Administration):**
  - Default ballot of Addendum 1 to TIA-606-A (Administration) addressing, “Equipment Room and Data Center Computer Room Administration” circulating
TR-42 Activities

- TR-42.7 (Copper Cabling):
  - New project: TIA-1152, “Requirements for Field Test Instruments” opened
  - New project: TSB-184, “Guidelines for Supporting Power Delivery over Twisted-Pair Cabling” opened
  - New project: Addendum 1 to TIA-568-C (Copper Cabling) to address “Balance and Coupling Attenuation Requirements” opened
TR-42 Activities

- TR-42.7 (Copper Cabling), cont.:
  - Liaison to IEEE 802.3 addressing:
    - Project TSB-184 initiated
    - Temperature vs. current data at various temperatures
    - Calculation capacity values
    - Calculated values consistent with ISO/IEC JTC 1/SC 25/WG 3 N 864
  - Proceed to an online review of the liaison letter
TR-42 Activities

- TR-42.8 (Optical Fiber Cabling):
  - TR-42 has established a liaison with INCITS Fibre Channel (T11) Technical Committee (Terry Cobb and Doug Coleman)
  - Approved a request for TR-42.12 to develop OM4 multimode fiber requirements based upon initial criteria
**TR-42 Activities**

- **TR-42.8 (Optical Fiber Cabling), cont:**
  - Initial OM4 criteria:
    - minimum effective modal bandwidth at 850 nm: 4700 MHz-km
    - minimum overfilled modal bandwidth at 850 nm: 3500 MHz-km
    - minimum overfilled modal bandwidth at 1300 nm: 500 MHz-km
TR-42 Activities

• TR-42.9 (Industrial Infrastructure):
  – Default ballot of TIA-1005 addressing, “Industrial Cabling” circulating

• TR-42.11 (Optical Fiber Systems):
  – TSB-178 “Launch Condition Guidelines for Measuring the Attenuation of Installed Multimode Cabling” approved for publication
**TR-42 Activities**

- **TR-42.12 (Optical Fibers and Cables)**
  - Did not meet

- **TR-42.13 (Interconnecting Devices and Passive Components)**
  - Did not meet

- **TR-42.15 (Fiber Optical Metrology)**:
  - Did not meet
TR-42 Activities

- TR-42.16 (Grounding and Bonding, previously TR-42.3.1):
  - Development of proposed TIA-607-B (Grounding and Bonding) is ongoing
‘568-C Development

- **SP-3-0177-C-2**: (pending ‘568-C.0)
  - 2\textsuperscript{nd} default ballot will close August 4, 2008
- **SP-3-4425-RV3-C-2**: (pending ‘568-C.1)
  - 2\textsuperscript{nd} default ballot will close August 4, 2008
- **PN-3-4426-RV3-A**: (pending ‘568-C.2)
  - 2\textsuperscript{nd} PN ballot closes July 23, 2008
  - Targeted publication: July 2009
- **ANSI/TIA-568-C.3**
  - Approved for publication: Sept., 2007

Targeted publication: July 2009
Upcoming TIA Meetings

TR-42.7 Interim Meeting
August 5 - 7, 2008
San Francisco, CA

TR-42 Plenary Meeting
October 6 – 10, 2008
Vancouver, CAN

www.tiaonline.org
Pending S.F. Discussions

• Resolve PN-3-4426-RV3-A comments
• Approve TSB 184 for first ballot
  – 2 hours maximum
• Flex time (maximum 1 hour) for:
  – Cabling and component balance specification
  – Test fixturing
Thank you

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