Approved Minutes
IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force Plenary Meeting
Webex Meeting
July 19, 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, July 19, 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 (60 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) Plenary Webex meeting was convened at 12:01 PM Eastern Daylight Time (EDT/ UTC -4), Thursday, July 19, 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 Webex Chat to Everyone].

Chair's Presentation:
Title: "Agenda and General Information"
Presenter: Robert Lingle, Jr. (OFS)
agenda_3db_01a_071921.pdf
Version 01a posted after the meeting had updated Agenda item of appointing TF Vice Chair pending WG Chair David Law's availability (postponed to future meeting).

Mr. Lingle then proceeded with reviewing the **Agenda**, Slide 3 of agenda_3db_01a_071921.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_01a_071921.pdf
- M: John Abbott
- S: Pavel Zivny
- (Procedural > 50%)
- Motion approved by unanimous consent.

Agenda approved at 12:05 PM

Approved Agenda:
- Welcome
- Approve Agenda
- Attendance
- Appointment of the Vice Chair (pending Mr Law's availability – could be postponed to future meeting)
- Approve Meeting Minutes for July 1st Interim
- 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
- Liaisons
- D1.1 Editors' Report and Comment Agenda – Earl Parsons (CommScope), Ramana Murty (Broadcom)
- Comment Resolution against D1.1
- Contributions:
    – "Big Picture for VR, and Interoperability" – Ramana Murty (Broadcom)
    – "Extending wavelength for -VR PMD, in support of D1.1 comments 13, 14, 15, 16 and 17 (Updated)" – David Lewis (Lumentum)
    – "Background on TDECQ Equalizer and Equalizer Options for 50 m PMD" – Ali Ghiasi (Ghiasi Quantum)
    – "Minimum TX Launch Power in OMA Shall Be Constrained by TECQ (In support of comment #11) – Yi Tang (Cisco)
- Straw Polls & Motions – may occur throughout the meeting
- Future Meetings

Meeting Registration Fee Reminder: Mr. Lingle reminded the participants that anybody that attends any meeting held during this plenary session must pay fee.

Attendance:
- Attendance was taken in two ways.
    – Attendee names and affiliations for the minutes will be taken from the WebEx participants list or from the Webex chat to Everyone
    – For 802.3 Plenary attendance (towards voting rights), please use IMAT. http://imat.ieee.org

Approved Meeting Minutes: Mr. Lingle asked if there were any updates/corrections to the July 1st Interim TF unapproved meeting minutes that had been previously posted for review/feedback. There were none.

.3db Motion #2:
Move to approve meeting minutes, previously posted, for:
- July 1, 2021, IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber TF Interim meeting: unapproved_meeting_minutes_3db_01_070121.pdf

- M: Flavio Marques
- S: Pavel Zivny
- (Procedural > 50%)
- Motion passes by unanimous consent.

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:**
- Comment resolution against D1.1
- Consider liaison to TIA TR-42 in response to their liaison requests to IEEE

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 15 of agenda_3db_01a_071921.pdf
IEEE Structure: slide 16 of agenda_3db_01a_071921.pdf
Important Bylaws and Rules: slide 17 of agenda_3db_01a_071921.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 18-22 of agenda_3db_01a_071921.pdf. Chair made "**Call for Potentially Essential Patents**" at 12:14 PM. No response from TF participants.

IEEE SA Copyright Policy: Mr. Lingle showed slides 23-25 of agenda_3db_01a_071921.pdf entitled "IEEE SA Copyright Policy" overview

IEEE SA Participation Policy: Mr. Lingle showed the participation policy overview slides 26-28 of agenda_3db_01a_071921.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 30 of agenda_3db_01a_071921.pdf).

Chair showed links for Approved Project Documents: PAR, CSD and Objectives slide 34 of agenda_3db_01a_071921.pdf). Mr. Lingle then showed the TF Objectives. He reviewed the Timeline, indicating that TF will need to resolve comments against D1.1 and authorize D1.2 in July/early August timeframe to stay on schedule.

