



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 June 2023

Location: Omaha, NE

Approved: 10 July 2023



Meeting Report

TR-42.7 Report

Organization: TIA Accredited Engineering Committee TIA TR-42.7
Telecommunications Copper Cabling Systems
Date: Tuesday, June 6, 8 am to 6 pm central time

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

Face-to-face:

Embassy Suites by Hilton Omaha Downtown / Old Market

555 South 10th Street

Omaha, NE 68102

Web: This meeting was also available by web.

Chair:	Wayne Larsen	CommScope	214-587-3970
Vice-Chair:	Brian Celella	The Siemon Company	860-952-3341

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

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Meeting Report

1.1 Call to order - Meeting started at 8:07 due to audio issues.

1.2 Attendance (call quorum, introductions, announce web registration code)
Quorum was established with 37 of 42 quorum companies in attendance.

The chair called upon attendees to introduce themselves which they did, both remote and in-person attendees.

company	Last Name	First Name
AEM	Patel	Arvind
Belden	Arbeeny	Caspar
Belden	Shuman	Brian
Belden	Siev	Virak
Belden	Camp	David
CME Consulting	Zimmerman	George
CommScope	Hayes	Trent
CommScope	Larsen	Wayne
Condumex	BANOS	JORGE
Cord Data	Hess	Dave
Dan Chief	Sheng-Kai	Su
Dan Chief	Chiou	Dachen
Fluke	Winston	William
Furukawa	Fabianne	Henriques
GDCE	Payton	Scott
Harger	Emplit	Ray
Harting	Schmidt	Rainer
Hubbell Premise Wiring	Savi	Olindo
Intertek	Pelletier	Antoine
Legrand	Aekins	Rob
Leviton	Harpel	Todd
Leviton	Poulsen	Jeffrey
Marmon IEI	Turner	Kevin
MC Communications	Diminico	Christopher
Molex	Rivers	Phillip
Molex	Woodman	Brad
Nest Technical Services	Smith	Will
NIS	Forbers	Diane
OCC	Stikeleather	Derrick
Panduit	Lenz	Sean
Panduit	Voss	Bob
Phoenix Contact	Bernd	Hormeyer
Proterial Cable	GARZA	EDUARDO

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Prysmian	Thwaites	Steve
Quabbin	Smigelski	Zachary
RIT	Kumar	Adnan
Sentinel	Jeskey	Dave
Siemon	farfan	nelson
Siemon	Ceella	Brian
Softing	Jallo	Tom
Softing	Huedepohl	Konstantin
Stewart Connector	Ellis	Mark
Superior Essex	Born	Steve
Surtec	Pickles	Tim
Telegartner	Ehredt	Al
TIA	McGarry	Tom
Trend Networks	Barrera	Dan
UL LLC	Vanderlaan	Paul
UL LLC	Tassone	Anthony
Wesco	Jimenez	Andrew
Winchester Interconnect	Dupuis	Marc

1.3 Intellectual Property Rights Policy – Reviewed and no responses of patents.

"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 – No Chair's report at this time.

1.7 Agenda review and approval (TR-42.7-2023-06-018a) Motion to approve agenda by George Zimmerman, second by Bob Voss. Approved by voice vote without opposition.

018a 04-12-23

Agenda for meeting of June

Wayne Larsen

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1.8 Meeting report review and approval (TR42.7-2023-06-019) Motion to approve by Ray Emplit, 2nd by Brad Woodman. Approved by voice vote without opposition.

019 04-12-22

Minutes from meeting of Jan/Feb

Wayne Larsen

1.9 Distribution of documents and contributions

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

 TR42.7-2023-06-021-SP56851ComForm

 TR42.7-2023-06-023-PN184A2ComForm

 TR42.7-2023-06-027-SP5682EComForm

1.9 Review of incoming liaison letters, reports, and requests – No incoming reports to review this meeting.

1.10 Review of action items

Item	Task group name or owner	Task group membership or task description	Completion Date
1	Test methods TG Derrick Stikeleather leader	Solve the problem of the grounding of the remote end	Samples being passed around. 8 labs, 3 done, 2 samples, estimate to finish in November.
2	Bob Voss	Lead TG on single-pair measurement methods	This will stop for now.
3	Wayne	Submit 1183-B for publication	Complete, published
4	Sean/Wayne	Circulate industry ballot for 568.2-E	Complete
5	Ray/Wayne	Circulate committee ballot for TSB-184-A-2	Complete
6	Ray/Wayne	Circulate industry ballot for 568.5-1	Complete
7	Cheryl/Wayne	Make a view-only version of TSB-190 available for members	Complete
8	Wayne	Submit PAR for revision of TSB-190	
9	Wayne / Caspar	Prepare initial draft of TSB-190-A	



