

Approved by General Counsel

TR-42.7 Meeting Report

Date(s): 01/30/2018 - 01/31/2018

Location: Orlando, Fl

Approved: 02/06/2018

TR-42.7 Minutes

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

Date: January 30-31, 2018

Time: Tuesday, 8:00am – 6:00pm (January 30th)
Wednesday, 8:00am – 11:45 am (January 31st)

MEETING LOCATION**Orlando, FL**

Wyndham Orlando International Drive 8001
International Dr, Orlando, FL 32819

Chair: Sterling Vaden - Vaden Enterprises - 828-712-3482
Vice-Chair: Wayne Larsen - CommScope - 972-792-3149

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.

1 ADMINISTRATIVE**1.1 Call to order**

Sterling called the meeting to order at 8:00 am January 30, 2018.

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

The registration code was announced, and introductions were made with several new members in attendance.

The Chair read the important notice.

Quorum was achieved with 35/40 quorum companies present.

The following individuals were in attendance at this meeting.

Attendee	Company / Representing	Attendee	Company / Representing
Manley, Paul	C: AFL Hyperscale	Diminico, Christopher	C: MC Communications
Jimenez, Andrew	C: Anixter	Woodman, Brad	C: Molex Inc.
Siev, Virak	C: Belden	Rivers, Phillip	C: Molex Incorporated
Tellas, Ron	C: Belden	Schnitter, Paul	C: NDC Technologies
Dallmann, Richard	C: Cablexpress	Forbes, Diane	C: NIS
Dawson, Fred	C: Chemours	Stikeleather, Derrick	C: Optical Cable Corp.
Kountz, Dennis	C: Chemours	Straka, Frank	C: Panduit

Zimmerman, George	C: CME Consulting, Inc.	Borgman, Michael	C: Panduit
Chambal, Melissa	C: CNet Training	Voss, Bob	C: Panduit
Hayes, Trent	C: CommScope Network Solutions	Lenz, Sean	C: Panduit
Shariff, Masood	C: CommScope Network Solutions	Judson, Ward	C: Pentair
Larsen, Wayne	C: CommScope Network Solutions	Frishkorn, Eric	C: Phoenix Contact
Cornelison, Ken	R: Hitachi	Hormeyer, Bernd	C: Phoenix Contact
Hess, Dave	C: CORD DATA	Rivernider, Jim	C: Quabbin
Alley, Chad	C: Corning	Gerber, Matthias	C: R&M
Jones, Rich	C: Datacom Standards Consulting	Jeskey, David	C: Sentinel Connector Systems
Withey, James	C: Fluke Networks	Huedepol, Konstantin	C: Softing
Kuniyoshi, Cristina	C: Furukawa Ind. S. A.	Jallo, Tom	C: Softing
Rainville, Michael	C: General Cable Corp.	Born, Steve	C: Superior Essex
Kusuma, Roy	C: General Cable Corp.	Vaden, Sterling	C: Surtec Industries
Emplit, Ray	C: Harger, Inc.	Ehredt, Allen	C: Telegartner
Khan, Naved	C: Hubbell Premise Wiring	Ceella, Brian	C: The Siemon Company
Barrera, Dan	C: Ideal Industries	Maguire, Val	C: The Siemon Company
Pelletier, Antoine	C: Intertek Testing Services	Soncodi, Marta	C: TIA
Stafford, Vicki	C: Intertek Testing Services	Ivans, Randy	C: Underwriters Laboratories
Aekins, Robert	C: Legrand	Dupuis, Marc	C: Web Industries
Dearing, Mark	C: Leviton	Lai, Peter	C: Wonderful Hi-Tech
Poulsen, Jeff	C: Leviton Network Solutions		

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 read this policy and called for responses. No responses were received.

1.4 Chair's Report

The Chair reported on the elections at the previous meeting. The Chair made a request that the Vice-chair, being the previous chair, would remind him of anything he might forget, which the Vice-chair tried diligently to do.

