

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

January 9-10, 2017
Huntington Beach, CA

Prepared by Jon Lewis

IEEE P802.3cg 10 Mbps Single Twisted Pair Ethernet Task Force meeting convened at 11:00AM, Monday, January 9, 2017 by David Law, 802.3 Working Group chair.

Attendance is listed in Appendix A

Administrative Matters

Mr. Law appointed Jon Lewis as recording secretary for this session.

Mr. Law explained that the Working Group chair appoints the Task Force Chair, and the Task Force would confirm the appointment. Mr. Law then reminded the group that he had announced his intention to appoint George Zimmerman Task Force Chair at the November 2016 Plenary and he then appointed Mr. Zimmerman as the Task Force Chair.

Motion #1: Confirm George Zimmerman as the IEEE P802.3cg 10Mbps Single Pair Ethernet Task Group Chair.

M: Alan Flatman S: Steve Carlson

Y: 37 N: 0 A: 0

MOTION PASSES

Mr. Law then turned the meeting over to Task Force Chair, George Zimmerman.

George Zimmerman displayed the agenda in [agenda_3cg_01a_0117.pdf](#).

The Task Force Chair called for introductions and affiliations.

George Zimmerman reviewed the agenda in [agenda_3cg_01a_0117.pdf](#).

Mr. Zimmerman asked the group if there was any objection to hearing a late presentation from Claude Gauthier. None Responded.

Motion #2: Move to approve the agenda as shown in [agenda_3cg_01a_0117.pdf](#)

M: Lennart Yseboodt S: Matthias Wendt
Approved by voice without opposition (Procedural > 50%)

The Chair then asked for comments or corrections to the minutes of the last meeting. No responses were heard.

Motion #3: Move to approve the minutes of the November 2016 10 Mbps Single Pair Ethernet Study Group meeting

M: Chad Jones S: Mehmet Tazebay

Approved by voice without opposition (Procedural > 50%)

The Chair then resumed the review of presentation [agenda_3cg_01a_0117.pdf](#).

- Mr. Zimmerman asked if anyone was attending from the press including those who would run a public blog on this meeting. None responded.
- Mr. Zimmerman noted that there should be no recording or photography without permission.

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

Attendance, Mr. Zimmerman advised the group of the IEEE meeting attendance tool and procedures, including both the attendance book and the web attendance tracking tool.

Mr. Zimmerman reviewed the slide entitled “Participation in IEEE 802 Meetings” and discussed the new slide with the Task Force.

IEEE Patent Policy, at **9:51 AM**, Mr. Zimmerman showed slides 0 through 4 patent policy from agenda_3cg_01_0117.pdf. Mr. Zimmerman showed slide 0 and read aloud slides 1 through 4. Mr. Zimmerman made the call for potentially essential patents at **9:54 AM**, and none responded. Mr. Zimmerman then completed the reading of slide #4

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.

LIAISONS

[ODVA to IEEE 802.3 Liaison Request, January 2017](#)

The Chair asked if there was any objection to appointing David Brandt as the liaison to ODVA. None responded. Mr. Zimmerman then asked David Brandt to draft a response liaison letter for discussion in the Task Force.

Chair reviewed the adopted P802.3cg Objectives.

PRESENTATIONS

The Chair then moved to the presentations for the meeting.

Title: ISO/IEC SC25 WG3: Who are they and what can they do for 802.3cg? ([iec sc25 wg3 overview for 802.3cg.pdf](#))

Presenter: Alan Flatman, LAN Technologies, Independent

The meeting recessed for a short break at 10:50 AM.

The meeting resumed at 11:17 AM.

Title: Tutorial: Characteristics & Requirements of Physical Networks in the Process Industry ([Franchuk 3cg 10 0117.pdf](#))

Presenter: Brian Franchuk, Emerson Automation Solutions

The Task Force broke for lunch at 11:54 AM to resume at 1:30 PM.

The Task Force resumed from lunch at 1:31 PM.

Title: Link Segment Baseline Proposal ([diminico 01a 0117.pdf](#))

Presenter: Chris Diminico, MC Communications/Panduit

Title: Link Segment and Channel ([Thompson – Term For Media Path.pdf](#))

Presenter: Geoff Thompson, GraCaSi/Independent

Afternoon Break at 3:00 PM

Task Force Meeting resumed at 3:23 PM

Title: PHY Ideas ([Graber 10SPE 10 0117.pdf](#))

Presenter: Steffen Graber, Pepperl+Fuchs

Title: 10SPE Powering Use Cases ([10SPE Powering Use Cases BV.pdf](#))

Presenter: Bob Voss, Panduit

Title: DC Powering ([Graber 10SPE 09a 0117.pdf](#))

Presenter: Steffen Graber, Pepperl+Fuchs

The meeting recessed for the day at 5:11 PM.

The Task Force meeting resumed at 9:04 AM.

Administrative Matters

George Zimmerman reviewed the agenda in [agenda_3cg_01_0117.pdf](#).

