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Approved by General Counsel

TR-42.13 Subcommittee on Passive

Optical Devices and Fiber Optic

Metrology

Meeting Date: 07 June 2023

Location: Omaha, NE

Approved: 10 July 2023



TR-42.13 Passive Optical Devices and Fiber Optic Metrology

Date: June 7, 2023

Time: 8:00AM to 12:00PM CST

Location: Embassy Suites by Hilton Omaha Downtown/Old Market

> 555 South 10th Street Omaha. NE 68102 1-402-346-9000

Sunny Xu Chair: Vice Chair: Shelly Buchter

Meeting/Event Schedule: see TIA's Events Calendar for the full schedule (https://tiaonline.org/events/) GoToWebinar Registration: https://attendee.gotowebinar.com/register/7670885138445407064

1. Administrative/General Business

1.1. Call to Order

Chair called the meeting to order at 8:01am CST and welcomed all members. All attendees were advised of the TIA Important Notice of Participation.

TIA Important Notice of Participation

Participation in, or attendance at, any activity of a TIA Formulating Group or any sub-element thereof, constitutes acceptance of an agreement to be bound by all provisions of TIA Standards Development Procedures and 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-bycase basis.

TIA is actively seeking participation in TR-42.13 standards projects from the user and general interest categories.

1.2. Attendance (Call Quorum, Introductions, Roster)

Chair established guorum with 23 of 29 guorum companies in attendance (15 needed).

The following participants were reported as attendees via GoToWebinar.

Participant	Affiliation	
Bill Allen	OFS	
Robert Aekins	Legrand	

Participant	Affiliation
Sylvanus Lee	Leviton
Cindy Montstream	Legrand



Participant Affiliation Tara Ahmadi Tameh Belden Alex Richard Legrand Nik Angra AFL Adam Broughton Sumitomo UL **Daniel Cassidy** Cheryl Thibideau TIA **Christin Ford Superior Essex** Mike Connaughton Leviton Ana Cruz Belden Dave Valentukonis Siemon Derek Huffman Corning **Scott Eischens** CommScope **Data Center Systems** Steve Eisele Seymour Goldstein Fluke Networks Gang He **EXFO** Phil Irwin Panduit Hamid Jahani Santec Karla Vazquez Legrand Helmut Knehr Ericsson **Bulent Kose** Panduit Corp. Angela Lambert Corning Wayne Larsen CommScope Tiger Ninomiya SENKO

Meeting Report

Weeting Report			
Participant	Affiliation		
Debjani Bhattacharya	OFS		
Mehulkumar Patel	Legrand		
Patrick Tourreau	Photon Kinetics		
Jacquelynn Pressey	NAVAIR		
Phil Rivers	Molex		
Roman Shubochkin	OFS		
Erich Rosenast	Tempo Communications		
Greg Sandels	OFS		
Shelly Buchter	US Conec		
Daniel Smith	Nest Technical Services		
David Tanis	AFL		
Ronald Tellas	Belden		
Thomas Schmalzigaug	HUBER SUHNER		
Henson Toland	HFCL		
Tyler Royer	Senko		
Andrei Vankov	SENKO		
Sunny Xu	CommScope		
Rick Dallmann	CABLExpress		
Nelson Farfan	Siemon Company		
David Kozischek	Corning		
Adnan Ahmed	R&M		
Tatiana Berdinskikh	SENKO		



1.3. Current Meeting Agenda Review and Approval

Review and approve the modified current meeting agenda (TR42.13-2023-06-001b).

Motion 1: Approve current meeting agenda. M: Sunny Xu S: Greg Sandels Result: Motion passed without any objections.

1.4. Previous Meeting Report Review and Approval

Review and approve the previous approved meeting report (TR42.13-2023-02-006) that has been approved by TIA and posted to TIAConnect.

Motion 2: Approve previous meeting report. M: Greg Sandels S: Shelly Buchter Result: Motion passed without any objections.

