



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: 07 October 2021

Location: Teleconference

Approved: 27 October 2021



Meeting Report

TR-42.7

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

Date: Thursday, October 7, 9:00 am – 7:00 pm eastern time

Meeting Location: Web and phone

Chair:	Wayne Larsen	CommScope	214-587-3970
Vice-Chair:	Brian Ceella	The Siemon Co.	860-945-8589

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 8:00 am CST.

1.2 Attendance (call quorum, introductions, announce web registration code)

No web registration code for this meeting. Introductions were made. Quorum achieved with 34 of 42 members present. After a later arrival a total of 35 of the 42 quorum companies were in attendance.

company	Last Name	First Name
AEM	Patel	Arvind

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Belden	Arbeeny	Caspar
Belden	Shuman	Brian
Belden	Siev	Virak
Belden	Camp	David
Chemours	Dawson	Fred
CME Consulting	Zimmerman	George
CommScope	Hayes	Trent
CommScope	Larsen	Wayne
Condumex	BANOS	JORGE
Cord Data	Hess	Dave
Dan Chief	Su	Sheng-Kai
Dan Chief	Chiou	Dachen
Datacom Standards	Jones	Richard
Fluke	Winston	William
Furukawa	kuniyoshi	cristina
GDCE	Thar	M
Harger	Emplit	Ray
Harting	Schmidt	Rainer
Hitachi	Cornelison	Ken
Hubbell Premise Wiring	Savi	Olindo
Trend Networks	Barrera	Dan
Legrand	Aekins	Rob
Leviton	Dearing	Mark
Leviton	Harpel	Todd
Leviton	Poulsen	Jeffrey
MC Communications	Diminico	Christopher
Molex	Woodman	Brad
Molex	Rivers	Phillip
OCC	Cozart	Jordan
ODVA/Rockwell	Jones	Cameron
Panduit	Lenz	Sean
Panduit	Voss	Bob
Prysmian	Thwaites	Steve
Quabbin	Smigelski	Zachary
R&M	Ahmed	Adnan
Sentinel	Jeskey	Dave
Siemon	Ceella	Brian
Siemon	Maguire	Valerie
Softing	Jallo	Tom
Softing	Huedepohl	Konstantin



Meeting Report

Sterlite	KHAN	MOHAMMAD SHAHID
Stewart Connector	Ellis	Mark
Superior Essex	Born	Steve
Superior Essex	Ford	Christin
Surtec	Pickles	Tim
Telegartner	Ehredt	Al
TIA	Thibideau	Cheryl
TIA	Jenkins	Teesha
UL LLC	Tassone	Anthony
UL LLC	Vanderlaan	Paul
Vaden Enterprises	Vaden	Sterling

Brian Celella to be minute taker.

- 1.3 Intellectual Property Rights Policy – The Chair reviewed this statement and called for patent disclosures. No patent disclosures were made.

"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."

1.5 Chair's Report

- 1.6 Agenda review and approval (TR-42.7-2021-10-045) – Motion to Approve by Mark Dearing , 2nd by Brad Woodman. Approved by voice vote without opposition.

045b 08-17-21 Agenda for meeting October 7 Wayne Larsen

- 1.7 Meeting report review and approval (TR42.7-2021-10-046) - Motion to Approve by Mark Dearing, 2nd by Derrick Stikeleather. Approved by voice vote without opposition.

046 06-18-21 Minutes from meeting of June Wayne Larsen

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1.3 Distribution of documents and contributions

(Contributions left in this place in the agenda do not need to be reviewed during this meeting.)

048 07-02-21 SP-568.5-R2 (Single-Pair) ballot comment form Wayne Larsen

1.9 Review of incoming liaison letters, reports, and requests – No incoming liaison letters for review

1.10 Review of action items

Item	Task group name or owner	Task group membership or task description	Completion Date
1	POE legislation ad hoc	Ron Tellas leader Val Maguire, Frank Straka, Fred Dawson, Antoine Pelletier, Dave Jeskey, Mark Dearing, Todd Harpel, Adnan Ahmed, George Zimmerman, Trent Hayes, Chris DiMinico, Diane Forbes	No report
2	Test methods TG Derrick Stikeleather leader	Solve the problem of the grounding of the remote end	Derrick has received data and will call a meeting Ongoing
3	Todd	Task group to study 1-pair cable heating. Members Bob Voss, Chris, Darshana, Dave Hess, Paul, Brian C., Anthony, George	This task group is in need of more wherewithal ongoing
4	Wayne	Circulate default ballot for 568.5	
5	Wayne, Arvind	Circulate industry ballot for 5071	
6	Wayne	Notify TIA to circulate ballot to re-affirm ANSI/TIA-1152A	Re-affirmed
7	Wayne	submit PAR for amendment for 184-A-2 for single pair	
8	Wayne, Dave	Send 568.5 to USTAG after updates	Complete
9	Wayne, Anthony	Prepare outline for TSB-184-A-2	



