



Telecommunications Industry Association

1310 North Courthouse Road, Suite 890
Arlington, VA 22201 | www.tiaonline.org

Approved by General Counsel

TR-42.7 Subcommittee on Copper

Cabling Systems

Meeting Date: 06 February 2024

Location: Charleston, SC

Approved: 26 February 2024



Meeting Report

TR-42.7 Report

Organization: TIA Accredited Engineering Committee TIA TR-42.7
Telecommunications Copper Cabling Systems

Date: Tuesday, February 6, 8:00 am to 2:30 pm eastern time

Meeting Location: This meeting will be both face-to-face and, on the web, both options listed below.

Please note: The meetings are scheduled in a hybrid format, with in-person participation preferred. Remote options for attendance are provided as a best effort only, without a guarantee of connectivity, as it is beyond our control. Due to the potential variance in network services, facilities and equipment available to online participants there is no implied quality of service levels. Once quorum is achieved with or without the participation of a remote participant(s) the meeting will proceed due to the timely nature of our activities.

Face-to-face:

The Limited Hotel
425 Meeting Street
Charleston, SC 29403
Tel. (843) 718-2327
Website: [The Limited Hotel](#)

Web:

- TR-42.7 Copper Cabling Systems, Tuesday, February 6, 2024, from 8:00 am to 2:30 pm EST:
- <https://attendee.gotowebinar.com/register/7245956885210366559>

Please cut and paste this web address link into your browser's address bar to register for the meeting. You will receive an e-mail with a link to join the meeting. Each person must register for each meeting separately.

New to GoToMeeting? Get the app now and be ready when your first meeting starts:
<https://global.gotomeeting.com/install/684626269>

Chair:	Brian Ceella	Siemon	860-952-3341
Vice-Chair:	Brad Woodman	Molex	847-224-8675

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IMPORTANT NOTICE OF PARTICIPATION

Participation in, or attendance at, any activity of a TIA Formulating Group or any sub element thereof, constitutes acceptance of and agreement to be bound by all provisions of the current TIA Procedures for American National Standards (PANS) and the TIA Engineering Committee Operating Procedures (ECOP), including but not limited to all competition and antitrust laws. Participation in, or attendance at, any activity of a TIA Formulating Group or any sub element thereof, also constitutes acceptance of and agreement to permission that all communications and statements, oral or written, or other information disclosed or presented, and any translation or derivative thereof, may without compensation, and to the extent such participant or attendee may legally and freely grant such copyright rights, be distributed, published, and posted on TIA's web site, in whole or in part, on a non-exclusive basis by TIA or TIA's licensees or assignees, or as TIA directs. Exceptions to the foregoing may be granted or permitted in writing to the Chair of the Formulating Group by the head of the TIA Standards Department on a case-by-case basis.

TIA is actively seeking participation in TR-42.7 standards projects from the user and general interest communities.

1 ADMINISTRATIVE

1.1 Call to order – [Meeting started at 8am eastern time](#)

1.2 Attendance (establish quorum, introductions) – [Quorum was established. See below attendee list.](#)

Company	Last Name	First Name
AECOM Technology Solutions	Mahoney	Patrick
AEM	Patel	Arvind
Bel Stewart	Ellis	Mark
Belden	Tellas	Ronald
Belden	Camp	David
Belden	Shuman	Brian
Belden Inc.	Arbeeny	Caspar
CME Consulting, Inc.	Zimmerman	George
CommScope	Hayes	Trent
Commscope	Shariff	Masood
Cord Data	Hess	Dave
Dan-Chief Technology Co., Ltd.	Kai Su	Sheng
Day2 Consultores	Aguilar	Juan Pablo
DND	Thomlinson	Les
Fluke	Winston	William

