

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:
September 18 - 22, 2017 in Las Vegas, NV**
- **Review TR-42 subcommittee activities**
 - 8 subcommittees met
- **Update on project development**
-  **This symbol highlights key points of interest**

2 TIA TR-42 Liaison Letters to IEEE 802.3

- 1. Draft 0.3 of ANSI/TIA-PN-568.5, “Single Twisted-pair Cabling and Components Standard” has been shared and is available in the IEEE 802.3 private area**

This liaison was previewed and a response provided at the September 2017 IEEE 802.3 interim meeting

TIA TR-42 Liaison Letter to IEEE 802.3, cont.

2. TIA provides an advance thank you for feedback on draft 0.3 of ANSI/TIA-PN-568.5

TIA has discussed specifying the mechanical and electrical characteristics of connectors for single pair 10BASE-T1 applications

IEEE 802.3 is requested to identify desired characteristics for single pair connectors

IEEE 802.3 is requested to provide early information on multidrop technologies under consideration by 802.3cg

TIA TR-42 Activities



- **TR-42.1 (Commercial Building Cabling):**
 - **ANSI/TIA-862-B-1, “Updated References, Accommodation of New Media Types” approved for publication**
 - **New project: New project: ANSI/TIA-4966-1, “Updated References, Accommodation of New Media Types” approved for publication**
 - **New project: ANSI/TIA-568.1-D-1, “Updated References, Accommodation of New Media Types” circulating for default ballot**

TIA TR-42 Activities


- **TR-42.1 (Commercial Building Cabling), cont.:**
 - **New project: ANSI/TIA-570-D, “Residential Telecommunications Standard” circulating for industry ballot**
 - **New project: ANSI/TIA-758-C, “Customer-Owned Outside Plant Telecommunications Infrastructure Standard” under development**

TIA TR-42 Activities

- **TR-42.1 (Commercial Building Cabling), 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-42.3 (Pathways and Spaces):**
 -  – **New project: ANSI/TIA-569-D-2 “Guidelines for Supporting Remote Powering” circulating for industry ballot**
- **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, “Balanced Twisted-Pair Telecommunications Cabling and Components Standard” circulating for default ballot**
-  – **New project: TSB-184-A-1, “Guidelines for Supporting Power Delivery Over Balanced Twisted-Pair Cabling: Addendum 1, Guidance to Support 28 AWG Cords” circulating for committee ballot**

TIA TR-42 Activities

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



-  – **New project: ANSI/TIA-PN-568.5, “Single Twisted-pair Cabling and Components Standard” under development**
-  – **TR-42.7 has solicited input on desired single pair connector characteristics via liaison from:**
 - **TIA TR-50 M2M - Smart Device Communications Engineering Committee**
 - **CABA**
 - **IEEE 802.24.2 IoT Task Group**
 - **ODVA**

TIA TR-42 Activities

- **TR-42.7 (Copper Cabling), cont.:**
 - Task Group formed to study testing and application of end plugs
 -  – Task Group formed to examine and gain insight on the electrical performance levels of all categories of cabling above 60°C/140°F
 -  – Task Group formed to study making the guidance in TIA TSB-184-A (“Guidelines for Supporting Power Delivery Over Balanced Twisted-Pair Cabling”) normative and rolling the requirements into an addendum to ANSI/TIA-568.2-D


TIA TR-42 Activities

- **TR-42.9 (Industrial Infrastructure):**


-  – **New project: ANSI/TIA-1005-A-2, “1G Industrial Cabling for Four Pair (100 meters) (1000BASE-T) for E2 and E3 Environments” circulating for industry ballot**
-  – **New project: ANSI/TIA-1005-A-3, “1G Industrial Cabling for One Pair Type B (40 meters) (1000BASE-T1) for E2 and E3 Environments” circulating for subcommittee “mock” ballot review**

TIA TR-42 Activities

- **TR-42.9 (Industrial Infrastructure), cont.:**

-  – **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**

- **TR-42.11 (Optical Fiber Systems):**

-  – **New project: ANSI/TIA-568.3-D-1, “Optical Fiber Cabling Component Standard - Addendum 1, General Updates” circulating for committee ballot**

TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables):**
 - **New project: ANSI/TIA-455-95-A, “FOTP-95 Absolute Optical Power Test for Optical Fibers and Cables” circulating for industry ballot**
 - **New project: ANSI/TIA-598-D-1, “Optical Fiber Color Coding in Cable, Addendum for Additional Colors” circulating for industry ballot**
 - **New project: ANSI/TIA-598-D-2, “Jacket Color for Wideband Laser-Optimized 50/125 μm Multimode Fiber Cables (OM5)” circulating for industry ballot**
 - **Approximately 10 documents under consideration for reaffirmation or revision**

TIA TR-42 Activities

- **TR-42.13 (Passive Optical Devices and Metrology)**
 - **New project: ANSI/TIA-455-171-B, "FOTP-171 IEC 61300-3-4 Attenuation by Substitution Measurement for Short Length Multimode Graded Index and Single-Mode Optical Fiber Cable Assemblies" circulating for committee ballot**
 - **New project: TIA-604-18-A, "FOCIS-18 Fiber Optic Intermateability Standard Type 1x16 and 2x16 Multifiber Push-on/ Multifiber Termination Push-on" circulating for committee ballot**

TIA TR-42 Activities

- **TR-42.13 (Passive Optical Devices and Metrology), cont.**
 - **New project: ANSI/TIA-604-5-F, "FOCIS 5 - Fiber Optic Connector Intermateability Standard, Type MPO (Multi-fiber Push On)" circulating for committee ballot**

Upcoming TIA Meetings

TR-42 Plenary Meetings
January 29 – February 2, 2018
Orlando, FL
www.tiaonline.org

Thank you

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