1.5 Agenda review and approval (TR-42.7-2018-01-001a)

001a 07-11-17 Agenda for meeting of January 30-31

Sterling Vaden

Sterling Vaden reviewed the agenda. The action items were updated. Wayne Larsen mentioned that document TSB-190, on inter-category AXT and sheath sharing, should be added to the POW at the end

of this standing agenda. After modifications, James Withey moved and Trent Hayes seconded, to approve the agenda as modified. This motion was approved by voice unanimously.

1.6 Meeting report review and approval (TR42.7-2018-01-002)

002 07-11-17 Minutes from meeting of September 19-20 Sterling Vaden

Sterling Vaden reviewed the minutes of the last meeting. Masood Shariff moved, and Derrick Stikeleather seconded, to approve the minutes. This motion was approved by voice unanimously.

1.7 Distribution of documents and contributions

(Contributions left in this place in the agenda were available but not reviewed during this meeting.)

003	09-27-17	SP-568.2-D-D1 (Copper Cabling) ballot comment form	Wayne Larsen
004	10-17-17	Agenda for Single Pair TG meeting of Oct 17	Sterling Vaden
005	10-17-17	Minutes from Single Pair TG meeting of Oct 17	Sterling Vaden
007	11-28-17	Minutes from TIA-568.5 TG meeting of Nov 28	Sterling Vaden
008	01-14-18	Agenda for Single Pair TG meeting of Jan 16	Sterling Vaden
010	01-17-18	Minutes from Single Pair TG meeting of Jan 16	Sterling Vaden

1.8 Review of incoming liaison letters, reports, and requests

Dave Hess presented a report on international standardization activity. Chris Diminico presented a general report on IEEE 802.3 activities, and reviewed two incoming liaison letters from IEEE.

024	01-30-18	US TAG ISO/IEC JTC1 SC25 WG3 report to TIA TR-42.7	Dave Hess
028	01-30-18	IEEE 802.3 incoming liaison report	Chris DiMinico
005	TR-42	Incoming Liaison from IEEE 802.3 re connectors and topologies for single-pair	David Law
026	01-30-18	IEEE 802.3 liaison to TR-42: Single-pair Ethernet	David Law

1.9 Review of action items

Item	Task group name or owner	Task group membership or task description	Completion Date
1	Dave	Provide draft of 60512-99-002 CD3	Complete
2	Wayne	Fix the process of getting drafts of IEC draft standards posted to the TIA ftp site.	
3	Ron (Masood to help)	Produce a press release and video to announce the publication of TSB-184-A	Complete
4	High temp study TG	Paul leader, Dave Hess, Jeff, Roy, Bob, Mark, Randy, Ron, Trent, Brian C., Brad, Antoine	Examine and gain insight on the electrical performance levels of all categories of cabling above 60 C No meeting scheduled.
5	George	Write liaison letter to IEEE on 1-pair connector choice. To be proposed in Plenary.	Complete
6	Elevate 184-A to normative TG	George leader, Sterling, Chris, Ray, Dave Hess, Ron, Brian C., Andy, Paul, Jim R., Jim W., Jeff, Fred, Navid, and Frank a TG to elevate 184-A to normative	This project is on hold pending contributions.

