



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: 02 February 2023

Location: Tampa, FL

Approved: 16 February 2023



Meeting Report

TR-42.7 Report

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

Date: Thursday, February 2, 2023, 8:00 am – 6:00 pm eastern time

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

Face-to-face:

Hilton Tampa Airport Westshore

2225 N Lois Ave.

Tampa, FL 33607

Web: This meeting was also available by web.

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

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Meeting Report

1 ADMINISTRATIVE

1.1 Call to order - Meeting started at 8am

1.2 Attendance (call quorum, introductions, announce web registration code)
 Quorum was established with 34 of 41 quorum companies in attendance. Two companies joined later making a total of 36 out of 41 quorum companies attending.

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
AESA SA	Dardel	Boris
Belden	Arbeeney	Caspar
Belden	Shuman	Brian
Belden	Siev	Virak
Belden	Camp	David
CME Consulting	Zimmerman	George
CommScope	Hayes	Trent
CommScope	Larsen	Wayne
Condux	BANOS	JORGE
Cord Data	Hess	Dave
Dan Chief	Chiou	Dachen
Department Of National Defense Canada	Thomlinson	Les
Fluke	Winston	William
Furukawa	Fabianne	Henriques
GDCE	Meepegama	Thar
GDCE	Payton	Scott
Google	Locker	Chris
Google	Reece	Mark
Harger	Emplit	Ray
Harting	Schmidt	Rainer
Hubbell Premise Wiring	Savi	Olindo
Intertek	Pelletier	Antoine
ITTERA	Ochoa	Miguelangel
Legrand	Montstream	Cindy
Legrand	Aekins	Rob
Leviton	Harpel	Todd
Leviton	Poulsen	Jeffrey
MC Communications	Diminico	Christopher

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Molex	Woodman	Brad
Nest Technical Services	Smith	Will
NIS	Forbers	Diane
nVent Electric	Judson	Ward
OCC	Stikeleather	Derrick
Panduit	Lenz	Sean
Panduit	Voss	Bob
Phoenix Contact	Bernd	Hormeyer
Proterial Cable	Forter	Tanner
Prysmian	Thwaites	Steve
Quabbin	Smigelski	Zachary
R&M	Ahmed	Adnan
Sentinel	Jeskey	Dave
Siemon	Ceella	Brian
Softing	Jallo	Tom
Softing	Huedepohl	Konstantin
Stewart Connector	Ellis	Mark
Superior Essex	Born	Steve
Surtec	Pickles	Tim
Telegartner	Ehredt	Al
TIA	Thibideau	Cheryl
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."



Meeting Report

1.5 Elections

Wayne Larsen nominated as Chair – Motion Sean Lenz and 2nd Ray Emplit. Motion Approved by voice vote with no opposition –

Brian Celella nominated as Vice-Chair – Motion by Ray Emplit 2nd by Bob Voss. Motion Approved by voice vote with no opposition.

1.6 Chair's Report – No Chair's report at this time.

1.7 Meeting report review and approval (TR42.7-2023-01-002) – Motion by Ray Emplit, 2nd by Brad Woodman to Approve the meeting report. Motion passed by voice vote with no opposition.

002 10-10-22 Minutes from meeting of October Wayne Larsen

1.8 Distribution of documents and contributions

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

004	10-31-22	SP-568.5-1 (TIA-568.5 Corrections) ballot comment form	Ray Emplit
008	11-14-22	PN-184-A-2 (Single-Pair Power Delivery) ballot cmt form	Ray Emplit
015	01-27-23	SP-568.2E (Twisted-Pair Cabling) draft 0.1	Sean Lenz

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 sought to study UTP 1-pr. Feb 2023 – Little movement. 2 UTP samples provided. Looking for 1 more UTP SPE 30m cable sample before starting testing. Group agrees to move forward with 2 samples if another sample cannot be found.
2	Bob Voss	Lead TG on single-pair measurement methods	Will continue Feb 2023 – Bob to schedule a meeting and report in June
3	Ray/Wayne	Circulate industry ballot for ANSI/TIA-568.5-1	Complete



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4	Wayne	Circulate default ballot for ANSI/TIA-1183-B	Complete
5	Sean/Wayne	Contribute draft for ANSI/TIA-568.2-E	Complete
6	Wayne	Submit PAR for ANSI/TIA-568.2-E	Complete
7	Ray/Wayne	Circulate committee ballot for TIA-184-A-2	Complete
8	Wayne	Submit 1183-B for publication	
9	Sean/Wayne	Circulate industry ballot for 568.2-E	
10	Ray/Wayne	Circulate committee ballot for TSB-184-A-2	
11	Ray/Wayne	Circulate industry ballot for 568.5-1	
12	Cheryl/Wayne	Make a view-only version of TSB-190 available for members	

2 OLD BUSINESS

2.1 ANSI/TIA-1183-B, Measurement methods and test fixtures for balun-less measurements of balanced components and systems

Expect to review comments on default ballot – Review default ballot. No comments to review. 19 affirmative. 19 abstain votes.