1.5. TIA Intellectual Property Rights (Early Disclosure Policy)

TIA's Intellectual Property Rights Policy can be found in Statements of Policy (ANNEX C) and other clauses and annexes of TIA Standards Development Procedures. 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. Distribution of documents and contributions

Document #	Title/Subject	Contributor	Affiliation
TR42.13-2023-02-006	February 2, 2023 Approved Meeting Report	S. Xu	CommScope
TR42.13-2023-06-001b	June 7, 2023 Meeting Agenda	Xu/Buchter	CommScope/USConec
TR42.13-2023-06-002	IEC 86B Liaison Report	D. Huffman	Corning
TR42.13-2023-06-003	Modeled Connector Loss in Bend Optimized Multimode Fiber Links	R. Shubochkin	OFS
TR42.13-2023-06-004 Development of Best Practices and Guidelines for the Use of Expanded Beam Connectors in Data Center Applications T. Berdinskikh		T. Berdinskikh	Senko
TR42.13-2023-06-005	TR42.13 Document List_June2023	S. Xu	CommScope
TR42.13-2023-06-006	IEC Adoption Status_June2023	G. Sandel	OFS



TR42.13-2023-06-007	TR42.13 Document List_June2023_rev1	S. Xu	CommScope
TR42.13-2023-06-008	June 7, 2023 Meeting Report	Xu/Buchter	CommScope/USConec

1.7. Chair's Report and General Items

An updated Project Request Form has been provided by TIA, dated March 2023.

2. Liaison Reports

2.1. IEC SC 86B Liaison report – D. Huffman

D. Huffman provided summary activities of IEC SC86B WG4, WG6 and WG7. The IEC 63267 series (MM connector optical interface documents) and IEC 61300-3-3 (Active monitoring of changes in attenuation and return loss) were highlighted for potential TR42.13 adoption project. The next IEC SC86B WG meeting will be held in Milan, Italy November 15-24, 2023.

2.2. CENELEC Liaison report - T. Schmalzigaug

CENELEC liaison report will be presented at the next TIA meeting in September.

3. Old Business

3.1. Previous Action Items

AI #1	Dave Kozischek to request approval from ITU-T to present ITU-T material to TIA-TR42 committees.	No request approval necessary. Committee will evaluate what material can and should be presented at TR42.13 from ITU-T SG15. Closed.
AI #2	Mike Gurreri to request approval from IWCS to present IWCS material to TIA-TR42 committees.	Completed.
AI #3	Greg to follow up on the status of IEC 61755-1, IEC 61755-2-1 and IEC 61755-2-2 word documents.	Completed.
AI #4	Sunny to upload contribution TR42.13-2021-10-02 on IEC Adoption.	Completed.
AI #5	Sunny to submit TIA-622.4 and TIA-622.5 for publication.	Completed. Documents are published.
AI #6	Greg to provide a presentation on TIA-623 at June meeting.	Completed.



AI #7	Greg to review the next IEC series to adopt and potentially bring PAR at the next meeting.	On-going.
AI #8	Sunny to schedule an interim joint-meeting with TR42.11, .12 and .13 leadership to review document list.	Each SC leadership will maintain their own document list.
		Closed.

3.2 IEC 61755 SM connector optical interfaces adoption

Document	Title	Status
ANSI/TIA-621.1	(Adoption of IEC 61755-1:2022) General and guidance	Ballot passed. See Motion 3.
ANSI/TIA-622.1	(Adoption of IEC 61755-2-1:2022) non-angled	Ballot passed. See Motion 3.
ANSI/TIA-622.2	(Adoption of IEC 61755-2-2:2022) angled	Ballot passed. See Motion 3.
ANSI/TIA-622.4	(Adoption of IEC 61755-2-4:2015) Non-angled, reference connection	Document published.
ANSI/TIA-622.5	(Adoption of IEC 61755-2-5:2015) angled, reference connection	Document published.
ANSI/TIA-623	(Adoption of IEC 61755-3-1)	Greg to bring PARs – on- going and waiting for IEC development.

Motion 3: Publish ANSI/TIA-621.1, ANSI/TIA-622.1 and ANSI/TIA-622.2.

M: Greg Sandels S: Derek Huffman Result: Motion passed without any objections.

Motion 4: Approve to initiate projects TIA-623.31 (adoption of IEC 61755-3-31) and TIA-623.32 (adoption

of IEC 61755-3-32).

M: Greg Sandels S: Derek Huffman Result: Motion passed without any objections.

Motion 5: Approve to initiate projects to adopt IEC 63267-1 and IEC 63267-2-1, pending the reservation of the TIA document numbers.

M: Greg Sandels S: Derek Huffman Result: Motion passed without any objections.