Meeting Report

2 OLD BUSINESS

2.1 Field testing for 1-pair cabling to be published as ANSI/TIA-5071

- *Expect to review comments on 2nd industry ballot – Completed review and resolution of comments.*
- *Possible vote to circulate 3rd industry ballot – Motion to circulate 3rd industry ballot by Ray Emplit, 2nd by Sterling Vaden. Approved by voice vote without opposition.*
- *Possible vote to default ballot*
- *Possible vote to publish*

051	07-20-21	SP-5071 (Single-Pair Field Testing) ballot summary	Wayne Larsen
052	07-20-21	SP-5071 (Single-Pair Field Testing) ballot comments	Wayne Larsen

2.2 Consider TSB for Guidance for supporting power delivery over single-pair TIA-TSB-5070 (To include thermal performance)

Reviewed ctrb 057 by Christin Ford on adding 22 AWG cables to TSB-184-A. We also reviewed ctrb 058 by Christin Ford, but decided not to implement 22 AWG as there was no consensus to do so at this time.

- *Expect to review PAR 053 Review ctrb 053 PAR by Wayne Larsen on single pair additions to TSB-184-A as a new addendum. Moved to accept by Ray Emplit, 2nd by Sterling Vaden. Motion was approved by voice vote without opposition.*
- *Expect to review preliminary outline*
- *Possible vote to circulate 1st committee ballot*
- *Possible vote to circulate 1st industry ballot*

049	07-06-21	SPE heat rise data entry spreadsheet_	Todd Harpel
050	07-06-21	Minutes from Single-Pair Heating TG meeting of July 2	Todd Harpel
053	07-29-21	PAR for TSB-184-A-2 (Single-Pair Power Delivery)	Wayne Larsen
057	09-28-21	Guidelines for supporting 22 AWG power delivery	Christin Ford
058	09-28-21	PAR for TSB-184-A-3 (22 AWG Power Delivery)	Christin Ford

2.3 Note re-affirmation of ANSI/TIA-1152A, Requirements for field test instruments and measurements for balanced twisted-pair cabling

2.4 ANSI/TIA-568.5 standard for 1-pair cabling

Review ctrb 056 by Sterling Vaden on TCL models.



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- *Expect to review comments on 5th industry ballot. All comments were reviewed and resolved.*
- *Possible vote to circulate 6th industry ballot*
- *Possible vote to default ballot Motion for default ballot by Ray Emplit, 2nd by Cameron Jones. Default ballot will include 9 comments as marked in the comment resolution. Motion was approved by voice vote without opposition.*
- *Possible vote to publish*

047	07-02-21	PN-568.5 (Single-Pair) draft 2.0	Sterling Vaden
054	09-01-21	SP-568.5-R2 (Single-Pair) ballot summary	Wayne Larsen
055	09-01-21	SP-568.5-R2 (Single-Pair) ballot comments	Wayne Larsen
056	09-16-21	Cable TCL model for 10BASE-T1L applications	Sterling Vaden

2.5 ANSI/TIA-568.6, Single Pair Multi-Drop (SPMD) cabling and component specifications – Reviewed ctrbs 041 and 038

- Expect to review contributions
- Possible vote to circulate mock ballot
- Possible vote to circulate committee ballot
- Possible vote to circulate industry ballot

059	10-06-21	Multidrop mixing segment considerations	Chris DiMinico
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3 NEW BUSINESS

3.1 Possible other new projects

3.2 Output documents and letters – Send 568.5 draft to USTAG after comments have been implemented.

3.2.1 Consider a liaison to IEEE on single-pair cabling and connectors.

3.2.2 Consider any draft documents to liaise to any other SDOs

3.2.3 Consider any other output documents

3.3 Review of potential new work items

3.4 Review of action items - Completed

3.5 Determination of future meeting dates

4 FUTURE MEETING DATES AND SCHEDULE

January 24-28, virtual

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5 ACKNOWLEDGEMENTS

6 ADJOURNMENT

Motion to adjourn by Ray Emplit, 2nd by Mark Dearing at approximately 3:30 pm Central time.

This meeting was conducted in accordance with the TIA Legal Guides 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

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 Valerie Maguire (the EDC) at valerie_maguire@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 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.

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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: Wayne Larsen

Ph: (214)-587-3970

E: wayne@wdlresearch.com

Vice-chair: Brian Celella

Ph: (860)-945-8589

E: brian_celella@siemon.com

Document	Title	Date of Revision	Current Status
TSB-5070	Guidelines for Supporting Power Delivery over Balanced Single Twisted-Pair Cabling		New project, no documents yet
ANSI/TIA-568.6	Single Pair Multi-Drop (SPMD) cabling and component specifications		New project, no documents yet
ANSI/TIA-5071	Requirements for Field Test Instruments and Measurements for Balanced Single Twisted-Pair Cabling		Being balloted
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		Being balloted
TSB-184-A-1	Guidelines for the use of 28 AWG cords for power delivery	February 2019	Published
ANSI/TIA-1183-A	Measurement methods and test fixtures for balun-less measurements of balanced components and systems	March 2017	Published
ANSI/TIA-568.4-D	Broadband Coaxial Cabling and Components Standard	June 2017	Published
TSB-184-A	Guidelines for Supporting Power Delivery Over Balanced Twisted-Pair Cabling	2017	Published

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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 (Re-affirmation in process)
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