<u>Approved by General Counsel</u>

TR-42 Meeting Report Date(s): 02/10/2017 - 02/10/2017 Location: Philadelphia, PA Approved: 02/22/2017

MEETING REPORT – CLOSING PLENARY

| Organization: | TIA TR-42 Engineering Committee on Telecommunications Cabling Systems |
|---------------|---|
| Chair: | Ray Emplit, Harger Lightning and Grounding, (610) 273-2648 |
| Vice Chair: | Greg Sandels, OFS, (770) 798-2036 |
| Date/Time: | Friday, February 10, 2017, 8:00 AM – noon |
| Location: | DoubleTree by Hilton Hotel Philadelphia Center City 237 South Broad St Philadelphia, PA 19107 |

1 Administration

1.1 Call to order

The chair, Ray Emplit, called the meeting to order at 8:00 AM

Attendees were advised of the Important Notice of Participation

IMPORTANT NOTICE OF PARTICIPATION

Participation in, or attendance at, any activity of a TIA Formulating Group or any subelement 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) 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.

1.2 Attendance (introductions, electronic roster)

The attendees introduced themselves and registered attendance using the on-line system. Quorum was verified by roster call. Attendees:

| Attendee | Company | Attendee | Company |
|---------------------|-------------------|-----------------|-------------------|
| Franc, Henry | Belden | Dearing, Mark | Leviton |
| Kolesar, Paul | CommScope | Woodman, Brad | Molex Inc. |
| Larsen, Wayne | CommScope | Forbes, Diane | NW Info Services |
| Shariff, Masood | CommScope | Sexton, Glenn | NW Info Services |
| Cornelison, Ken | Consultant | Lounsbury, Bob | ODVA |
| Hess, Dave | Cord Data | Sandels, Greg | OFS |
| Alley, Chad | Corning | Born, Steve | Superior Essex |
| Withey, James | Fluke Networks | Vaden, Sterling | Surtec Industries |
| Kuniyoshi, Cristina | Furukawa Ind. S.A | Ehredt, Allen | Telegartner |
| Emplit, Ray | Harger, Inc. | Maguire, Val | The Siemon Co |

| Schmalzigaug, Thomas | Huber+Suhner AG | Palangdao, Germaine | TIA |
|----------------------|-----------------|---------------------|--------|
| Jew, Jonathan | J&M Consultants | Ivans, Randy | UL LLC |
| Montstream, Cindy | Legrand | | |

1.3 Approval of agenda

The revised meeting agenda (TR42-2017-02-017a) was approved without objection.

1.4 Intellectual property rights statement (early disclosure policy)

The Chair brought to the attention of the attendees the TIA policy regarding intellectual property rights:

TIA has an Intellectual Property Rights (IPR) Policy. We call to the attention of participants and attendees that TIA's Policy is to encourage, but not require, the voluntary disclosure (preferably early) of Essential Patent(s) and published pending patent application(s) that may be essential to the practice of a TIA Publication. Such disclosures are to be made following the procedures of the TIA Intellectual Property Rights Policy. Additional information can be found in the TIA Intellectual Property Rights Guidelines.

1.5 Distribution of documents and contributions

The following documents were distributed on the TR-42 FTP site:

| Document # | Title | Company | Contributor |
|--------------|---|----------|-------------|
| 2017-02-017a | TR-42 Closing Plenary Agenda Philadelphia | TR-42 | Emplit |
| 2017-02-041 | TR-42.1 Closing Plenary Review | TR-42.1 | Franc |
| 2017-02-042 | TR-42.3 Closing Plenary Review | TR-42.3 | Montstream |
| 2017-02-043 | TR-42.5 Closing Plenary Review | TR-42.5 | Forbes |
| 2017-06-044 | TR-42.6 Closing Plenary Review | TR-42.6 | Jew |
| 2017-02-045 | TR-42.7 Closing Plenary Review | TR-42.7 | Larsen |
| 2017-02-046 | TR-42.9 Closing Plenary Review | TR-42.9 | Lounsbury |
| 2017-02-047 | TR-42.10 Closing Plenary Review | TR-42.10 | Sexton |
| 2017-02-048 | TR-42.11 Closing Plenary Review | TR-42.11 | Kolesar |
| 2017-02-049 | TR-42.12 Closing Plenary Review | TR-42.12 | Kinard |
| 2017-02-050 | TR-42.13 Closing Plenary Review | TR-42.13 | Sandels |
| 2017-02-051 | TR-42.16 Closing Plenary Review | TR-42.16 | Harger |
| 2017-02-055a | Outgoing Liaison to IEEE 802.3 re Single-Pair Ethernet | TR-42 | Emplit |
| 2017-02-056 | Outgoing Liaison to NFPA re TSB-184-A | TR-42 | Emplit |
| 2017-02-057a | Press Release re TSB-184-A | TR-42.7 | Shariff |

