

Approved Minutes
**IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force
Interim Meeting**

Webex Meeting

May 27, 2021

Prepared by Mabud Choudhury

Group Name: IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force

Date/Location: Thursday, May 27, 2021. Webex meeting.

Chair: Robert Lingle, Jr (OFS)

Editors: Ramana Murty (Broadcom), Earl Parsons (CommScope)

Recording Secretary: Mabud Choudhury (OFS)

Meeting Participants: Attendance is listed in Appendix A (47 attendees – based on Webex participants list)

Call to order:

IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force (TF) Interim Webex meeting was convened at 12:00 Noon Eastern Daylight Time (EDT/ UTC -4), Thursday, May 27, 2021, by Robert Lingle, Jr., P802.3db TF Chair.

Webex Meeting Procedures:

He instructed attendees to either add their affiliations to their names in the Webex participants list, or else list their name with affiliation in the chat window – a meeting requirement. [These two instructions were repeated multiple times throughout the meeting via Chat].

Chair's Presentation:

Title: "Agenda and General Information"

Presenter: Robert Lingle, Jr. (OFS)

[agenda_3db_01_052721.pdf](#)

Mr. Lingle then proceeded with reviewing the **Agenda**, Slide 3 of [agenda_3db_01_052721.pdf](#) and asked if there were any modifications, additions or deletions? There were none.

.3db Motion #1:

Move to approve the Agenda for Interim TF Teleconference, Slide 3 of [agenda_3db_01_052721.pdf](#)

- M: John Abbott
- S: Lance Thompson
- (Procedural > 50%)
- Motion approved by unanimous consent.

Agenda approved at 12:03 PM

Approved Agenda:

- Welcome
- Approve Agenda
- Attendance
- Goals for this meeting

- Reflector and Web
- Ground Rules
- IEEE
 - Structure, Bylaws and Rules
 - Call for Patents. IEEE Patent Policy reminder: <http://www.ieee802.org/3/patent.html>
 - IEEE Copyright reminder: <https://standards.ieee.org/ipr/index.html>
 - IEEE Participant reminder: <http://www.ieee802.org/devdocs.shtml>
 - IEEE Standards Process
- PAR & Objectives
- Updated D1.0 Editors' Report – Earl Parsons (CommScope), Ramana Murty (Broadcom)
- Contributions:
 - “Support for a comment proposing better emulation of fiber dispersion for multimode TDECQ” - Greg D. Le Cheminant (Keysight), Marlin Viss (Keysight)
 - “List of TBDs in Clause 167” - Ramana Murty (Broadcom), Earl Parsons (CommScope)
- Straw Polls & Motions – may occur throughout the meeting
- Future Meetings

Attendance: Chair asked attendees to use <http://imat.ieee.org/> to record attendance, provided Session Code, and reviewed the IMAT steps to log attendance for this TF meeting. Unfortunately, IMAT was down for maintenance and could not be accessed during first 15 to 20 minutes of the meeting. Additionally, IMAT attendance could be recorded for only one meeting of the three parallel TF/SG meetings at the same time during WG interim meeting weeks. Therefore, Chair indicated that official attendance for this meeting would be based on Webex Participant List and with Chat to Everyone with Name and Affiliation for those whose Name and Affiliation was not displayed on Webex Participant List.

Task Force Decorum: Chair asked for attendees to stay on mute when not speaking. Chair asked if anyone from the **Press** was present – no one indicated that they were from the Press.

Mr. Lingle provided **Goals for the meeting:**

- Complete comment resolution against D1.0
- Approve motion to authorize D1.1
- Review list of Clause 167 TBDs and identify owners and dates for contributions (along with consensus building) to determine/agree to specified values for all TBDs with D1.1 and D1.2 (last TF review draft)

Reflector and Web: Chair showed the links to the IEEE 802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force page, and the email reflector.

TF Private Area: Chair provided Username and Password for TF private area. All draft standards will be in private area.

Chair reviewed:

Ground Rules: slide 11 of [agenda_3db_01_052721.pdf](#)

IEEE Structure: slide 12 of [agenda_3db_01_052721.pdf](#)

Important Bylaws and Rules: slide 13 of [agenda_3db_01_052721.pdf](#)

TF Secretary had shared the IEEE SA Patent, Copyright and Participation Policies prior to the meeting and had asked participants to be familiar these policies. Mr. Lingle asked if any participants had questions, and that there were no questions.