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Furukawa	Henriques	Fabianne
Harger	McElroy	Andy
HARTING INC NA	Schmidt	Rainer
Hubbell	Savi	Olindo
Intertek Testing Services	Pelletier	Antoine
ITTERA	Ochoa	Miguelangel
Legrand	Aekins	Robert
Leviton	Poulsen	Jeffrey
Leviton	Harpel	Todd
Marmon IEI	Turner	Kevin
Molex	Woodman	Brad
Navair	Pressey	Jacquelynn
NIS	Forbes	Diane
OCC	Stikeleather	Derrick
Panduit	Babu	Suren
Panduit Corp	Lenz	Sean
Panduit Corp.	Voss	Bob
MC Communications	Diminico	Christopher
Proterial Cable America	Savoie	Jacob
Prysmian Group	Thwaites	Steve
Quabbin Wire and Cable	Smigelski	Zachary
RiT Tech	Kumar	Anand
Sentinel Connector Systems	Jeskey	Dave
Siemon	Ceella	Brian
Softing	Hüdepohl	Konstantin
Superior Essex communication	Girma	Solomon
Surtec	Tim	Pickles
Telecommunications Industry Association	Thibideau	Cheryl
Telegartner inc.	Ehredt	Al
Trend Networks	Barrera	Dan
UL LLC	Tassone	Anthony
UL Solutions	Vanderlaan	Paul
Wesco	Jimenez	Andy
Winchester Interconnect	Dupuis	Marc

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1.3 Intellectual Property Rights Policy

"TIA's Intellectual Property Rights Policy can be found in Statements of Policy (ANNEX C) and other clauses and annexes of this document. Participants in the work of the TIA Formulating Groups are urged to review the appropriate sections. Individual participants are encouraged to notify TIA of any patent(s) or published pending patent application(s) of which they are aware that may be essential to the practice of a proposed TIA Publication, including requirements introduced through normative references, early on in the development to reduce the possibility for delays in the development process and increase the likelihood that the proposed TIA Publication will become a Standard. However, a Patent Holder who has provided TIA with a TIA Patent Holder Statement with respect to the applicable proposed TIA Publication need not (but may elect to) identify its specific patent(s) or published pending patent application(s) that may be essential to the practice of the proposed TIA Publication in question. Patent searches are not required to comply with the TIA Intellectual Property Rights Policy."

1.6 Chair's Report - Verbal report. Call for volunteers for Vice Chair as well as EDC and Editor's for this group.

1.7 Elections

- *Elections to be held for Vice-Chair – Brad Woodman was elected as interim Vice-Chair.*

1.8 Agenda review and approval (TR-42.7-2024-02-001-Agenda) – Agenda review completed. Motion to approve by Caspar Arbeeny and 2nd by Todd Harpel. Approved by voice vote with no opposition.

001 01-19-24 Agenda for meeting of February 2024 Brian Celella

1.9 Meeting report review and approval (TR42.7-2024-02-002-Sept Meeting Report) – No feedback on the report. Moved to Approve by Derrick Stikeleather and 2nd by Andy Jimenez. Approved by voice vote with no opposition.

002 01-19-24 Minutes from meeting of September Brian Celella

1.10 Distribution of documents and contributions (Contributions left in this place in the agenda do not need to be reviewed during this meeting.)

1.11 Review of incoming liaison letters, reports, and requests – No incoming issues to discuss

1.12 Review of action items

Item	Task group name or owner	Task group membership or task description	Completion Date
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1	Test methods TG Derrick Stikeleather leader	Solve the problem of the grounding of the remote end	Derrick expecting to have a report complete for the June 2024 meeting
2	Brian / Caspar	Circulate initial ballot of TSB-190-A	Complete
3	Brian / Ray	Update Draft and circulate next ballot of ANSI/TIA-568.5-1	Complete
4	Brian / Sean	Update Draft and submit for publication of ANSI/TIA-568.2-E	Ongoing
5	Brian / Ray	Update draft and circulate next ballot of TSB-184-A-2	Complete
6	Brian / Bob	Send ANSI/TIA 568.5 to ODVA	Complete
7	All	Contributions on SPE PoDL installations, considering bundling and temperature	Ongoing
8	Brian / Caspar	Update draft and submit for publication of ANSI/TIA-568.5-1	
9	Brian / George	Update draft and circulate next ballot of TSB-184-A-2	
10	Brian / Caspar	Update draft and circulate next ballot of TSB-190-A	
11	Brian	Send existing project authorization and scope info from ANSI/TIA-568.6 multi-drop project to group	
12	Brian / Dave Hess	Send copies of latest drafts of 568.5-1 and 184-A-2 to SC 25/WG 3	

2 OLD BUSINESS

2.2 ANSI/TIA-568.5-1 standard for 1-pair cabling – Addendum 1, correcting certain errors

Appointed Caspar Arbeen as new editor. Reviewed ballot summary and comments. Completed comment resolution. Motion to publish the document by Masood Shariff and 2nd by George Zimmerman. Approved by voice vote with no opposition.

