Unconfirmed Meeting Minutes: Meeting of the IEEE P802.3dg 100 Mb/s Long-Reach Single Pair Ethernet Task Force

Wednesday-Thursday November 15-16 2023 Hybrid Plenary Meeting

Prepared by Bob Voss

IEEE 802.3dg 100 Mb/s Long-Reach Single Pair Ethernet Task Force meeting was called to order at **1:02 PM HST**, Wednesday, November 15, 2023, by George Zimmerman, Chair of the IEEE 802.3dg Task Force. Bob Voss served as recording secretary for the meeting.

The meeting was held electronically via WebEx and in person in Honolulu. The chair asked that participants whose affiliation is not shown in their Webex identity, please post their affiliation in the chat window.

<u>Attendance is listed in Appendix A.</u> Attendance will be taken via WebEx and IMAT, imat.ieee.org. An in-room sign in sheet was also circulated.

Mr. Zimmerman displayed and proceeded to review the agenda at <u>https://ieee802.org/3/dg/public/May_2022/agenda_3dg_01a_231115.pdf</u>. Mr. Zimmerman asked if there was any objection to approving the agenda. No objections were heard. Agenda approved by unanimous consent.

Approve Prior Meeting Minutes Mr. Zimmerman asked if there were any changes or additions, or if anyone needed additional time to review the posted minutes from 25Oct2023. None heard. The chair asked if there was any objection to approving the minutes as posted. No objections heard. Minutes approved by unanimous consent.

Mr. Zimmerman reviewed the General Decorum slide.

Members of the Press, At **1:10 PM HST** the chair asked for any members of the press to identify themselves. None were heard.

Mr. Zimmerman reviewed the Task Force Decorum slide.

The chair reviewed the Goals for This Meeting.

Hear technical presentations. Progress work on PHY baselines – identify points of agreement. Progress discussion on MII

Plenary Meeting - Fees slide

The chair reminded attendees that a meeting fee is due as a condition of participating in this meeting.

Any presentations referenced in these minutes are located on the Task Force Meeting Materials site.

At **1:14 PM HST**, Mr. Zimmerman resumed review of the agenda deck, including the following items – goals for the meeting, use of reflector and web to build consensus, ground rules, 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.

IEEE Patent Policy, Mr. Zimmerman showed the patent slides, 1 through 4, at **1:15 PM HST**. Slides were shown and not read aloud.

The call for patents was made at **1:16 PM HST**. None responded.

At 1:17 PM HST, the chair showed the slides on SA Copyright Policy.

At **1:18 PM HST**, the chair reminded participants that they agree to comply with IEEE Code of Ethics, all applicable laws and with all IEEE policies. Individual process, fair & equitable consideration, slides shown and read to participants. Individuals not agreeing to comply were asked to leave the meeting. No meeting participants left. The chair reviewed the slide regarding the fair and equitable consideration of all viewpoints.

At **1:22 PM HST**, Mr. Zimmerman reported that no liaisons or communications have been received for consideration by the task force at this meeting.

Mr. Zimmerman reported that the task force may be at risk of not meeting the Revised Timeline (approved 7/11/2023) as the Draft 1.0 baseline is due Jan 2024.

Presentations and Discussion:

At 1:25 PM HST, the Chair moved on to Presentations.

At 1:26 PM HST, Enhanced SMII Proposal – William Lo, Axonne

https://ieee802.org/3/dg/public/May_2022/Lo_3dg_01_11152023.pdf

- Presentation made by Mr. Lo
- Questions asked and answered.

At **2:33 PM HST, Cable Insertion Loss, measured using "PAM3 Signal"** – *Michal Brychta, Niall Fitzgerald, Analog Devices*

https://ieee802.org/3/dg/public/May_2022/Brychta_3dg_01_11152023.pdf

- Presentation made by Mr. Brychta.
- Questions asked and answered.

AFTERNOON BREAK 2:58PM – 3:30PM HST

At **3:35 PM HST, Modulation format for 802.3dg** – *Tingting Zhang, Dongchen Pan, Huawei Technologies*

https://www.ieee802.org/3/dg/public/May_2022/Tingting_3dg_01_16_11_2023.pdf

- Presentation made by Ms. Zhang
- Questions asked and answered.

At **4:10 PM HST, IEEE P802.3dg 100BASE-T1L PHY Time Domain Simulations** – *Brian Murray, Phillip Curran, Analog Devices*

https://ieee802.org/3/dg/public/May_2022/Murray_3dg_11132023.pdf

- Presentation made by Mr. Murray
- Questions asked and answered.

Presentations and discussion concluded at **4:59 PM HST**.

At **5:00 PM HST**, Mr. Zimmerman led the group in a working session to determine needs and activities to support progressing the work of the task force. The working session was documented as <u>zimmerman_3dg_01a_11152023.pdf</u>.

Mr. Zimmerman suspending the working session for the day.

To settle the MII issue, the chair offered a straw poll.

Straw Poll

- I support (choose one)
 - A. We need to define a new MII in 802.3dg
 - $\circ~$ B. We need to define a new MII and we should do it in a new project
 - C. We do not need to mess with the MII we can leave this outside of the standard.
 - o D. Abstain / No opinion.
- A = 7 + 5 = 12
- B = 2 + 1 = 3
- C = 1 + 0 = 1

• D = 5 + 2 = 7

At **6:06 PM HST**, Mr. Zimmerman recessed the meeting until 9 AM HST 11/16/2023.

