

TR-42.7 meeting report

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

Date: Friday, October 2, 9:00 am – 7:00 pm eastern time
Thursday, October 8, 9:00 am – 7:00 pm eastern time

Meeting Location: Web and phone

Chair: Wayne Larsen CommScope 214-587-3970
Vice-Chair: Sterling Vaden Vaden Enterprises 828-712-3482

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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 code
(this code works Tuesday and Wednesday)
www.tiaonline.org/standards/committees/rosters/

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

Quorum was achieved with 39/41 companies attending.

company	Last Name	First Name
AEM	Pandya	Harshang
AEM	Patel	Arvind
AESA	Dardel	Boris
Analog	Stewart	Heath
Anixter	Jimenez	Andrew
Belden	Kusuma	Roy
Belden	Siev	Virak
Belden	Tellas	Ronald
Leviton	Harpel	Todd

Chemours	Dawson	Fred
CME Consulting	Zimmerman	George
CommScope	Hayes	Trent
CommScope	Shariff	Masood
CommScope	Larsen	Wayne
Compuserve	Olders	Peter
Condumax	BANOS	JORGE
Cord Data	Hess	Dave
Dan Chief	Chiou	Dachen
Fluke	Winston	William
Fluke	Brillhart	Theo
Furukawa	kuniyoshi	cristina
Global Data Center Engineering	Payton	Scott
Harger	Emplit	Ray
Harting	Fritsche	Matthias
Harting	Schmidt	Rainer
Hitachi	Zeleny	Jordan
Hitachi	Cornelison	Ken
Hubbell Premise Wiring	Savi	Olindo
IDEAL	Barrera	Dan
Intertek	Pelletier	Antoine
Legrand	Aekins	Rob
Leviton	Dearing	Mark
Leviton	Poulsen	Jeffrey
MC Communications	diminico	christopher
Molex	Woodman	Brad
NIS	Forbes	Diane
nVent	Judson	Ward
OCC	Stikeleather	Derrick
ODVA/Rockwell	Jones	Cameron
OFS	Sandels	Greg
Panduit	Lenz	Sean
Panduit	Voss	Bob
Prysmian	Thwaites	Steve
Quabbin Wire and Cable	Smigelski	Zachary
R&M	Ahmed	Adnan
RIT	Bagaria	Anand
Sentinel	Jeskey	Dave
Siemon	Ceella	Brian
Siemon	Maguire	Valerie
Softing	Harrison	Simon
Softing	Huedepohl	Konstantin
Sterlite	bhatt	darshana
Stewart Connector	Ellis	Mark
Stewart Connector	Marowsky	Richard
Surtec	Pickles	Tim
Telegartner	Ehredt	Al
TIA	Bain	David

TIA	Otieno	Florence
TIA	Jenkins	Teesha
UL LLC	Tassone	Anthony
UL LLC	Ivans	Randy
UL LLC	Vanderlaan	Paul
University of Wisconsin-Milwaukee	Keller Jr.	Michael
Vaden Enterprises	Vaden	Sterling
	Hinoshita	Shinji

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."

The Chair reviewed the intellectual property rights policy. Rob Aekins of Legrand mentioned a patent of interest. Patent Application # WO2020190758A1 from CommScope for single-pair connector. No other patents were discussed.

1.4 Chair's Report

TIA new system for documents will be used for future meetings. FTP site will remain accessible for past meetings. Attendance is being recorded through GotoMeeting. Wayne reported on a mistake: discrepancy in Cat 8 TCL channel requirements between C.2-1 and -2.D. Wayne suggested to wait until .2-D update in 2023 to fix the issue. No other opinions on the topic were made.

1.5 Agenda review and approval (TR-42.7-2020-10-083a)

083a Agenda for meeting of October 2 and 8 Wayne Larsen

The agenda was reviewed. Motion to approve agenda by Ray Emplit. 2nd by Brad Woodman. Motion approved unanimously by voice vote.

1.6 Meeting report review and approval (TR42.7-2020-10-084)

084 Minutes from meeting of July 27 Wayne Larsen

Motion to Approve meeting report by Dan Barrera, 2nd by Ray Emplit. Motion approved unanimously by voice vote.

1.7 Distribution of documents and contributions

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

093	09/10/20	Agenda for Single-Pair Heating TG meeting of Sep 10	Todd Harpel
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094 09/14/20 Minutes from Single-Pair Heating TG meeting of Sep 10 Todd Harpel

1.8 Review of incoming liaison letters, reports, and requests

1.9 Review of action items

Item	Task group name or owner	Task group membership or task description	Completion Date
1	Antoine Pelletier	Task group to investigate short channel cat 8 PSANEXT. Members include Antoine Pelletier, Mike Borgman, Phillip Rivers, Sterling Vaden, Derrick Stikeleather, Brian Celella, Naved Khan, Jeff Poulsen, Paul Vanderlaan, Peter, Arvind, Will Winston	Completed by contributions to past meetings This task group will now be dormant until there are more contributions No Change in status
2	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	Ron Tellas has made reports, will continue to report as needed Ongoing; cont 96
3	Test methods TG Derrick Stikeleather leader	Solve the problem of the grounding of the remote end	Round robin is planned, being delayed by virus considerations Ongoing – Derrick gave verbal report
4	Wayne Larsen	Stimulate press release and by other methods attempt to provoke participation from industry experts in support of SPMD	Completed by David Bain
5	Ray, Wayne	Update 568.2-D-2 per default ballot results and previous ballot results, and publish	Complete
6	Wayne	Forward SPMD liaison letter to IEEE to plenary for consideration	Complete
7	Todd	Task group to study 1-pair cable heating. Members Bob Voss, Chris, Darshana, Dave Hess, Paul, Brian C., Anthony, George	Hold a meeting, not scheduled yet, to begin study. Ongoing – Todd reported status in cont. 98 A meeting is planned for Oct 16
8	Arvind, Wayne	Update draft per comment resolution and circulate another committee ballot for ANSI/TIA-5071	
9	Sterling, Wayne	Update draft per comment resolution and circulate another industry ballot for ANSI/TIA-568.5	
10	Chris	Hold a TG meeting to discuss SP-II field testing	

