



Technical Review Board Update

Technical Track

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Objective of This Session

Provide an overview of the recent and planned technical activities of the organization.

- *TRB introduction and update*
- *Special Interest Group (SIG) updates*
- *EtherNet/IP Workshop update*

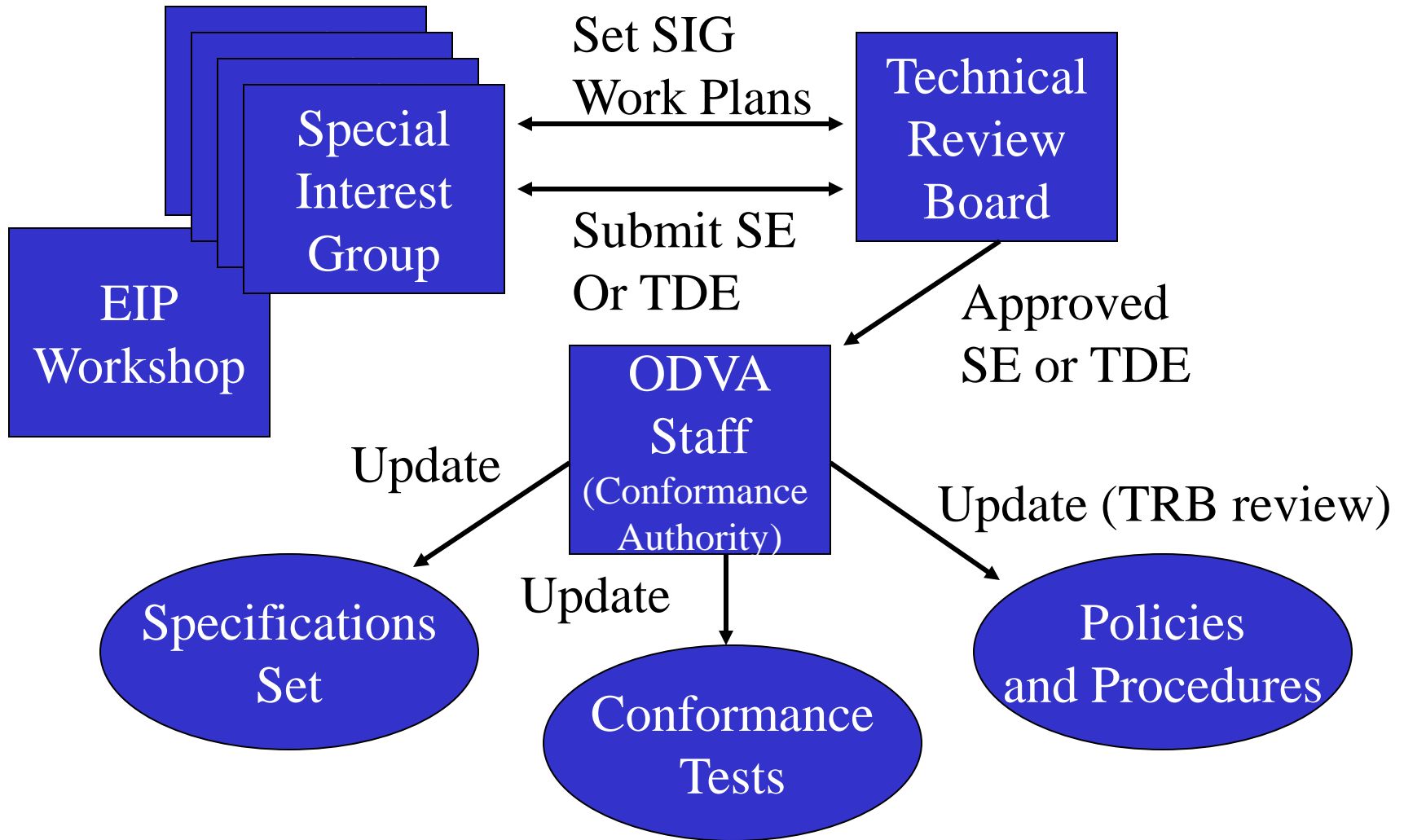
Technical Review Board

Roster

- ▶ Chair, Rich Harwell (Eaton)
 - Dave VanGompel (Rockwell Automation)
 - Ludwig Leurs (Bosch Rexroth)
 - Rudy Belliardi (Schneider)
 - Paul Didier (Cisco)
 - Jeff Jurs (Omron)
 - *To Be Appointed* (Endress + Hauser)
 - Damien Leterrier (Molex) (Member elected)
 - Joakim Wiberg (HMS) (Member elected)
 - Alain Grenier (ODVA)

