

Unconfirmed Meeting Minutes: Meeting of the IEEE P802.3cg 10 Mbps Single-Pair Ethernet Task Force

September 9, 2019  
Indianapolis, IN, USA

Prepared by Curtis Donahue, UNH-IOL & Jon Lewis, Dell EMC

The meeting of the IEEE P802.3cg 10 Mbps Single Pair Ethernet Task Force convened at 8:11 AM, Monday, September 9, 2019 by George Zimmerman, P802.3cg Task Force chair.

Attendance for the meeting is listed in Appendix A

All presentations referenced in these minutes are located on the [September 2019 P802.3cg public website](#).

#### Administrative Matters

The Chair started the meeting by thanking Rockwell Automation for hosting this out-of-cycle interim.

George Zimmerman displayed the agenda in [agenda 3cg 01a 0919.pdf](#).

The Task Force Chair asked the participants to introduce themselves, their employer and affiliations.

- Mr. Zimmerman noted that there should be no recording or photography permitted.
- Mr. Zimmerman asked if anyone was attending from the press including those who would run a public blog on this meeting. None responded.

**Motion #1: Move to approve the agenda as shown in [agenda 3cg 01b 0919.pdf](#).**

**M: Peter Jones                      S: Matthias Fritsche**

**Approved by voice without opposition (Procedural > 50%)**

**Motion Passes**

**Motion #2: Move to approve minutes of IEEE P802.3cg 10 Mbps Single Pair Ethernet Task Force from August 2019 as posted.**

**M: Ron Nordin                      S: Theo Brillhart**

**Approved by voice without opposition (Procedural > 50%)**

**Motion Passes**

Chair reviewed the goals for the meeting, big ticket items, access to the reflector and website, and ground rules for the meeting.

**Attendance**, Mr. Zimmerman advised the group that the attendance tool would be used and showed the IMAT login information. The physical attendance log was introduced and passed to the group.

**IEEE Patent Policy**, at **8:40 AM**, Mr. Zimmerman read aloud slides #1 and #2. Mr. Zimmerman then made the call for potentially essential patents at **8:41 AM**, none responded. Mr. Zimmerman then read aloud slides #3 and #4.

Mr. Zimmerman showed and summarized the slide entitled "Participation in IEEE 802 Meetings". Mr. Zimmerman asked if there was any discussion necessary, none responded.

Chair reviewed the IEEE 802.3 Standards process and where the Task Force was in the process and the process by which we will develop the standard. The Chair clearly defined the basis by which the Task Force can move to RevCom as the schedule indicates. The Chair asked the group if there were any questions regarding the process, none responded.

## **LIAISONS**

The Chair reviewed the timeline noting key dates to RevCom submittal.

**Title: Editor's Opening Report: P802.3cg Draft D3.2 ([maguire 3cg 01a 0919.pdf](#))**  
**Presenter: Valerie Maguire, Siemon**

The Chair reviewed the last draft balloting status, outlined the comments by topic, and reminded participants that the comments had been posted by topic on the website.

The Chair reviewed the distribution of the submitted comments and asked if there were any comments where the commenter would like to withdraw the comment, none responded.

At this time, the editor's report was concluded.

## **COMMENT RESOLUTION**

Decisions during comment resolution were made by consensus, except where noted that motions were taken. For details on comment resolution see the posted comment database.

Presentations related to comment resolution are listed as they were presented. Details on the outcome of these presentations are contained in the comment database.

**The group took a short break at 10:45 AM.**

**The group resumed at 11:08 AM.**

Jon Lewis took over as the recording secretary.

Comment resolution continued.

**Title: Clause 148 cleanup ([beruto\\_3cg\\_c148\\_cleanup\\_revA.pdf](#))**

**Presenter: Piergiorgio Beruto, Canova Tech**

**The group took a lunch break at 12:22 PM.**

**The group resumed at 1:40 PM.**

Comment resolution continued.

The Chair asked the group if there was objection for him to continue chairing the meeting as he had made personal comments on the reflector concerning the MDI connector, none responded.

**Title: IEC 63171-1 EMC performance with Pepperl+Fuchs 10BASE-T1L prototype transceivers ([shariff\\_3cg\\_1A\\_09\\_0219.pdf](#))**

**Presenter: Masood Shariff, Commscope**

**Title: MDI Comments Application Perspective ([diminico\\_3cg\\_01a\\_0919.pdf](#))**

**Presenter: Chris Diminico, MC Communications**

**The group took a break at 3:02 PM.**

**The group resumed at 3:28 PM.**

Comment resolution continued.

