

Unconfirmed Meeting Minutes: Meeting of the IEEE 802.3 Greater than 10 Mb/s Long-Reach Single Pair Ethernet Study Group

October 13, 2021
Electronic Study Group meeting

Prepared by George Zimmerman

IEEE 802.3 Greater than 10 Mb/s Long-Reach Single Pair Ethernet Study Group meeting convened at 7:02AM PDT, Wednesday, October 13, 2021 by George Zimmerman, Chair of the IEEE 802.3 Greater than 10 Mb/s Long-Reach Single Pair Ethernet Study Group.

The meeting was held electronically via WebEx.

Attendance is listed in Appendix A

Administrative Matters

The Chair began with a review of the agenda deck:

https://www.ieee802.org/3/SPEP2P/public/agenda_3GT10M_01a_10132021.pdf

Note that during the meeting the agenda deck was updated to include the motion for the appointment of the Vice Chair.

All presentations referenced in these minutes are located on the [Study Group Meeting Materials](#) site.

This being a teleconference meeting, the Chair asked that participants introduce themselves when speaking, in lieu of a formal roll call. There was no objection.

Mr. Zimmerman displayed the agenda, and asked if there were any changes or additions.

The agenda was approved at 7:05am PDT by unanimous consent
Minutes from the September 29 meeting were approved by unanimous consent (7:06am)

Members of the Press At 7:07am PDT the chair asked for any members of the press to identify themselves. None were heard.

The chair resumed with the agenda deck.

IEEE Patent Policy, Mr. Zimmerman read aloud the pre-par patent slides at **7:10 AM PDT**.

Mr. Zimmerman continued review of the agenda deck, including the following items – a review of the participation policy, a review of the IEEE copyright policy, a review of the IEEE policy on dominance, and a review of the IEEE Standards process. There were no questions

Attendance, Mr. Zimmerman advised the group that the attendance would be taken from Webex.

Appointment of Vice Chair (7:27AM)

Mr. Zimmerman turned the meeting over to David Law, Chair of the IEEE 802.3 Working Group.

Mr. Law announced that he would be appointing Mr. Steven Carlson as the study group chair. Mr. Carlson accepted the nomination and left the teleconference for discussion of his nomination.

MOTION #1: Confirm Steve Carlson as the IEEE 802.3 Greater than 10 Mb/s Long-Reach Single Pair Ethernet Study Group Vice Chair

M: George Zimmerman S: Chad Jones
Motion Passes by Unanimous Consent

Mr. Carlson reentered the teleconference.

Mr. Law turned the meeting back over to Mr. Zimmerman to Chair.

Presentations and Discussion:

The Chair then moved on to the presentations and scheduled discussion of objectives.

Presentations: -

Working Objectives : >10 Mb/s long-reach SPE

(Presented by George Zimmerman)

https://www.ieee802.org/3/SPEP2P/public/objectives_10132021_wkg.pdf

- Presenter presented presentation

The Chair led a general discussion of the proposed objectives, trying to determine refinements, points of consensus, and points where more work may be required. The results of the discussion are documented in the output file:

https://www.ieee802.org/3/SPEP2P/public/objectives_10132021_out.pdf

There was general consensus on many PHY objectives, and on the 100 Mb/s rate. There was general consensus on supporting a 100 Mb/s rate in industrial environments at a Bit Error Ratio of 1e-10.

Significant work remains on the 'big ticket item' question of reach for the , although there was general consensus that 100 Mb/s reach be 300m or greater, with many expressing a preference for 500m.

There was some discussion over adding a latency objective, with some concerned that latency might preclude maximum reach. A compromise wording of "Do not preclude latency \leq TBD msec was offered, which might allow low latency as an optional mode, perhaps at a cost of reach. Until the TBD is filled in, this cannot be at full consensus.

Several participants remarked that higher speed needed to be accompanied by a latency constraint if the PHYs were to be considered for control applications.

Time limited discussion on the 1000 Mb/s rate, and participants were encouraged to bring presentations to the next meeting addressing reach and technical feasibility from a PHY SME perspective on this objective – filling in a parallel set of objectives to those for 100Mb/s

Discussion concluded at 9:03 AM PDT with the Chair advising the group that presentations and consensus needed to be built at the next meeting, so that work would be in a position to complete (or

be obviously nearly complete) at the November Plenary, especially since the Study Group would need to be rechartered then.

Future Meetings

The next regular meeting will be held 27 Oct 2021 at 7am Pacific Time.

Having exhausted the time, the meeting was adjourned at 9:03 AM PDT.

Appendix A: Attendees at the IEEE 802.3 Greater than 10 Mb/s Long-Reach SPE Study Group

First Name	Last Name	Affiliation	Webex
Tim	Baggett	Microchip	X
David	Brandt	Rockwell Automation	X
Rory	Buchanan	OnSemi	X
Steve	Carlson	HSD, Bosch, Ethernovia	X
John	DeAndrea,	II-VI/Finisar	X
Matthias	Fritsche	HARTING	X
Steffen	Graber	Pepperl+Fuchs	X
Dave	Hess	Cord Data	X
Gergely	Huszk	Kone	X
Andy	Jimenez	WESCO Anixter	X
Chad	Jones	Cisco	X
Peter	Jones	Cisco	X
Hans	Lackner	QoSCom GmbH	X
Wayne	Larsen	CommScope	X
David	Law	HPE	X
Valerie	Maguire	Siemon	X
Brian	Murray	Analog Devices	X
Ralf	Peteranderl	Rosenberger	X
Jason	Potterf	Cisco	X
Victor	Renteria	Bel Fuse/TRP Connectors	X
Dieter	Schicketanz	Reutlingen University	X
wensheng	sun	Marvell	X
Geoff	Thompson	GraCaSI S.A./self	X
Bob	Voss	Panduit	X
James	Withey	Fluke	X
Peter	Wu	Marvell	X
Dayin	Xu	Rockwell Automation	X
George	Zimmerman	CME Consulting/ADI, APL Group, Cisco, CommScope, Marvell, SenTekSe	X