Click to insert presentation title

TRB Organization and Work Flow



- **EtherNet/IP Physical Layer- Bob Lounsbury**
- **DeviceNet Physical Layer – Brad Woodman**
- **EtherNet/IP Infrastructure – Mark Rossi**
- **EtherNet/IP System – Brian Batke**
- **Distributed Motion SIG – Steve Zuponic**
- **CompoNet – Tianbing Li**
- **Conformance – Alain Grenier**
- **Modbus Integration – Todd Snide**
- **Energy Initiative – Rick Blair and Rich Morgan**
- **CIP Safety – Paul Kucharski**
- **Semiconductor – Rolf Enderes**
- **CIP System – Dave VanGompel**
- **EtherNet/IP workshop – Kevin Knake (NA), Viktor Schiffer (Europe)**

EtherNet/IP Physical Layer

Roster

- ▶ Chair: Bob Lounsbury (Rockwell Automation)
- ▶ V-Chair: Brian Shuman (Belden)
 - 25 Member Companies
 - Companies with Voting Rights 4
 - 48 Members

EtherNet/IP Physical Layer

Member Name	Company Name	Member Name	Company Name	Member Name	Company Name
Harmon, John	Balluff	Klecka, Rudy	Cisco Systems, Inc.	Tom Williams	Metz Connect (BTR)
Ramler, Jim	Balluff	McGaughey, Reid	Cisco Systems, Inc.	Mike Balekdjian	Metz Connect (BTR)
Shuman, Brian	Belden	Fernald, Darrell	Cooper Interconnect	Offner, Arnold	Phoenix Contact
Koditek, Frank	Belden	Bertelsen, Torben	Dan Foss	Hormmeyer, Bernd	Phoenix Contact
Schmidt, David	Camozzi SpA	Latino, Frank	Festo Corporation	Yi, Kristy	Phoenix Contact
Migliorati, Juri	Camozzi SpA	Mulligan, Paul	FiberFin, Inc.	Cicerchi, Timothy	Pepperl + Fuchs
Garstkiewicz, Edmund	Harting, Inc. NA	Steidl, Steve	Innovasic Semiconductor	Johnston, Scott	Rockwell Automation/Allen-Bradley
Shea, Jill	Harting, Inc. NA	Wehrenberg, Michael	Kendall Electric Inc.	Tanvi Desi	Rockwell Automation/Allen-Bradley
Craig Zagorski	Harting, Inc. NA	Mitukiewicz, Rick	Metz Connect (BTR)	Ayanle, Abdi	Turk Inc
Harwell, Richard	Eaton	Roland Dold	Metz Connect (BTR)	McGonigle, Kevin	Tyco Electronics Corporation
Woodman, Brad	Molex Incorporated	Crane, David	ODVA	Wess, Thomas	Tyco Electronics Corporation
Mallozzi, Meghan	3M	Grenier, Alain	ODVA	Lounsbury, Robert E.	Rockwell Automation/Allen-Bradley
Elliot, Bob	Panduit	Dan McGrath	Panduit	Zomcheck Kevin	Rockwell Automation/Allen-Bradley
Reid, Robert	Panduit	Rossi, Mark	Schneider Electric	Adragna Jean-Jacques	Schneider Electric
Harper Gary	Schneider Electric	Unni Mohanan	Schneider Electric	Short, Ken	Schneider Electric
Seereiner, Simon	Weidmueller Interface GmbH & Co. KG	Nicholson, Richard	SMC		