009 ANSI/TIA-568.5-1 Draft 5
010 Ballot Summary

Brian Celella
Brian Celella

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011 Ballot Comments w/Editor recommendations Brian Celella

- *Expect to appoint a new editor for this project*
- *Expect to review comments on ballot*
- *Possible vote to circulate ballot*
- *Possible vote to publish*

2.3 Consider addendum TSB-184-A-2 for Guidance for supporting power delivery over single-pair
(To include thermal performance)

Appointed George Zimmerman as new editor. Reviewed ballot summary and comments. Completed comment resolution. Motion to re-circulate the entire document for ballot by Bob Voss and 2nd by Masood Shariff. Approved by voice vote with no opposition.

006	TSB-184-A-2 Draft 6	Brian Celella
007	Ballot Summary	Brian Celella
008	Ballot Comments w/Editor recommendations	Brian Celella

- *Expect to appoint a new editor for this project*
- *Expect to review comments on ballot*
- *Possible vote to circulate ballot*
- *Possible vote to publish*

2.4 Consider draft for ANSI/TIA-568.2-E, Balanced Twisted-Pair Telecommunications Cabling and Components Standard

Discussed status of publication. Brian Celella to work with TIA to get document published.

- *Expect to discuss status of publication*

2.5 Consider draft of TSB-190-A, Guidelines on Shared Pathways and Shared Sheaths

Reviewed ballot summary and comments. Completed comment resolution. Motion to circulate a limited ballot including only CME1, CME2, and SI-05 by Masood Shariff and 2nd by Rainer Schmidt. Approved by voice vote with no opposition.

003	TSB-184-A-2 Draft 6	Brian Celella
004	Ballot Summary	Brian Celella
005	Ballot Comments w/Editor recommendations	Brian Celella



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- *Expect to review comments on ballot*
- *Possible vote to circulate ballot*
- *Possible vote to publish*

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

Reviewed contribution 012 by Chris Diminico. Discussion followed and concluded that we will review status again in June to see when we can start working on this project again. Brian Celella agreed to review the Scope of the project and send to the group.

- *Expect to review contributions*
- *Expect to discuss continuing or abandoning this project*

3 NEW BUSINESS

3.1 Output documents and letters

- 3.1.1 Consider any draft documents to liaise to any other SDOs

Agreed to send copies of the latest drafts of 568.5-1 and TSB-184-A-2 to JTC 1/SC 25/WG 3

- 3.1.2 Consider any other output documents - None

3.2 Review of potential new work items – No new discussion

- *Expect to discuss 100BASE-T1*
- *Expect to discuss centralized cabling in relation to SPE*
- *Expect to discuss other potential new work items*

3.3 Review of action items

3.4 Determination of future meeting dates

4 Future Meeting Dates and Schedule

- June 3-7 2024
- Oct 7-11 2024

These meetings will be 'hybrid', that is, face-to-face with a remote attendance option. Locations have not been determined.



Meeting Report

5 ACKNOWLEDGEMENTS – Ray Emplit was acknowledged for his years of dedication to TIA and the industry in whole. He will be missed by all. The TIA stars program was also mentioned and several winners within our group.

6 ADJOURNMENT – Motion to adjourn and 2nd with no opposition. Meeting Adjourned at 11:27 am (EST).

This meeting was conducted in accordance with the TIA Legal Guidelines and the engineering procedures.

AVAILABILITY OF MEETING DOCUMENTS:

TR-42.7 members/participants are instructed to download contributions and other meeting documents from TIA Connect (connect.tiaonline.org) before the meeting.

To access the meeting's contributions, please follow the directions below:

- Go to connect.tiaonline.org
- Enter your *Username* (your email address in the TIA database)
- Enter your *Password*
- Click "LOGIN"
- Click the "Communities" tab and then select "All My Communities"
- Scroll down the page and select "TR-42.7 Cooper Cabling Systems"
- Click on "Documents" and then select the "2021-02 Virtual" folder

To access the following files:

- TR-42 Meeting Notice
- All TR-42 (sub)committee agendas

Use the following URL:

connect.tiaonline.org/communities/community-home/...

