


IEEE 802.3 Ethernet Working Group TIA TR-42 Liaison to IEEE 802.3

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The Siemon Company
Teleconference Update
March 7, 2022


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:
January 24 - 28, 2022 via GoToWebinar**
- **Review TR-42 subcommittee activities**
 - 8 subcommittees met
- **Update on project development**
-  **This symbol highlights key points of interest**

TR-42 Officer Election Results

- **Congratulations to new TIA TR-42 officers!**
 - **TR-42 Chair - Mr. Henry Franc**
henry.franc@belden.com
 - **TR-42 Vice Chair - Ms. Cindy Montstream**
cindy.montstream@legrand.us
 -  – **Update IEEE 802.3 outgoing liaison letterhead accordingly**

TIA TR-42 Activities

- **TR-42.1 (Premises Infrastructure):**
 - **ANSI/TIA-568.0-E-1, “Generic Telecommunications Cabling for Customer Premises, Addendum 1: Single Balanced Twisted-pair Use Cases and Topology” approved for publication**
 - **ANSI/TIA-942-B-1, “Telecommunications Infrastructure Standard for Data Centers, Addendum 1: Edge Data Center Infrastructure” approved for publication**

TIA TR-42 Activities

- **TR-42.1 (Premises Infrastructure), cont.:**
 - **ANSI/TIA-862-C, “Structured Cabling Infrastructure Standard for Intelligent Building Systems” approved for publication**
 - **ANSI/TIA-4966-A, “Telecommunications Infrastructure Standard for Educational Facilities” approved for publication**
 - **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-1179-B, “Healthcare Facility Telecommunications Infrastructure Standard” circulating for committee ballot**
 - **New project: ANSI/TIA- 5017-A, “Telecommunications Physical Network Security Standard” circulating for committee ballot**
 - **New project: ANSI/TIA-942-C, “Telecommunications Infrastructure Standard for Data Centers” circulating for committee ballot**

TIA TR-42 Activities



- **TR-42.3 (Pathways, Spaces, and Grounding):**
 - **New project: ANSI/TIA-569-E-1, “Commercial Building Standard for Telecommunications Pathways and Spaces, Addendum 1: Revised Temperature and Humidity Guidelines for Telecommunications Spaces” 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):**

-  – **ANSI/TIA-568.5, “Single Twisted-Pair Cabling and Components Standard” approved for publication**
- **New project: ANSI/TIA-5071, “Requirements for Field Test Instruments and Measurements for Balanced Single Twisted-Pair Cabling” circulating for default ballot**
- **New project: ANSI/TIA-1183-B, “Measurement Methods and Test Fixtures for Balunless Measurements of Balanced Components and Systems” circulating for industry ballot**

TIA TR-42 Activities



- **TR-42.7 (Copper Cabling), cont.:**
 - **New project: ANSI/TIA-568.4-E, “Broadband Coaxial Cabling and Components Standard” circulating for industry ballot**
 -  – **New project: ANSI/TIA-568.6, “Single-Pair Multidrop Cabling and Components Standards” under development**
 -  – **New project: TSB-184-A-2, “Guidelines for Supporting Power Delivery over Balanced Single Twisted-Pair Cabling” under development**

TIA TR-42 Activities


- **TR-42.7 (Copper Cabling), cont.:**
 -  – **New project: ANSI/TIA-568.5-1, “Single Twisted-pair Cabling and Components Standard, Addendum 1: Corrections” under development**

TIA TR-42 Activities

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

-  – **New project: ANSI/TIA-1005-B, “Telecommunications Infrastructure Standard for Industrial Premises” circulating for committee ballot**
-  – **New project: ANSI/TIA-568.7, “Balanced Single Twisted-Pair Communications Cabling and Components Standard for Industrial Premises” under development**

TIA TR-42 Activities

- **TR-42.11 (Optical Fiber Systems):**
 - TIA-526-7-A, “Measurement of Optical Power Loss of Installed Single-Mode Fiber Cable Plant (adoption of IEC 61280-4-2)” approved for publication
 -  – New project: ANSI/TIA-568.3-E, “Optical Fiber Cabling Components Standard” circulating for industry ballot
 - New project: TIA-526-14-D, “Optical Power Loss Measurement of Installed Multimode Fiber Cable Plant” circulating for industry ballot

