

# Telecommunications Industries Association Standards and Technology Department

## Engineering Committee TR-42 User Premises Telecommunications Cabling Infrastructure Meeting Report

Chair: Paul Kish  
Vice-Chair: Bob Jensen, RCDD  
Secretary: Bob Jensen, RCDD

November 9, 2001  
Fairmont Hotel  
Dallas, TX

### 1. Call to order (opening remarks; objectives)

#### 1a. TR-42 Chair Remarks

1. Paul Kish welcomed all of the attendees to the meeting and explained to the Committee that elections for TR-42 Chair and Vice-chair would be held at the February 2002 TR-42 meeting. In particular, the election will be held on Tuesday morning during Liaison Reports. Paul Kish and Bob Jensen congratulated all of those that were elected to various Chair and Vice-chair positions at this meeting. The elected positions for 2001-2003 include:

Subcommittee	Chair	Vice-chair
TR-42.1	Herb Congdon	Julie Roy
TR-42.3	Ray Keden	Steve Huffaker
TR-42.5	Peter Sharp	Bob Jensen
TR-42.7	Masood Shariff	Valerie Rybinski
TR-42.9	Peter Sharp	Bob Lounsbury

### 2. Roll call and introductions; call quorum — Kish/Jensen

The attendees introduced themselves and an attendance roster was distributed for participants to sign. The roll was called and quorum declared.

#### Attendees

<b>Paul Kish</b>	<b>TR-42 Chair</b>		
	<b>NORDX/CDT</b>		
Masood Shariff	Avaya	Ray Keden	Erico
Paul Vanderlaan	Belden Wire & Cable	Bob Jensen	Fluke Networks
Henry Franc	Bell Canada	Peter Sharp	Giffels Associates
Marilyn Michelson	BCS	Ed Pivonka	Ideal Industries
Donna Ballast	BICSI	Julie Roy	NORDX/CDT
Chad Burel	Corning Cabling Systems	Herb Congdon	Tyco Electronics
Steve Swanson	Corning Inc.		

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### 3. Review agenda and approval — Paul Kish

Document: TR-42/01-11-073

The Engineering Committee approved the agenda.

### 4. Intellectual property rights (early disclosure policy) — Paul Kish

The Chair brought the Engineering Committee's attention of the TIA policy regarding patents, the use of which may be essential to a standard being considered. The full statement is contained in the 2001 edition of the TIA Engineering Manual.

### 5. Distribution and numbering of documents — Kish/Jensen

Document #	Document title	
TR-42/01-11-072	Bob Jensen	Montreal, Quebec Meeting Report; August '01
TR-42/01-11-073	Bob Jensen	Dallas, TX Meeting Agenda, November '01
TR-42/01-11-074	Bob Jensen	Dallas, TX Liaison Meeting Agenda, Nov '01
TR-42/01-11-075	Bob Jensen	UPED Presentation (Update on TR-42)
TR-42/01-11-076	Dave Hess	ISO Liaison report
TR-42/01-11-077	Stuart Reeves	CENELEC Report
TR-42/01-11-078	Bob Jensen	TR-42 Liaison Report
TR-42/01-11-079	Chris DiMinico	IEEE Liaison
TR-42/01-11-080	Steve Swanson	FO2/6 Liaison
TR-42/01-11-081	Steve Swanson	ISO Report
TR-42/01-11-082	Herb Congdon	Project Request for array connector polarity
TR-42/01-11-083	Donna Ballast	Letter to ASTM on using Sewers for OSP cabling
TR-42/01-11-084	Masood Shariff	Request for info on balance requirements
TR-42/01-11-085	Herb Congdon	Liaison letter to FO-2.2.1
TR-42/01-11-086	Herb Congdon	Liaison letter to FO-6.3.10
TR-42/01-11-087	Masood Shariff	Project Request addendum 3 568-B.2 IL & RL
TR-42/01-11-088	Masood Shariff	Project Request addendum 4 568-B.2 IDC & IPC
TR-42/01-11-089	Herb Congdon	Project Request 568-B.1 AD3 Fiber applications
TR-42/01-11-090	Herb Congdon	ANSI PINS 568-B.1 AD3 Fiber applications
TR-42/01-11-091	Masood Shariff	ANSI PINS addendum 3 568-B.2 IL & RL
TR-42/01-11-092	Masood Shariff	ANSI PINS addendum 4 568-B.2 IDC & IPC

### 6. Previous meeting report — Bob Jensen

Document: TR-42/01-11-072

The Engineering Committee approved the August 2001 meeting report.