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10	Wayne / Ray	Circulate next ballot of ANSI/TIA-568.5-1	
11	Wayne / Sean	Circulate next ballot of ANSI/TIA-568.2-E	
12	all	Contributions on SPE PoDL installations, considering bundling and temperature	

2 OLD BUSINESS

2.1 ANSI/TIA-1183-B, Measurement methods and test fixtures for balun-less measurements of balanced components and systems (No action since this was approved for publication last time)

2.2 Consider addendum TSB-184-A-2 for Guidance for supporting power delivery over single-pair (To include thermal performance) – Review ballot comments. Agreement was made to not circulate an additional ballot at this time since the DC Resistance issue in 568.5-1 may have implications on this document. Solve the issue in 568.5-1 first. Defer CS-01 and completion of comment resolution until September meeting.

TR42.7-2023-06-022-184A2_d5.1

TR42.7-2023-06-024-PN184A2Summary

TR42.7-2023-06-025-PN184A2BalComsEdRec

- *Expect to review comments on 3rd committee ballot*
- *Possible vote to circulate 4th committee ballot*
- *Possible vote to circulate default ballot*
- *Possible vote to publish*

2.3 ANSI/TIA-568.5-1 standard for 1-pair cabling – Addendum 1, correcting certain errors – Review contributions (Caspar, Ray). Review ballot comments. Complete comment resolution. Motion to send the document out for another full ballot. Motion by Bob Voss, 2nd by Will Winston. Approved by voice vote with no opposition.

TR42.7-2023-06-032-Single-Pair-DCR

TR42.7-2023-06-020-56851_d3

TR42.7-2023-06-028-SP56851Summary

TR42.7-2023-06-029-SP56851BalComsEdRec

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- *Expect to review comments on 3rd industry ballot*
- *Possible vote to circulate 4th industry ballot*
- *Possible vote to circulate default ballot*
- *Possible vote to publish*

2.4 Consider draft for ANSI/TIA-568.2-E, Balanced Twisted-Pair Telecommunications Cabling and Components Standard Reviewed contributions (Wayne). Reviewed ballot comments. Completed comment resolution. Motion to send the document out for another full ballot. Motion by Brian Celella, 2nd by Bob Voss. Approved by voice vote with no opposition.

TR42.7-2023-06-026-5682E_d0.2
 TR42.7-2023-06-030-SP5682ESummary
 TR42.7-2023-06-031-SP5682EBalComsEdRec

- *Expect to review comments on 1st industry ballot*
- *Possible vote to circulate 2nd industry ballot*
- *Possible vote to circulate default ballot*
- *Possible vote to publish*

2.5 Consider revision, re-affirmation, or withdrawal, of TSB-190, Guidelines on Shared Pathways and Shared Sheaths – It was pointed out that at least the out-of-date references should be updated. Caspar Arbeeney volunteered to be editor on a revision. Ray Emplit Motioned to start project and accept the PAR as drafted and reviewed. Dave Camp 2nd the motion. Motion passed by voice vote with no opposition.

2.6 Task group on single-pair measurement methods – no report or updates

2.7 ANSI/TIA-568.6, Single Pair Multi-Drop (SPMD) cabling and component specifications – Discussion on whether to continue or abandon this project. Decision to leave on agenda for now, and revisit at future meetings.

3 NEW BUSINESS

3.1 Output documents and letters

3.1.1 Consider any draft documents to liaise to any other SDOs – None at this time

3.1.2 Consider any other output documents – none at this time

3.2 Review of potential new work items – Discussed end user guidance on the use of different PoDL classes and how they map into our cabling systems. No new work item needed yet, but contributions on the topic are requested of the group for the next meeting.

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3.3 Review of action items –

1. Action items were reviewed and are captured in the table above.

3.4 Determination of future meeting dates

4 Future Meeting Dates and Schedule

- Sept 25-29, 2023 - Tulsa, Oklahoma, hotel TBD
- Feb 5-9, 2024 - Location TBD
- June 3-7 2024 - Location TBD
- Oct 7-11 2024 - Location TBD

These meetings will be 'hybrid', that is, face-to-face with a remote attendance option.

5 ACKNOWLEDGEMENTS – NONE AT THIS TIME

6 ADJOURNMENT – MOTION TO ADJOURN BY RAY EMLIT, 2ND BY GEORGE ZIMMERMAN.

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:

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

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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: Wayne Larsen	Ph: (214)-587-3970	E: wayne.d.larsen@commscope.com
Vice-chair: Brian Celella	Ph: (860)-952-3341	E: Brian_Celella@siemon.com

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

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ANSI/TIA-5071	Requirements for Field Test Instruments and Measurements for Balanced Single Twisted-Pair Cabling	2022	Published
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