Confirmed Meeting Minutes: IEEE 10 Mb/s Backplane Ethernet Study Group

January 22 & 24, 2018

Geneva, CH

Prepared by George Zimmerman, Curtis Donahue, and Mike Klempa

Meeting was called to order 22 January, 2018 at 9am by Mr. David Law, IEEE 802.3 Working Group chair

<u>Attendance for the meeting is listed in Appendix A</u>

Mr. Law announced that he would be appointing Mr. Lewis as the study group chair.

Mr. Law appointed Mr. Zimmerman reporting secretary for the meeting

Mr. Lewis accepted the nomination and left the room for discussion of his nomination.

MOTION #1: Confirm Jon Lewis as the IEEE 10Mbps Backplane Ethernet Study Group Chair

> **M: Lennart Yseboodt   S: Valerie Maguire**

> **Y: 40   N:0   A:0   MOTION PASSES**

Mr. Lewis (the Chair) reentered the room. Mr. Law turned the meeting over to Mr. Lewis, and left the room.

The Chair called for introductions and affiliations, the participants introduced themselves, and the Chair then proceeded with the agenda.

The Chair reviewed the agenda. Mr. Lewis turned to presentation agenda_10BPE_01_0118.pdf and reviewed the schedule of presentations for the meeting.

**MOTION #2: Approve the agenda as shown in
http://www.ieee802.org/3/10BPE/public/Jan2018/agenda_10BPE_01_0118.pdf**

> **M: Peter Jones S: Lennart Yseboodt**

> **Motion Passes by Voice without opposition**

The Chair continued with the presentation agenda_10BPE_01_0118.pdf:

- •   Mr. Lewis asked if anyone was attending from the press including those who would run a public blog on this meeting – there were no indications from the group..
- •   Mr. Lewis noted that there should be no recording or photography without permission.

IEEE Patent Policy, Mr. Lewis read aloud the patent policy for study groups from agenda_10BPE_01_0118.pdf, page entitled "Guidelines for IEEE-SA Meetings" (9:18 am).

Mr. Lewis reviewed the goals for the meeting, access to the reflector and website, and ground rules, including the WG motion from the November plenary meeting of the 802.3 WG to establish the Study Group.

Mr. Lewis then continued review of the presentation, Big Ticket items for this meeting, to develop PAR, CSD responses, and Objectives modifications for 802.3cg to include backplane Ethernet.

LIAISONS
The Chair moved to liaisons, and noted that there were none for the Study Group at this time.

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

The Chair completed review of the agenda.

PRESENTATIONS

The Chair then moved to the presentations for the meeting. (Abstracts are given as a guide to the presentation material, where possible, these are as provided by authors.)

Title: 802.3cg and 802.3 BPE Combined Ad-hoc Report (jones_10BPE_01_0118.pdf)
Abstract: The presenter reported on the ad hoc meetings held since the November plenary, reporting on the combined ad hoc meetings of the 802.3cg task force and the 10 Mbps Backplane Ethernet Study Group.
Presenter: Peter Jones, Cisco, Chair of the 10Mbps Backplane Ethernet Study Group Ad Hoc
Discussion: The next ad hoc meeting will be Wednesday February 14, 2018.

Title: PAR/CSD Recommendations (jones_10spe_10bpe_03_0118_d1.pdf)
Abstract: The presenter described recommendations presented to and discussed in the ad hoc meetings for the PAR and CSD modifications to IEEE 802.3cg.
Presenter: Peter Jones, Cisco (co-author, George Zimmerman, CME Consulting/ Commscope, Aquantia, CME Consulting, Cisco, ADI, BMW, APL Group)

Mr. Donahue assumed recording secretary duties for the remainder of the day's session so Mr. Zimmerman could present.

Title: Objectives Recommendations (jones_10spe_10bpe_04_0118_d1.pdf)
Abstract: The presenter described recommendations presented to and discussed in the ad hoc meetings for the Objectives modifications to IEEE 802.3cg to support 10 Mbps Backplane Ethernet.
Presenter: Peter Jones, Cisco (co-author, George Zimmerman, CME Consulting/ ADI, APL Group, Aquantia, BMW, Commscope, Cisco)

11:47am - 10BPE SG is recessed until Wednesday January 24.

1:57 PM, Wednesday, January 24, 2018 - The joint meeting of the IEEE P802.3cg 10 Mbps Single Twisted Pair Ethernet Task Force and IEEE P802.3cg 10 Mbps Backplane Ethernet convened by Jon Lewis, IEEE 802.3 10 Mb/s Backplane Ethernet Study Group chair and George Zimmerman, IEEE P802.3cg Task Force Chair.

<u>Administrative Matters</u>
Mr. Lewis appointed Mike Klempa as recording secretary for this session.

PRESENTATIONS
The joint meeting then moved to the presentations for the meeting.

