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

March, 2012 Waikoloa, HI

Introduction to TIA

- Telecommunications Industry Association
- www.tiaonline.org
- TR-42: Defines mechanical and transmission requirements for copper twisted-pair, optical fiber, and coaxial cabling and components

Agenda and Meeting Overview

- February 6 10 in West Palm Beach, FL
- Review TR-42 sub-committee activities
 - 12 sub-committees met
- Update on project development
- This symbol highlights key points of interest

TR-42.1 (Commercial Building Cabling):



- ANSI/TIA-568-C.0-2, "General Updates" approved for publication
- ANSI/TIA-942-A, "Telecommunications Infrastructure Standard for Data Centers" approved for publication pending no comments on final default

- TR-42.1 (Commercial Building Cabling), cont.:
 - New project: ANSI/TIA-942-A-1,
 "Telecommunications Infrastructure
 Standard for Data Centers, Addendum 1 –
 Cabling Guidelines for Data Center
 Fabrics" circulating for committee ballot
 - New project: ANSI/TIA-4966,
 "Telecommunications Infrastructure for Educational Buildings and Spaces" under development

- TR-42.2 (Residential Infrastructure):
 - No new project status updates
- TR-42.3 (Pathways and Spaces):
 - New project: ANSI/TIA-569-C-1,
 "Commercial Building Standard for Telecommunications Pathways and Spaces, Addendum 1 Revised Temperature and Humidity Requirements for Telecommunications Spaces" under development

- 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" circulating for reaffirmation
- TR-42.6 (Infrastructure Administration):
 - ANSI/TIA-606-B, "Administration Standard for Commercial Telecommunications Infrastructure" approved for publication

- TR-42.7 (Copper Cabling):
 - ANSI/TIA-1183, "Test Fixtures for Balunless Measurements of Balanced Components and Systems" approved for publication
 - New project: TSB-1197, "Mode Conversion Parameters for Balanced Twisted-Pair Cabling" circulating for Committee Ballot

TR-42.7 (Copper Cabling), cont.:



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-42.7 (Copper Cabling), cont.:



- Four "100Ω Next Generation Cabling"
 Task Groups established
 - 1. Cable TG
 - 2. Connector TG
 - 3. Applications Space TG
 - 4. Capacity Task TG

Contact the Chair of TR-42.7 (sterling.vaden@occfiber.com) for participation information

TR-42.7 (Copper Cabling), cont.:



- "100Ω Next Generation Cabling" Baseline
 Objectives adopted
- Discussions converging on a 2- or 3connector, 50-meter channel topology (TBD)
- Bandwidth specification may be as high as 2 GHz (TBD)
- Interim meeting schedule for April 11 12 in Washington, DC area

- TR-42.9 (Industrial Infrastructure):
 - No new project status updates
- TR-42.11 (Optical Fiber Systems):
 - Encircled flux test method under study
 - BIMMF requirements under study
 - 24-fiber cabling requirements under study
 - Dispersion compensating MMF under study

- TR-42.12 (Optical Fibers and Cables):
 - ANSI/TIA-455-244/FOTP-244, "Expressed Tube Temperature Cycling" approved for publication
 - ANSI/TIA-4720000 family of Optical Fiber Specifications approved for publication
 - New project: TIA-455-7/FOTP-7,
 "Numerical Aperture" circulating for committee ballot

- TR-42.12 (Optical Fibers and Cables), cont.:
 - 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
 - New project: TIA-455-80/FOTP-80, "Patch Cord Wavelength" circulating for committee ballot

- TR-42.12 (Optical Fibers and Cables), cont.:
 - New project: TIA-455-177/FOTP-177,
 "Graded-index MMF, adoption of IEC 60793-1-31" circulating for reaffirmation ballot
 - New project: TIA-455-204-A/FOTP-204, "Multimode Bandwidth, adoption of IEC 60793-1-41" circulating for reaffirmation ballot

- TR-42.12 (Optical Fibers and Cables), cont.:
 - New project: TIA-455-220/FOTP-220, "DMD Measurement, adoption of IEC 60793-1-4" circulating for reaffirmation ballot
 - New project: TIA-598, "Cable Color Coding" circulating for committee ballot

- TR-42.13 (Passive Optical Devices and Components):
 - New project: TIA-4947, "Adhesive Guidelines" circulating for committee ballot
 - New project: TSB 143, "Fiber Optic Power Meters" linearity under development
 - New project: TIA-455-231/FOTP-231,
 "Calibration of FO Power Meters" under development

- TR-42.13 (Passive Optical Devices and Components), cont.:
 - Return loss calibration under study
 - New multimode launch conditions (TIA-455-34/FOTP-34) under study
 - Encircled flux metrology and calibration under study

- TR-42.16 (Grounding and Bonding):
 - New project: ANSI/TIA-607-B-1, "Generic Telecommunications Bonding and Grounding (Earthing) for Customer Premises Addendum 1 External Grounding" under development

Upcoming TIA Meetings

TR-42 Plenary Meetings

June 4 - 8, 2012

Dallas, TX

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