2 OLD BUSINESS

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

- Expect to review comments on 2nd committee ballot
- Possible vote to circulate 3rd committee ballot
- Possible vote to circulate industry ballot

087	08/17/20	PN-5071-R1 (Single-Pair Field Testing) ballot summary	Wayne Larsen
088a	08/17/20	PN-5071-R1 (Single-Pair Field Testing) ballot comments	Arvind Patel
097	09/30/20	TCL model	Jim Withey

Completed comment resolution. Motion by Chris D to circulate a 3rd committee ballot. This was seconded by Theo, and the motion passed by voice vote with no opposition.

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

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

089	08/31/20	SP-568.5 (Single-Pair) ballot summary	Wayne Larsen
090	08/31/20	SP-568.5 (Single-Pair) ballot comments	Sterling Vaden
082	07/27/20	SPE length considerations	Chris DiMinico

Completed comment resolution during Oct 8th meeting. Motion to go for a 2nd industry ballot by Mark D, 2nd by Ray Emplit. The motion passed by voice vote without opposition.

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

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

Reviewed portions of doc 053a, and minutes from June meeting which had a list of issues with multi-drop. Wayne called for written contributions for our next meeting that can be used to develop a multi-drop standard.

2.4 Thermal performance of 1-pair cables

- Review report from task group
- Consider the content of ISO/IEC 29125 and its amendments
- Possible vote to adopt this
- Possible consideration of a new project on this topic

098	09/30/20	Single-Pair Heating TG report	Todd Harpel
091	09/09/20	Scaling 1-pair temperature rise information	W. Hopkinson
092	09/09/20	Temperature rise of SPE bundles vs modeled temp rise	Harpel, Marchant
095	09/24/20	Modeled Single-Pair ampacity values	W. Hopkinson

We reviewed a task group report on 1-pair cable heating, from Todd. We agreed to a new project to develop a TSB for guidance on **supporting power delivery over 1-pair**, similar to TSB-184, which will include this information. **Motion** to start this project by Ray Emplit, 2nd by Mark Dearing. No opposition to starting this new project to develop a TSB. The motion **passed by voice vote without opposition**. Wayne to come to February meeting with a draft PAR for review.

2.5 ANSI/TIA-568.2-D-2, Balanced Twisted-Pair Telecommunications Cabling and Components Standard Addendum 2: Power Delivery Over Balanced Twisted-Pair Cabling (normativization of TSB-184-A)

(No further action on this is required since the document was approved for publication in July.)

3 NEW BUSINESS

3.1 Possible other new projects

085	07/28/20	Supplemental discussion on cable aging degradation	Shinji Hinoshita
086	08/10/20	Proposed changes to ANSI/TIA-568.2-D, revision of #076	Shinji Hinoshita
099	10/06/20	Test data on 24AWG 7/32 stranded Cat5 cable manufactured in 1997	Zachary Smigelski

We reviewed contributions 085a from Shinji and 099 from Zachary. There were no proposals to take any action. The Chair has decided that further written contributions on this topic may be made but no further meeting time will be spent reviewing them.

3.2 Output documents and letters

- 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

096	09/30/20	POE legislation report	Ron Tellas
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Ron reviewed contribution 096a. Members are encouraged to watch out for harmful legislation. Ron and his TG will also do this for us and make further reports as needed.

3.3 Review of potential new work items

3.4 Review of action items

3.5 Determination of future meeting dates

4 FUTURE MEETING DATES AND SCHEDULE

February 1-5, 2021, This meeting will be virtual, using web and phone
June 7-11, 2021, location TBD
October 4-8, 2021, Tentative date and location TBD, pending date of IEC meeting

5 ACKNOWLEDGEMENTS

Brief acknowledgement of Masood's retirement for those that were not at the last meeting.

6 ADJOURNMENT

Motion to adjourn by Ray, 2nd by Sterling. Motion approved by voice vote with no opposition at approximately 12:35 central time.

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

AVAILABILITY OF MEETING DOCUMENTS:

All meeting attendees are instructed to download contributions and other meeting documents from the TIA TR-42.7 FTP site (<http://ftp.tiaonline.org/TR-42.7/>) before the meeting. For information on how to access the FTP site, contact TIA (Marta Soncodi, MSoncodi@tiaonline.org).

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 the TR42 FTP site 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 the TIA FTP site 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 the TIA FTP site 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: Sterling Vaden	Ph: (828)-712-3482	E: sterlingv@charter.net

Document	Title	Date of Revision	Current Status
	Guidance for supporting power delivery over single-pair		Project approved, title not yet official
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
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	2016	Published
TSB-5021	Guidelines for the Use of Installed Category 5e and Category 6 Cabling to Support 2.5GBASE-T and 5GBASE-T	2016	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