TIA TR-42 Liaison to IEEE 802.3

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Introduction to TIA

- Telecommunications Industry Association
- www.tiaonline.org
- TR-42: Defines mechanical and transmission requirements for copper twisted-pair, optical fiber, and coaxial cabling and components
- Chris DiMinico is outgoing liaison from IEEE 802.3 to TIA TR-42

Agenda and Meeting Overview

- Most recent TR-42 Plenary meetings: January 27 - 31, 2014 in Fort Myers, FL
- Review TR-42 subcommittee activities
 - 11 subcommittees met
- Update on project development
- This symbol highlights key points of interest

TIA TR-42 Leadership

- New TR-42 committee leadership elected in January
- Ray Emplit, Chair of TR-42 can be reached at: remplit@harger.com
- Greg Sandels, Vice Chair of TR-42 can be reached at: gsandels@ofsoptics.com
- Courtesy copy Germaine Palangdao at: gpalangdao@tiaonline.org

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- The TR-42.11 Optical Systems
 Subcommittee reviewed IEEE 802.3's
 request to harmonize the return loss
 specification of single-mode fiber
 connections with that of ISO/IEC 11801
- ANSI/TIA-568.3-D, the document in which the subject parameter is specified, is currently bring revised

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- Ballot comments proposing to increase the value of return loss from a minimum of 26 dB to a minimum of 35 dB were received and accepted
- This change harmonizes draft ANSI/TIA-568.3-D with ISO/IEC 11801 and return loss grade 3 of IEC 61755-1
- '568.3-D remains under revision and will not publish within the next six months

IEEE 802.3 Liaisons Received

- Confirming TIA TR-42 receipt of two incoming IEEE 802.3 liaisons/ communications:
 - Liaison to TIA TR-42 updating on IEEE P802.3bp project activity
 - Informal communication to TIA TR-42 updating on IEEE P802.3bt project activity
- No formal responses developed

- TR-42.1 (Commercial Building Cabling):
 - ANSI/TIA-4966, "Telecommunications Infrastructure for Educational Buildings and Spaces" approved for publication
- New project: ANSI/TIA-568.0-D, "Generic Telecommunications Cabling for Customer Premises" circulating for industry ballot
- New project: ANSI/TIA-568.1-D,
 "Commercial Building
 Telecommunications Cabling Standard"
 circulating for industry ballot

- TR-42.1 (Commercial Building Cabling), cont.:
 - New project: ANSI/TIA-862-B, "Building Automation Systems Cabling Standard" pending committee ballot comment resolution
 - New project: ANSI/TIA-xxxx,
 "Telecommunications Physical Network Security Standard" under development

- TR-42.1 (Commercial Building Cabling), cont.:
 - New project: TSB-xxxx "Structured Cabling Infrastructure Standard to support Distributed Antenna Systems" under development
- TR-42.2 (Residential Infrastructure):
 - No updates

- TR-42.3 (Pathways and Spaces):
 - New project: ANSI/TIA-569-D "Commercial Building Standard for Telecommunications Pathways and Spaces" under development

- TR-42.5 (Terms and Symbols):
 - Definitions, acronyms, units of measure, and symbols maintained in a working document
 - New project: ANSI/TIA-440-C, "Fiber Optic Terminology" circulating for industry ballot
- TR-42.6 (Infrastructure Administration):
 - No new project status updates

- TR-42.7 (Copper Cabling):
 - New project: TSB-1197, "Mode Conversion Parameters for Balanced Twisted-Pair Cabling" circulating for committee ballot
- New project: ANSI/TIA-568-C.2-1,
 "Balanced Twisted-Pair
 Telecommunications Cabling and
 Components Standard, Addendum 1:
 Specifications for 100Ω Category 8
 Cabling" under development (draft 0.9d posted to IEEE P802.3bq private area)

- TR-42.7 (Copper Cabling), cont.:
 - 2-connector, 30-meter channels are currently defined
 - Upper frequency bandwidth specification remaining at 2 GHz



- Adjustments still being made to return loss and insertion loss requirements
- Task Group working to develop class II performance criteria/limits (channel only at this time)

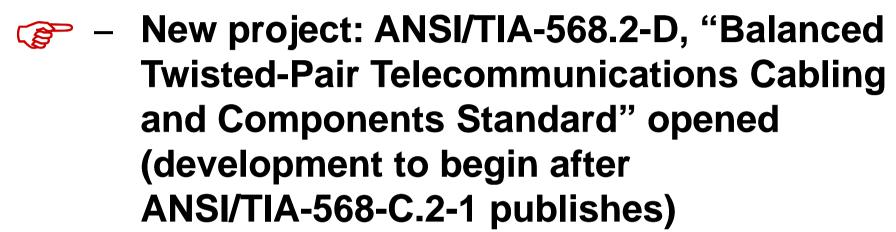
- TR-42.7 (Copper Cabling), cont.:
 - New project: ANSI/TIA-1152-A,
 "Requirements for Field Test Instruments" under development
 - New project: ANSI/TIA-1183-1, "Test Fixtures for Balunless Measurements of Balanced Components and Systems to 2 GHz" under development
 - New project: ANSI/TIA-568-C.2-2, "Additional Considerations for Category 6A Patch Cord Testing" under development

TR-42.7 (Copper Cabling), cont.:



- New project: TSB-5008, "Internally-**Generated Impulse Noise Characterization,** Detection, and Mitigation" under development
 - New project: ANSI/TIA-568.4-D, "Broadband Coaxial Cabling and **Components Standard" opened** (development to begin after ANSI/TIA-568-C.2-1 publishes)

TR-42.7 (Copper Cabling), cont.:



- TR-42.9 (Industrial Infrastructure):
 - New project: ANSI/TIA-1005-A,
 "Telecommunications Infrastructure
 Standard for Industrial Premises
 Addendum 1, M12-8 X-coding Connector
 for Industrial Premises" under
 development



 Noise induced on cabling carrying 1000BASE-T in E2 and E3 environments under study

- TR-42.10 (Sustainable Information Communications Technology)
 - New project: ANSI/TIA-4994, "Standard for Sustainable Information Communications Technology" circulating for industry ballot
 - New project: ANSI/TIA-xxxx, "Standard Process for Sustainable Information Communications Technology Manufacturers" under development

- TR-42.11 (Optical Fiber Systems):
 - New project: ANSI/TIA-526-14-C: "Optical Power Loss Measurement of Installed Multimode Fiber Cable Plant" pending committee ballot comment resolution
- New project: ANSI/TIA-568.3-D: "Optical Fiber Cabling Components Standard " circulating for committee ballot
- Task Group formed to consider POL/PON splitter specifications
- 19 documents up for 5-year review

- TR-42.12 (Optical Fibers and Cables):
 - New project: ANSI/TIA-598-D, "Cable Color Coding" circulating for default ballot
 - 20+ documents circulating for reaffirmation or committee ballot

- TR-42.13 (Passive Optical Devices and Metrology):
 - New project: TSB-4947: "Guidance for Adhesive Usage in Fiber Optic Components" circulating for committee ballot
 - New project: ANSI/TIA-604-18, "FOCIS-18
 Fiber Optic Intermateability Standard Type
 1x16 and 2x16 Multifiber Push-on/
 Multifiber Termination Push-on" under
 development

- TR-42.16 (Grounding and Bonding):
 - New project, ANSI/TIA-607-C, "Structural Metal" under development

Upcoming TIA Meetings

TR-42.7 Interim Meeting

April 9 - 10, 2014

New Orleans, LA

TR-42 Plenary Meetings

June 9 - 13, 2014

San Diego, CA

www.tiaonline.org

Thank you

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