



Telecommunications Industry Association

1310 North Courthouse Road, Suite 890
Arlington, VA 22201 | www.tiaonline.org

Approved by General Counsel

TR-42.12 Subcommittee on Optical Fibers and

Cables Meeting Date: 06 October 2021

Location: Teleconference

Approved: 27 October 2021



Meeting Report

TR-42.12 Telecommunications Cabling Systems Engineering Committee

Date: 2021.10.06
Time: 8am – 12:00pm (CDT)
Location: Virtual GoToWebinar
Chair: Patrick Van Vickle
Vice Chair: Roman Shubochkin

Meeting Schedule:

Registration: (not required as meeting is not in person)

GoToWebinar Registration: <https://attendee.gotowebinar.com/register/4062131832005520400>

1. Administrative/General Business

1.1. Call to Order

Called to order at 8:00 CDT

TR42 Chair Greg Sandels informed participant that TR42.12 Vice Chair Roman Shubochkin would act as a Chair for this October meeting. Acting TR42.12 Chair Roman Shubochkin requested Greg Sandel to act as a moderator for the duration of the meeting.

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-by-case basis.

TIA is actively seeking participation in TR-42 standards projects from the user and general interest categories

1.2. Attendance (Call Quorum, Introductions, Roster)

Meeting sign-in link: attendance will be collected via GoToWebinar

Quorum achieved with 20 companies attending forming quorum versus 13 needed.

**Telecommunications
Industry Association**

**1310 North Courthouse Road, Suite 890
Arlington, VA 22201, USA**

**+1.703.907.7700 MAIN
+1.703.907.7727 FAX**



Meeting Report

Last Name	First Name	Email Address	Organization
Ahmed	Adnan	adnan.ahmed@rdm.com	R&M
Alex Richard	Legrand	alex.richard@legrand.us	Legrand
Andrea Lizarraga	Belden	andrea.lizarraga@belden.com	Belden
Broughton	Adam	abroughton@sumitomo.com	Sumitomo
Christin Ford	Superior Essex	CHRISTIN.FORD@SPSX.COM	Superior Essex
Cindy Montstream	Legrand -	cindy.montstream@legrand.us	Legrand
Cruz	Belden - Ana	ana.cruz@belden.com	Belden
Davis	Adam	adam.davis@belden.com	Belden
Derek Huffman	Corning	huffmand@corning.com	Corning
Franc	Henry	henry.franc@belden.com	Belden
Gang HE	EXFO	gang.he@exfo.com	EXFO
Greg Sandels	OFS	gsandels@ofs optics.com	OFS
Huang	Lei	lei.huang@legrand.us	Legrand
Jenkins	Teesha	tjenkins@tiaonline.org	TIA
Knehr	Helmut	helmut.knehr@ericsson.com	Ericsson
Kolczynski	Emmanuel	emmanuel.kolczynski@senko.com	Senko
Kose	Panduit Bulent	bulent.kose@panduit.com	Panduit
Lee	Ben	ben.lee@senko.com	Senko
Lee	Sylvanus	sylvanus.lee@leviton.com	Leviton
M.	GDCE Thar	thar.meepegama@globaldce.com	Global DCE
Manley	Paul	paul.manley@AFLglobal.com	AFL
Morris	Dan	dan.morris@kitcofo.com	KITCO Fiber Optics
NINOMIYA	Tiger	tiger.ninomiya@senko.com	Senko
Pace	Joe	PACE@NZ6L.NET	
Pete Weimann	Pete	pweimann@ofs optics.com	OFS
Phil Irwin	Panduit	phillip.irwin@panduit.com	Panduit
Pondillo	Peter	pondillopl@corning.com	Corning
Provost Lionel	Prysmian	lionel.provost@prysmiangroup.com	Prysmian
Risch	Brian	brian.risch@prysmiangroup.com	Prysmian
Rivers	Phillip	Phil.Rivers@molex.com	Molex
Roman Shubochkin	OFS	RShubochkin@ofs optics.com	OFS
Rosenast	Erich	erich.rosenast@tempocom.com	Tempo
Royer	Tyler	tyler.royer@senko.com	Senko
Ryan	Jim	jim.ryan@prysmiangroup.com	Prysmian
Scott Hopper	Leviton	shopper@leviton.com	Leviton
Scott Payton	GDCE	scott@globaldce.com	Global DCE
Shelly Buchter	US Conec	shellybuchter@uscconec.com	USConec LTD
Siemon	Dave Valentukonis	dave_valentukonis@siemon.com	Siemon Company
Tellas	Belden - Ronald	ronald.tellas@Belden.com	Belden
Thomas Schmalzigaug	HUBER SUHNER	thomas.schmalzigaug@hubersuhner.com	Huber & Suhner
Tourreau	Patrick	patrick.tourreau@pkkinetics.com	PK Kinetics
Vanderlaan	Paul	paul.vanderlaan@ul.com	UL
Xu - CommScope	Sunny	sunny.xu@commscope.com	Commscope
YOUNG	James	jyoung@commscope.com	Commscope
dallmann	rick	rick.dallmann@cablexpress.com	Cable Express
farfan	nelson	nelson_farfan@siemon.com	Siemon
goldstein	seymour	seymour.goldstein@flukenetworks.com	Fluke Networks
heisler	chris	chris.heisler@optotest.com	Optotest Corp
kozischek	david	david.kozischek@corning.com	Corning