EtherNet/IP Physical Layer

Accomplishments since 14th Annual Meeting

- ▶ Progress on Grounding and Bonding covering all ODVA Physical Layers
- ▶ Progress on re-order of Chapter 8
 - Definition of 1Gig Cabling
 - Coordination with TIA and ISO/IEC
 - End2End Link
- ▶ 1 ESE to release new 1G connector
- ▶ Release of Planning and Install IEC 61784-5-2
 - ControlNet
 - EtherNet/IP
 - DeviceNet

EtherNet/IP Physical Layer

Proposed plans: Next 12-18 months

- ▶ Complete Grounding and Bonding
- ▶ Complete and release 1 Gig Cabling
- ▶ Complete and release new Chapter 8
- ▶ Update EtherNet/IP Planning and Install Manual
- ▶ Add End to End Link definition to Chapter 8
- ▶ Track and Coordinate activities in TIA
- ▶ Track and Coordinate activities in ISO/IEC
- ▶ Track and Coordinate activities in IEC SC65C/JWG10

DeviceNet Physical Layer

Roster

- ▶ Chair: Brad Woodman (Molex)
 - 14 Participants representing 11 companies
 - 8 Active participants representing 7 companies

DeviceNet Physical Layer

Accomplishments since 14th Annual Meeting

- ▶ Provided comments on IEC 61784-5-2 Annex C to US TAG
- ▶ Updated Planning and Install Guide for DeviceNet

DeviceNet Physical Layer

Proposed plans: Next 12-18 months

- ▶ Harmonize the current Planning and Install Guide to the IEC Planning and Install Guide
- ▶ Update all cable profiles with the maximum drop current
- ▶ Clarifying transceiver timing issues

EtherNet/IP Infrastructure SIG

Roster

- ▶ Chair: Mark Rossi (Schneider Electric)
 - Active Participants
 - Belden Hirschmann – O. Kleineberg, M. Höglinger, J. Mower
 - Cisco Systems – P. Didier, Y. Nguyen
 - General Motors – G. Workman
 - Innovasic Semiconductor – J. Woods
 - Moxa – E. Lee, N. Sandoval, J. Toepper
 - N-Tron – T. Oberkirch
 - ODVA – D. Crane, A. Grenier
 - Rockwell Automation – B. Batke, M. Hantel, A. Moldovansky, S. Piyevsky
 - Schneider Electric – G. Ditzel, B. LeRette, J. Li, M. Rossi T. Snide
 - Tyco Electronics – K. McGonigle
 - Other Member Companies
 - Anixter, Bernecker + Rainer, Danfoss, Delta Computer Systems, Eaton, Festo, Murrelektronik, Omron, Panduit, Phoenix Contact, Shanghai Electrical, SMC,, Wago, Weidmueller

EtherNet/IP Infrastructure SIG

Accomplishments since 14th Annual Meeting

- ▶ The following topics have been developed and have since been published as part of the current Volume 2 specification
 - Managed Ethernet Switch Device Profile
 - Base Switch Object
 - RSTP Bridge Object
 - RSTP Port Object
- ▶ PRP Object
 - Submitted for consideration by TRB

EtherNet/IP Infrastructure SIG

Focus for the next 12-18 months

- ▶ Appendix A (WIP) for improving PUB35
- ▶ DLR Whitepaper (WIP)
- ▶ Define the Interoperability Test requirements and recommendations for Infrastructure devices according to Appendix A (WIP)
- ▶ Create the Interoperability Test Plan for Infrastructure Devices based on the Test Requirements and Recommendations
- ▶ Support the development of the Conformance Test Plan for Infrastructure Devices according to Managed Switch Profile
- ▶ Address infrastructure support requests from TRB and Conformance Lab as requested

EtherNet/IP System Architecture

Roster

- ▶ 82 members; 32 different companies

Chair: Brian Batke (Rockwell Automation)

Active Participants:

Ludwig Leurs, Bosch-Rexroth

Joakim Wiberg, HMS

**Jamin Wendorf, Real-Time
Automation**

Ovidiu Adam, Phoenix Contact

Mike Mann, Pyramid Solutions

Todd Snide, Schneider Electric

Dennis Dube, Schneider Electric

George Ditzel, Schneider Electric

Bill Lurette, Schneider Electric

**Gary Baczkowski, Rockwell
Automation**

Darren Klug, Rockwell Automation

**Plus: Occasional participants as
subject matter warrants.**

EtherNet/IP System Architecture

Accomplishments since 14th Annual Meeting

▶ Approved ESEs:

243-010: SNMP Support (new capability)

001-046: DLR Gateway (new capability)

590-001: QoS Clarification

170-003: Encapsulation Options Clarification

090-004: EDS Clarification

001-044: Admin State Clarification

590-002: ACD Clarifications

090-007: ACD Clarifications

EtherNet/IP System Architecture

Proposed plans: Next 12-18 months

- ▶ Address urgent issues as they arise, in particular relating to conformance
- ▶ Review Single Wire Coexistence Application Guide when available (not started)
- ▶ Complete specification work on EtherNet/IP support of IPv6 (in progress)
- ▶ Begin work on EtherNet/IP security, based on input from Task Force and TRB (not started)

Distributed Motion SIG

Roster

- ▶ Chair: Steve Zuponcic (Rockwell Automation)

- Participants

Chaffee, Mark	Rockwell Automation
Cooper, Mark	Rockwell Automation
Demassieux, Valerie	Rockwell Automation
Grenier, Alain	ODVA
Harris, Ken	Rockwell Automation
Hirschinger, Bob	Rockwell Automation
Knudsen, Chris	Yaskawa Electric
Lee, Darek	Yaskawa Electric
Li, Hongbin	Applied Materials, Inc
Nachtwey, Peter	Delta Computer Systems Inc.
Orehawa, Luke	Control Techniques PLC
Ratliff, Cortland	SMC Corporation
Rossi, Mark	Schneider Electric
Saravanan, Pradeep	Power Electronics S.L.
Tormanen, Quinton	Delta Computer Systems, Inc.
Wehrenberg, Michael	Kendall Electric Inc.
Wiese, Todd	Rockwell Automation
Zuponcic, Steve	Rockwell Automation
Harwell, Richard*	Eaton Electrical

Distributed Motion jSIG Activities Update

Distributed Motion SIG

Accomplishments since 14th Annual Meeting

- ▶ Updated CIP Sync Time Sync Object
 - Clarified attributes that should be designated as non-volatile
- ▶ Improved CIP Motion Device Axis Object based on continued development and product implementation.
 - Included Additions, Changes, Clarifications and Corrections
- ▶ Improved CIP Motion Device Profile based on continued development and product implementation.
 - Included Additions, Changes, Clarifications and Corrections
- ▶ Started the CIP Motion Controller Axis Object Definition
- ▶ Started Peer to Peer Connection definition for sharing real-time motion control information among peer devices.
 - Inter-vendor and Intra-vendor coordination for real-time electronic line-shafting and camming applications

Distributed Motion SIG

Proposed plans: Next 12-18 months

- ▶ Peer to Peer Connection Object Definition
 - Definition and Specification
 - Plan for a Multi-Vendor “Plug-Fest” for Testing and Debugging
- ▶ Motion Controller Axis Object Definition (MCAO)
 - Continue Definition and Specification
 - Corollary to Motion Device Axis Object (MDAO) already published and standardized.
- ▶ Continued Enhancements to existing MDAO and CIP Motion Device Profile

Roster

▶ Chair: Tianbing Li (OMRON)

- Participants: 12

Brad Woodman,

Yasuhito Inamori,

Takeshi Sugimoto

Hideki Harada, Tianbing Li

Bill Henry, Alain Grenier

Bernd Hormmeyer

Bob Lounsbury

Peifeng Xi

Yoshihiro Tanabe,

Qiang Peng

Molex Incorporated

Nichigoh Communication-

Electric Wire Co. Ltd

OMRON

ODVA

Phoenix Contact

Rockwell Automation

SEARI

SMC Corporation

Tokyo Keiso Co. Ltd

Accomplishments since 14th Annual Meeting

- ▶ No official activities in the SIG
- ▶ Part of participants collaborated on moving CompoNet to national standards(JIS/GB)
 - Waiting for final approval from authorities respectively

