

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:
June 12 - 16, 2017 in Quebec City, QC, CAN**
- **Review TR-42 subcommittee activities**
 - 10 subcommittees met
- **Update on project development**
-  **This symbol highlights key points of interest**

TIA TR-42 Liaison Letter to IEEE 802.3

- **TIA TR-42 has initiated four new projects related to single-pair cabling, components, use cases, topology, and environments**
 - **ANSI/TIA-PN-568.5, Single Twisted-pair Cabling and Components Standard**
 - **ANSI/TIA-PN-568.0-D-2, Generic Telecommunications Cabling for Customer Premises, Addendum 2: Single Balanced Twisted-pair Use Cases and Topology**

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

- **ANSI/TIA-PN-862-B-2, Structured Cabling Infrastructure Standard for Intelligent Building Systems, Addendum 2: Single Balanced Twisted-pair Use Cases and Topology**
- **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**

TIA TR-42 Activities

- **TR-42.1 (Commercial Building Cabling):**
 - **ANSI/TIA-568.0-D-1, “Updated References, Accommodation of New Media Types” approved for publication**
 - **ANSI/TIA-942-B “Telecommunications Infrastructure Standard for Data Centers” approved for publication**
 - **ANSI/TIA-1179-A “Healthcare Facility Telecommunications Infrastructure Standard” approved for publication**

TIA TR-42 Activities



- **TR-42.1 (Commercial Building Cabling):**
 - **New project: ANSI/TIA-568.1-D-1, “Updated References, Accommodation of New Media Types” circulating for default ballot**
 - **New project: ANSI/TIA-862-B-1, “Updated References, Accommodation of New Media Types” circulating for default ballot**
 - **New project: ANSI/TIA-4966-1, “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 committee ballot**
- **TR-42.5 (Terms and Symbols):**
 - **Definitions, acronyms, units of measure, and symbols maintained in a working document**
 - **ANSI/TIA-440-C, “Fiber Optic Terminology” approved for publication**

TIA TR-42 Activities



- **TR-42.6 (Infrastructure Administration):**
 - **ANSI/TIA-606-C, “Administration Standard for Telecommunications Infrastructure” published**
 - **ANSI/TIA-5048, “Automated Infrastructure Management (AIM) Systems – Requirements, Data Exchange and Applications” published**

TIA TR-42 Activities


- **TR-42.7 (Copper Cabling):**
 - **ANSI/TIA-568.4-D, “Broadband Coaxial Cabling and Components Standard” approved for publication**
 -  – **New project: ANSI/TIA-568.2-D, “Balanced Twisted-Pair Telecommunications Cabling and Components Standard” circulating for industry 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**
-  – **New project: TSB-184-A-1, “Guidelines for Supporting Power Delivery Over Balanced Twisted-Pair Cabling: Addendum 1, Guidance to Support 28 AWG Cords” under development**

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 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 committee 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-42.10 (Sustainable Information Communications Technology)**

- **TSB-5046, “Standard Process for Sustainable Information Communications Technology Manufacturers” published**

TIA TR-42 Activities

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

-  – **New project: ANSI/TIA-568.3-D-1, “Optical Fiber Cabling Component Standard - Addendum 1, General Updates” under development**

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)" under development**

Upcoming TIA Meetings

TR-42 Plenary Meetings

September 18 - 22, 2017

Las Vegas, NV

www.tiaonline.org

Thank you

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