


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

Wayne Larsen
CommScope
July 11, 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:
June 6-10, 2022 via GoToWebinar**
- **Review TR-42 subcommittee activities**
 - 8 subcommittees met
- **Update on project development**
-  **This symbol highlights key points of interest**

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-C, “Telecommunications Infrastructure Standard for Data Centers, Comment resolution progressing, will continue in interim meeting July 7**

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-758-C, “Customer-Owned Outside Plant Telecommunications Infrastructure Standard” to be circulated for industry ballot**

TIA TR-42 Activities

- **TR-42.1 (Premises Infrastructure), cont.:**
 - **ANSI/TIA-1179-B, “Healthcare Facility Telecommunications Infrastructure Standard”**
Comments resolved, to be circulated for re-ballot
 - **New project: ANSI/TIA- 5017-A,**
“Telecommunications Physical Network Security Standard” To be circulated for committee ballot

TIA TR-42 Activities

- **TR-42.3 (Pathways, Spaces, and Grounding):**
 - **ANSI/TIA-569-E-1, “Commercial Building Standard for Telecommunications Pathways and Spaces, Addendum 1: Revised Temperature and Humidity Guidelines for Telecommunications Spaces” Approved for publication**
- **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-568.5-1, “Single Twisted-Pair Cabling and Components Standard Addendum 1, some corrections” Circulating for industry ballot**
- **ANSI/TIA-5071, “Requirements for Field Test Instruments and Measurements for Balanced Single Twisted-Pair Cabling” Approved for publication**
- **ANSI/TIA-1183-B, “Measurement Methods and Test Fixtures for Balunless Measurements of Balanced Components and Systems” Comments resolved, to be circulated for industry re-ballot**

TIA TR-42 Activities

- **TR-42.7 (Copper Cabling), cont.:**
 - **ANSI/TIA-568.4-E, “Broadband Coaxial Cabling and Components Standard” Approved for publication**
 -  – **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” Approved for circulation of committee ballot**

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, work has been paused temporarily**
-  – **New project: ANSI/TIA-568.7, “Balanced Single Twisted-Pair Communications Cabling and Components Standard for Industrial Premises” to be circulated for ballot**

TIA TR-42 Activities

- **TR-42.11 (Optical Fiber Systems):**
 - **New Project: ANSI/TIA-568.3-E-1 to incorporate polarity content from TSB-5069**
 - **New project: ANSI/TIA-568.3-E, “Optical Fiber Cabling Components Standard” approved for publication**
 - **New project: TIA-526-14-D, “Optical Power Loss Measurement of Installed Multimode Fiber Cable Plant” to be circulated for default 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-4920000-C, adoption of IEC 60793-2:2019, approved for ballot circulation**
 - **New Project: Errata to TIA-492AAAF-1, “Sectional Specification for Category A1 Graded-Index Multimode Optical Fibers (adoption of IEC 60793-2-10)”**
 - **ANSI/TIA-455-111 (FOTP-111), adoption of IEC 60793-1-34 Measurement methods – Fibre curl, was conditionally approved for publication.**

TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables), cont.:**
 - **ANSI/TIA-455-111, “FOTP-111 Fiber Curl” (adoption of IEC 60793-1-34) conditionally approved for publication**

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) to be circulated for ballot**
 - **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) to be circulated for ballot**

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) to be circulated for ballot**

Upcoming TIA Meetings

TR-42 Plenary Meetings

October 3 - 7, 2022

To be hybrid Face-to-face and virtual

www.tiaonline.org

Thank you

Contact Information:

Wayne Larsen

CommScope

1027 Santiago Trail

Wylie, Texas 75098

phone: (214) 587-3970

wayne.d.larsen@commscope.com