IEEE SA Patent Policy: Mr. Lingle provided overview of slides 14-18 of [agenda_3db_01_052721.pdf](#). Chair made “Call for Potentially Essential Patents” at 12:11 PM. No response from TF participants.

IEEE SA Copyright Policy: Mr. Lingle showed slides 19-21 of [agenda_3db_01_052721.pdf](#) entitled “IEEE SA Copyright Policy” overview

IEEE SA Participation Policy: Mr. Lingle showed the participation policy overview slides 22-24 of [agenda_3db_01_052721.pdf](#).

Mr. Lingle then reviewed the Overview of IEEE 802.3 Standards Process – completed Study Group Phase, and now in Task Force Comment Phase (slide 26 of [agenda_3db_01_052721.pdf](#)).

Chair showed links for Approved Project Documents: PAR, CSD and Objectives slide 30 of [agenda_3db_01_052721.pdf](#)). Mr. Lingle then showed the TF Objectives and Timeline, indicating that TF is now back on timeline schedule.

Editors’ Report:

Title: "802.3db Editors’ Report and Comment Agenda"

Presenters: Editors Ramana Murty (Broadcom Inc.) and Earl Parsons (CommScope)
[editors_report_D1p0_3db_01_052721.pdf](#)

- Editorial team:
 - Earl Parsons, CommScope, Co-editor earl.parsons@commscope.com
 - Ramana Murty, Broadcom, Co-editor ramana.murty@broadcom.com
- Status:
 - Draft 1.0 was posted to P802.3db private area April 21st
 - Included:
 - Changes discussed during comment resolution against D0.2 on Apr 15 •
 - Editorial changes to Clauses 1, 30, 78, 91, 116 and 167 as well as Introduction and Front matter as described on slide 11 in [https://www.ieee802.org/3/db/public/April 15 2021/editors_report_comments_D0p2_3db_01_041521.pdf](https://www.ieee802.org/3/db/public/April%2015%202021/editors_report_comments_D0p2_3db_01_041521.pdf)
 - Clause 45
 - D1.0 was open for comments through Wednesday, May 5th
 - Comments were received from five individuals
 - 31 total comments
 - Comments and proposed responses were posted May 11th
 - Thank you to everyone who commented!
- Comment resolution against D1.0 resumed from last TF meeting.
- Technical discussion followed. Topics included: MDI/APC MPO-12, TDECQ, emulation of fiber dispersion, test methodology – including following contribution:

Contribution #1:

Title: "Support for a comment proposing better emulation of fiber dispersion for multimode TDECQ"

Presenter: Greg D. Le Cheminant (Keysight Technologies)

[le_cheminant_3db_01_052721.pdf](#)

- Presentation provides:
 - Proposal for better emulation of the fiber response and potentially achieve better accuracy in assessing the transmitter dispersion penalty without incurring extra measurement time or cost. This can also simplify the testing of other transmitter parameters.
 - The end goal is to determine a practical test method that predicts the transmitter eye closure penalty.
 - In support of comment ID 30. Presentation adds proposed "Prior to TDECQ analysis the waveform is passed through a function that emulates the response of the maximum allowed fiber span. This function is described as a fourth order Bessel response with a -3dB bandwidth of 18 GHz" (the last part adds to comment ID 30)
 - The TF should determine what best represents the effect of the fiber, with the 18 GHz value as proposed best estimate at this time.
 - Presenter indicated that what we do today is not wrong, but measurement technology is evolving, and he is thinking about potential improvements.
- Technical discussion followed.
- Presenter welcomed feedback from the group and answered clarifying questions.

Comment resolution concluded with all comments against D1.0 closed, along with proposed responses for "bucket" comments.

.3db Motion #2:

- Move to adopt proposed responses to remaining comments, noted as "bucket" on slide 7 of [editors_report_D1p0_3db_01_052721.pdf](#), and generate Draft 1.1 from Draft 1.0 and closed comments.
- M: Earl Parsons
- S: Ramana Murty
- Y: N: A:
- Technical (>=75% of 802.3 voters)
- Motion is approved by unanimous consent.

Contribution #2:

Title: "List of TBDs in Clause 167"

Presenter: Ramana Murty (Broadcom)

[clause_167_tbd_list_3db_01a_052721.pdf](#)

Version 01a update adds owners and dates for contributions to provide values for Clause 167 TBDs – as discussed and agreed to during the meeting.