Future Meeting Straw Poll:

November 2019 Plenary:

Waikoloa Village, HI USA, Nov 11-14

Y: 17            N: 4            Maybe: 10

January 2020 Interim:

Geneva, CH, January 20-24

Y: 16            N: 7            Maybe: 9

Straw Poll #1:

In regards to comments related to changes to the MDI Connector: (Pick One)

1. I support making no changes to the draft.
2. I support reverting back to D3.2 (supporting r01-88)

1: 19            2: 10            None of the above: 6

The Chair opened the floor for an extensive discussion on the MDI connector comments.

Straw Poll #2: I think the idea of specifying the 63171-1 connector (with a 'shall') for 10BASE-T1L only and adding an informative annex to support the provision, test and use of IEC 63171-6 in industrial environments and other environments which are more extreme than those supported by the capabilities of IEC 63171-1, and remove the connector references from 10BASE-T1S so that it matches the other automotive clauses is:

1. the right idea and should be developed into a solution.
2. not the right direction and should be ignored.

1: 6            2: 18

Straw Poll #3: I support keeping both connectors optional and state that once one is picked, the same connector shall be used for interoperability reasons in one installation.

Y:4    N: 26

Straw Poll #4: I support adding a sentence:

The optional MDI connectors are a choice, not a recommendation and should be selected based on equipment, cabling, and environmental considerations

Y:1    N:27

Strawpoll #5: Accept the suggested remedy and revert to draft 3.2 text for this subject.

Y: 17    N: 10    A: 7

**Motion #3: Move to reject comment #r03-15 with the response:**

**The CRG cannot come to a consensus to make changes necessary to address the comment. Significant discussion and contributions have been dedicated to this issue in prior meetings, and many statements are matters of opinion. Consensus does not satisfy all, but the group has discussed the issue repeatedly in an attempt to build a broad consensus.**

**Commenters on previous drafts, supported by technical data, have shown that the restrictions to specific electromagnetic environments in the liaised ISO/IEC specifications for the link segment are not applicable for the equipment.**

**Moved by: Chad Jones**

**Seconded by: Valerie Maguire**

**(Technical >= 75%)**

**Y: 24 N: 0 A: 7**

**Motion Passes**

**Motion #4: Move to accept #r03-25.**

**Moved by: Lennart Yseboodt**

**Seconded by: Valerie Maguire**

**(Technical >= 75%)**

**Y: 12 N: 8 A: 15**

**Motion Fails**

**Motion #5: Move to accept #r03-26.**

**Moved by: Chad Jones**

**Seconded by: Jon Lewis**

**(Technical >= 75%)**

**Y: 10 N: 9 A: 14**

**MOTION FAILS**

**Motion #6: Move to reject comment #r03-28 with the response:**

**The CRG disagrees with the commenter.**

**IEEE Std 802.3-2018 contains other clauses which specify more than one MDI connector (see, e.g., 39.5.1, 85.11, 92.12, 96.8.1, or Annex 136C in IEEE Std 802.3cd-2018). Significant discussion in the CRG has referenced that which connector is used may depend on environmental, equipment design, or other factors which require variation. Referencing connectors which may be used in a number of environments, particularly connectors which ISO/IEC SC25 WG3 and TIA TR42 have liaised that they are recommending for use in single pair installations, provides assistance to the user of the standard by aligning with other standards.**

**Moved by: Chris DiMinico**

**Seconded by: Masood Shariff**

**(Technical >= 75%)**

**Y: 23 N: 0 A: 9**

**MOTION PASSES**

**Motion #7: Move to reject comment #r03-29 with the response:**

**The CRG disagrees with the commenter. The referenced sentence can only be interpreted as referring to the plug connector specified to be mated with the MDI connector used on the port.**

**Moved by: Bob Voss**

**Seconded by: Jon Lewis**

**(Technical >= 75%)**

**Y: 27 N: 0 A: 8**

**MOTION PASSES**

**Motion #8: Move to reject comment #r03-30 with the response:**

The CRG disagrees with the commenter.

IEEE Std 802.3-2018 contains other clauses which specify more than one MDI connector (see, e.g., 39.5.1, 85.11, 92.12, or 96.8.1). Significant discussion in the CRG has referenced that which connector is used may depend on environmental, equipment design, or other factors which require variation. Referencing connectors which may be used in a number of environments, particularly connectors which ISO/IEC SC25 WG3 and TIA TR42 have liaised that they are recommending for use in single pair installations, provides assistance to the user of the standard by aligning with other standards.

