

# IEEE 802.3 Ethernet Working Group TIA TR-42 Liaison to IEEE 802.3

Valerie Maguire  
The Siemon Company  
Vienna, Austria  
July 15, 2019

# 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 TR-42**

# Agenda and TIA Meeting Overview

---

- **Most recent TR-42 Plenary week:  
Jun 10 - 14, 2019 in Vancouver, CAN**
- **Review TR-42 subcommittee activities**
  - 8 subcommittees met
- **Update on project development**
-  **This symbol highlights key points of interest**



# TIA TR-42 Liaison Letter to IEEE 802.3

---

- **No incoming liaison letters from TR-42**

# TIA TR-42 Activities

---

- **TR-42.1 (Premises Infrastructure):**
  - **New project: ANSI/TIA-758-C, “Customer-Owned Outside Plant Telecommunications Infrastructure Standard” circulating for industry ballot**
  -  – **New project: ANSI/TIA-568.0-E, “Generic Telecommunications Cabling for Customer Premises” circulating for industry ballot**
  -  – **New project: ANSI/TIA-568.1-E, “Commercial Building Telecommunications Infrastructure Standard” circulating for industry ballot**

# TIA TR-42 Activities



---

- **TR-42.1 (Premises Infrastructure), cont.:**
  - **New project: TSB-162-A, “Telecommunications Cabling Guidelines for Wireless Access Points” circulating for committee ballot**
  - **New project: ANSI/TIA-4966-A, Telecommunications Infrastructure Standard for Educational Facilities” under development**
  - **New project: ANSI/TIA-942-B-1 (TBD), “Telecommunications Infrastructure Standard for Data Centers, Addendum 1: Edge Data Centers (TBD)” under development**

# TIA TR-42 Activities

---

- **TR-42.1 (Premises Infrastructure), cont.:**

-  – **New project: ANSI/TIA-568.0-D-2, “Generic Telecommunications Cabling for Customer Premises, Addendum 2: Single Balanced Twisted-pair Use Cases and Topology” under development**
-  – **New project: ANSI/TIA-862-B-2, “Structured Cabling Infrastructure Standard for Intelligent Building Systems, Addendum 2: Single Balanced Twisted-pair Use Cases and Topology” under development**

# TIA TR-42 Activities

---




- **TR-42.3 (Pathways, Spaces, and Grounding):**
  - **ANSI/TIA-569-E, “Commercial Building Standard for Telecommunications Pathways and Spaces” published**
  - **ANSI/TIA-607-D, “Generic Telecommunications Bonding and Grounding (Earthing) for Customer Premises” approved for publication**
- **TR-42.5 (Terms and Symbols):**
  - **Definitions, acronyms, units of measure, and symbols maintained in a working document**



# TIA TR-42 Activities


---

- **TR-42.7 (Copper Cabling):**

-  – **New project: ANSI/TIA-568.5, “Single Twisted-pair Cabling and Components Standard” circulating for mock ballot**
-  – **New project: ANSI/TIA-568.2-D-2, “Balanced Twisted-Pair Telecommunications Cabling and Components Standard, Addendum 2: Power Delivery Over Balanced Twisted-Pair Cabling” under development**
-  – **Task Group studying category 8 short channel alien crosstalk**

# TIA TR-42 Activities



---

- **TR-42.9 (Industrial Infrastructure):**
  - **New project: ANSI/TIA-1005-B (TBD), “Telecommunications Infrastructure Standard for Industrial Premises” circulating for industry ballot**
  -  – **New project: ANSI/TIA-1005-A-2, “Telecommunications Infrastructure Standard for Industrial Premises, Addendum 2: 1G Industrial Cabling for Four Pair (100 meters) (1000BASE-T) for E2 and E3 Environments” circulating for industry ballot**

# TIA TR-42 Activities

---

- **TR-42.9 (Industrial Infrastructure), cont.:**

-  – **New project: ANSI/TIA-1005-A-3, “Telecommunications Infrastructure Standard for Industrial Premises, Addendum 3: 1G Industrial Cabling for One Pair Type B (40 meters) (1000BASE-T1) for E2 and E3 Environments” circulating for committee ballot**
-  – **New project: ANSI/TIA-PN-1005-A-4, “Telecommunications Infrastructure Standard for Industrial Premises, Addendum 4: Single Balanced Twisted-pair Use Cases and Topology for Industrial Premises” under development**

# TIA TR-42 Activities

---

- **TR-42.11 (Optical Fiber Systems):**
  - **New project: TSB-5069 , “Optical Fiber Channel Polarity - Duplex - Single Row Fiber - Double Row Fiber Polarity” circulating for committee ballot**
- **TR-42.12 (Optical Fibers and Cables), cont.:**
  - **New project: ANSI/TIA-455-82-B, “FOTP-82 Fluid Penetration Test for Fluid-Blocked Fiber Optic Cable” circulating for industry ballot**
  - **New project: ANSI/TIA-598-E, “Optical Fiber Color Coding” under development**

# TIA TR-42 Activities

---

- **TR-42.12 (Optical Fibers and Cables), cont.:**
  - **New project: ANSI/TIA-455-244-A, “FOTP-244-A Methods for Measuring the Change in Transmittance of Optical Fibers in Expressed Buffer Tubes When Subjected to Temperature Cycling” under development**
  - **New project: ANSI/TIA-455-3-B, “FOTP-3-C Procedure to Measure Temperature Cycling Effects on Optical Fiber Units, Optical Cable, and Other Passive Fiber Components” under development**

# TIA TR-42 Activities

---

- **TR-42.13 (Passive Optical Devices and Metrology)**
  - **New project: ANSI/TIA-604-19, “FOCIS 19-Fiber Optic Connector Intermateability Standard Type SEN Connector” circulating for industry ballot**

# Upcoming TIA Meetings

---

**TR-42 Plenary Meetings**

**September 16 - 20, 2019**

**Albuquerque, NM**

**[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**