- Based on TF discussion, the following was agreed to (dates subject to change):

TBD	Owner	Date
Center wavelength	Dave Lewis	24-Jun
TDECQ	Piers Dawe	July
# taps on the reference equalizer	Piers Dawe	July
Stressed receiver sensitivity (OMA outer), each lane (max)	Yi Tang	10-Jun
Over/undershoot	Ramana Murty	July
TDECQ calculation method	Ali, Greg	July
Constraints on tap coefficients	Piers Dawe	July?

Future TF meetings:

- See: <http://ieee802.org/3/calendar.html> and <http://ieee802.org/3/interims/index.html>
- P802.3db TF Ad Hoc Teleconferences are currently scheduled:
 - Biweekly on Thursdays at 12 Noon to 2 pm Eastern US (EST/UTC -5):
<http://www.ieee802.org/3/db/public/adhoc/index.html>
 - Next Ad Hoc meeting: Thursday, June 10, 2021, 12 Noon to 2 pm Eastern Daylight US (EDT/UTC -4)
 - Ad Hoc meetings will be converted to TF interims when TF business requires
- P802.3db TF Interim Teleconferences:
 - On TF interim teleconferences, only 802.3 voters may vote on TF motions

Future WG meetings:

Meeting	Location	Dates
IEEE 802 July 2021 plenary	Virtual	12-15 & 19-22 July 2021
IEEE 802.3 September 2021 interim	Virtual	TBD September 2021
IEEE 802 November 2021 plenary	Vancouver, BC, Canada	15-18 November 2021
IEEE 802.3 January 2022 interim	TBD	10-14 & 17-21 January 2022
IEEE 802 March 2022 plenary	Orlando, FL, USA	14-17 March 2022
IEEE 802.3 May 2022 interim	TBD	16-20 & 23-27 May 2022
IEEE 802 July 2022 plenary	Montreal, Quebec, Canada	11-14 July 2022
IEEE 802.3 September 2022 interim	TBD	5-9 & 12-16 September 2022
IEEE 802 November 2022 plenary	Bangkok, Thailand	14-17 November 2022

Upcoming meeting details at: <http://ieee802.org/3/interims/index.html>

2:35 PM: Mr. Lingle had to leave before end of meeting and asked Mr. Choudhury to chair meeting to finish meeting.

.3db Motion #3:

Move to Adjourn TF Telephonic Interim Meeting

- M: James Young
- S: Mike Dudek
- (Procedural > 50%)
- Motion passes by unanimous consent

The Task Force Interim meeting was adjourned at 2:51 PM EDT/ UTC -4, Tuesday, May 27, 2021.

Next Meeting:

Scheduled P802.3db TF Ad Hoc Webex meeting for Thursday, June 10, 2021 at 12:00 Noon – 2:00 PM EDT/UTC -4 (subsequently canceled due to postponed contribution).

	Name	Employer	Affiliation
1	Akbaba, Enis	Maxim Integrated Products	Maxim Integrated Products
2	Bolig, Matthew	Inphi Corporation	Inphi Corporation
3	Bottoni, Fabio	Cisco Systems, Inc.	Cisco Systems, Inc.
4	Chang, Yongmao	Inphi Corporation	Source Photonics
5	Chen, Chan	Applied Optoelectronics, Inc.	Applied Optoelectronics
6	Choudhury, Mabud	OFS	OFS
7	Dawe, Piers J G	NVIDIA	Nvidia
8	Dudek, Michael	Marvell	Marvell
9	Ferretti, Vincent	Corning Incorporated	Corning Incorporated
10	He, Xiang	Huawei Technologies Co., Ltd	Huawei Technologies Co.
11	Healey, Adam	Broadcom Inc.	Broadcom Inc.
12	Hidaka, Yasuo	Credo Semiconductor	Credo Semiconductor
13	Hu, Kangmin	Innogrit	Innogrit
14	Jackson, Kenneth	Sumitomo Electric Device Innovations, USA	Sumitomo Electric Industries
15	Kamino, John	OFS	OFS
16	Kimber, Eric	Semtech Ltd	Semtech Ltd
17	Klempa, Michael	University of New Hampshire InterOperability Laboratory (UNH-IOL)	Amphenol Corporation
18	Latchman, Ryan	Macom	Macom
19	Le Cheminant, Greg	Keysight Technologies	Keysight Technologies
20	Ledentsov, Nikolay	VI Systems GmbH	VI Systems GmbH
21	Lewis, David	Lumentum Inc.	Lumentum Inc.
22	Lim, Jane	Cisco Systems, Inc.	Cisco Systems, Inc.
23	Lin, Youxi	Huawei Technologies Co., Ltd	Huawei Technologies Co.
24	Lingle, Robert	OFS	OFS
25	Maki, Jeffery	Juniper Networks, Inc.	Juniper Networks, Inc.
26	Malicoat, David	Malicoat Networking Solutions	Malicoat Networking Solutions
27	Marques, Flavio	FURUKAWA ELECTRIC	FURUKAWA ELECTRIC
28	Mitcheltree, Tom	US Conec, Ltd.	US Conec, Ltd.
29	Murty, Ramana	Broadcom Inc.	Broadcom Corporation
30	Nering, Raymond	Cisco Systems, Inc.	Cisco Systems, Inc.
31	Palkert, Thomas	Macom, & Samtec	Samtec-Macom
32	Parsons, Earl	CommScope, Inc.	CommScope, Inc.
33	Piebler, David	Dell Technologies	Dell
34	Pimpinella, Rick	Panduit Corp.	Panduit Corp.
35	Quan, Yu	Huawei Technologies Co., Ltd	Huawei Technologies Co.