7	1-pair TG '568.5	Sterling leader. Matthias to join. Derrick to join. Incorporate connector selection process criteria.	Meeting to be held Feb 22, 11:00 am -1:00 pm
8	184-A-1 TG	Ron, Frank co-leaders	Complete
9		Liaison to ICEA about test methods doc for cat 8 cable S-118-746.	Complete
10		Liaisons to 802.24.2, CABA, IOT consortium, ODVA, IEEE 802.3, TR50, on 1-pair connector properties (802.3 also multi-drop topologies)	Complete
11	Masood	Present a proposed process for addressing the 1-pair connector choice issue	Complete
12	All	Make proposals, and contributions, for the 1-pair connector	Ongoing
13	Wayne	Fill out paperwork for the two new projects, ANSI/TIA-568.5, and TIA-TSB-184-A-1	Complete
14	Antoine	Task group to investigate short channel cat 8 PSANEXT. Members include Antoine, Mike Borgman, Phillip Rivers, Sterling Vaden, Derrick Stikeleather, Brian Celella, Naved Khan, Jeff Poulsen, Paul Vanderlaan	Ongoing April 3, 11:00 am
15	Wayne	Circulate second default ballot for 568.2-D	
16	Wayne	Circulate committee ballot for 184-A-1.	Not done yet
17	Draft text for 184-A-1 for impact of managing cables	Chris leader, Sterling, George, Dave Hess, Ron, Brian C., Andy, Paul, Jim R., Jim W., Jeff, Fred, Navid, and Frank, Randy, Roy, Ward, Masood	Teleconferences scheduled Feb 13, Feb 20 11:00 am
18	Masood	Liaison letter to IEEE responding to their liaison on single pair cabling.	Draft review at closing plenary
19	Sterling	Update 568.5 draft per the meeting discussion	
20	Sterling	Circulate updated draft of 568.5 to ISO SC25 WG3	

2 OLD BUSINESS

2.1 Report from task group on high temperature cabling

There was no report from this TG, and there has not been a TG meeting since the last 42.7 meeting. The 42.7 leadership is considering to table this activity, if there is no progress prior to the next meeting.

2.2 568-2.D revision of 568-C.2 to include new material in C.2-1 and C.2-2

013	01-24-18	SP-568.2-D-D1 (Copper Cabling) ballot summary	Wayne Larsen
014	01-24-18	SP-568.2-D-D1 (Copper Cabling) ballot comments	Sterling Vaden
015	01-25-18	SP-568.2-D (Copper Cabling) draft 2.1	Sterling Vaden

- Reviewed comments on 1st default ballot
- Voted to circulate a 2nd default ballot with conditional approval to publish if no technical comments or substantive editorial comments are received.

The committee reviewed the ballot summary and resolved all ballot comments. Ballot resolution was recorded in document **TR42.7-2018-01-014-SP5682DD1BalComsResolved.docx** Comment AESA_01, the only not approve comment, was rejected, with no consensus for change. Clause G.1.3 was edited on pursuant to comments CS-01, SUR-3 and SUR-5.

Wayne Larsen moved, and Mark Deering seconded, to circulate a second default ballot, including the comments AESA_01, SUR-1, SUR-2, and the entire clause G.1.3, and to pre-authorize publication of this document in case there are no technical comments or no-votes received. This motion passed by voice unanimously.

2.3 Report from task group on 1-pair cabling

006	11-28-17	Single pair user interface connector selection process	Masood Shariff
009	01-14-18	Single pair modular conductor for large AWG cables	Sterling Vaden
012	01-23-18	PN-568.5-D (Single Pair Cabling) draft 0.4	Sterling Vaden
016	01-25-18	Connectivity for SPE	Bernd Horrmeyer
017	01-25-18	Connectivity for SPE with cable sharing properties	Matthias Gerber
018	01-25-18	Single pair connector proposal	Brian Celella
021	01-29-18	Proposed enhancements to SPE connector criteria	Bob Voss
023	01-29-18	1-pr LC connector proposal	Wayne Larsen
027	01-30-18	1-pair prototype cable test results	Trent Hayes

- Reviewed TG draft of ANSI/TIA-568.5
- Single pair connector selection

There were five contributions, containing descriptions of single-pair connectors reviewed. No decisions were made about them at this time. Trent Hayes presented contribution 021 on single-pair cable performance test results. Masood Shariff and Bob Voss presented two contributions 006 and 021 on connector selection process. It was noted that the connector selection process could benefit from some refinement, including, review of numerical requirements. The ampacity requirement of 1 Amp was increased to 1.36 Amps. The committee agreed to review numerical requirements. There was a recommendation to create a single table with the recommended features added to the required features. Additional selection criteria may need to be added. The committee agree to keep this as a part of the single-pair 568.5 TG and not create a separate TG. There was a single-pair TG teleconference scheduled as documented in the action items list. Multi-Drop channel topology as a potential inclusion in the document was discussed. Chris Diminico agreed to bring a contribution on multi-drop topology. There was a general consensus that multi-drop topology may not qualify as structured cabling and would be difficult to characterize. Sterling Vaden was tasked to update the draft to 0.5 incorporating comments recorded by Wayne Larsen during the online draft review.

