

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**

Agenda and TR42 Meeting

- **Most recent TR-42 Plenary week:
September 25 - 29, 2023,
a hybrid meeting held in Tulsa, OK and virtually**
- **Review TR-42 subcommittee activities**
 - 8 subcommittees met
- **Update on project development**

TIA TR42 Activities

- **TR-42.1 (Premises Infrastructure)**
 - Resolved ballot comments to TIA 942C, *Data Center Telecommunications Infrastructure*, and approved a recirculation ballot
 - Reviewed a contribution on liquid cooling in Data Centers from Suren Babu of Panduit
 - Resolved ballot comments to TIA-570-E, *Residential Revision*, and approved publication.
 - Appointed Ron Tellas as editor of ANSI/TIA-5017-A (Security).

TIA TR42 Activities

- **TR-42.1 (Premises Infrastructure), cont.:**
 - Reviewed draft of TSB-6000, Application Tables, contributed by Sunny Xu & authorized 1st ballot.
 - Appointed Cindy Monstream as editor for project to consolidate TIA-568.0, TIA-568.1, and TIA-862 into the next revision of TIA-568.1.

TIA TR42 Activities

- **TR-42.3 (Pathways, Spaces, and Grounding):**
 - **ANSI/TIA-569-F, Pathways and Spaces, deferred until new revision of TIA-568.1 exists**
 - **Resolved comments to ANSI/TIA-607-E, Grounding and Bonding, and approved publication.**
- **TR-42.5 (Terms and Symbols):**
 - **Definitions, acronyms, units of measure, and symbols maintained in a working document**

TIA TR42 Activities

- **TR-42.7 (Copper Cabling):**
 - Resolved comments to ANSI/TIA-568.2-E, *Copper systems and components*, and authorized publication
 - ANSI/TIA-568.5-1, *Single Twisted-Pair Cabling and Components Standard Addendum 1*, resolved comments and authorized recirculation ballot
 - Reviewed first draft of TSB-190-A, *Shared Sheath*, and authorized a first ballot

TIA TR42 Activities

- **TR-42.7 (Copper Cabling), cont.:**
 - **New project: ANSI/TIA-568.6, *Single-Pair Multidrop Cabling and Components Standards*, under development**
 - **TSB-184-A-2, *Guidelines for Supporting Power Delivery over Balanced Single Twisted-Pair Cabling*, Resolved comments and authorized recirculation ballot.**
 - **Leadership elections for Vice Chair planned for February 2024 Plenary meeting**

TIA TR42 Activities

- **TR-42.9 (Industrial Infrastructure):**
 - **ANSI/TIA-1005-B, “Telecommunications Infrastructure Standard for Industrial Premises” deferred document resolution, pending approval of TIA-568.7**
 - **ANSI/TIA-568.7, “Balanced Single Twisted-Pair Communications Cabling and Components Standard for Industrial Premises” comments partially resolved**
Interim meeting held Oct 31, 2023, to complete ballot comment resolution
 - **Reviewed contribution regarding 100MB/500m SPE link.**

TIA TR42 Activities

- **TR-42.11 (Optical Fiber Systems):**
- **Reviewed contribution to addendum 1 of TIA-568.3-E**
- **Phil Irwin serving as editor**

TIA TR42 Activities

- **TR-42.12 (Optical Fibers and Cables):**
 - Resolved ballot comments to TIA-455-3C (FOTP-3), *Temperature Ramps and Precision*, and authorized a recirculation ballot
 - ANSI/TIA-4920000-C, Adoption with modification of IEC 60793-2 Ed9. Document published.
 - ANSI/TIA-492AAAF-1, Adoption with modification of IEC 60793-2-10 Ed7.1. Approved publication.
 - TR42.12 will have leadership elections at the February 2024 plenary.
 - Revision of ANSI/TIA-598-D-2014 Optical Fiber Color Coding
 - Under development

TIA TR42 Activities

- **TR-42.12 (Optical Fibers and Cables), cont.:**
 - **TR42.12 reviewed and voted on actions for**
 - **FOTPs that are over 10 years old**
 - **FOTPs that will be over 10 years old in 2024**
 - **FOTPs that will be 5 to 9 years old in 2024**

TIA TR42 Activities

- **TR-42.13 (Passive Optical Devices and Metrology)**
 - **EC adoption projects continue to progress.**
 - **ANSI/TIA-621.1, adoption of IEC 61755-1:2022 General and guidance. Document published**
 - **ANSI/TIA-622.1, adoption of IEC 61755-2-1:2022 Non-angled physically contacting fibres. Document published.**
 - **ANSI/TIA-622.2, adoption of IEC 61755-2-2:2022 Angled physically contacting fibres. Document published**
 - **Approved a new project for ANSI/TIA-623.31, Adoption of IEC 61755-3-31:2015, *SM Angled Polyphenylene Sulphide Rectangular Ferrules.***
 - **Interim meeting to review relevant IEC SC86B documents and determine path forward for adoption..**
 - **Approved a project for revision of ANSI/TIA-604-10 (FOCIS 10), *Fiber Optic Connector Intermateability Standards, Type LC, dual-LC and dual-MPO belly-to-belly pitch specifications.***

TIA TR42 Activities

- **TR-42.13 (Passive Optical Devices and Metrology), cont.**
 - **TR42-13 approved projects to revise the following standards**
 - **ANSI/TIA-455-225 (FOTP-225), Adoption of IEC 61745, *End-Face Image Analysis Procedure for the Calibration of Optical Fibre Geometry Test Sets***
 - **ANSI/TIA-455-231 (FOTP-231), Adoption of IEC 61315, *Calibration of Fibre Optic Power Meters***

Upcoming TR42 Meetings

TR-42 Plenary Meetings

June 4-9, 2023

To be hybrid Face-to-face and virtual

www.tiaonline.org

Thank You

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