## 7. Subcommittee reports and action items

### 7a. TR-42.1, Commercial Building Telecommunications Cabling — Herb Congdon for John Siemon

Documents: TR-42/01-11-089 TR-42/01-11-090

1. **PN-4655 Building Automation Systems:** Ballot comment resolution on draft 8 was completed. The Subcommittee will forward draft 9 for industry ballot.
2. **SP-3-4425-AD2 Grounding and Bonding Specifications for Screened Horizontal Cabling:** The ballot is still open for comment with a majority of response not received at this time. The ballot closes November 11, 2001. Members who registered are encouraged to vote and submit any comments.
3. **TR-42.1.1 Working Group on Network Distribution Nodes:** The work to create a standard has been divided among three groups: facility, cabling and network design. The Working Group has requested volunteers for the work effort and as well as contributions.
4. **Revisions to 568-B.1 Annex E (Optical Fiber Applications Support Information):** The Subcommittee agreed to open a work item for an addendum to 568-B.1 to incorporate two new fiber applications: 100BASE-SX and 10GBASE. Herb Congdon reviewed the Project Request and ANSI PINS form with the Engineering Committee (TR-42/01-11-089, TR-42/01-11-090, respectively). After the review, Herb made a motion to initiate the Project Request through TIA.

**Plenary action:** The motion was unanimously approved.

### 7b. TR-42.2, Residential Telecommunications Infrastructure — Bob Jensen

1. A TR-42.2 ad-hoc meeting was held at the EH Expo in Long Beach, CA on October 27<sup>th</sup>. Although it was lightly attended, it was worth the time to clarify cabling needs of the residential community and to view products on the display floor.
  2. John Seger, Leviton, gave a presentation on whole-home audio cabling that described cabling specifications, design, and installation requirements. A few comments were received on the current draft that were addressed as the Subcommittee agreed to send it for industry ballot.
  3. Ballot resolution was held on SP-3-2490-AD1, **Security Cabling for Residences**. The ballot initially consisted of nine “yes” votes, three “yes with comments” votes, four “no with comments” votes, and one with "no comment". With exception to one “no with comments” vote, the four “no with comments” votes were resolved which modified the number of “yes with comments” to six. One company, who was not attending the meeting, did not withdraw there “No vote” after ballot resolution by the Subcommittee. Due to the fact that there was an outstanding “No vote” and technical changes were made to the document, a default ballot was approved by the Subcommittee.
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4. Ballot resolution began on SP-3-2490-AD2, ***Control Cabling for Residences***. The ballot initially consisted of eight “yes” votes, two “yes with comments” votes, four “no with comments” votes, and three with "no comment". Unfortunately there was not enough time to address all comments and the resolution of comments will continue at the February meeting.
5. With the advent of the new addenda nearing their approval, it will likely be time to open the TIA-570-A standard for revision at the February meeting. Not only can the addenda be incorporated, but also topics on administration and specifications on coaxial cabling can be addressed.

**7c. TR-42.3, Commercial Building Telecommunications Pathways and Spaces —  
Bob Jensen**

1. Comment resolution was held on SP-3-2950-AD7 regarding the cable tray addendum. Overall, there were 8 approvals, 8 approvals with comment, and three with no comment votes. A total of eight comments were resolved editorially with no technical changes to the document. Bob Jensen made a motion to publish the addendum after minor editorial cleanup and distribution of letters to those commenting.

**Plenary action:** The motion was unanimously approved.

2. Draft 1.1 of TIA-569-B was reviewed with the Subcommittee. Steve Huffaker, Superior Systems Technologies, provided several contributions to the draft that will be included during an editorial session. Items left to be incorporated into TIA-569-B before balloting include: conduit fill, two items for the telecommunications enclosure, and the editing of the document with Steve’s contributions. All of these items are planned to come together at the February meeting so that the document will be able to be balloted.
3. The “cabinet TR” Task Group gave an update of their work in the Subcommittee. In accordance with a TR-42.1 liaison, it was agreed that TR-42.3 would only focus on pathways and spaces as there is support in TR-42.1 for developing options enabling LAN hubs in work areas and recognizing cabling implementations using cabinet TRs. The group worked on terminology, a definition, and a new subclause that was agreed to be inserted into the current draft of TIA-569-B. The Subcommittee then worked on inserting a new subclause into draft 1.2 of 569-B under a new subclause, “Telecommunications enclosure”.
4. Poke-thru devices were discussed at the meeting due to a contribution received regarding safety. The contribution did not provide any substantiation for an alleged safety issue or performance issue. The Subcommittee agreed that TR-42.3 was not the right forum for this contribution and that the contributor should in all likelihood provide any future information directly to a Nationally Recognized Testing Laboratory such as UL.