4. New Business

4.1. Contributions

4.1.1. Modeled Connector Loss in Bend Optimized Multimode Fiber Links



Studies the impact of fiber parameters on connector IL. Simulation shows that fibers with tighter specs (CD & NA) can decrease connector loss by up to 50%. Lower loss connectors can serve the need for extra link margin with the faster and newer Ethernet applications.

4.1.2. Development of Best Practices and Guidelines for the Use of Expanded Beam Connectors in **Data Center Applications**

Studies the impact of contamination (dry & wet) on EB connector loss performance, comparison was done with standards MPO connectors and air-gap connectors. Better optical performance and lower total cost-of-ownership play a key role in wider industry adoption of the EB connectors.

- 4.2. New Projects and Proposals
- 4.3. TR-42 Chair Request Solicit feedback on how to improve the functioning of TR42 and subcommittees.

Request to TIA - The need for an accurate and up-to-date TIA document database.

5. Document Maintenance

Reviewed the list of all published TR42.13 documents. ANSI-approved documents can lose ANSI accreditation if no actions (revision/reaffirmation) have been taking beyond 10 years, and many documents have passed the 10-year ANSI accreditation requirement. Documents that are near the 10year cutoff are considered higher priority, especially if referenced in ANSI/TIA-568.3. Task Group was formed to review the document list in detail and provide recommended course of action, and strategy on FOTP and FOCIS adoption.

Interested members: Derek H., Helmut K., Greg S., Sunny X., Bill A., Phil I., Steve E, Tara T, Shelly B.

6. New Action Items Review

AI #1	To refresh and present the IEC 61753-1 series overview again and potentially bring PARs at the September meeting. – Greg & Derek
AI #2	Reserve TIA document numbers for the IEC 61753-1 adoption series. – Greg
AI #3	Submit PARs to adopt IEC 61755-3-31 and IEC 61755-3-32 before the September meeting. – Greg
AI #4	Reserve TIA documents to adopt IEC 63267-1, 63267-2 and 63267-3 series. Bring PARs at the September meeting. – Greg
AI #5	Schedule an interim meeting with the Document Maintenance Task Group and review scope Sunny

7. Upcoming Meetings

September 25-29 2023, Tulsa, OK hybrid (date and location fixed)

February 5-9 2024, hybrid (date fixed, location TBD) *note will select 2025 dates at this meeting June 3-7 2024 hybrid (date fixed, location TBD)



October 7-11 2024 hybrid (date fixed, location TBD)

8. Adjournment

Motion 6: Adjourn meeting at 11:49am CST. M: Derek Huffman S: Greg Sandels Result: Motion passed without any objections.

Chair Ms. Xu thanked all members participated and contributed during the meeting.

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

AVAILABILITY OF MEETING DOCUMENTS TO NON-MEMBERS:

All TIA non-members can download contributions and other meeting documents before the meeting by accessing the TR-42.13 Standalone Library:connect.tiaonline.org/communities/community-home/...

AVAILABILITY OF MEETING DOCUMENTS:

TR-42.13 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 0
- o Click "LOGIN"
- Click the "Communities" tab and then select "All My Communities"
- Scroll down the page and select "TR-42.13 Passive Optical Devices and Optic Metrology"
- o Click on "Documents" and then navigate to any meeting folder of interest.

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 the electronic document coordinator (EDC). 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).

Early submittal and posting of contributions for consideration in meetings is highly encouraged. Contributions shall be submitted to the EDC as soon as possible and then posted to the appropriate TIA Connect folders by the EDC as soon after receipt as possible, preferably within one business day. All contributions shall be posted to the appropriate location on TIA Connect no later than 12:00 noon EST on the Monday preceding the week of the meeting in which the contribution is to be considered (example: if the meeting will be held on Thursday the 20th, the contributions shall be posted by noon on Monday the 10th).



LATE CONTRIBUTIONS:

Meeting Report

Contributions not provided to the EDC within 24-hours of the meeting shall be classified as "late contributions." They may be considered in the meeting to which they are addressed at the discretion of the chair. All late contributions shall be provided to the EDC and to the committee members on a memory stick or other electronic media. All late contributions shall be posted to TIA Connect within one week of meeting adjournment.

Questions and comments on this agenda should be submitted to:

Sunny Xu, Chair	Sunny.Xu@commscope.com	(972) 345-3812
Shelly Buchter, Vice-Chair	ShellyBuchter@usconec.com	(717) 309-1754