**Moved by: Chris DiMinico**

**Seconded by: Jon Lewis**

**(Technical >= 75%)**

**Y: 27 N: 0 A: 7**

**Motion Passes**

The group consented to accepting a late comment from Piergiorgio Beruto as r03-33.

Comment resolution concluded

**Title: Editor's Closing Report: P802.3cg Draft D3.3 ([maguire 3cg 02 0919.pdf](#))**

**Presenter: Valerie Maguire, Siemon**

**Motion #9: Move to grant the Task Force editors license to editorially conform the comment responses to RevCom guidelines and instruct the Task Force editors to generate draft 3.4 from draft 3.3 and the closed comments, with editorial license granted to update PICS as needed, and conduct a 15-day SA Recirculation ballot.**

**M: Valerie Maguire S: Steffen Graber**

**(Technical >= 75%)**

**Y: 29 N: 0 A: 2**

**Motion Passes**

**Motion #10: Move to ask the IEEE P802.3cg Task Force chair to request the IEEE 802.3 working group and EC chair ask for conditional approval to proceed to Revcom**

**M: Chad Jones S: Bob Voss**

**Procedural > 50%**

**Y: 33 N: 0 A: 1**

**Motion Passes**

After exhausting the agenda the Chair asked if anyone had additional business, none responded.

**The Chair adjourned the meeting at 5:28 PM.**

*Appendix A: Attendees at the IEEE P802.3cg 10 Mb/s Single-Pair Ethernet Task Force Meeting, September 9, 2019.*

<b>IEEE 802.3 P802.3cg 10 Mb/s Single Pair Ethernet Task Force IEEE 802.3 September 2019</b>				Day 1 9 Sept
By choosing to attend and sign in to this meeting, you acknowledge and agree that your personal data will be documented for IEEE standards development purposes to comply with policies and procedures, legal and accreditation requirements, and evaluation of patent claims by patent offices. See Front Page for additional information.				
Last Name	First Name	Employer	Other Affiliations	Mon
Baggett	Tim	Microchip	Microchip	X
Beruto	Piergiorgio	Canova Tech SRL	Canova Tech SRL	X
Boyer	Rich	Aptiv	Aptiv	X
Brandt	David	Rockwell Automation	Rockwell Automation	X
Brillhart	Theo	Fluke Networks	Fluke Networks	X
Buchanan	Rory	On Semiconductor	On Semiconductor	X
Choi	Emily	DGIST	DGIST	X
DiMinico	Christopher	MC Communications	Panduit	X
Donahue	Curtis	UNH - IOL	UNH - IOL	X
Franchuk	Brian	Emerson Automation Solutions	Emerson Automation Solutions	X
Frishkorn	Eric	Phoenix Contact	Phoenix Contact	X
Fritsche	Matthias	Harting	Harting	X
Graber	Steffen	Pepperl+Fuchs	Pepperl+Fuchs	X
Gubow	Martin	Keysight Technologies	Keysight Technologies	X
Ito	Hiroaki	Yazaki	Yazaki	X
Jones	Chad	Cisco	Cisco	X
Jones	Peter	Cisco	Cisco	X
Kadry	Haysam	Ford Motor Company	Ford Motor Company	X
Lewis	Jon	Dell   EMC	Dell   EMC	X
Maguire	Valerie	Siemon	Siemon	X
McIntosh	James	Microchip	Microchip	X
McSorley	Greg	Amphenol	Amphenol	X
Mueller	Harald	Endress+Hauser	Endress+Hauser	X
Neveux	Paul	Superior Essex	Superior Essex	X
Nordin	Ron	Panduit	Panduit	X

<b>IEEE 802.3 P802.3cg 10 Mb/s Single Pair Ethernet Task Force IEEE 802.3 September 2019</b>	Day 1 9 Sept
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Last Name	First Name	Employer	Other Affiliations	Mon
Patwardhan	Gaurav	ADI	ADI	X
Rakanovic	Demir	U-Blox	U-Blox	X
Renteria	Victor	Bel Fuse Inc.	Bel Fuse Inc.	X
Sedio	Steve	TDK	TDK	X
Shariff	Masood	Commscope	Commscope	X
Sparrowhawk	Bryan	Leviton	Leviton	X
Stewart	Heath	Analog Devices	Analog Devices	X
Thompson	Geoff	GraCaSI SA.	Independent	X
Voss	Bob	Panduit	Panduit	X
Wucher	Markus	Endress+Hauser	Endress+Hauser	X
Zimmerman	George	CME Consulting	Commscope, Aquantia, CME Consulting, Cisco, ADI, BMW, APL Group, SenTekse	X