1.6 Meeting report review and approval

The meeting report from the October, 2016 meeting (TR42-2016-10-157) was approved without objection

2 Old business

2.1 Liaison letters received since the opening plenary

No liaison letters were received since the opening plenary

2.2 TR-42 program of work: status of online tools

Ray Emplit and Germaine Palangdao provided an update regarding the online tools for tracking the TR-42 program of work.

2.3 Subcommittee reports and plenary action

2.3.1 TR-42.1 – Generic Telecommunications Cabling and Premises Cabling

Henry Franc presented TR42-2017-02-041.

Comments were resolved on TIA-568.0-D (Generic) addendum 1. The next ballot will be an industry ballot.

Comments were resolved on TIA-568.1-D (Commercial) addendum 1. The next ballot will be an industry ballot.

A project request was approved for TIA-570-D (Residential). The first industry ballot is planned in the next meeting cycle.

A project request was approved for TIA-758-C (Outside Plant). The first industry ballot will occur based on the editor's schedule.

A project request was approved for TIA-862-B (Intelligent Buildings) addendum 1 – new media types. The first industry ballot in the next meeting cycle.

Comments were resolved on TIA-942-B (Data Center). The next ballot will be a default ballot. The document is approved for publication if there are no technical comments or negative votes.

Comments were resolved on TIA-1170-A (Healthcare). The next ballot will be a default ballot. The document is approved for publication if there are no technical comments or negative votes.

A project request was approved for TIA-4966 (Education) addendum 1 – new media types. The first industry ballot in the next meeting cycle.

No vote was held for reaffirmation of TSB-185 (MICE). Responsibility for revision of TSB-185 will be transferred from TR-42.1 to TR-42.9.

There was a call for interested parties to contact Cindy Montstream at <u>cindy.montstream@legrand.us</u> to participate in the Places of Assembly Task Group.

It was suggested that a table with the status of all documents for which the subcommittee is responsible be added to every subcommittee's closing plenary report.

2.3.2 TR-42.3 – Telecommunications Pathways and Spaces

Cindy Montstream presented TR42-2017-02-042

Comments were resolved on TIA-569-D (Pathways & Spaces) addendum 2 on pathways and spaces for remote powering. The next ballot will be a committee ballot.

2.3.3 TR-42.5 – Telecommunications Infrastructure Terms and Symbols

Diane Forbes presented TR42-2017-02-043.

Comments were resolved on TIA-440-C (Fiber Terms Dictionary). The next ballot will be a default ballot.

2.3.4 TR-42.6 – Telecommunications Infrastructure and Equipment Administration

Jonathan Jew presented TR42-2017-02-044.

Comments were resolved on TIA-606-C (Telecommunications Administration). The next ballot will be a default ballot with authorization to publish concurrently with TIA-5048, if there are no technical comments or negative votes.

TIA-5048 – Adaption of ISO/IEC 18598 (Automated Infrastructure Management) was approved for an industry ballot with authorization to publish concurrently with TIA-606-C, if there are no technical comments or negative votes

2.3.5 TR-42.7 – Telecommunications Copper Cabling Systems

Wayne Larsen presented TR42-2017-02-045.

ANSI/TIA-1152-A (field testing for category 8) was published since the last meeting.

TIA-TSB-5021 (support for 2.5GBASE-T and 5GBASE-T) was published since the last meeting.

Default ballot comments on TSB-184-A (support for 4-pair remote power) were resolved. It was authorized for publication.

Mock ballot comments to TIA-568.2-D (balanced twisted pair components) were resolved. The next ballot will be a committee ballot.

Ballot comments on TIA-1183-A, (Consolidation of 1183 and 1183-1, balun-less testing of balanced twisted pair cabling) were resolved. It was authorized for publication,

Industry ballot comments for ANSI/TIA-568.4-D (coaxial cabling) were resolved. The next ballot will be an industry ballot

TR-42.7 established a task group to study 28 AWG for patch cords.

TR-42.7 established a task group to study transmission properties at temperatures above 60 C.

TR-42 approved sending TIA TSB-184-A to the NFPA task group chaired by Ernest Gallo and empowered Ray Emplit to create the liaison cover letter.

TR-42 edited and approved a draft press release for TSB-184-A (2017-02-057a).

