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

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10Nov2025

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

TR 42.1 - *Premises Telecommunications Infrastructure*

Comment resolution :

- ANSI/TIA-5017-A (Security) - moves to 60-day approval ballot
- TSB-162-B (Wireless Access Points) – approved for publication
- ANSI/TIA-758-C (OSP) – approved for publication
- ANSI/TIA-568.1-F (Consolidation of 568.0, 568.1 & 862)
  - Ballot closes on 10/30. Comments will be resolved at the February, 2026 meeting

New Projects:

- Approved opening TIA TSB-6000 (Application tables)
  - Will be TIA TSB-6000-2026
- Approved opening TIA TSB-185 to reaffirm
- Approved opening TIA TSB-5018 (DAS)
  - Looking for editor

TR 42.3 – *Commercial Building Telecommunications Pathways & Spaces*

- Completed comment resolution for TIA-606-E (Administration) (TR423-2025-10-014a)
  - Dave K. reviewed *RFID, QR Codes, Bar Codes and Labeling* Contribution (TR423-2025-10-015)
  - Approved 60-day recirculation ballot on entire document

- ANSI/TIA-569-F (Pathways & Spaces) (TR423-2025-10-013)
  - Ballot closes end of the month
  - Comment resolution will be done at next meeting

TR 42.5 – *Telecommunications Infrastructure Terms & Symbols*

SC	Update	Type	Current	Change to
TR42.3	New	Definition	N/A	**fault managed power (FMP):** Also known as Class 4 power in NFPA 70, FMP is a powering system that monitors for faults and controls current delivered to ensure fault energy is limited. The monitoring and control systems differentiate fault-managed power from electric light and power circuits.
TR42.3	New	Acronym	N/A	**FMP**: fault managed power
TR42.1	Modification	Definition	**horizontal connection point**: A connection point within Cabling Subsystem 1 between a distributor and equipment outlets or devices supporting intelligent building systems. [TR 42.1]	**horizontal connection point (connector):** A fixed connection between a horizontal cross-connect and an equipment outlet or device in a coverage area. [TR42.1]

TR 42.7 - *Telecommunications Copper Cabling Systems*

- TSB-5073, Guidelines for Supporting Extended Distance over 4-pair Balanced Twisted-Pair Cabling
    - Reviewed task group draft and contributions
    - Agreed to keep the draft in the task group for further development to be reviewed in Feb.
- ANSI/TIA-5071, Requirements for Field Test Instruments and Measurements for Balanced Single Twisted-Pair
    - Review link has been supplied to TR-42.7
    - Reaffirmation discussion to occur in Feb.
- ANSI/TIA-568.4-E, Broadband Coaxial Cabling and Components Standard
    - Ballot is out for comment.
    - Agreed to Publish if there are no technical comments received from the ballot.
- Request from TR42.1 to review table from 568.1-F draft
    - Discussed the issue and provided enough feedback to commenters to the document to be able to submit comment.
- Received 802.3dg draft 2.1 liaised by IEEE 802.3 WG

TR 42.9 - *Industrial Telecommunications Infrastructure*

ANSI/TIA-1005-B

- Ballot comments regarding Appendix B were addressed.
- Motion approved to send out for a recirculation ballot for the entire document.

ANSI/TIA-568.7 Industrial SPE

Ballot comment resolution completed. No technical comments received.

Motion approved to publish the document with the editorial comment resolution implemented.

Motion approved to send the final document to the USTAG for submittal to IEC SC25 WG3 and to ODVA.

TR 42.11 - *Optical Fiber Systems*

Document Development

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

Reviewed 3nd "Call for Comments" ballot and completed comment resolution.

- Motion passed for 4th "Call For Comments" ballot to including resolved comments.
- Motion passed to change project type from Addendum to Revision.

ANSI/TIA 526-2-A: Output Power Measurement for SM Fiber. Published.