- *Possible vote to circulate 2nd default ballot –*
- *Possible vote to publish - Will moves to publish document, 2nd by Todd Harpel. Motion Approved by voice vote with no opposition.*

005	11-14-22	SP1183B (Balunless Fixtures) default ballot	D. Stikeleather
006	11-14-22	SP1183B (Balunless Fixtures) ballot comment form	Ray Emplit
013	01-10-23	SP-1183-B (Balunless Fixtures) ballot summary	Ray Emplit

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

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- *Expect to review comments on 2nd committee ballot – 3 negative votes.*
- *Possible vote to circulate 3rd committee ballot – Motion to circulate 3rd committee ballot by Ray Emplit, 2nd by George Zimmerman. Approved by voice vote with no opposition.*
- *Possible vote to circulate default ballot*
- *Possible vote to publish*

007	11-14-22	PN-184-A-2 (Single-Pair Power Delivery) draft 4.1	Ray Emplit
011	01-10-23	PN-184-A-2 (Single-Pair Power Delivery) ballot summary	Ray Emplit
012	01-10-23	PN-184-A.2 (Single-Pair Power Delivery) ballot comments	Ray Emplit
014	01-27-23	Single-Pair Loop Resistance Calculations	Paul Vanderlaan

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

- *Expect to review comments on 2nd industry ballot – Reviewed comments*
- *Possible vote to circulate 3rd industry ballot – Motion to go out for an Industry Ballot by Bob Voss, and 2nd by George Zimmerman. Motion passes by voice vote without opposition.*
- *Possible vote to circulate default ballot*
- *Possible vote to publish*

003	10-31-22	SP-568.5-1 (TIA-568.5 Corrections) draft 2	Ray Emplit
009	01-10-23	SP-568.5-1 (TIA-568.5 Corrections) ballot summary	Ray Emplit
010	12-20-22	SP-568.5-1 (TIA-568.5 Corrections) ballot comments	Ray Emplit

2.4 Consider draft for ANSI/TIA-568.2-E, Balanced Twisted-Pair Telecommunications Cabling and Components Standard – Reviewed Draft doc 015 and ctrb 016. Motion for Sean to make a clean draft of 568.2-E and submit for Industry Ballot. Motion by Ray and 2nd by Bob. Motion Passes with voice vote with no opposition.

015	01-27-23	SP-568.2E (Twisted-Pair Cabling) draft 0.1	Sean Lenz
016	01-27-23	Consider cats 5, 5e, 3, in annex	Sean Lenz



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2.5 Consider revision, re-affirmation, or withdrawal, of TSB-190, Guidelines on Shared Pathways and Shared Sheaths – Review document online...Agreed to wait until June to discuss what to do.

2.6 Task group on single-pair measurement methods

- *(No report)*

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

- *Expect to review contributions – Reviewed ctrb 017.*

017 01-27-23 Multi-drop considerations

Chris DiMinico

3 NEW BUSINESS

3.1 Output documents and letters

3.1.1 Consider any draft documents to liaise to any other SDOs

3.1.2 Consider any other output documents

3.2 Review of potential new work items – No Items

3.3 Review of action items

3.4 Determination of future meeting dates

- June 2023 – Request for 1.5 days. Request to keep 42.7 and 42.9 close on the schedule for travel purposes.

- October 2023

4 FUTURE MEETING DATES AND SCHEDULE

June 5-9 2023,

October 2-6, 2023, date tentative – This date was changed in the plenary meeting

Also, dates for 2024 meetings were tentatively set in the plenary meeting.

No physical locations for future meetings have been set yet.

The five meetings planned for 2023 and 2024 will be hybrid, meeting in a physical location with a remote attendance option.

5 ACKNOWLEDGEMENTS

Acknowledgement to Cameron Jones who has moved on and has been an active member of this group.

6 ADJOURNMENT - Adjourned at 5:10 pm.

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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.

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 Ceella	Ph: (860)-952-3341	E: Brian_Ceella@siemon.com

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Document	Title	Date of Revision	Current Status
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		Publication authorized Jan 2023
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
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



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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