Proposed plans: Next 12-18 months

- ▶ Editorial Corrections
 - To correct editorial errors found in IEC/JIS/GB standard development

Roster

- ▶ Chair: Alain Grenier (ODVA)
 - 42 SIG members registered
 - Average attendance is about 5 plus 2 ODVA staff members
 - Meetings frequency is once a month – the first Wednesday of every month at 10:00 AM EST
- ▶ Mission:
 - Support and work cooperatively with the ODVA Conformance Authority to enhance and improve the overall quality and effectiveness of the conformance testing practice for the complete family of CIP Networks

Accomplishments since 14th Annual Meeting

- ▶ Conformance Test Suites Released
 - EtherNet/IP CT9 & CT9 Update (Nov 2011 & Aug 2012)
 - EtherNet/IP CT10 (Oct 2012)
 - DeviceNet CT24 (July 2012)
- ▶ Test Plans Approved
 - Time Sync Test Plan
 - DLR Test Plan
 - QoS Test Plan
 - ACD Test Plan

Proposed plans: Next 12-18 months

- ▶ Working with ODVA CA on the planning for the new content to incorporate into conformance test suites
 - EtherNet/IP CT11 and Generation 2
 - DeviceNet CT25
- ▶ Finalize and Approve test plans for:
 - Position Sensor Object
 - Connection Configuration Object
 - Originator/Scanner functionality
 - TCP/IP and Ethernet Link object manual testing

Proposed plans: Next 12-18 months

- ▶ Working with ODVA CA on the planning for the new content to incorporate into conformance test suites related to Specification Enhancements approved by the ODVA TRB

Modbus Integration SIG

Roster

- ▶ Chair: Todd A. Snide (Schneider Electric)
 - Participants
 - Belliardi, Rudy - Schneider Electric
 - Bertelsen, Torben - Danfoss
 - **Blair, Rick - Schneider Electric**
 - Crane, David - ODVA
 - Dube, Dennis - Schneider Electric
 - Goehrig, Alexander - SEW Eurodrive GmbH
 - Grenier, Alain – ODVA
 - Heijma, René - Omron Corporation
 - Kulkarni, Aditi - ProSoft Technology, Inc.
 - Leterrier, Damien - Molex Incorporated
 - Li, James - Schneider Electric
 - **Mann, Michael - Pyramid Solutions, Inc.**
 - Pålsson, Joel - HMS Industrial Networks AB
 - Ratliff, Cortland - SMC Corporation
 - **Schiffer, Viktor - Rockwell Automation**
 - **Scott, Eric - Molex Incorporated**
 - Semrow, Greg - ABB Inc.
 - Telljohann, Pat - Rockwell Automation
 - **VanGompel, Dave - Rockwell Automation**
 - Vasko, David - Rockwell Automation
 - Wester, Ken - Schneider Electric
 - Xue, Ji - SEARI Group Co. Ltd.
 - Zeng, Qi – ODVA
 - Bold indicates active participants

Modbus Integration SIG

Accomplishments since 14th Annual Meeting

- ▶ Held 50 Modbus Integration SIG meetings
 - Meetings are held every 2nd and 4th Tuesday of the month
- ▶ Published TDE-243-002 Modbus Integration EDS White Paper
- ▶ Submitted multiple specification enhancements
 - CIPSE-170-005 Modbus Object
 - MISE-170-005 EDS Chapter Cleanup
 - MISE-243-004 Error Handling for non-settable Modbus registers
 - MISE-170-004 Network LED behavior
 - MISE-243-005 Object Model of the Translator
 - MISE-243-006 Object Model of the Translator, Part 2
 - CIPSE-170-004 Modbus Translation Device Type