Liaisons:
TIA TR-42 sent two liaison letters, dated June 17, 2021, addressed to IEEE 802.3 WG Chair David Law informing IEEE that TIA was considering the retirement of the following TIA standards:
- TIA-455-30 Frequency Domain Measurement of Multimode Optical Fiber Information Transmission Capacity
- TIA-455-54 Mode Scrambler Requirements for Overfilled Launching Conditions to Multimode Fibers

TIA TR-42 requested IEEE to evaluate the impact to IEEE standards if the above referenced TIA standards were retired. WG Chair David Law had asked TF Chair Robert Lingle and P802.3db TF MMF expert participants to provide draft liaison letter responses. Mr. Lingle sent the liaison letters from TIA TR42 to the TF for review and potential response via TF reflector on July 7. Mr. Law reviewed the TIA liaison letter during the WG opening plenary meeting on July 12. These letters were also posted on July 19 TF plenary meeting page prior to TF meeting:
- https://www.ieee802.org/3/minutes/jul21/incoming/TR-42%20Liaison%20to%20IEEE%20re%20FOTP-455-30.pdf
- https://www.ieee802.org/3/minutes/jul21/incoming/TR-42%20Liaison%20to%20IEEE%20re%20FOTP-455-54.pdf

Draft liaison responses from IEEE 802.3 to TIA TR-42 were posted prior to the meeting and reviewed during the meeting:
- IEEE_802d3_to_TR-42_re_TIA-455-30_071921_draft1.pdf
- IEEE_802d3_to_TR-42_re_TIA-455-54_071921_draft1.pdf

TF review of the above draft liaison letters based on the following contribution:

Contribution #1:
Title: "Background Information on Draft Liaison Letters from IEEE 802.3 WG to TIA TR-42 re FOTP 30 & FOTP 54"
Presenter: Mabud Choudhury (OFS)
choudhury_3db_01_071921.pdf
This presentation was not posted prior to the meeting. Mr. Lingle asked TF if anyone objected to presenting above contribution during the meeting, with contribution posted after the meeting. No one objected.
Based on TF review, no changes were made to the draft liaison letters from IEEE 802.3 WG to TIA TR-42

.3db Motion #3:
Move that the IEEE P802.3db Task Force approve IEEE_802d3_to_TR-42_re_TIA-455-30_071921_draft1.pdf and IEEE_802d3_to_TR-42_re_TIA-455-54_071921_draft1.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to TIA TR-42
- M: Mabud Choudhury
- S: John Abbott
- Y: N: A:
- Technical (>/=75% of 802.3 voters)
- Motion passes by unanimous consent

Editors' Report:
Title: "802.3db Editors' Report and Comment Agenda"
Presenters: Editors Earl Parsons (CommScope) and Ramana Murty (Broadcom Inc.)
editors_report_D1p1_3db_01_071921.pdf
- Editorial team:
    - o Earl Parsons, CommScope, Co-editor earl.parsons@commscope.com
    - o Ramana Murty, Broadcom, Co-editor ramana.murty@broadcom.com
- Status:
    - o Draft 1.1 opened for comments 2021 Jun 14
    - o Draft 1.1 closed for comments 2021 Jun 25
    - o Total 74 comments from 8 individuals
    - o Thanks to all who submitted comments
    - o Comments received posted 2021 Jun 20
    - o Proposed responses posted on 2021 Jul 16. A partial list of proposed responses was posted on 2021 Jun 30.
- Comment resolution Agenda and Goals for this meeting:
    - o Comments related to receiver sensitivity (10, 45, 46, 47, 48, 56) were resolved on 2021 Jul 1
    - o The VR link has TBDs that must be viewed together to make the best decision Considerations for VR Link and Interoperability murty
    - o Today review comments related to
        - ▪ Center wavelength for VR   2, 13 [lewis], 15, 65, 70
        - ▪ Max TDECQ for VR   14, 16, 63, 67
        - ▪ Reference equalizer for VR   64 [ghiasi], 71
        - ▪ Additional comments if time permits   11 [tang], 17, 57, 1, 40, 43
    - o Presentations associated with comments were reviewed during comment resolution
    - o T and TR will be treated with the same status; no signoff required
    - o E and ER will be treated with the same status; no signoff required

Comment resolution against D1.1 resumed from July 1 TF interim meeting.

Contribution #2:
Title: "Big Picture for VR, and Interoperability"
Presenter: Ramana Murty (Broadcom, Inc.)
murty_3db_01a_071921.pdf
Version 01a posted after meeting: slide 4, where a figure and reference to Ingham's presentation was added.

