

TIA TR-42 Liaison to IEEE 802.3

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**Vice Chair, TIA TR-42 Telecommunications
Cabling Systems Engineering Committee**


**Vice Chair, TIA TR-42.7 Copper Cabling
Subcommittee**

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San Antonio, TX**

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**

Agenda and Meeting Overview



- **October 1 - 5 in Philadelphia, PA**
- **Review TR-42 subcommittee activities**
 - **10 subcommittees met**
- **Update on project development**
-  **This symbol highlights key points of interest**

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- **Draft category 8 requirements are available for review and comment**

“Attached is a working draft that contains the specifications for this newly developed Category 8 cabling. Also, attached herewith is a summary of the channel transmission parameters that may be relevant for application development.”

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-  – **Draft 0.5 of ANSI/TIA-568-C.2-1, “Balanced Twisted-Pair Telecommunications Cabling and Components Standard, Addendum 1: Specifications for 100Ω Category 8 Cabling” available in password protected area**
-  – **Summary of channel performance requirements for category 8 cabling excerpted from draft 0.5 of ‘568-C.2-1 available in password protected area**

TR-42 Activities

- **TR-42.1 (Commercial Building Cabling):**
 - **New project: ANSI/TIA-942-A-1, “Telecommunications Infrastructure Standard for Data Centers, Addendum 1 – Cabling Guidelines for Data Center Fabrics” circulating for default ballot**
 - **New project: ANSI/TIA-4966, “Telecommunications Infrastructure for Educational Buildings and Spaces” circulating for industry ballot**


TR-42 Activities

- **TR-42.1 (Commercial Building Cabling), cont.:**
 - **New project: ANSI/TIA-862-B, “Building Automation Systems Cabling Standard” under development**
 - **New project: TSB-162-A, “Telecommunications Guidelines for Wireless Access Points” under development**
 - **Requirements for “Places of Assembly” under study**


TR-42 Activities

- **TR-42.2 (Residential):**
 - Addressed procedural issues only
 - Will revert back to “dormant” status
- **TR-42.3 (Pathways and Spaces):**
 - ANSITIA-569-C-1, “Commercial Building Standard for Telecommunications Pathways and Spaces, Addendum 1 - Revised Temperature and Humidity Requirements for Telecommunications Spaces” circulating for default ballot




TR-42 Activities

- **TR-42.5 (Terms and Symbols):**
 - **Definitions, acronyms, units of measure, and symbols maintained in a working document**
 -  – **.pdf of working document to be published on TIA web site**
 - **New project: ANSI/TIA-440-B, “Fiber Optic Terminology” under development**
- **TR-42.6 (Infrastructure Administration):**
 - **No new project status updates**


TR-42 Activities

- **TR-42.7 (Copper Cabling):**
 - **New project: TSB-1197, “Mode Conversion Parameters for Balanced Twisted-Pair Cabling” circulating for second 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**

TR-42 Activities

- **TR-42.7 (Copper Cabling), cont.:**
 - **Strawman draft 0.5 recently completed**
 -  – **Converging on specifications for a 2-connector, 50-meter channel (TBD)**
 -  – **Bandwidth specification converging on 2 GHz (TBD)**
 -  – **Sterling Vaden to present tutorial to Next Generation BASE-T Study Group**
 - **Interim meeting scheduled for December 4 - 5 in Miami, FL**

TR-42 Activities

- **TR-42.9 (Industrial Infrastructure):**
 -  – **Noise induced on cabling carrying 1000BASE-T in E2 and E3 environments under study**
- **TR-42.10 (Sustainable Information Communications Technology)**
 - **Revised subcommittee name**
 - **New project: ANSI/TIA-xxxx, “Standard for Sustainable Information Communications Technology” under development**

TR-42 Activities

- **TR-42.11 (Optical Fiber Systems):**
 - **New project: TSB-4979: "Practical Considerations for Implementation of Multimode Launch Conditions in the Field" circulating for committee ballot**
 - **New project: TSB-172-A, "High Data Rate Multimode Fiber Transmission Techniques" circulating for committee ballot**

TR-42 Activities

- **TR-42.11 (Optical Fiber Systems), cont.:**
 - **New project: TSB-xxx, “Encircled Flux Launch Conditions” under development**
 - **New project: TSB-xxx, “Loss Budget” under development**
 - **4 Standards related to Jitter Tolerance, Jitter Transfer Function, Output Jitter Measurement, and Systematic Jitter Generation under maintenance**

TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables):**
 - **New project: TIA-455-7/FOTP-7, “Numerical Aperture” circulating for committee ballot**
 - **New project: TIA-455-28/FOTP-28, “Dynamic Tension” circulating for committee ballot**
 - **New project: TIA-455-58/FOTP-58, “Core Size (adoption of IEC 60793-1-20)” circulating for reaffirmation ballot**

TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables), cont.:**
 - **New project: TIA-455-80/FOTP-80, “Patch Cord Wavelength” circulating for committee ballot**
 - **New project: TIA-455-177/FOTP-177, “Graded-index MMF (adoption of IEC 60793-1-31)” circulating for reaffirmation ballot**
 - **New project: TIA-598-D, “Cable Color Coding” circulating for committee ballot**

TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables), cont.:**
 - **New project: TIA-455-204-A/FOTP-204, “Multimode Bandwidth, adoption of IEC 60793-1-41” circulating for reaffirmation ballot**
 - **New project: TIA-455-220/FOTP-220, “DMD Measurement, adoption of IEC 60793-1-4” circulating for reaffirmation ballot**
 - **20+ documents circulating for reaffirmation ballot**

TR-42 Activities

- **TR-42.16 (Grounding and Bonding):**
 - **Requirements for “Structural Metal” under development**

Upcoming TIA Meetings

TR-42 Plenary Meetings

February 4 - 8, 2013

Scottsdale, AZ or Palm Springs, CA

www.tiaonline.org

Thank you

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