Title: <u>Backplane Simulations</u> (beruto_3cg_03_0118.pdf)
Abstract: Current 10BASE-T1S specifications seems to be suitable for the backplane use case.
Presenter: Piergiorgio Beruto, Canova Tech

Title: <u>PAR/CSD Recommendations (draft 5)</u> (jones_10spe_10bpe_03_0118_d5.pdf)
Abstract: Proposed Changes Summary for PAR/CSD changes, highlighted in red
Presenter: George Zimmerman, CME Consulting/ Commscope, Aquantia, CME Consulting, Cisco, ADI, BMW, APL Group

Title: <u>Objectives Recommendations (draft 6)</u> (jones_10spe_10bpe_04_0118_d6.pdf)
Abstract: Proposed Changes to 802.3cg Objectives, highlighted in red
Presenter: George Zimmerman, CME Consulting/ Commscope, Aquantia, CME Consulting, Cisco, ADI, BMW, APL Group

Straw Poll #1:
        I prefer (choose one)
        A: no change to existing 1km objective.
        B: add full duplex to existing 1km objective.
        C: make change as per page 6 of jones_10spe_10bpe_04_0118_d6.pdf.
        A: 7 B: 3 C: ++
        Consensus C

Straw Poll #2:
        I prefer (choose one)
        A: Leave 18 as is. Don't add 19.
        B: Remove "link" from 18. Don't add 19.
        C: Leave 18 as is and add 19 for multidrop power.
        A: 9 B: 31 C: 2
        Consensus B

Straw Poll #3:
        I prefer (choose one)
        A: 18 (without one or more)
        B: 19 (with one or more)
        A: 12 B: 15

Break at 4:00pm. Resumed at 4:30pm.

Straw Poll #3:
> I prefer (choose one)
> A: 10E-8
> B: 10E-9
> C: 10E-10
> A: 0 B: 1 C: ++
> Consensus C

LIAISONS
The TF Chair then moved to outgoing liaisons from the Task Force.

1: ISO-IEC optionally adding more MDI connectors
- Minor edits

2: TIA optionally adding more MDI connectors
- Minor edits

Mr. Lewis then explained that when voting for the following motions the group was voting:
> **Study Group: Recommend change to the IEEE P802.3cg Task Force**
> **Task Force: Accepts the change to the P802.3cg project documentation**

NOTE: Motion numbering follows P802.3 Task Force meeting minutes, not the Study Group numbering thus Motion 3 and 4 are intentionally left out)

Motion #5: Move to instruct Chief Editor to create IEEE P802.3cg D1.1 from D1.0 and closed comments
M: Valerie Maguire
S: Ron Nordin
MOTION PASSES by voice without opposition

Motion #6: Move to instruct Chief Editor to review and refine editing instructions as needed throughout draft 1.1 prior to task force review
M: Valerie Maguire
S: Ron Nordin
MOTION PASSES by voice without opposition

Motion #7: Move to adopt PAR modifications on slide 4 of jones_10spe_10bpe_03_0118_d6.pdf
M: Peter Jones
S: Brett McClellan
Y: 48 N: 0 A: 3
MOTION PASSES (>= 75%)

Motion #8: Move to adopt CSD modifications on slides 8-12 of jones_10spe_10bpe_03_0118_d6.pdf
M: Peter Jones
S: Gergely Huscak
Y: 53 N: 0 A: 0
MOTION PASSES (>= 75%)

Motion #9: Move to adopt objectives modifications on slide 5-7 of jones_10spe_10bpe_04_0118_d7.pdf
M: Peter Jones
S: Mick McCarthy
Y: 52 N: 0 A: 1
MOTION PASSES (>= 75%)

Motion #10: Move to approve draft liaison letter to TIA TR-42 (IEEE_802d3_to_TIA_TR42_TF_0118_draft3.pdf)
M: Peter Jones
S: Amrik Bains
Y: 52   N: 0   A: 1
MOTION PASSES (>= 75%)

Motion #11: Move to approve draft liaison letter to ISO/IEC SC25 WG3 (IEEE_802d3_to_ISOIEC_SC25_WG3_0118_10spe_d4.pdf)
M: Peter Jones
S: James Withey
Y: 50   N: 0   A: 1
MOTION PASSES (>= 75%)

Straw Poll #5:

I am likely to attend 802.3cg at:

Attend March 2018 802 Rosemont, IL plenary:

Y: 36   N: 6   M: 5

Attend May 2018 interim, EA, Pittsburgh, PA, USA:

Y: 28   N: 3   M: 18

Motion #12: Move to adjourn.
M: David Brandt
S: Brian Franchuk
Passes by Voice without Opposition

THE MEETING ADJOURNED AT 5:42PM

Appendix A: Attendees at the IEEE 10 Mb/s Backplane Ethernet Study Group Meeting, January 22 & 24, 2018.