At **9:05 AM HST on 16Nov2023**, Mr. Zimmerman resumed the meeting. Mr. Zimmerman asked if any members of the group had not seen the slides in the agenda deck reviewing IEEE SA, IEEE 802, and IEEE 802.3 process, including decorum, patent policy, copyright policy, individual process, and ethics policy, or otherwise wished to review them now. None heard. Mr. Zimmerman made the call for patents, no responses were heard. Call for members of the press to announce themselves, none heard. Mr. Zimmerman asked if any member of the TF needed to announce a change of affiliation, none heard.

Mr. Zimmerman opened the floor to any new business for the task force, resuming discussion of the working document <u>zimmerman_3dg_01a_11152023.pdf</u>.

Mr. Brandt responded he had a follow up item involving Ethernet APL powering. Discussion ensued. Item captured in the slide deck started yesterday for actions needed to progress to baseline text.

Next Meetings

The PHY modeling task owners will hold an ad hoc call on 27 November 2023.

- An electronic task force ad hoc meeting is planned for 13Dec2023.
 - Meeting coordinates to follow.
- January 22 to 25, 2024 IEEE802.3 Interim, St. Petersburg, FL
 - In person with hybrid access, <u>https://ieee802.org/3/interims/index.html</u> for details.
 - Note: All remote access is best effort.
- Follow on topics: Progress on PHY proposals (PCS, PMA, FEC, or other noise strategy, etc.) Progress MII discussion, Build consensus to baselines.

Mr. Zimmerman repeated the call for new business before the task force. No new items were heard. The chair said he would entertain a motion to adjourn.

M = Geoff Thompson S = Bob Voss

No objection to adjourning was heard. Motion passes.

Meeting adjourned at 9:30 AM HST.

Appendix A: Attendance November 15-16, 2023, IEEE P802.3dg Task Force

	First				In			In
Last Name	Name	Affiliation	IMAT	Webex	Room	IMAT	Webex	Room
Baggett	Tim	Microchip Technology, Inc.	Х	Х	Х	Х	Х	Х
Beauregard	Francois	Belden	Х	Х		Х	Х	
Borda	Jamila J.	BMW					Х	
Brandt	David	Rockwell Automation	Х	Х		Х	Х	
Brychta	Michal	Analog Devices Inc.	Х	Х		Х	Х	
Carty	Clark	Cisco Systems, Inc.	Х		Х			
		University of New Hampshire InterOperability Laboratory						
Chabot	Craig	(UNH-IOL)				Х	Х	
Fellhauer	Felix	Robert Bosch GmbH				х	Х	
Gilb	James	General Atomics, Aeronautical Systems			х			
Goel	Sachin	Aviva Links					Х	
Graber	Steffen	Pepperl+Fuchs SE	х			Х	Х	
Gubow	Martin	Keysight Technologies	Х	Х				
Gubow	Marty	Keysight	Х	Х				
	Mary							
Haydt	Sue	Microchip Technology, Inc.	Х	Х		Х	Х	
Jimenez	Andy	Wesco	Х	Х				
Jones	Chad	Cisco Systems, Inc.	Х	Х	Х	Х	Х	Х
Jones	Peter	Cisco Systems, Inc.	Х	Х	Х	Х	Х	Х
Jonsson	Ragnar	Marvell	Х		Х			
Kawatsu	Yasuaki	APRESIA Systems				Х	Х	
Lackner	Hans	QoSCom GmbH			Х	Х	Х	Х
Lennartsson	Kent	Kvaser AB	Х		Х	Х		Х
Lo	William	Axonne		Х	Х			
Lou	Wei	Broadcom Corporation	Х	Х		Х	Х	
Maguire	Valerie	Copperopolis	Х		Х	Х		Х
Mark	Simon	Wurth Electronik Group	х			Х		
McClellan	Brett	Marvell		Х				
Mueller	Harald	Endress + Hauser				Х	Х	
Murray	Brian	Analog Devices	Х	Х			Х	
Noseworthy	Bob	UNH-IOL			Х			
Paul	Michael	Analog Devices	Х		х			
Peters	Kevin	Inneos				х		
Potterf	Jason	Cisco Systems, Inc.	Х	Х	Х	Х	Х	Х
Razavi	Alireza	Marvell				1	Х	
Renteria	Victor	Bel Fuse	Х	Х	Х	Х		Х
Schreiner	Stephan	Rosenberger	х	Х		Х	Х	

Simon	Mark	Wurth Electronik Group			х			
		University of New Hampshire						
		InterOperability Laboratory						
Sisk	Jason	(UNH-IOL)	Х	Х	Х	Х		Х
Steffen	Graber	Pepperl+Fuchs		Х				
Stewart	Heath	Analog Devices Inc.	Х		Х			
		Motorcomm Electronic						
Sun	jingcong	Technology Co	Х	Х	Х			
Tellas	Ron	Belden	Х	Х	Х	Х		Х
Thompson	Geoffrey	INDEPENDENT	Х	Х	Х	Х	Х	Х
Tremblay	David	Hewlett Packard Enterprise				Х	Х	
Vanderlaan	Paul	UL Solutions	Х	Х	Х	Х		Х
Voss	Robert	Panduit Corp.	Х	Х	Х	Х	Х	Х
Withey	James	Fluke Corporation				Х	Х	
Wu	Peter	Marvell Semiconductor, Inc.	Х	Х	Х			
Xu	Dayin	Rockwell Automation	Х	Х				
Zhang	Tingting	Huawei		Х				
Zhuang	Yan	Huawei Technologies Co., Ltd	Х	Х				Х
		CME Consulting/ADI, APL						
		Group, Cisco, Marvell,						
Zimmerman	George	OnSemi, SenTekSe LLC, Sony	Х	Х	Х	Х	Х	Х