2.4 TIA TSB-184-A-1 addendum on guidelines for 28 AWG patch cord heating

011	01-17-18	Draft TSB-184-A annex for 28 AWG patch cords	Frank Straka
019	01-26-18	28 AWG cable heat rise information	Ron Tellas
020	01-29-18	28AWG Cable IL and DCR Information	Ron Tellas
022	01-29-18	28 AWG patch cord PoE testing	Frank Straka
025	01-30-18	Draft TSB-184-A addendum for 28 AWG patch cords	Frank Straka

- Circulate 1st committee ballot

There was an approved motion to circulate a committee ballot at the September meeting. This did not happen. The committee reviewed the draft that was to be circulated, and agreed to circulate it now. Frank Straka presented contribution 022, which contains useful ideas for controlling temperature rise due to dc powering of cords in vertical cable managers. There was a TG established to review this information, and develop content for TSB-184-A-1 as part of the ballot comment process. Additionally, TR-42.7 agreed to inform the IEEE 802.3 that we are planning to provide additional guidance on addressing temperature rise of 28 AWG patch cords used for dc powering. Masood Shariff was instructed to include this information in a liaison letter to IEEE 802.3.

2.5 Report from task group on normativization of TIA-TSB-184-A

It was noted that this TG has not met since the last meeting. A proposal by Wayne Larsen to discontinue this activity was not accepted. It was agreed to continue this TG under the leadership of Chris Diminico, to have at least one teleconference and to make a decision at our next 42.7 meeting as to whether to stop this work, or create a project. A teleconference has been scheduled as recorded in the action items.

3 NEW BUSINESS

3.1 Output documents and letters

- 3.1.1 Draft liaison to IEEE 802.3 on single-pair cabling, containing both information and questions

It was moved by Wayne Larsen and seconded by Chris Diminico, to authorize Masood Shariff, to draft a liaison letter to IEEE 802.3, to be considered for approval at the TR-42 plenary on Friday, to cover both the single-pair and the AWG 28 cable heating performance, with Masood to accept input from Chris, George Zimmerman, Valerie Maguire, and others who wish to provide guidance. This motion was approved by voice unanimously.

It was agreed to send the draft of '568.5 to ISO/IEC SC25 WG3 after Sterling Vaden updates the draft. It was not approved to send the draft to IEEE at this time. It was agreed that the draft of TSB-184-A-1 does not need to be circulated to other SDOs at this time.

4 FUTURE MEETING DATES AND SCHEDULE

June 11-15, 2018, Pittsburgh
 October 1-5, 2018, Seattle or Phoenix
 January 28 - February 1, 2019, Naples, Fort Myers, Sanibel Island
 June 10-14, 2019, Calgary, Vancouver
 September 16-20, Boston, Savanna, Albuquerque

5 ACKNOWLEDGEMENTS

The outstanding work of Marta Soncodi in providing sweet food during all of the coffee breaks, and in coordinating the meeting in general, was graciously acknowledged by applause.

6 ADJOURNMENT

Having concluded all business in a satisfactory manner the meeting was adjourned by the Chair's declaration at 12:07 pm January 31, 2018.

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 (Stephanie Montgomery: smontgomery@tiaonline.org).

TSB-155-A	Guidelines for the Assessment and Mitigation of Installed Category 6 Cabling to Support 10GBASE-T	2014 (Re-affirmed)	Complete
TSB-5008	Mechanically-Generated Cable Impulse Noise Detection and Characterization	2014	Complete
TSB-1197	Mode Conversion Parameters for Balanced Twisted Pair Cabling	2014	Complete
TSB-190	Guidelines on Shared Pathways and Shared Sheaths	2011	Needs review