IEEE 10BPE Study Group Jan'18				1/22/18	1/24/18
Last Name	**First Name**	**Employer**	**Affiliation**	**Monday**	**Wednesday**
Abedy	Yossuf	Pulse Electronics	Pulse Electronics	X	
Akkihal	Shiva	Microchip	Microchip	X	X
Alessandro	Ingrassia	Canova Tech	Canova Tech	X	X
An	Hongming	Microchip	Microchip	X	X
Ayla	Chang	Huawei Tech	Huawei Tech	X	
Bains	Amrik	Cisco	Cisco	X	
Bergner	Bert	TE Connectivity	TE Connectivity		X
Beruto	Piergiorgio	Canova Tech SRL	Canova Tech SRL	X	X
Bo	Gian Marco	Canova Tech	Canova Tech	X	
Brandt	David	Rockwell Automation	Rockwell Automation	X	X
Brychta	Michal	Analog Devices	Analog Devices	X	X
Caliskan	Fatma	Microchip	Microchip	X	X
Chabot	Craig	UNH-IOL	UNH-IOL	X	
Den Besten	Gerrit	NXP Semiconductor	NXP Semiconductor	X	X
DiMinico	Christopher	MC Communications	Panduit	X	
Donahue	Curtis	UNH - IOL	UNH - IOL	X	
Fathi	Borhan	Nvidia	Nvidia	X	X
Flatman	Alan	LAN Technologies	LAN Technologies		X
Franchuk	Brian	Emerson Automation Solutions	Emerson Automation Solutions	X	
Fritsche	Matthias	Harting	Harting	X	
Gauthier	Claude	Omniphy	Omniphy	X	
Goldberg	Jonathan	IEEE-SA	IEEE-SA	X	X
Gottron	Jens	Siemens AG	Siemens AG	X	
Graber	Steffen	Pepperl+Fuchs	Pepperl+Fuchs	X	X

Last Name	First Name	Employer	Affiliation	1/22/18 Monday	1/24/18 Wednesday
IEEE 10BPE Study Group Jan'18					
Horrmeyer	Bernd	Phoenix Contact	Phoenix Contact	X	
Huszak	Gergely	Kone	Kone	X	X
Jimenez	Andrew	Anixter Inc.	Anixter Inc.	X	
Jones	Peter	Cisco	Cisco	X	
Kabra	Lokesh	Synopsys	Synopsys		X
Kappertz	Jannis	Endress+Hauser	Endress+Hauser	X	X
Kattainen	Ari	Kone	Kone	X	
Klempa	Michael	UNH-IOL	UNH-IOL		X
Krieger	Olaf	Volkswagen	Volkswagen	X	
Lackner	Hans	QoSCom Gmbh	QoSCom Gmbh	X	
Law	David	Hewlett Packard Enterprise	Hewlett Packard Enterprise	X	
Lewis	Jon	Dell | EMC	Dell | EMC	X	X
Maguire	Valerie	Siemon	Siemon	X	
McCarthy	Mick	Analog Devices	Analog Devices	X	X
McClellan	Brett	Marvell	Marvell	X	X
Medina	Marcel	Spirent	Spirent		X
Meier	Alexander	Volkswagon	Volkswagon	X	
Miller	Martin	Microchip	Microchip	X	X
Nordin	Ron	Panduit	Panduit	X	
Orzelli	Antonio	Canova Tech	Canova Tech	X	X
Pandey	Sujan	NXP	NXP	X	X
Scantamburlo	Nicola	CanovaTech	CanovaTech	X	X
Schicketanz	Dieter	Self	Reutlingen University	X	
Shariff	Masood	Commscope	Commscope	X	
Sparrowhawk	Bryan	Leviton	Leviton	X	
Stewart	Heath	Analog Devices	Analog Devices	X	
Sun	Marcus	Huawei Tech	Huawei Tech		X
Taiji	Kondo	Megachips	Megachips	X	

Last Name	First Name	Employer	Affiliation	1/22/18 Monday	1/24/18 Wednesday
IEEE 10BPE Study Group Jan'18				**1/22/18**	**1/24/18**
Last Name	**First Name**	**Employer**	**Affiliation**	**Monday**	**Wednesday**
Takeo	Masuda	OITDA	OITDA	X	
Tan	Alex	NXP	NXP	X	
Tanaka	Masahiro	Hirose Electric	Hirose Electric	X	X
Tazebay	Mehmet	Broadcom Ltd.	Broadcom Ltd.		X
Tremblay	David	HPE	HPE	X	
Wang	Min	Waymo	Waymo	X	X
Wendt	Matthias	Philips Lighting	Philips Lighting	X	
Wienckowski	Natalie	GM	GM		X
Withey	James	Fluke Networks	Fluke Networks	X	X
Wucher	Markus	Endress+Hauser	Endress+Hauser	X	X
Xu	Li	Huawei Tech	Huawei Tech	X	X
Xu	Dayin	Rockwell Automation	Rockwell Automation	X	X
Yseboodt	Lennart	Philips Lighting	Philips Lighting	X	
Yun	Zhang	Huawei Tech	Huawei Tech		X
Zerna	Conrad	Frannhofer IIS	Frannhofer IIS	X	X
Zielinski	Martin	Emerson Automation Solutions	Emerson Automation Solutions	X	
Zimmerman	George	CME Consulting	Commscope, Aquantia, CME Consulting, Cisco, ADI, BMW, APL Group	X	X
Zweck	Harald	Infineon Tech.	Infineon Tech.	X	