TIA TR-42 Activities

- **TR-42.11 (Optical Fiber Systems), cont.:**
 - **New project: ANSI/TIA-590-A, “Standard for Physical Location and Protection of Below Ground Fiber Optic Cable Plant” status under review**

TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables):**
 - **ANSI/TIA-455-3-C, “FOTP-3 Procedure to Measure Temperature Cycling Effects on Optical Fiber Units, Optical Cable, and Other Passive Fiber Components” approved for publication**
 - **Errata to TIA-492AAAF, “Sectional Specification for Category A1 Graded-Index Multimode Optical Fibers (adoption of IEC 60793-2-10)” approved for publication**
 - **Errata to TIA-492CAAC, “Sectional Specification for Class B Single-mode Optical Fibers (adoption of IEC 60793-2-50)” approved for publication**


TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables), cont.:**
 - **New project: ANSI/TIA-455-111-B, “FOTP-111 Fiber Curl” (adoption of IEC 60793-1-34) circulating for industry ballot**
 - **Errata to TIA-4920000-B, “Generic Specification for Optical Fibers” (adoption of IEC 60793-2) circulating for industry ballot**
 - **New project: ANSI/TIA-598-E, “Optical Fiber Color Coding” under development**
 - **New project: ANSI/TIA-455-133-B, “FOTP-133 Measurement Methods and Test Procedures - Length Measurement” (adoption of IEC-60793-1-22) under development**

TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables), cont.:**
 - **New project: ANSI/TIA-455-203-B, “FOTP-203 Light Source Encircled Flux Measurement Method” under development**
 - **New project: ANSI/TIA-455-204-B, “FOTP 204 Measurement of Bandwidth on Multimode Fiber” under development**

TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables), cont.:**
 - **Published project: TIA-455-30-B, “FOTP-30: Frequency Domain Measurement of Multimode Optical Fiber Information Transmission Capacity” proposed to withdraw**
 -  – **Published project: TIA-455-54-B, “FOTP-54: Mode Scrambler Requirements for OFL Conditions to Multimode Fibers” proposed to withdraw**
 - **Published project: TIA-455-124-A, “FOTP-124: Polarization-Mode Dispersion Measurement for Single-Mode Optical Fibers by Interferometry” proposed to withdraw**

TIA TR-42 Activities

- **TR-42.13 (Passive Optical Devices and Metrology)**
 - **New project: TIA-622-4, “Fibre Optic Interconnecting Devices and Passive Components - Connector Optical Interfaces – Part 2-4: Connection Parameters of Non-Dispersion Shifted Single-Mode Physically Contacting Fibres - Non-Angled for Reference Connection Applications” (adoption of IEC 61755 2-4) circulating for industry ballot**

TIA TR-42 Activities

- **TR-42.13 (Passive Optical Devices and Metrology), cont.**
 - **New project: TIA-622-5, “Fibre Optic Interconnecting Devices and Passive Components - Connector Optical Interfaces – Part 2-5: Connection Parameters of Non-Dispersion Shifted Single-Mode Physically Contacting Fibres - Angled for Reference Connection Applications” (adoption of IEC 61755 2-5) circulating for industry ballot**

TIA TR-42 Activities

- **TR-42.13 (Passive Optical Devices and Metrology), cont.**
 - **New project: TIA-621-1, “Fibre Optic Connector Optical Interfaces - Part 1: Optical Interfaces for Single Mode Non-Dispersion Shifted Fibres - General and Guidance” (adoption of IEC 61755-1) under development**
 - **New project: TIA-622-1, Fibre Optic Connector Optical Interfaces – Part 2 1: Optical Interface Standard Single Mode Non-Angled Physically Contacting Fibres” (adoption of IEC 61755-2-1) under development**

TIA TR-42 Activities

- **TR-42.13 (Passive Optical Devices and Metrology), cont.**
 - **New project: TIA-622-2, “Fibre Optic Connector Optical Interfaces – Part 2 2: Optical Interface Standard Single Mode Angled Physically Contacting Fibres” (adoption of IEC 61755-2-2) under development**

Upcoming TIA Meetings

TR-42 Plenary Meetings

June 6 - 10, 2022

Virtual GoToWebinar

www.tiaonline.org

Thank you

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