Modbus Integration SIG

Proposed plans: Next 12-18 months

- ▶ Complete pending specification enhancements
 - MISE-170-005 ModbusParamN EDS Keyword
 - MISE-001-005 Modbus Integration Chapter 1 & 7 Cleanup
- ▶ Develop the functionality to allow CIP Object mapping within the Modbus translation function to better utilize the capabilities of a Modbus device inside the CIP environment
 - Object mapping focusing first on the Energy Object(s)
 - Followed by more general object mapping methodologies
- ▶ Investigate automated methods to insert Modbus device specific information into the Modbus translation function.
 - XML, DTM, etc.
- ▶ Investigate the impact IPv6 on Volume 7

Energy Applications SIG

Roster

- ▶ Co-Chairs: Rick Blair (Schneider Electric)
Rich Morgan (Rockwell Automation)
- ▶ Active members
 - Schneider Electric: Rudy Belliard, Marc Geneau, Ulrich Kaemmerer, Mark Rossi, Todd Snide
 - Rockwell Automation: Dave Brandt, John Caspers, Cliff Whitehead
 - Cisco Systems: John Parello
 - Molex: Eric Scott
- ▶ Other participants
 - Omron, Panduit, Eaton, Weidmueller, SMC

Energy Applications SIG

Accomplishments since 14th Annual Meeting

- ▶ Energy Initiatives SIG established
- ▶ Energy Awareness (phase 1) published Nov. 2011
 - Base, Electrical, Non-electrical Energy Objects
 - At-a-glance published
- ▶ Power Management (phase 2a) published May, 2012
 - Power Management Object – power reduction during idle states
 - Wake-on-LAN specification for EtherNet/IP
 - At-a-glance published
 - Working on a clean-up CIPSE

Energy Applications SIG

Marketing activity support

- ▶ At-a-glance documents published
 - Energy Awareness: Dec 2011
 - Management of Energy Usage: April, 2012
- ▶ Webinars and workshop sessions
 - Energy Awareness Webinars
 - Ann Arbor, Jan 2012
 - Germany, Mar 2012

Energy Applications SIG

Proposed plans: Next 12-18 months

- ▶ Energy Management (phase 2b) CIPSE – power reduction during operational states
- ▶ Conformance development for Power Management Object
- ▶ Energy application profile proposal
 - Unified presentation of energy, power and energy management
 - Higher level than device profile

Roster

- ▶ Chair: Rolf Enderes (INFICON AG)
- ▶ Participants

FirstName	LastName	Email	Company
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Jochen	Boettcher	jochen.boettcher@pfeiffer-vacuum.de	Pfeiffer Vacuum GmbH
Dave	Chamberlain	dave_chamberlain@mksinst.com	MKS Instruments, Inc.
Gary	Conner	gary.conner@brooksinstrument.com	Brooks Instrument
Chris	Ellec	chris.ellec@brooksinstrument.com	Brooks Instrument
Rolf	Enderes	rolf.enderes@inficon.com	INFICON AG
Yukimasa	Furukawa	yukimasa.furukawa@horiba.com	Horiba-STECC Inc.
Jamie	Gallant	jamie.gallant@molex.com	Molex Incorporated
Larry	Glentz	lglentz@watlow.com	Watlow
Oscar	Gomez	oscar_gomez@amat.com	Applied Materials
Alain	Grenier	agrenier@odva.org	ODVA
Bill	Henry	whenry@odva.org	ODVA
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Bill	Rothrock	bill.rothrock@pivotalsys.com	Pivotal Systems
Ariel	Tabangcura	ariel.tabangcura@horiba.com	Horiba-STECC Inc.
Warner	Thelen	wthelen@parker.com	Parker Hannifin Corp.
Yi-Li	Tsai	yli.tsai@horiba.com	Horiba-STECC Inc.
Masatoshi	Tsuruoka	masatoshi_tsuruoka@omron.co.jp	Omron Corporation
Mike	Westra	mike.westra@aei.com	Advanced Energy Industries, Inc.

