


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

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Teleconference Update
July 12, 2021

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:
Jun 14 - 18, 2021 via GoToWebinar**
- **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. **Published status of TIA-455-30, “Frequency Domain Measurement of Multimode Optical Fiber Information Transmission Capacity” is expiring**

It was last published in 1991 and has been superseded by TIA-455-204.

TIA-455-30 appears to be referenced in:

- **IEEE 1594 Helically-Applied Fiber Optic Cable Systems (WRAP) for Use on Overhead Utility Lines**
- **IEEE 802.3 Ethernet Amendment 10: Maintenance #14: Isolation**

Please confirm these call-outs and identify other IEEE documents that might reference TIA-455-30.

2 TIA TR-42 Liaison Letters to IEEE 802.3

- 2. Published status of TIA-455-54, “Mode Scrambler Requirements for Overfilled Launching Conditions to Multimode Fibers” is expiring.**


It was last published in 1998. Measurement standards using a mode scrambler now copy the text from TIA-455-54 instead of referencing it.

TIA-455-54 appears to be referenced in:

- IEEE 802.3 Ethernet Amendment 10: Maintenance #14: Isolation**

Please confirm this call-out and identify other IEEE documents that might reference TIA-455-54.

TIA TR-42 Activities

- **TR-42.1 (Premises Infrastructure):**
 -  – **Publication of ANSI/TIA-568.0-E-1, “Generic Telecommunications Cabling for Customer Premises, Addendum 1: Single Balanced Twisted-pair Use Cases and Topology” on hold pending publication of ANSI/TIA-568.5**
 - **Published project: TSB-5046, “Process for Sustainable Information Communications Technology Manufacturers” withdrawn (expired and not reaffirmed)**

TIA TR-42 Activities

- **TR-42.1 (Premises Infrastructure), cont.:**
 - **Published project: TIA-4994, “Standard for Sustainable Information Communications Technology withdrawn (expired and not reaffirmed)**
 - **New project: ANSI/TIA-758-C, “Customer-Owned Outside Plant Telecommunications Infrastructure Standard” circulating for industry ballot**
 - **New project: ANSI/TIA-862-C, “Structured Cabling Infrastructure Standard for Intelligent Building Systems” circulating for default 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: ANSI/TIA-942-B-1, “Telecommunications Infrastructure Standard for Data Centers, Addendum 1: Edge Data Center Infrastructure” circulating for industry ballot**
 - **New project: ANSI/TIA-1179-B, “Healthcare Facility Telecommunications Infrastructure Standard” under development**


TIA TR-42 Activities

- **TR-42.1 (Premises Infrastructure), cont.:**
 - **New project: ANSI/TIA-942-C, “Telecommunications Infrastructure Standard for Data Centers” under development**
 - **New project: ANSI/TIA- 5017-A, “Telecommunications Physical Network Security Standard” under development**

TIA TR-42 Activities



- **TR-42.3 (Pathways, Spaces, and Grounding):**
 - **ANSI/TIA-5048-1, “Automated Infrastructure Management (AIM) Systems – Requirements, Data Exchange and Applications, Addendum 1: Adoption of ISO/IEC 18598-1” approved for publication**
 - **ANSI/TIA-607-D-1, “Generic Telecommunications Bonding and Grounding (Earthing) for Customer Premises, Addendum 1: Harmonization with ANSI/TIA-222” approved for publication**

TIA TR-42 Activities

- **TR-42.3 (Pathways, Spaces, and Grounding), cont.:**
 - **New project: ANSI/TIA-606-D, “Administration Standard for Telecommunications Infrastructure” 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-568.5, “Single Twisted-Pair Cabling and Components Standard” circulating for industry ballot**
-  – **New project: ANSI/TIA-5071, “Requirements for Field Test Instruments and Measurements for Balanced Single Twisted-Pair Cabling” circulating for industry ballot**
- **Existing project: ANSI/TIA-1152-A, “Requirements for Field Test Instruments” circulating for re-affirmation ballot**



TIA TR-42 Activities

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


-  – **New project: ANSI/TIA-568.6, “Single-Pair Multidrop Cabling and Components Standards” under development**
-  – **New project: TSB-184-A-2 (previously TSB-5070), “Guidelines for Supporting Power Delivery over Balanced Single Twisted-Pair Cabling (TBD)” 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-526-28, “Installed Cabling Plant - Attenuation Measurement of MPO Terminated Fibre Optic Cabling Plant using Test Equipment with MPO Interfaces (adoption of IEC 61280-4-5)” 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: TIA-526-7-A, “Measurement of Optical Power Loss of Installed Single-Mode Fiber Cable Plant (adoption of IEC 61280-4-2)” circulating for re-affirmation ballot**

TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables):**
 - **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 60793-50)” approved for publication**
 -  – **Published project: TIA-455-30-B, “FOTP-30: Frequency Domain Measurement of Multimode Optical Fiber Information Transmission Capacity” proposed to withdraw**

TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables):**
 -  – **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**
 - **New project: ANSI/TIA-455-3-C, “FOTP-3 Procedure to Measure Temperature Cycling Effects on Optical Fiber Units, Optical Cable, and Other Passive Fiber Components” circulating for industry ballot**

TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables), cont.:**
 - **New project: ANSI/TIA-455-133-B, “FOTP-133 Measurement Methods and Test Procedures - Length Measurement (adoption of IEC-60793-1-22)” circulating for industry ballot**
 - **New project: ANSI/TIA-455-203-B, “FOTP-203 Light Source Encircled Flux Measurement Method” circulating for industry ballot**
 - **New project: ANSI/TIA-455-204-B, “FOTP 204 Measurement of Bandwidth on Multimode Fiber” circulating for industry ballot**

TIA TR-42 Activities

- **TR-42.12 (Optical Fibers and Cables), cont.:**
 - **New project: TIA-4920000-C, “Generic Specification for Optical Fibers (adoption of IEC 60793-2)” under development**
 - **New project: ANSI/TIA-598-E, “Optical Fiber Color Coding” under development**
 - **New project: ANSI/TIA-455-111-B, “FOTP-111 Fiber Curl (adoption of IEC 60793-1-34)” under development**

TIA TR-42 Activities

- **TR-42.13 (Passive Optical Devices and Metrology)**
 - **ANSI/TIA-604-19, “FOCIS 19-Fiber Optic Connector Intermateability Standard, Type CS Connector” approved for publication**
 - **ANSI/TIA-604-10-C, “FOCIS 10-Fiber Optic Connector Intermateability Standard, Type LC Connector” approved for publication**

Upcoming TIA Meetings

TR-42 Plenary Meetings

October 4 - 8, 2021

Virtual GoToWebinar

www.tiaonline.org

Thank you

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