36	Son, Yung Sung	Optomind Inc	Optomind Inc
37	Sun, Yi	OFS	OFS
38	Tang, Yi	Cisco Systems, Inc.	Cisco Systems, Inc.
39	Thompson, lance	II-VI	Finisar Corporation
40	Ulrichs, Ed	Intel	Intel
41	Young, James	CommScope, Inc.	CommScope
42	Zivny, Pavel	Tektronix, Inc.	Tektronix, Inc.

Appendix A: Attendance List IEEE P802.3db Task Force WebEx Interim Meeting

47 individuals attended on Tuesday, 27 May 2021, 12:00 Noon – 2:51 PM EDT/UTC -4

	Last Name	First Name	Employer	Affiliation
1	Abbott	John	Corning Incorporated	Corning Incorporated
2	Bolig	Matt	Marvell	Marvell
3	Bordogna	Mark	Intel	Intel
4	Bruckman	Leon	Huawei	Huawei
5	Castro	Jose	Panduit	Panduit
6	Chang	Frank	Source Photonics	Source Photonics
7	Chen	Chan Chih (David)	Applied Optoelectronics, Inc.	Applied Optoelectronics, Inc.
8	Choudhury	Mabud	OFS	OFS
9	Dawe	Piers	Nvidia	Nvidia
10	Didde	Stephen	Keysight	Keysight
11	Dube	Kae	UNH-IOL	UNH-IOL
12	Ghiasi	Ali	Ghiasi Quantum	Ghiasi Quantum
13	He	Xiang	Huawei	Huawei
14	Hidaka	Yasuo	Credo	Credo
15	Jackson	Kenneth	Sumitomo	Sumitomo
16	Jones	Peter	Cisco	Cisco
17	Kamino	John	OFS	OFS
18	Kimber	Mark	Semtech	Semtech
19	Latchman	Ryan	Macom	Macom
20	Le Cheminant	Greg	Keysight Technologies	Keysight Technologies
21	Lewis	David	Lumentum	Lumentum
22	Lingle	Robert	OFS	OFS
23	Lyubomirsky	Ilya	Marvell	Marvell
24	Maki	Jeffery	Juniper Networks	Juniper Networks
25	Malicoat	David	Malicoat Networking Solutions	Independent; SENKO Advanced Components
26	Marques	Flavio	Furukawa Electric	Furukawa Electric
27	McMillan	Larry	Western Digital	Western Digital
28	Murty	Ramana	Broadcom	Broadcom
29	Nowell	Mark	Cisco	Cisco
30	Palkert	Tom	Macom, Samtec	Macom, Samtec
31	Parsons	Earl	CommScope	CommScope
32	Pimpinella	Rick	Panduit Corp.	Panduit Labs, Panduit Corp.
33	Reddy	Upen	Cisco	Cisco
34	Shubochkin	Roman	OFS	OFS
35	Son	Yung	Optomind	Optomind
36	Sun	Phil	Credo	Credo
37	Sun	Yi	OFS	OFS
38	Takahashi	Tadashi	Nitto Denko Corp	Nitto Denko Corp
39	Takayama	Kazuya	Nitto Denko	Nitto Denko
40	Tang	Yi	Cisco	Cisco
41	Thompson	Lance	II-VI	II-VI
42	Tooyserkani	Pirooz	Cisco	Cisco
43	Tsujita	Yuichi	Nitto Inc	Nitto Inc
44	Ulrichs	Ed	Intel	Intel
45	Young	James	CommScope	CommScope
46	Youxi	Lin	Huawei	Huawei
47	Yu	Quan	Huawei	Huawei