Accomplishments since 14th Annual Meeting

- ▶ Change on SEMI Interface Guidelines and Conformance Test Procedures
voted and in preparation to be sent to TRB
 - CAN BIT Sampling Point
 - If possible >83%
 - Clarification of Isolation Verification
- ▶ Discussion about definitions of new profiles for SEMI Devices
 - Drawn back from different vendors

Accomplishments since 14th Annual Meeting

- ▶ Discussion about Conformance Test Plan for Turbomolecular Pumps
 - Drawn back by vendor
- ▶ Turbo Pump Device Profile
 - Correction of Device Type Definiton

Accomplishments since 14th Annual Meeting

- ▶ Long discussion with Applied Materials about
 - Handling of secure or controlled File Download (password protected or something like that)
 - CAN Error Detection during Conformance Test
 - Drawn back by Applied

Accomplishments since 14th Annual Meeting

- ▶ Dormant CIPSE's drawn back by Brooks and Applied
 - CIPSE-246-010-03
 - CIPSE-246-011-03
 - CIPSE-246-012-03
 - CIPSE-246-013-02
 - CIPSE-101-001-02

Accomplishments since 14th Annual Meeting

- ▶ Request on Process Control Valve Profile
 - Change Manufacturer Exception Detail Size to any length
 - Drawn back

- ▶ Discussion about change of the Conformance Test to check the CAN CONTROLLER ACCEPTANCE FILTER possibility
 - Drawn back

Accomplishments since 14th Annual Meeting

- ▶ Request for New I/O Assembly for Mass Flow Controller
 - Adding a setpoint ramp is a wish of Applied Materials.
 - Drawn back
- ▶ Discussion with the CTL about a problem in the S-Device Supervisor definition with Perform Diag Service while in Abort
 - CIPSE will be written soon

Accomplishments since 14th Annual Meeting

- ▶ Clarification of an attribute definition in the S-Analog Sensor / Subclass Diaphragm Gauge
 - CIPSE will follow soon
- ▶ Discussion with the CTL about a new definition of a «Generic» Device Type in the S-Device Hierachy.
 - Rejected

Accomplishments since 14th Annual Meeting

- ▶ Currently reworking S-Single Stage Controller
 - Inst. ID 7 – Process Variable is defined as “Not accessible over the network”
 - CIPSE will follow

Proposed plans: Next 12-18 months

Proposed plans: Next 12-18 months

In General:

- ▶ Definition of new object classes and behaviors inside the CIP specification related to devices used in semiconductor equipment.
- ▶ Definition of new device profiles inside the CIP specification related to devices used in semiconductor equipment.
- ▶ Review and change management of existing object classes and device profiles in case of specification errors or enhancements to the object class like new attributes, new services or new/additional behavior.
- ▶ Working directly with the TRB during the TRB review of the currently proposed CIPSE's and new specification documents.
- ▶ Working directly with the Conformance Authority of ODVA to define conformance test plans.
- ▶ Definition of special guidelines for the use of devices used on semiconductor manufacturing tools
- ▶ Review SEMI organization standards and align ODVA semiconductor specification as appropriate

CIP System Architecture SIG

- CIP, CNet, DNet Spec Volumes -

Roster : 47, Monitoring or Inactive Members : 38

- ▶ Chair – Dave VanGompel, Rockwell Automation
- ▶ Active Participants : 8
 - Rick Blair, Schneider Electric
 - Perry Green, Pyramid Solutions
 - Darren Klug, Rockwell Automation
 - Viktor Schiffer, Rockwell Automation
 - Eric Scott, Molex
 - Todd Snide, Schneider Electric
 - Pat Telljohann, Rockwell Automation
 - Joakim Wiberg, HMS
- ▶ Occasional Participants : 1
 - Quinton Tormamen, Delta Computer Systems
- ▶ Monitoring or Inactive Members : 38

Held Meeting #543 on October 1, 2012

- 66 SIG meetings since last annual meeting
- Standing meeting weekly, Mondays @ 9:30am ET-US

CIP System Architecture SIG

Accomplishments since 14th Annual Meeting

▶ 25 SEs (23 CIPSEs, 1 DSE, 1 CSE)

CIPSE-001-144 - Target Connection List Object	Online readback of test , default & other Connections supported
CIPSE-001-166 – EDS clarifications V	c/u
CIPSE-001-179 – EDS Parameter Link Scaling	c/u
CIPSE-090-005 – EDS Section Keywords	c/u
CIPSE-527-001 – Turbomolecular Vacuum Pump Device Profile Device Type Label	c/u
CIPSE-001-174 - Extended Logical Segments for sub-attribute addressing	Addressing data within simple & complex structures