2.3.6 TR-42.9 – Industrial Telecommunications Infrastructure

Bob Lounsbury presented TR42-2017-02-046.

TR-42.9 reviewed the draft of ANSI/TIA-PN1005-A-2 (Performance requirements for 1G four pair industrial cables and cabling supporting 1000BASE-T for MICE2 and MICE3 environments) and hopes to circulate the draft for committee ballot before the June meeting.

TR-42.9 reviewed the draft of ANSI/TIA-PN-PN1005-A-3 (1G industrial cabling for one pair Link Segment Type B, 1000BASE-T1 for MICE2 and MICE3 environments) and hopes to circulate the draft for committee ballot before the June meeting.

TR-42.9 requests a dedicated 2-hour joint meeting time with TR-42.7 for the single-pair task group.

TR-42.7 and TR-42.9 jointly drafted the Outgoing Liaison to IEEE 802.3 re Single-Pair Ethernet. The liaison was edited and approved by TR-42 (TR42-2017-02-055a).

2.3.7 TR-42.10 – Sustainable Information Communications Technology

Glenn Sexton presented TR42-2017-02-047.

Default ballot comments on TSB-5046 (Sustainability for manufacturers) were resolved. It was authorized for a second default ballot. The document is approved for publication if there are no technical comments or negative votes.

2.3.8 TR-42.11 – Optical Fiber Systems

Paul Kolesar presented TR42-2017-02-048.

TSB-5040 Understanding duplex and single row fiber polarity lost its editor and will be cancelled.

Seven FOTPs related to optical amplifiers that are expired will remain in that state. The TR42.11 Chair will provide TIA with directives for IHS website that point customers to IEC standards

David Mazzarese will be stepping down as vice-chair of TR-42.11. The chair of TR-42 will appoint a replacement to serve the remainder of David Mazzarese's term.

2.3.9 TR-42.12 – Optical Fibers and Cables

Paul Kolesar presented TR42-2017-02-049 on behalf of Mike Kinard.

The committee ballot for FOTP-95 (absolute power) will proceed based on comments received from the reaffirmation ballot.

Lime green was approved for the jacket color for OM5 fiber applications.

TR-42.12 determined that colors 13-16 are ready. Therefore, TIA-598-D-1 will be released for a second committee ballot.

TR-42.12 approved a project for TIA-598-D-2 (addendum for OM5 jacket color).

TR-42.12 formed a task group to draft restructured TIA-492-series fiber specs to align with IEC MMF and SMF specifications. FOTP-56, TIA-455-56C (fungus resistance) was approved for reaffirmation

FOTP-234, TIA-455-234-A (change of temperature, fiber) was approved for publication

2.3.10 TR-42.13 – Passive Optical Devises and Fiber Optic Metrology

Greg Sandels presented TR42-2017-02-050

Comments were resolved on FOTP 171B. The next ballot will be an industry ballot.

New projects were approved for revisions of FOCIS 18 and FOICS 5.

TR42.13 defined a strategy for eventual adoption of the IEC modular 61755 series - parts 1 (GG), 2 (fiber to fiber), and 3 (ferrule geometry no connector specific) to support a later adoption of IEC "FOCIS" type document.

TR42.13 will convert expired ANSI standards 604-2, 604-3, 604-4, 604-13, 604-16, 604-17 to TIA standards. They will remain as TIA standards until the adoption of the IEC equivalents as ANSI standards.

2.3.11 TR-42.16 – Premises Bonding and Grounding

Cindy Montstream presented TR42-2017-02-051 on behalf of Mark Harger

TR-42.16 will not be meeting in June, but requests 1 hour in September to review work on ISO/IEC 30129.

2.4 Other old business

There was no other old business.

3 New business and output documents

3.1 Output documents

3.1.1 US TAG to ISO/IEC JTC 1/SC 25/WG 3

The following documents will be sent to USTAG to ISO/IEC JTC 1 SC 25 WG 3:

- Final TIA-606-C Telecommunications Administration
- Draft TIA-1005-A-3 Industrial cabling for single pair Link Segment Type B, 1000BASE-T1 including MICE 2 and MICE 3 (for JMTG)

3.1.2 IEEE 802.3 and other SDOs

The following documents were approved to be sent to IEEE 802.3

the MICE table from TIA-568.0-D with liaison letter to be drafted by Ray Emplit.

The following documents were approved to be sent to NFPA

- Approved by TIA General Counsel 2/22/17
- TSB-184-A Draft 8.1c, Guidelines for Supporting Power Delivery Over Balanced Twisted-Pair Cabling. Ray Emplit to compose and send liaison letter (TR42-2017-02-056) to NFPA task group chaired by Ernest Gallo by 15 Feb.

