

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 and optical fiber cabling and components**

Agenda and Meeting Overview

- **February 2 - 6 in Mesa, AZ**
- **Review TR-42 sub-committee activities**
 - **14 sub-committees met**
- **Update on '568-C development**
-  **New symbol added to liaison report to highlight key points of interest**

TR-42 Activities

- **TR-42.1 (Commercial Building Cabling):**
 -  – **An errata for ANSI/TIA-568C.0 and ANSI/TIA-568C.1 will be issued with a revised diagram**
 - **New project: Addendum 2 to TIA-942 (Data Centers) to address “Additional Media and Guidelines” circulating for default ballot**
 - **New project: TSB-195 to provide a MICE Tutorial pending 3rd ballot circulation**
 - **New content for BAS and Healthcare Standards under development**

TR-42 Activities

- **TR-42.2 (Residential Infrastructure):**
 - **Study group formed for home theater, distributed audio & video**
 - **Need for generic broadband coaxial cabling standard discussed**
- **TR-42.3 (Pathways and Spaces):**
 - **Addendum 1 to TIA-569-B-1 (Administration) addressing, “Equipment Room and Data Center Computer Room Administration” approved for publication**


TR-42 Activities

- **TR-42.3 (Pathways and Spaces), cont.:**
 - **Addendum 1 to TIA-1005 (Industrial) addressing, “Telecommunications Infrastructure Standard for Industrial Premises; Addendum 1” circulating for industry ballot**
 - **TIA-569-C (Pathways and Spaces) draft development under discussion**


TR-42 Activities

- **TR-42.4 (Outside Plant):**
 - **New project: ANSI/TIA-758-B to circulate for ‘mock’ ballot**
- **TR-42.5 (Terms and Symbols):**
 - **Dictionary terms will replace the glossary on the TIA web site**


TR-42 Activities

- **TR-42.6 (Infrastructure Administration):**
 - New project: ANSI/TIA-606-B development deferred until ISO/IEC TR 14763-2-1 work is complete
- **TR-42.7 (Copper Cabling):**
 -  New project: ANSI/TIA-568-C.2, “Balanced Twisted-Pair Telecommunications Cabling and Components Standard” circulating for default ballot

TR-42 Activities

- **TR-42.7 (Copper Cabling), cont.:**
 -  – **New project: TSB-184, “Guidelines for Supporting Power Delivery over Twisted-Pair Cabling” circulating for default ballot**
 - **Draft 2.0 of PN-3-0324-A (TSB-184) available on IEEE 802.3 and IEEE 802.3at FTP sites (private-area)**

TR-42 Activities

- **TR-42.7 (Copper Cabling), cont.:**
 - **New project: TIA-1152, “Requirements for Field Test Instruments” circulating for 2nd ballot**
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 -  – **New project: TSB-155-A, “Guidelines for the Assessment and Mitigation of Installed Category 6 Cabling to Support 10GBASE-T”, align with ‘568-C.2 content**


TR-42 Activities

- **TR-42.8 (Optical Fiber Cabling):**
 - Discussed fiber assignments within MPO connector in conjunction with IEEE 802.3ba array connectivity
- **TR-42.9 (Industrial Infrastructure):**
 - New project: TIA-1005-A, “Industrial Cabling” approved for publication
 - Align with ‘568-C.2 structure
 - TG is investigating POF technology for possible inclusion in TIA-1005-A

TR-42 Activities

- **TR-42.11 (Optical Fiber Systems):**
 - **New project: FOTP-243, describing a new PMD test method, circulating for 1st ballot**
 - **New project: TIA 526-14, attenuation of installed MM cabling, is under development and will be based upon the content of IEC 61280-4-1**
 - **Ad-hoc is collecting information on multi-path interference (MPI) in order to formulate a test method recommendation**

TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables):**
 -  – **New project: TIA-492AAAD, addressing OM4 fiber specification, circulating for 2nd ballot**
 - **New project: TIA-455-C, FOTP master document, under development**
 - **FOTP-244, addressing temperature cycling of tubes expressed in pedestals, circulating for 2nd ballot**

TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables),
cont.:**
 - **New project: Revision of FOTP-204,
addressing multimode bandwidth**
 - **A new project to investigate skew
measurement has been initiated**

TR-42 Activities

- **TR-42.13 (Interconnecting Devices and Passive Components):**
 - **New projects:**
 - **Revision of FOTP-11, Vibration Test Procedure for Fiber Optic Components and Cables**
 - **Adhesive Application Guidelines**
 - **Adhesion Strength Test Methods,**
 - **MDU/MTU Cabling (with TR-42.2, TR-42.12 and TR-42.13)**

TR-42 Activities

- **TR-42.13 (Interconnecting Devices and Passive Components), cont.:**
 - **New projects, cont.:**
 - **APC Endface Geometry**
 - **Method for Measuring GPB Diameter in MT Ferrules**
 - **Method for Measuring Relative Angle in GPB Axis in MT Ferrules**
 - **Multiple documents to be reaffirmed, withdrawn, or balloted**

TR-42 Activities

- **TR-42.15 (Fiber Optical Metrology):**
 - **Group is conducting APC return loss round robin testing**
 - **New projects:**
 - **Calibration methods and associated uncertainties for MM Launch condition measurements**
 - **ORL reference standard(s) and calibration issues**
 - **PMD reference standards and associated calibration issues**

TR-42 Activities

- **TR-42.16 (Grounding and Bonding):**
 - **New project: Revision of TIA-607-B (Grounding and Bonding)**
 - **Investigating busbar specifications**
 - **Content for an annex on EMI**
 - **Terms and descriptions**
 - **Testing and verification**

'568-C Development

- **ANSI/TIA-568-C.0**
 - **Errata issues: January, 2009**
- **ANSI/TIA-568-C.1**
 - **Errata issued: January, 2009**
- **SP-3-4426-RV3-B-1: (pending '568-C.2)**
 - **1st default ballot closes March 16, 2009**
 - **Targeted publication: August 2009**
- **ANSI/TIA-568-C.3**
 - **Approved for publication: September, 2007**

Upcoming TIA Meetings

TR-42 Interim Plenary Meetings

May 5 - 6, 2009 (TR-42.7 only)

Indianapolis, IN


TR-42 Plenary Meeting

August 3 - 7, 2009


Minneapolis/St. Paul (TBD)

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Pending IN Discussions

- **SP-3-4426-RV3-B-1 ('568-C.2, first default ballot) comment resolution**
-  **PN-3-0324-B-1 (TSB-184 Power Delivery) comment resolution**
- **SP-3-0323-A (TIA-1152 Field Testers) comment resolution**
- **PN-3-4426-RV3-AD1 ('568-C.2-1 Balance) draft development**

Pending IN Discussions, cont.

- **Test fixturing TG report**
-  **(PN-3-0134-RV1) TSB-155-A draft development**
- **Discuss whether TR-42.7 should take over development of coaxial cabling specifications**

Thank you

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