CIP System Architecture SIG

CIPSE-001-148 – EDS, PortN, Port Type Definition	c/u
CIPSE-001-178 - FwdOpen Extended Status Code Deprecation Clarification	c/u - beware
CIPSE-170-001 – Client Connection Trigger Type and Sequence Count Behavior	c/u – also covers cyclic, change of state, sequence counts
CIPSE-001-176 - Bit String Variants	Selectable Assem members based on bits
CIPSE-001-157 – Correct Open CCO EDS examples	c/u
CIPSE-090-006 – Get & Set All Layout Structure	c/u –TRB request
CIPSE-590-002 - Inactivity/Watchdog Timeout Clarifications	c/u
CIPSE-590-003 - MaxInst Correction	c/u
CIPSE-001-181 – Vendor specific extended network segment range	c/u
CIPSE-001-182 - Connection Manager Attribute Name Corrections	c/u

CIP System Architecture SIG

CIPSE-001-188 – Service not supported for specified path	Existing error code too broad (e.g. Get & Clear service of Enet Link Obj)
CIPSE-001-175 – EDS Clarification VI	c/u
CIPSE-243-005 – Modbus Clarifications	c/u
CIPSE-001-193 – Identity Object Clarification	c/u, instance#1 shall exist
CIPSE-008-010 – Odometer Data Type Definitions	New, Constructed Data Types (0xB0)
CIPSE-001-195 – Network Segment Position in Connection Path	c/u
CIPSE-001-199 – Set_Attribute_Single Service Correction	c/u
CSE-001-075 – ControlNet EDS Chapter Cleanup	c/u
DSE-001-110 – DeviceNet EDS Chapter Cleanup	c/u

CIP System Architecture SIG

Proposed plans: Next 12-18 months

- ▶ CIPSEs to support TRB Directive(s)
 - Fill EDS gaps to support migration from STC → EDS for conformance testing
 - Require Device's EDS be a reasonable match of its capabilities
 - Add EDS constructs for new Logical Addressing types
- ▶ CIPSE(s) to support ENet/IP Workshop activities
 - Improve troubleshooting of communications in ENet/IP
- ▶ Add constructs for High Option Devices (Obj, EDS)
 - Build to order (vs Modular Devices)
- ▶ Dynamic EDS for highly configurable/programmable devices
- ▶ Several cleanup CIPSEs and DSE in queue
- ▶ 64 Job Jar items, needs culling
 - 32 prioritized, 32 unprioritized
 - Define Obsolete vs Deprecated
 - Fix "conditional" items that have no conditions defined
 - Common sense Electronic key wildcard restrictions w/VendSpec app path(s)

2013 Workshop Projects

Project List for 2013:

1. Finalize low-cost performance test tool, publish on ODVA web site
 - Change PlugFest procedure to use low cost tool

2. Create device level EtherNet/IP Diagnostics recommendations
 - Multi-vendor demo
 - Move to SIG for specification enhancement

3. PlugFest Generation 2 Testing implementation
 - Define Conformance Test levels
 - Move most of current interoperability testing to conformance test
 - Add to PF G2
 - Multiport EtherNet/IP Interoperability
 - Expand Originator / Scanner testing
 - Expand system test cases

2013 Workshop Projects

Project List for 2013:

4. Interoperability Recommendations
 - Multiport EtherNet/IP Interoperability
5. IPv6 multi-vendor prototype
6. Move relevant content from General Recommendations for EtherNet/IP Developers (Pub 100) into EtherNet/IP Quick Start for Vendors (Pub 213)

2013 Workshop Schedule

Proposed Workshop Events

- ▶ WS#37
 - Date: February 19-20, 2013
 - Location: TBD
- ▶ PlugFest#17
 - Date: May 7-8, 2013
 - Location: ODVA HQ - Ann Arbor, Michigan
- ▶ WS#38
 - Date: August 13-14, 2013
 - Location: TBD