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

Attendance, Mr. Zimmerman advised the group of the IEEE meeting attendance tool and procedures, including both the attendance book and the web attendance tracking tool.

Mr. Zimmerman reviewed the slide entitled “Participation in IEEE 802 Meetings”.

The 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.

IEEE Patent Policy, at **9:24 AM**, Mr. Zimmerman showed slides 0 through 4 patent policy from agenda_3cg_01_0117.pdf. Mr. Zimmerman showed slide 0 and read aloud slides 1 through 4. Mr. Zimmerman made the call for potentially essential patents at **9:26 AM**, and none responded. Mr. Zimmerman then completed the reading of slide #4

PRESENTATIONS

The Chair then resumed presentations for the meeting.

Title: Introduction to ODVA for IEEE liaison purposes ([ODVA_cg_01_0117.pdf](#))

Presenter: David Brandt, Rockwell Automation

Discussion: Presentation includes copyrighted material and is available in the private area.

Motion #4: Move to adopt the liaison letter “[ODVA Liaison Response 0117r1.pdf](#)” and instruct the Task Force Chair present the letter for approval at the working group meeting.

M: Chad Jones S: Mick McCarthy

Approved by voice without opposition (Procedural > 50%)

Title: 802.3cg 10 Mb/s Single Twisted Pair Ethernet TF Ad Hoc Report

([jones_10spe_01_0117.pdf](#))

Presenter: Peter Jones, Cisco Systems

Abstract: Peter Jones discussed the meetings held since the San Antonio Plenary meeting.

Discussion: Minutes from the ad hoc meetings were approved. Peter explained the ad hoc purpose and schedule for future meetings.

Title: xBASE-T1 Auto-Negotiation ([McClellan_10SPE_01a_0117_xBASE-T1_Autoneg.pdf](#))

Presenter: Brett McClellan, Marvel Semiconductor

The meeting recessed for a short break at 10:35 AM.

The meeting resumed at 11:03 AM.

Title: PD Power, Vpse and Rcable ([jones_cg_01_0117.pdf](#))

Presenter: Chad Jones, Cisco Systems

Title: 10SPE Powering Discussion ([10SPE Power Discussion.pdf](#))

Presenter: Jean Picard, Texas Instruments

Discussion: “profiles” and use cases generated during the meeting will be a working list.

The meeting recessed for lunch at 12:00 PM.

The meeting resumed at 1:45 PM.

The Chair reconvened the meeting reviewing the power Use-Cases slide from Jean’s presentation and discussion around power commenced.

Title: Update on PHY Terms and Parameters ([gauthier_3cg_01_0117.pdf](#))

Presenter: Claude Gauthier, OmniPHY

Discussion: Extensive discussion concerning the presentation and the work the needs to be completed.

Afternoon Break at 3:12 PM

Task Force Meeting resumed at 3:39 PM

End of Presentations.

The Chair reviewed the timeline as shown in [agenda_3cg_01a_0117.pdf](#) and urged the Task Force that without baseline proposals this project will not progress.

Straw Poll #1:

I support adoption of [diminico_01a_0117.pdf](#) slide 11 for the (objective 12) Link Segment Insertion Loss baseline.

Yes: 33

No: 0

Abstain: 10

Straw Poll #2:

I support adoption of [diminico_01a_0117.pdf](#) slide 26 for the (objective 12) Link Segment Return Loss baseline.

Yes: 31

No: 0

Abstain: 14

Source Power per Port #1

My 1000m to 800m application needs a source power of:

- 1) more than 500W
- 2) 500W: 1
- 3) 250W: 1
- 4) 100W: 13
- 5) 60W or less: 22

Voted at least once: 22

Vote Many/often

Source Power per Port #2

My 200m to 15m application needs a source power of:

- 1) more than 500W:1
- 2) 500W: 1
- 3) 250W: 3
- 4) 100W: 13
- 5) 60W or less: 22

Voted at least once: 22

Vote Many/often

Source Power per Port #3

My 15m to 1m application needs a source power of:

- 1) more than 500W: 1
- 2) 500W: 1
- 3) 250W: 3
- 4) 100W: 15
- 5) 60W or less: 21

voted at least once: 21

Vote Many/often

Cabling to Device

My cabling to powered device is likely to use:

- 1) 12awg or larger conductors: 4
- 2) 14awg or larger conductors: 6
- 3) 16awg or larger conductors: 8
- 4) 18awg or larger conductors: 14
- 5) 24awg or larger conductors: 19

Vote Many/often

OTHER ADMINISTRATIVE BUSINESS

The Chair turned back to the agenda slides and reviewed upcoming IEEE 802.3 meetings.

Future Meeting Straw Polls

I am likely to attend 802.3cg at:

- **March plenary (Vancouver):**
 - **Y:33 N:3 M:9**

- **May Interim (New Orleans):**
 - **Y:32 N:1 M:16**

- **July plenary (Berlin):**
 - **Y:24 N:4 M:19**

Adjournment

Motion #10: To adjourn the meeting.