Meeting Report

25 Companies listed in quorum			Total members at meeting		26	23	28	
13 Companies needed to form quorum								
20 Companies attending forming quorum								
Member Status	Quorum Achieved!!!	Send attendance letter	Attained voting status this mtg	Voting member at beginning of this mtg	Number of the last 3 mtgs attended			
	Company					Virtual 6-Oct	Virtual 16-Jun	Virtual 4-Feb
ME	3M							
ME	AEM							
ME	AFL							
ME	AFL Hyperscale			Voting	3	1	1	1
ECP	Belden Networks Division			Voting	3	1	1	1
	BASF				1			1
ME	BR+A Consulting Engineers					1		
ME	Cable Express			Voting	3	1	1	1
ME	CommScope			Voting	3	1	1	1
ME	Convergent Connectivity Technologies							
ME	Corning Incorporated			Voting	3	1	1	1
ME	Ericsson					1		
ME	Exfo			Voting	3	1	1	1
ME	Exporior Laboratories							
ME	Fluke Networks			Voting	3	1	1	1
ME	Furukawa				1			1
ME	Global Datacenter Engineering					1		
ME	Hitachi							
ECP	Huber + Suhner			Voting	3	1	1	1
	Intertek				1			1
ME	JGR Optics Inc			Voting	1			1
ME	JP Morgan Chase							
ME	KITCO Fiber Optics			Voting	3	1	1	1
ME	Legrand			Voting	3	1	1	1
ME	Leviton			Voting	3	1	1	1
	NAVAIR							
	NAVSEA							
ME	OFS			Voting	3	1	1	1
ME	OptoTest Corp			Voting	3	1	1	1
ME	Panduit Corp.			Voting	3	1	1	1
ME	Photon Kinetics, Inc.			Voting	3	1	1	1
ME	Prysmian Group, The			Voting	3	1	1	1
ME	R&M			Voting	3	1	1	1
	RIT Tech				1			
ME	Rosenberger							
ME	Senko			Voting	3	1	1	1
ME	Siemon Company, The			Voting	3	1	1	1
ME	Sumitomo Electric			Voting	3	1	1	1
ECP	Superior Essex			Voting	3	1	1	1
ME	Tempo			Voting	3	1	1	1
ME	Total Cable Solutions			Voting	1			1
ME	USConec LTD			Voting	3	1	1	1

1.3. Current Meeting Agenda Review and Approval

Meeting agenda document "TR42.12-2021-10-001.agenda_v4.docx" was approved without objection.

1.4. Previous Meeting Report Review and Approval

Meeting report document "TR42.12-2021-06-001.report_v0.docx" was approved without objection.

