


IEEE 802.3 Ethernet Working Group 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 TIA Meeting Overview



- **Most recent TR-42 Plenary week:
Sep 16 - 20, 2019 in Albuquerque, NM**
- **Review TR-42 subcommittee activities**
 - 8 subcommittees met
- **Update on project development**
-  **This symbol highlights key points of interest**

TIA TR-42 Liaison Letters to IEEE 802.3

- **No incoming liaison letters from TR-42**

TIA TR-42 Activities



- **TR-42.1 (Premises Infrastructure):**

-  – **New project: ANSI/TIA-568.0-E, “Generic Telecommunications Cabling for Customer Premises” circulating for default ballot**
-  – **New project: ANSI/TIA-568.1-E, “Commercial Building Telecommunications Infrastructure Standard” circulating for default ballot**
- **New project: ANSI/TIA-758-C, “Customer-Owned Outside Plant Telecommunications Infrastructure Standard” circulating for industry ballot**


TIA TR-42 Activities

- **TR-42.1 (Premises Infrastructure), cont.:**
 - **New project: ANSI/TIA-4966-A, Telecommunications Infrastructure Standard for Educational Facilities” circulating for industry ballot**
 - **New project: TSB-162-A, “Telecommunications Cabling Guidelines for Wireless Access Points” circulating for committee ballot**
 - **New project: ANSI/TIA-942-B-1, “Telecommunications Infrastructure Standard for Data Centers, Addendum 1: Edge Data Centers” under development**

TIA TR-42 Activities



- **TR-42.1 (Premises Infrastructure), cont.:**
 -  – **New project: ANSI/TIA-568.0-D-2, “Generic Telecommunications Cabling for Customer Premises, Addendum 2: Single Balanced Twisted-pair Use Cases and Topology” under development**
 -  – **New project: ANSI/TIA-862-B-2, “Structured Cabling Infrastructure Standard for Intelligent Building Systems, Addendum 2: Single Balanced Twisted-pair Use Cases and Topology” under development**

TIA TR-42 Activities

- **TR-42.1 (Premises Infrastructure), cont.:**
 -  – **Joint TR-42.1/TR-42.7 Task Group formed to study building automation and multidrop single twisted-pair implementations**
- **TR-42.3 (Pathways, Spaces, and Grounding):**
 - **ANSI/TIA-607-D, “Generic Telecommunications Bonding and Grounding (Earthing) for Customer Premises” published**
- **TR-42.5 (Terms and Symbols):**
 - **Definitions, acronyms, units of measure, and symbols maintained in a working document**



TIA TR-42 Activities

- **TR-42.7 (Copper Cabling):**

-  – **New project: ANSI/TIA-568.2-D-2, “Balanced Twisted-Pair Telecommunications Cabling and Components Standard, Addendum 2: Power Delivery Over Balanced Twisted-Pair Cabling” circulating for industry ballot**
-  – **New project: ANSI/TIA-568.5, “Single Twisted-pair Cabling and Components Standard” circulating for committee ballot**

TIA TR-42 Activities



- **TR-42.7 (Copper Cabling), cont/:**

-  – **New project: ANSI/TIA-xxxx, “Requirements for Field Test Instruments and Measurements for Balanced Single Twisted-Pair Cabling” under development**
-  – **Task Group studying category 8 short channel alien crosstalk**


TIA TR-42 Activities

- **TR-42.9 (Industrial Infrastructure):**
 - ➡ – **New project: ANSI/TIA-1005-B, “Telecommunications Infrastructure Standard for Industrial Premises” under development**
 - **The content of proposed ANSI/TIA-1005-A-2, “Telecommunications Infrastructure Standard for Industrial Premises, Addendum 2: 1G Industrial Cabling for Four Pair (100 meters) (1000BASE-T) for E2 and E3 Environments” will be incorporated into this revision of ANSI/TIA-1005**

TIA TR-42 Activities

- **TR-42.9 (Industrial Infrastructure), cont.:**
 -  – **New project: ANSI/TIA-1005-A-3, “Telecommunications Infrastructure Standard for Industrial Premises, Addendum 3: 1G Industrial Cabling for One Pair Type B (40 meters) (1000BASE-T1) for E2 and E3 Environments” cancelled (new PAR expected)**
 -  – **New project: ANSI/TIA-PN-1005-A-4, “Telecommunications Infrastructure Standard for Industrial Premises, Addendum 4: Single Balanced Twisted-pair Use Cases and Topology for Industrial Premises” under development**

TIA TR-42 Activities

- **TR-42.11 (Optical Fiber Systems):**
 - **New project: TSB-5069 , “Optical Fiber Channel Polarity - Duplex - Single Row Fiber - Double Row Fiber Polarity” circulating for committee ballot**
 -  – **New project: ANSI/TIA-568.3-E, “Optical Fiber Cabling Components Standard” under development**
 - **New project: TIA-526-14-D, “Optical Power Loss Measurement of Installed Multimode Fiber Cable Plant” under development**

TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables):**
 - **New project: ANSI/TIA-455-82-B, “FOTP-82 Fluid Penetration Test for Fluid-Blocked Fiber Optic Cable” circulating for industry ballot**
 - **New project: ANSI/TIA-455-244-A, “FOTP-244-A Methods for Measuring the Change in Transmittance of Optical Fibers in Expressed Buffer Tubes When Subjected to Temperature Cycling” circulating for industry ballot**
 - **New project: ANSI/TIA-598-E, “Optical Fiber Color Coding” under development**

TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables), cont.:**
 - **New project: ANSI/TIA-455-3-B, “FOTP-3-C Procedure to Measure Temperature Cycling Effects on Optical Fiber Units, Optical Cable, and Other Passive Fiber Components” under development**
 - **New project: ANSI/TIA-455-191-C, “FOTP-191 Optical Fibres - Part 1-45: Measurement Methods and Test Procedures - Mode Field Diameter (adoption of IEC 60793-1-45)” under development**

TIA TR-42 Activities

- **TR-42.13 (Passive Optical Devices and Metrology)**
 - **New project: ANSI/TIA-604-19, “FOCIS 19-Fiber Optic Connector Intermateability Standard Type SEN Connector” circulating for industry ballot**

Upcoming TIA Meetings

TR-42 Plenary Meetings

January 27 - 31, 2020

New Orleans, LA

www.tiaonline.org

Thank you

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