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

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Teleconference Update
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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:**
  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**
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It was last published in 1991 and has been superseded by TIA-455-204.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. 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):
  – Published project: TSB-5046, “Process for Sustainable Information Communications Technology Manufacturers” withdrawn (expired and not reaffirmed)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  - Published project: TIA-4994, “Standard for Sustainable Information Communications Technology withdrawn (expired and not reaffirmed)
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
TIA TR-42 Activities

• TR-42.1 (Premises Infrastructure), cont.:
  – New project: ANSI/TIA-942-C, “Telecommunications Infrastructure Standard for Data Centers” under development
TIA TR-42 Activities

- **TR-42.3 (Pathways, Spaces, and Grounding):**
  - 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-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
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-492AAAFA, “Sectional Specification for Category A1 Graded-Index Multimode Optical Fibers (adoption of IEC 60793-2-10)” 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
  – 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-455-204-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: ANSI/TIA-598-E, “Optical Fiber Color Coding” 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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