**Telecommunications
Industry Association**

**1310 North Courthouse Road, Suite 890
Arlington, VA 22201, USA**

**+1.703.907.7700 MAIN
+1.703.907.7727 FAX**



Meeting Report

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

The following documents distributed via TIAConnect

Table 1. Contributions

Document	Contributor	Affiliation	Title
TR42.12-2021-10-001	Van Vickle	Sumitomo	Meeting Agenda
TR42.12-2021-10-002	Kozischek	Corning	ITU Report
TR42.12-2021-10-008	Kozischek	Corning	ICEA Report
TR42.12-2021-10-003	Tourreau	Photon Kinetics	Withdrawal of FOTP 30, 54, 124
TR42.12-2021-10-004	Tourreau	Photon Kinetics	Proposed liaison letter to IEEE
TR42.12-2021-10-005	Kose	Panduit	Errata sheet for ANSI-TIA-492CAAC
TR42.12-2021-10-006	Xu	Commscope	Errata sheet for ANSI-TIA-492AAAF
TR42.12-2021-10-007	Weimann	OFS	Comment Resolution TIA-455-3 10.5.21
TR42.12-2021-10-009	Xu	Commscope	Munsell Color System Round Robin Measurements in CIELAB Coordinates Draft2
TR42.12-2021-10-010	Irwin	Panduit	PAR Form TIA-455-111 Proposed

1.7. Chair's Report and General Items

1.8. List of Standards and TSBs from Subcommittee

Please reference the tracking spreadsheet located in TIAConnect TR42.12 workspace.



Meeting Report

1.9. Liaison letters received

Liaison response letter from IEEE to TIA "TR42-2021-10-104 IEEE-802.3 reply re TIA-455-30"

Liaison response letter from IEEE to TIA "TR42-2021-10-105 IEEE-802.3 reply re TIA-455-54"

1.10. Reports

Please note a virtual meeting will be held for USTAG 86A

US TAG 86A for Fiber, Thursday, October 7, 2021, from 3:15 pm to 6:00 pm CDT:

<https://attendee.gotowebinar.com/register/1476281694104819726>

ITU-T: TR42.12-2020-10-002

ICEA: TR42.12-2020-10-008

2. Old Business

2.1. TIA-455-3 (FOTP-3) Temperature Ramps and Precision

Pete Weimann reviewed ANSI/TIA ballot results and resolved 3 editorial comments.

A motion to forward the document to publication was moved (Greg Sandels), seconded (Pete Pondillo) and approved without objection.

2.2. TIA-455-111 (FOTP-111), Fiber Curl, Adoption of the IEC 60793-1-34

IEC published in March 2021; we need to open a project to revise the current standard to reflect the most recent IEC standard. Phil Irwin went through PAR. No need to seek an approval at the plenary because it is a revision of an existing document.

A motion to open the PAR was moved (Phil Irwin), seconded (Greg Sandels) and approved without objection.

2.3. TIA-492 Series Restructuring

2.3.1. Generic Specification for Optical Fibers (Adapt IEC 60793-2:2019 as ANSI/TIA-4920000 Revision C)

Review of progress of publishing "errata" of updated 492 cross references.

- The ANSI/TIA-4920000-C has not been published yet. Proposed to open a project to withdraw the current ANSI/TIA-4920000-C document, because it contains fiber types that are not currently present in TIA. Motion to rescind the document in its current state was made (Greg Sandels); seconded (Phil Irwin) and approved without objection.
- Motion to start a new project to adapt the IEC 60793-2:2019 was made (Greg Sandels); seconded (Phil Irwin) and approved without objection. Pete Pondillo is the editor for the project; he will put together the PAR, circulate it and put together the document Forward



Meeting Report

by the next meeting that is describing what is not part of the adaption in the original IEC document.

- Motion was made (Phil Irwin) to open the Committee Ballot Authorization form, seconded (Greg Sandels) and approved without objection.
- The document will go to ballot prior to the next meeting in January 2022.

2.3.2. Detail Specification for Class 1a Graded-Index Multimode Optical Fibers (Adapt 60793-2-10:2019 as ANSI/TIA-492AAAF)

- The document was published as TIA-492AAAF 2020 Edition, April 2020
- Review of progress of publishing “errata” of updated 492 cross references. The errata section was approved at the June meeting and has been sent for publication.

2.2.3 Sectional Specification for Class B Single-Mode Optical Fibers (Adapt 60793-2-50:2018 as ANSI/TIA-492CAAC)

- The document was published as TIA-492CAAC 2020 Edition, April 2020
- Review of progress of publishing “errata” of updated 492 cross references. The errata section was approved at the June meeting and has been sent for publication.

2.4. Update adoptions:

Motion to wait until stable IEC documents are available for adoption was made (Greg Sandels); seconded (Patrick Tourreau) and approved without objection.