ANSI/TIA-526-28: Attenuation measurement of MPO. Published

Other

Contributions Presented:

TR42.11-2025-10-006 Common Transceiver MDIs using 2-row MPO connectors

TR42.11-2025-10-008 Recommended Language for Corning Comments 13 and 17

TR42-2025-10-105 IEC SC86C Liaison Report

TR 42.12 - *Optical Fiber Systems*

- IEC 86A / WG1 formed a new Correspondence Group (CG) to liaison with and support IEEE 802.3 200G/wavelength MMF Study Group Document Development
- CG lead & IEEE 802.3 to IEC 86A liaison: Vince Ferretti/Corning/US
- Potential new A1 MMF1, (not official name: OM_6100_860): with EMB > 4700 MHz-km (6100 MHz)/TBD) at 860 nm (TBD) to support 50 m reach objective (initiated by IEEE) for 200G/wavelength VCSEL-MMF link
- IEEE contribution has supporters from experts affiliated with Broadcom, Coherent, Alibaba, Huawei, Panduit, CommScope, YOFC
- Characterize OM3/OM4/OM5 at 1060 nm to support 10 m reach objective (**not** initiated by IEEE)
- Not discussed in IEC yet; expect discussion via CG: Potential new A1 MMF2: (not official name: OM_TBD_1060): peak EMB (> 2000? MHz-km/TBD) at 1060 nm to support 30 m and 50 m reach objectives (initiated by IEEE) for 200G/wavelength VCSEL-MMF link.
- Potential smaller core (TBD).
- IEEE contribution has supporters from experts affiliated with Lumentum, Nvidia, Microsoft, Coherent, Trumpf, Juniper/HPE, Panduit, Lightera

TR-42.12 The Numbers

Revisions Published - 1

FOTP-133 Adoption of the IEC 60793-1-22:2001 Optical fibres - Part 1-22: Measurement methods and test procedures – Length measurement

ICEA Ballot Support - 2

ICEA submitted comments to TIA in October. Approved for call for comments within TIA.

- FOTP-86 Jacket Shrinkage
- FOTP- 25 Impact Testing of Optical Fiber Cables

Ongoing Document Work- 2

PARs need to be submitted

- FOTP-162 Optical Fiber Cable Temperature Humidity
- ANSI/TIA-598-D-2014 (“Optical Fiber Cable Color Coding”): open for revision

Ongoing Doc Work- 4

PARs complete but Ballot not started

- FOTP-28 Measuring Dynamic Strength and Fatigue Parameters of Optical Fibers by Tension
- FOTP 84 Jacket Self-Adhesion (Blocking) Test for Optical Fiber Cable
- FOTP 85 Fiber Optic Cable Twist Test
- FOTP-87 Fiber Optic Cable Knot Test

Ongoing Doc Work- 1

Withdrawn

- FOTP-38 Measurement of Fiber Strain in Cables under Tensile Load

Ongoing Doc Work - 6

Requested 1st Ballot Authorization

- FOTP- 33 Impact Testing of Optical Fiber Cables
- FOTP- 41 Compressive Loading Resistance of Optical Fiber Cables
- FOTP- 88 Optical Fiber Cable Jacket Shrinkage
- FOTP- 89 Optical Fiber Cable Jacket Elongation and Tensile Strength
- FOTP- 91 Fiber Optic Cable Twist-Bend Test
- FOTP- 98 Fiber Optic Cable External Freezing Test

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

Published Documents

- ANSI/TIA-455-157-A (PDL adoption of IEC 61300-3-2:2009)
- ANSI/TIA-455-16-B (Salt Spray/Corrosion Test)

Maintenance Projects

- ANSI/TIA-455-227-A (Keying accuracy of PM connectors) – project request initiated; motion approved for approval ballot
- Bulk reaffirmation of 5 documents: FOTP-196, 197, 200, 201 and 240 – motion approved to reaffirm all 5 documents
- 4 FOTPs to be reviewed by experts for input on revisions/adoptions: FOTP-1, 2, 8, and 32 – actions taken, expect to review in February meeting

Ongoing New Projects

- ANSI/TIA-604-20 (FOCIS AIM connector) – comment resolution, motion approved for approval ballot
- ANSI/TIA-623.1 (Adoption IEC 61755-3-1 optical interface – comment resolution (editorial), motion approved for publication
- ANSI/TIA-623.2 (Adoption IEC 61755-3-2 optical interface – in circulation