M: Jon Lewis S: Joel Goergen

MOTION PASSES by voice without opposition

The Meeting was adjourned at 5:00 PM

Appendix A: Attendees at the IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet Task Force Meeting, January 9-10, 2017.

802.3cg Working Group Jan'17				1/9/17	1/10/17
Last Name	First Name	Employer	Affiliation	Monday	Tuesday
Abramson	David	Texas Instruments	Texas Instruments		X
Ahmed	Mohammad	TE Connectivity	TE Connectivity	X	X
Bauer	Jim	Marvell	Marvell	X	X
Beaulieu	Tim	UNH-IOL	UNH-IOL	X	
Brandt	David	Rockwell Automation	Rockwell Automation	X	X
Brownlee	Phillip	TDK	TDK	X	X
Carlson	Steve	High Speed Design	High Speed Design	X	
Chabot	Craig	UNH-IOL	UNH-IOL	X	X
Chadha	Mandeep	Microsemi	Microsemi	X	
Dai	Shaoan	Marvell	Marvell	X	X
DiBiaso	Eric	TE Connectivity	TE Connectivity	X	X
DiMinico	Christopher	MC Communications	Panduit	X	X
Donahue	Curtis	UNH - IOL	UNH - IOL	X	
Flatman	Alan	LAN Technologies	LAN Technologies	X	X
Franchuk	Brian	Emerson Automotive Solutions	Emerson Automotive Solutions	X	X
Fritsche	Matthias	Harting	Harting	X	X
Fujimoto	Yukihiro	NTT	NTT	X	X
Gauthier	Claude	OmniPHY	OmniPHY	X	X
Goergen	Joel	Cisco	Cisco	X	X
Gottron	Jens	Siemens AG	Siemens AG	X	X
Graber	Steffen	Pepperl+Fuchs	Pepperl+Fuchs	X	X
Grau	Olaf	Robert Bosch	Robert Bosch	X	X
Hoglund	David	Johnson Controls	Johnson Controls	X	X
Hyakutake	Yasuhiro	Adamant Co., Ltd	Adamant Co., Ltd		X
Jones	Chad	Cisco	Cisco	X	X
Jones	Peter	Cisco	Cisco	X	X
Kim	Yong	Broadcom Ltd.	Broadcom Ltd.		X
Kountz	Dennis	Chemours	Chemours	X	X
Lapak	Jeff	UNH - IOL	UNH - IOL		X
Law	David	Hewlett Packard Enterprise	Hewlett Packard Enterprise	X	
Leung	Michael	Marvell	Marvell		X
Lewis	Jon	Dell EMC	Dell EMC	X	X
Lin	Alex	Mediatek	Mediatek	X	X

802.3cg Working Group Jan'17				1/9/17	1/10/17
Last Name	First Name	Employer	Affiliation	Monday	Tuesday
Masaki	Yasukawa	NEC Magnus	NEC Magnus	X	X
McCarthy	Mick	Analog Devices	Analog Devices	X	X
McClellan	Brett	Marvell	Marvell		X
Medina	Marcel	Spirent	Spirent	X	X
Moritake	Toshijuki	JAE	JAE		X
Mueller	Harold	Endress+Hauser	Endress+Hauser	X	X
Muir	Ron	JAE	JAE	X	X
Naumann	Ken	Cisco	Cisco	X	X
Nemr	Daniel	UNH-IOL	UNH-IOL	X	X
O'Neil	Adam	UNH-IOL	UNH-IOL		X
Pandey	Sujan	NXP	NXP	X	X
Pardo	Carlos	KDPOF	KDPOF		X
Picard	Jean	Texas Instruments	Texas Instruments	X	
Sayre	Edward	Samtec	Samtec	X	
Sedarat	Hossein	Aquantia	Aquantia	X	X
Shariff	Masood	Commscope	Commscope	X	X
Sparrowhawk	Bryan	Leviton	Leviton	X	X
Stewart	Heath	Linear Technologies	Linear Technologies	X	X
Su	Ching-Yao	Realtek	Realtek	X	X
Thepot	Frederic	Intel	Intel		X
Umnov	Alexander	Corning	Corning	X	
Vanderlaan	Paul	Berk-Tek LLC	Berk-Tek LLC	X	
Voss	Bob	Panduit	Panduit	X	X
Ward	Lisa	Rohde & Schwarz	Rohde & Schwarz	X	
Wendt	Matthias	Philips Lighting	Philips Lighting	X	X
Winkel	Ludwig	Siemens	Siemens	X	X
Wu	Peter	Marvell	Marvell	X	X
Wucher	Markus	Endress+Hauser	Endress+Hauser	X	X
Yoo	Sungjong	Molex, LLC	Molex, LLC	X	X
Yseboodt	Lennart	Philips Lighting	Philips Lighting	X	X
Zielinski	Martin	Emerson Automotive Solutions	Emerson Automotive Solutions	X	X
Zimmerman	George	CME Consulting	ADI, Commscope, Aquantia, LTC, CME Consulting, Cisco	X	X
Zinner	Helge	Continental	Continental	X	X