NEW CONTRIBUTIONS:

Contributions shall use the approved templates and specific wording provided by TIA. Contributions affecting a document are to include a TIA cover sheet, proposed text to be included in the document, and the rationale/substantiation for the contribution. File templates are available on TIA Connect under the Standards Procedure Toolbox tab in the Form folder for download. All contributions shall be submitted to Brian Celella (the acting EDC) at brian.celella@siemon.com and copied to the chair and vice-chair. All electronic files shall be provided in either Adobe Acrobat (*.PDF); Microsoft Word (*.DOC); Microsoft PowerPoint (*.PPT); or in Microsoft Excel (*.XLS). Compressed files shall be accessible using PKUNZIP or WINZIP (*.ZIP).

All contributions shall be sent to the EDC for posting on appropriate location on TIA Connect no later than 12:00 am AOE on the Thursday preceding the week of the meeting in which the contribution is to be

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considered (example: if the meeting will be held on Thursday the 28th, the contributions shall be sent by midnight on Thursday the 21st).

LATE CONTRIBUTIONS:

Contributions not posted as described in the timing above shall be classified as “late contributions.” They may be considered in the meeting to which they are addressed provided that an appropriate motion receives 50% or greater of a vote.

All late contributions shall be provided to the EDC and to the committee members on a memory stick or CD-ROM along with sufficient paper copies for those members without a PC.

All late contributions shall be posted to TIA Connect no later than one week following the meeting in which they are considered. Notification of the posting shall be made to the group’s email reflector list by the EDC.

Questions and Comments concerning this agenda should be submitted to:

Chair: Brian Celella

Ph: (860)-952-3341

E: Brian_Celella@siemon.com

Vice Chair: Brad Woodman

Ph: (847)-224-8675

E: Bradley.woodman@molex.com

Document	Title	Date of Revision	Current Status
ANSI/TIA-568.2-E	Balanced Twisted-Pair Telecommunications Cabling and Components Standard		Approved for Publication
ANSI/TIA-568.5-1	Single pair balanced twisted-pair telecommunications cabling and components – addendum 1, correct certain errors		Approved for Publication
TSB-184-A-2	Guidelines for Supporting Power Delivery over Balanced Single Twisted-Pair Cabling		Being balloted
TSB-190-A	Guidelines on Shared Pathways and Shared Sheaths		Being balloted
ANSI/TIA-568.6	Single Pair Multi-Drop (SPMD) cabling and component specifications		New project, no documents yet
ANSI/TIA-1183-B	Measurement methods and test fixtures for balun-less measurements of balanced components and systems	Feb 2023	Published
ANSI/TIA-568.4-E	Broadband Coaxial Cabling and Components Standard	2022	Published
ANSI/TIA-5071	Requirements for Field Test Instruments and Measurements for Balanced Single Twisted-Pair Cabling	2022	Published

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ANSI/TIA-568.2-D-1	Balun requirements for Category 8 testing	April 2019	Published
ANSI/TIA-568.2-D-2	Balanced Twisted-Pair Telecommunications Cabling and Components Standard Addendum 2: Power Delivery Over Balanced Twisted-Pair Cabling	July 2020	Published
ANSI/TIA-568.5	Single pair balanced twisted-pair telecommunications cabling and components	February 2022	Published
TSB-184-A-1	Guidelines for the use of 28 AWG cords for power delivery	February 2019	Published
TSB-184-A	Guidelines for Supporting Power Delivery Over Balanced Twisted-Pair Cabling	2017	Published
ANSI/TIA-568.2-D	Balanced Twisted-Pair Telecommunications Cabling and Components Standard	2018	Published
ANSI/TIA-1152-A	Requirements for Field Test Instruments and Measurements for Balanced Twisted-Pair Cabling	2021 (Re-affirmed)	Published
TSB-5021	Guidelines for the Use of Installed Category 5e and Category 6 Cabling to Support 2.5GBASE-T and 5GBASE-T	2021 (Re-affirmed)	Published
TSB-5019	High Performance Structured Cabling Use Cases for Data Centers and Other Premises	2020 (Re-affirmed)	Published
TSB-155-A	Guidelines for the Assessment and Mitigation of Installed Category 6 Cabling to Support 10GBASE-T	2014 (Re-affirmed)	Published
TSB-5008	Mechanically-Generated Cable Impulse Noise Detection and Characterization	2019 (Re-affirmed)	Published
TSB-1197	Mode Conversion Parameters for Balanced Twisted Pair Cabling	2019 (Re-affirmed)	Published
TSB-190	Guidelines on Shared Pathways and Shared Sheaths	2018 (Re-affirmed)	Published