

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
- Report current as of TIA TR42 Plenary, 06-10Oct2025 in San Antonio, TX

TIA TR42 Key Activities

- **Request IEEE 802.3 WG input on TIA TSB-6000**
- **Request IEEE 802.3 WG input on draft TSB-5073 regarding multipair extended reach Ethernet applications**
- **IEEE 802.3 WG invitations to E4AI and extended reach workshops**

IEEE 802.3 Working Group input on TIA TSB-6000

- **Entire document open for comment**
- **Specific feedback requested by TIA TR42.1**
 1. Normative References section
 - Is IEEE 802.3 standard listed in the correct manner?
 2. Request input on SPE section formatting
 3. Ethernet tables for MMF and SMF
 - Speeds over 100G – want to make sure correct values are used.

Request IEEE 802.3 Working Group Input on TSB-5073

Multipair extended reach Ethernet applications

- **Objective: Provide implementation guidelines to extend link length beyond 100M standards-imposed limit**
- **TIA TR42.7 has created a draft document, TSB-5073**
- **TIA TR42.7 seeks commentary from IEEE 802.3 WG on this document**

IEEE 802.3 WG invitations - E4AI and extended reach workshops

- **Liaison letters from IEEE 802.3 Working Group presented to the TIA TR42 Engineering Committee at Opening Plenary**
- **Significant interest expressed by members**

TR 42.1 - *Premises Telecommunications Infrastructure*

Open Documents:

- ANSI/TIA 5017 (Security) – comment resolution
- TIA TSB-6000 (Application Tables) – resolve comments
- ANSI/TIA-568.1-F (consolidation of TIA 568.0, TIA 568.1 and TIA 862)

New Work:

- TIA-5018 (Distributed Antenna Systems) – review draft
- Addendum to ANSI/TIA-942 (Data Center) related to AI
- TSB-6000, liaise to IEEE 802.3 Working Group for comment

TR 42.3 — *Commercial Building Telecommunications Pathways & Spaces*

- Comment Resolution:
 - ANSI/TIA-569-F (Pathways & Spaces) (TR423-2026-06-008)
- Vote on next step for TIA-606-E (Administration)
- Bonding & Grounding Task Group Update

TR 42.5 – *Telecommunications Infrastructure Terms & Symbols*

- Old Business
 - Requesting editors to review the use of “Cabling Systems 1-3” and “Distributor A-C” as these will be replaced in a future revision, and please provide feedback to TR42.5
- Updated Dictionary: Published following the February 2025 meeting
- Agenda summary
 - Review and discuss the list of proposed changes to Dictionary
 - Use of the brackets (subcommittees) and parathesis (document numbers) within the document

TR 42.7 - *Telecommunications Copper Cabling Systems*

TIA-TSB-5073, Guidelines for Supporting Extended Distance over 4-pair Balanced Twisted-Pair Cabling (Editor – Todd Harpel)

Expect to review contributions and comments on ballot and discuss next steps

ANSI/TIA-568.5-B, standard for 1-pair cabling – Revision (Editor – Brad Woodman)

Expect to review contributions and comments on ballot and discuss next steps

ANSI/TIA-1152-B, Requirements for Field Test Instruments and Measurements for Balanced Twisted- Pair Cabling (Editor – Will Winston)

Expect to review contributions and comments on ballot and discuss next steps

ANSI/TIA-5071, Requirements for Field Test Instruments and Measurements for Balanced Single Twisted-Pair

Expect to review status of reaffirmation ballot

ANSI/TIA-568.6, Single Pair Multi-Drop (SPMD) cabling and component specifications

Expect to review contributions and whether to continue or abandon this project

TR 42.9 - *Industrial Telecommunications Infrastructure*

Document development:

ANSI/TIA-1005-B

Recirculation Ballot #4 comment resolution

TR 42.11 - *Optical Fiber Systems*

Document Development

Addendum ANSI/TIA-568.3-E-1 [Optical Fiber Cabling and Components]:

Review Ballot 4 Call for Comments and resolve comments.

Future action to move to Ballot the entire document as ANSI/TIA 568.3-F incorporating resolved comments to date. Editor: Phil Irwin

Review document maintenance.

ANSI/TIA-526-7: SM Attenuation and RL measurement. Review for revision ballot.
Calle

Editor: Olivie

Other

Contributions:

TR42.11-2026-06-006 MCF Multi-core Fiber Polarity Review [Corning]

TR42.11-2026-02-006 ANSI/TIA 526-7 propose adopt IEC 61280-4-2 ed. 3.

TR42-2026-06-065 IEC SC86C Liaison Report

TR 42.13 - *Passive Optical Devices & Fiber Optic Metrology*

■ Agenda

- Maintenance Projects
 - Contributions on FOTP-1 and FOTP-226 recommendations
 - FOTP-2 and FOTP-8 comment resolution
 - Discuss FOTP-32 recommendations
 - Discuss review and recommendations on TIA-604
- Other Contributions
 - Review of IEC 61754-37 (MDC) for possible adoption
 - Review of FOTP-199 vs. FOTP-227 (recently published adoption)
- Liaison Reports
 - CENELEC
 - IEC SC86B