**7d. TR-42.4, Customer-Owned Outside Plant Telecommunications Infrastructure —  
Donna Ballast**

Documents: TR-42/01-11-083

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1. A contribution was reviewed that was left over from the August 2001 TR-42 meeting to determine if TR-42.4 would entertain a new project on installing optical fiber cable in sewer systems. After much discussion, the Subcommittee agreed that this topic was not within the expertise of TR-42.4 at the present time and that ICEA should be specifying the cable requirements for this environment. Donna Ballast reviewed a liaison letter to be sent to ASTM and ICEA indicating TR-42's stance on this subject (TR-42/01-11-083). Donna Ballast made a motion to forward this letter to ASTM and ICEA.

**Plenary action:** The motion was unanimously approved.

2. A review of the NESC will take place prior to the February meeting so that the Subcommittee can determine if there is a need for re-opening TIA-758.

#### **7e. TR-42.5, Telecommunications Infrastructure Terms — Ray Keden**

1. Several terms were brought to the Subcommittee including: common equipment room (telecommunications), enclosure, telecommunications, firestop, insulation displacement contact, insulation displacement contact, accessible, insulation displacement contact, non-accessible, insulation piercing contact, building backbone, campus backbone, mechanical room, multipoint bus, multipoint ring, and telecommunications room. Acronyms were discussed including: IPC, IDC, SIP IC, SSTP and TE. All terms will be updated and sent to TR-42 chairs for incorporation into their documents.

#### **7f. TR-42.6, Telecommunications Infrastructure and Equipment Administration — Bob Jensen for Mel Lesperance**

1. Ballot Resolution was held on SP-4256-RV1-A, the proposed 606-A draft. In all there were 11 approve, four approve with comments, three disapprove with comments, and two abstaining on the ballot. Resulting from the resolution of comments was an agreement to allow for an interim meeting via conference call to resolve outstanding issues and approval for an industry re-ballot (either complete or default depending on the severity of changes). A conference call will be held on December 10, 2001 at 1 PM Eastern Time.

#### **7g. TR-42.7, Telecommunications Copper Cabling Systems — Masood Shariff**

Documents: TR-42/01-11-084 TR-42/01-11-091  
TR-42/01-11-087 TR-42/01-11-092  
TR-42/01-11-088

1. Three items have been assigned to TR-42.7.2. These include a newly recommended cable balance equation, to adjust the elevated temperature requirements for category 6 cables, and issuing a liaison letter to TR-42.9 indicating TR-42.7.2's desire to work jointly in developing cable specifications. The work on electro-static discharge (ESD) trials will continue.
  2. TR-42.7.2's activities were focused on resolving SP-3-3727-AD1-A ballot comments related to connecting hardware-. Specification of connector reliability was also discussed and a contribution provided to for a committee ballot with eventual publication as Addendum 3 to TIA-568-B.2. Masood Shariff reviewed the Project Request and ANSI PINs form (TR-42/01-11-087 and TR-42/01-11-091, respectively) with the Engineering Committee for
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this new addendum to TIA-568-B.2. Masood then made a motion to approve the Project Request and ANSI PINS form.

**Plenary action:** The motion was unanimously approved.

3. The insertion loss rule existed in TIA TSB 67 but was not continued through TIA-568-B or the category 6 documents. Masood explained that an addendum is required to rectify test procedures concerning return loss, attenuation and the 3-dB rule and provided the Project Request and ANSI PINs form (TR-42/01-11-088 and TR-42/01-11-092, respectively). Masood then made a motion to approve the Project Request and ANSI PINS form.

**Plenary action:** The motion was unanimously approved.

4. The remaining technical ballot responses to SP-3-3727-AD1-A, category 6 cabling, were reviewed in the Subcommittee. The Subcommittee was unable to resolve all of the comments, but did agree to a re-ballot of the document.
5. Masood reviewed a letter to be sent to a variety of applications groups requesting their input on balance requirements (TR-42/01-11-084). Masood then made a motion to approve the sending the liaison letter.

