

# ***TIA TR-42 Liaison to IEEE 802.3***

**Valerie Maguire**

**Vice Chair, TIA TR-42 Telecommunications  
Cabling Systems Engineering Committee**


**Vice Chair, TIA TR-42.7 Copper Cabling  
Subcommittee**

**July, 2012  
San Diego, CA**


# ***Introduction to TIA***

- **Telecommunications Industry Association**
- **[www.tiaonline.org](http://www.tiaonline.org)**
- **TR-42: Defines mechanical and transmission requirements for copper twisted-pair, optical fiber, and coaxial cabling and components**
- **Chris DiMinico is outgoing liaison from IEEE 802.3 to TIA**

# *Agenda and Meeting Overview*

- **June 4 - 8 in Grapevine, TX**
- **Review TR-42 sub-committee activities**
  - **9 subcommittees met**
  - **1 new subcommittee formed**
- **Update on project development**
-  **This symbol highlights key points of interest**

# *TR-42 Activities*

- **TR-42.1 (Commercial Building Cabling):**
  -  – **ANSI/TIA-942-A, “Telecommunications Infrastructure Standard for Data Centers” approved for publication**
  - **New project: ANSI/TIA-942-A-1, “Telecommunications Infrastructure Standard for Data Centers, Addendum 1 – Cabling Guidelines for Data Center Fabrics” circulating for industry ballot**

# ***TR-42 Activities***

- **TR-42.1 (Commercial Building Cabling), cont.:**
  - **New project: ANSI/TIA-4966, “Telecommunications Infrastructure for Educational Buildings and Spaces” under development**
  - **New project: ANSI/TIA-862-B, “Building Automation Systems Cabling Standard” under development**

# ***TR-42 Activities***

- **TR-42.1 (Commercial Building Cabling),  
cont.:**
  - **New project: TSB-162-A,  
“Telecommunications Cabling Guidelines  
for Wireless Access Points” under  
development**

# ***TR-42 Activities***


- **TR-42.3 (Pathways and Spaces):**
  - **ANSI/TIA-569-C-1, “Commercial Building Standard for Telecommunications Pathways and Spaces, Addendum 1 - Revised Temperature and Humidity Requirements for Telecommunications Spaces” approved for publication pending no comments on final default**

# ***TR-42 Activities***



- **TR-42.5 (Terms and Symbols):**
  - **Definitions, acronyms, units of measure, and symbols maintained in a working document**
  - **New project: ANSI/TIA-440-B, “Fiber Optic Terminology” under development**
- **TR-42.6 (Infrastructure Administration):**
  - **No new project status updates**



# *TR-42 Activities*



- **TR-42.7 (Copper Cabling):**
  - **New project: TSB-1197, “Mode Conversion Parameters for Balanced Twisted-Pair Cabling” circulating for Committee Ballot**
  -  – **New project: ANSI/TIA-568-C.2-1, “Balanced Twisted-Pair Telecommunications Cabling and Components Standard, Addendum 1: Specifications for 100Ω Next Generation Cabling” under development**

# ***TR-42 Activities***

- **TR-42.7 (Copper Cabling), cont.:**
  - **Work of the four “100Ω Next Generation Cabling” Task Groups is complete**
    - ✓ **Cable TG**
    - ✓ **Connector TG**
    - ✓ **Applications Space TG**
    - ✓ **Capacity Task TG**
  -  – **Strawman draft 0.3 under development**
  -  – **Focus on return loss, channel ILD, and measurement procedures**

# ***TR-42 Activities***


- **TR-42.7 (Copper Cabling), cont.:**

-  – **Converging on specifications for a 2-connector, 50-meter channel (TBD)**
-  – **Bandwidth specification converging on 2 GHz (TBD)**
- **Spirited discussion on naming with no convergence**
- **Interim meeting scheduled for August 7 - 8 in Mystic, CT**

# ***TR-42 Activities***

- **TR-42.9 (Industrial Infrastructure):**
  - No new project status updates
- **TR-42.10 (Sustainable Technology Environments Program - STEP):**
  - New Subcommittee
  - Scope under development

# *TR-42 Activities*

- **TR-42.11 (Optical Fiber Systems):**
  - **New project: TSB-172-A, “High Data Rate Multimode Fiber Transmission Techniques” under development**
  - **New project: TSB-xxx, “Encircled Flux Launch Conditions” under development**
  -  – **New project: TSB-xxx, “Optical Connector Insertion Loss ” under development**
  - **24-fiber cabling requirements under study**

# ***TR-42 Activities***

- **TR-42.12 (Optical Fibers and Cables):**
  - **New project: TIA-455-7/FOTP-7, “Numerical Aperture” circulating for committee ballot**
  - **New project: TIA-455-28/FOTP-28, “Dynamic Tension” circulating for committee ballot**
  - **New project: TIA-455-58/FOTP-58, “Core Size (adoption of IEC 60793-1-20)” circulating for reaffirmation ballot**

# ***TR-42 Activities***

- **TR-42.12 (Optical Fibers and Cables), cont.:**
  - **New project: TIA-455-80/FOTP-80, “Patch Cord Wavelength” circulating for committee ballot**
  - **New project: TIA-455-177/FOTP-177, “Graded-index MMF (adoption of IEC 60793-1-31)” circulating for reaffirmation ballot**
  - **New project: TIA-598, “Cable Color Coding” circulating for committee ballot**

# ***TR-42 Activities***

- **TR-42.12 (Optical Fibers and Cables), cont.:**
  - **New project: TIA-455-204-A/FOTP-204, “Multimode Bandwidth, adoption of IEC 60793-1-41” circulating for reaffirmation ballot**
  - **New project: TIA-455-220/FOTP-220, “DMD Measurement, adoption of IEC 60793-1-4” circulating for reaffirmation ballot**
  - **BIMMF requirements under study**



# ***TR-42 Activities***

- **TR-42.16 (Grounding and Bonding):**
  - **ANSI/TIA-607-B-1, “Generic Telecommunications Bonding and Grounding (Earthing) for Customer Premises Addendum 1 – External Grounding” approved for publication**

# *Upcoming TIA Meetings*

## **TR-42 Plenary Meetings**

**October 1 - 5, 2012**

**Philadelphia, PA**

**[www.tiaonline.org](http://www.tiaonline.org)**

***Thank you***

**Contact Information:**

**Valerie Maguire**

**The Siemon Company  
101 Siemon Company Drive  
Watertown, CT 06795**

**phone: (602) 228-7943**

**valerie\_maguire@siemon.com**