2.4.1. TIA-455-133 adopted IEC 60793-1-22:2001 Optical fibres - Part 1-22: Measurement methods and test procedures - Length measurement

Update on ballot status. Stability date 2022.

2.4.2. TIA-455-203 adopted IEC 61280-1-4 Fibre Optic Communication Subsystem Test Procedures - Part 1-4: General Communication Subsystems - Light Source Encircled Flux Measurement Method

Update on ballot status. Stability date 2021.

2.4.3 TIA-455-204 adopted IEC 60793-1-41:2010 Optical fibres - Part 1-41: Measurement methods and test procedures – Bandwidth

Update on ballot status. Stability date 2022.

2.5 ANSI/TIA-598-D-2014 (“Optical Fiber Cable Color Coding”): open for revision

Update on the status of the project

Discussed inter-company Round Robin results with “golden sample” color chips in contribution TR42.12-2021-10-009 (Munsell Color System Round Robin Measurements in CIELAB Coordinates). The Task Group needs to complete additional work to finish the RR measurements, including with additional colors, process and discuss the results. The TG needs



Meeting Report

to determine color targets and acceptable delta E limits based on RR results. Pete Pondillo will set up an ad-hoc call for the TG prior to the next subcommittee meeting at the end of January 2022. It is important to preserve the “golden sample” approach to gather the data; buying and circulating a new Munsell book between participants could be an additional approach.

Sample preparation methods for ink and fiber will be discussed in a contribution to ITU (Pete Pondillo & Pete Weimann) and shared at the next subcommittee meeting in January 2020.

3. Rescission/Obsoleting Documents Discussions

Review contribution TR42.12-2021-10-003.

3.1.1. FOTP 30 - Frequency Domain Measurement of Multimode Optical Fiber Information Transmission Capacity

Reviewed a July 2021 reply from IEEE to the June 2021 TIA liaison letter (TR42-2021-10-104 IEEE-802.3 reply re TIA-455-30). Can be replaced with a reference to TIA-455-204. Moved to obsolete the document (Patrick Turreau), seconded (Greg Sandels), and approved without objection.

3.1.2. FOTP 54 - Mode Scrambler Requirements for Overfilled Launching Conditions to Multimode Fibers

Reviewed a July 2021 reply from IEEE to the June 2021 TIA liaison letter (TR42-2021-10-104 IEEE-802.3 reply re TIA-455-54). Will continue the discussion at the joint TR42.11 and .13 SC meeting as related to a cross-reference in the TIA-455-171. Can be replaced with a reference to the Annex D of the TIA-455-204. Will be sending a new response liaison letter to IEEE (Patrick Turreau).

3.1.3. FOTP 124 - Polarization-Mode Dispersion Measurement for Single-Mode Optical Fibers by Interferometry (merge with FOTP 122?)

Continued discussion on rescission. Pending the ICEA response. Will re-send a liaison letter to the ICEA (Greg Sandels).

4. New Business

4.1. Standards Spreadsheet review -

https://docs.google.com/spreadsheets/d/1pkIMX2Vve9VhNyAXb9WB8xyZvDgdpPZk_SkZdyI3Xko/edit?usp=sharing

4.2. Collaboration with ICEA on cable document maintenance



Meeting Report

Continued discussion from the previous meeting cycle. TR42 leadership will be discussing a possibility of an official liaison and cooperation with ICEA further.

5. Next meeting

Date to be discussed, uncertain. Next plenary meeting week will be held on January 24-28, 2022.

6. Adjournment

The meeting was adjourned at 11:35pm CDT.

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 access contributions and other meeting documents before the meeting by accessing the following TR-42.12 Standalone Library:

<https://connect.tiaonline.org/communities/community-home/librarydocuments?LibraryKey=3EAA9087-C7B2-4503-9DFB-C3787088B28D>

AVAILABILITY OF MEETING DOCUMENTS:

TR-42.12 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-42.12 Optical Fibers and Cables"
- 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 the electronic document coordinator (EDC). All electronic files



Meeting Report

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:

Contributions 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:

Patrick Van Vickle, Chair	pvanvickle@sumitomoelectric.com	919.541.8153
Roman Shubochkin, Vice-Chair	RShubochkin@ofsoptics.com	781.583.7826