**Plenary action:** The motion was unanimously approved.

#### 7h. TR-42.8, Telecommunications Optical Fiber Cabling Systems — Herb Congdon

Documents: TR-42/01-11-082                      TR-42/01-11-086  
                  TR-42/01-11-085

1. **PN-3894-AD1, Additional Transmission Performance Specifications for 50/125 $\mu$ m Optical Fiber Cables Addendum Ballot Status:** It was agreed to un-table the ballot. All ballot comments were resolved. The group unanimously supported sending the document out for industry re-ballot after review by the editorial committee.
2. **Fiber Optic Link Certification Study Group:** The BICSI survey has received over 700 responses, but only 25 or so have been tabulated so far. The survey summary is expected for review at the February meeting.
3. **Liaison Letter from TIA FO-2.2.1:** A letter was reviewed with the Engineering Committee in responding to FO-2.2.1 that 40G is expected to be the next logical extension of data rates for multimode fiber (TR-42/01-11-085). Herb Congdon made a motion to approve sending the letter to FO-2.2.1.

**Plenary action:** The motion was unanimously approved.

4. A letter was reviewed with the Engineering Committee regarding a previous letter sent to FO-6.3.10 on further work of launch conditions (TR-42/01-11-086). Herb Congdon made a motion to approve sending the letter to FO-6.3.10.

**Plenary action:** The motion was unanimously approved.

5. The Subcommittee agreed to create a TSB on the polarity of array connectors (connectors with more than one fiber per ferrule). A Project Request was reviewed (TR-42/01-11-082)
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by Herb Congdon. After the review, Herb Congdon made a motion to approve the Project Request.

**Plenary action:** The motion was unanimously approved.

**7i. TR-42.9, Industrial Telecommunications Infrastructure — Bob Jensen for Bill Sewell**

1. A project plan and outline were reviewed by the Subcommittee. Reports were given on cabling, pathways and spaces, and process control. Although outside plant is not assigned to a Task Group at this time, the Subcommittee anticipates that this will be needed in the eventual standard.
2. It was reported that CENELEC TC 215/WG1 would like to receive information from TR-42.9 in order to harmonize with a proposed CENELEC standard. A direct formal liaison could not be set-up at this time due to the fact that TIA is not an American Standards group. It was noted that interested parties outside of the US could attain TIA membership.
3. A liaison letter from TR-42.7 to TR-42.9 was discussed which had asked that TR-42.7 be allowed to provide the copper cabling specifications to TR-42.9 as they had been hearing that there are specific requirements needed in this environment. It was agreed by the Subcommittee that the newly elected chair and vice-chair would respond to the letter and that a standing agenda item would be added for liaisons from other committees.

**8. Liaison reports**

1. All liaison reports are being given on Tuesday mornings (TR-42/01-11-074). Written liaison reports at this meeting included:
  - a) TR-42/01-11-076; Dave Hess, Wayne Larsen – ISO 11801
  - b) TR-42/01-11-077; Stuart Reeves – CENELEC
  - c) TR-42/01-11-078; Bob Jensen – TR-42 Chairs
  - d) TR-42/01-11-079; Chris DiMinico – IEEE 802.3
  - e) TR-42/01-11-080; Steve Swanson – FO-2/6
  - f) TR-42/01-11-081; Steve Swanson – ISO 11801

**9. Old/New business — Paul Kish**

**9a. Old business**

1. Project Tracking System – Bob Jensen  
Bob Jensen reported that he progress on the tracking system has not progressed further since the last TR-42 meeting.
2. 607-A Status – Bob Jensen  
Nothing to report at this meeting.

**9b. New business**

1. UPED Presentation
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Bob Jensen reported that he made a presentation to the TIA UPED regarding the status of TR-42 (TR-42/01-11-075).

## **10. Meeting schedules**

### **10a. Next meeting — Paul Kish/Bob Jensen**

#### **February 4-8, 2002**

Marriott Ft. Lauderdale, North  
6650 North Andrews Avenue  
Fort Lauderdale, FL 33309  
Phone 800/343-2459  
FAX 954/772-9834

### **10b. Future meetings — Bob Jensen**

- June: Ottawa or Bar Harbor
- October: Long Beach or Los Angeles

## **11. Adjournment — Paul Kish**

This meeting was conducted in accordance with TIA Legal Guidelines and Manual of Organization and Procedures.

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Paul Kish  
TR-42 Chair

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Robert Jensen, RCDD  
TR-42 Vice-chair and Secretary

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BUILDING GLOBAL COMMUNICATIONS

## Approved by General Counsel

TR-42 Meeting Report  
Date: 11/9/01  
Location: Dallas, TX

Approved: 12/4/01  
**T#6153**