The following documents are approved to be sent to the BICSI Standards Committee:

• TSB-184-A Draft 8.1c, Guidelines for Supporting Power Delivery Over Balanced Twisted-Pair Cabling. To be sent with liaison letter to be sent Feb 15.

3.1.3 Other output documents.

Outgoing Liaisons approved:

- (TR42-2017-02-055a) Outgoing Liaison to IEEE 802.3 re Single-Pair Ethernet.

3.2 Revision to TR-42 operating procedures for liaison officers and reports

Ray Emplit will propose modifications to the TIA operating procedures regarding the liaison officers and reports.

3.3 Other new business

3.3.1 Consolidation of IEC TC 86 reports

TR-42 agreed that the IEC TC 86 subcommittee reports should remain separate.

3.3.2 IEC TC 46, IEC SC 46C & IEC SC 48B reports

TR-42 requested that IEC TC 46, IEC SC 46C & IEC SC 48B activities be added to Dave Hess' ISO/IEC JTC 1 SC 25 WG 3 report.

3.3.3 NFPA Public Input Task Group Proposal

TR-42 agreed to form the NFPA Public Input Task Group with Masood Shariff as the chair. The task group will report to TR-42 and meet monthly.

3.3.4 Proposed Revisions of Ballot Comment Form and Meeting Schedules

There was no consensus on revising the TIA ballot comment form to harmonize with the IEC one.

No decision was made regarding shortening the meeting schedule for TR-42. It will be considered for meetings after the January 2018 meeting.

3.4 Action items derived from this meeting

Ray Emplit - By Feb 15, send TSB-184-A to BICSI and NFPA.

Ray Emplit – two liaisons to IEEE: liaison for transmittal of MICE table from TIA-568.0-D and liaison regarding single-pair Ethernet.

Germaine Palangdao - Publish press release for TSB-184-A (TR42-2017-02-057a).

Ray Emplit will draft modifications to the TIA operating procedures regarding the liaison officers and reports. Subcommittee chairs - consider proposals for shortening the meeting schedule for TR-42 meetings after the Jan 2018 meeting.

Ray Emplit - Develop a flexible meeting schedule for smaller meetings and document this in the meeting agenda and meeting schedules.

Subcommittee chairs - add a table with the status of all documents (standards and TSBs) in the subcommittee's opening and closing plenary reports. Henry Franc to send an example of the table to all chairs.

Mike Kinard to submit publication authorization for:

- FOTP-56, TIA-455-56C fungus resistance, reaffirmation
- FOTP-234, TIA-455-234A, change of temperature, fiber

4 Upcoming meetings

4.1 June 12 - 16, 2017: Quebec City

4.2 Subsequent meetings

- September 18 22, 2017: Las Vegas (already firm) •
- January 29 February 2, 2018: Florida (dates firm, suggested locations are Palm Beach, Daytona, Key West)
- June 11 15, 2018 new dates to avoid conflict with ICEA (suggested locations, Chicago [downtown], Pittsburgh, Jackson Hole, WY)
- October 1 5, 2018 (dates firm, suggested locations, Phoenix and Seattle)

4.3 Meeting schedule for June, 2017

To be done by correspondence by the TR-42 Vice Chair and subcommittee chairs.

5 Adjournment

The meeting was adjourned at 10:33 AM.

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

AVAILABILITY OF MEETING DOCUMENTS:

All meeting attendees are instructed to download contributions and other meeting documents from the TIA TR42 FTP site (http://ftp.tiaonline.org/TR-42/) before the meeting. For information on how to access the FTP site, contact TIA (Stephanie Montgomery: smontgomery@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 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 FTP folders by the EDC as soon after receipt as possible, preferably within one business day. Notification of the posting shall be made to the group's email reflector list by the EDC within one working day of the posting. All contributions shall be posted to the appropriate location on the TIA FTP site <u>no later than 12:00 noon EST on the Monday preceding the week of the meeting in which the contribution is to be considered</u> (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 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 TR-42 FTP site within one week of meeting adjournment. **Questions and comments on this agenda should be submitted to:**

| Ray Emplit, Chair | remplit@harger.com | (610) 273-2648 |
|-------------------------------|------------------------|----------------|
| Greg Sandels, Vice Chair | gsandels@ofsoptics.com | (770) 798-2036 |
| Jonathan Jew, EDC & Secretary | jew@j-and-m.com | (415) 292-7734 |