Presentation provided:
- For comments related to VR TBDs - broader context of what features are best to include in the VR link. Isolated changes impact choices for other parameters.
- Key Aspects of VR.
- 850 nm Link – Simulations & Measurements
- Interoperability between SR and VR
- Interoperability between 850 and 940 nm Links
- Examples of choices for VR
- Review of project Objectives for VR & SR, and key CSD items as it relates to VR

Technical discussion followed. Key point was not having unintended negative consequences of 940 nm on 850 nm.

Comment 10, 46, 47, 48, 49, 50, 56 dealing with Receiver sensitivity resolved.

TF Break: 1:46 PM EDT/UTC-4
TF Resumed: 1:56 PM

Contribution #3:
Title: "Extending wavelength for –VR PMD - in support of D1.1 comments 13, 14, 15, 16, and 17"
(Updates lewis_3db_01_070121.pdf)
Presenter: David Lewis (Lumentum)
lewis_3db_01_071921.pdf

Presentation provided:
   • Author provided updates to lewis_3db_01_070121.pdf based on July 1 TF discussion and feedback.
Technical discussion following on topics that included: 850 – 940 nm wideband compatibility with SR. Does 940 nm give roadmap to 200GBd VCSELs? Does 940 nm provide lower relative cost? Some consensus around wideband receiver.

Comment resolution will resume with July 29 TF interim meeting.

.3db Motion #3:
Move to Adjourn TF Telephonic Plenary Meeting
   • M: Mike Dudek
   • S: Pavel Zivny
   • (Procedural > 50%)
   • Motion passes by unanimous consent

The Task Force Plenary meeting was adjourned at 2:58 PM EDT/ UTC -4, Thursday, July 19, 2021.

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, August 5, 2021, 12 Noon to 2 pm Eastern Daylight US (EDT/UTC -4). Converted to Interim meeting 12 Noon to 3 pm Eastern Daylight US (EDT/UTP-4) after July 19 Plenary meeting.
      – Ad hoc meetings will be converted to TF interims when TF business requires
   • TF Interim and Plenary Meetings:
      – On TF interim & plenary teleconferences, only 802.3 voters may vote on TF motions
      – Next TF Interim meeting: Thursday, July 29, 2021, 12 Noon to 3 pm Eastern Daylight US (EDT/UTC -4)
   • September IEEE 802.3 WG Interim session will be virtual, 20-23 & 27-30 September 2021

- Will we be ready to authorize D2.0, WG ballot, per timeline?
  - November plenary session: virtual or in-person will be decided by 7 Sep
    -

Future WG meetings:

Meeting	Location	Dates
IEEE 802.3 September 2021 interim	Virtual	20-23 & 27-30 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

Next Meeting:
Scheduled P802.3db TF Interim Webex meeting for Thursday, July 29, 2021, at 12:00 Noon – 3:00 PM
EDT/UTC -4.

Appendix A: Attendance List IEEE P802.3db Task Force WebEx Plenary Meeting
60 individuals attended on Thursday, 19 July 2021, 12:01 Noon – 2:58 PM EDT/UTC -4

	First Name	Last Name	Affiliation	Employer
1	Ali	Ghiasi	Ghiasi Quantum, Marvell	Ghiasi Quantum LLC
2	Bob	Grow	RMG Consulting	RMG Consulting
3	Chan Chih David	Chen	AOI	AOI
4	David	Lewis	Lumentum	Lumentum
5	David	Malicoat	Independent/Senko	Independent
6	David	Piehler	Dell	Dell
7	Earl	Parsons	CommScope	CommScope
8	Ed	Ulrichs	Intel	Intel Corporation
9	Eugene	Opsasnick	Broadcom	Broadcom
10	Flavio	Marques	Furukawa	Furukawa Electric
11	Frank	Chang	Source Photonics	Source Photonics
12	Gary	Nicholl	Cisco	Cisco Systems, Inc.
13	Greg	LeCheminant	Keysight	Keysight
14	Hai-Feng	Liu	HG Genuine	HG Genuine
15	James	Young	CommScope	CommScope
16	Jane	Lim	Cisco	Cisco Systems, Inc.
17	John	Abbott	Corning	Corning Incorporated
18	John	Kamino	OFS	OFS
19	Jonas	Kapraun	Berxel Photonics	Berxel Photonics
20	Jose	Castro	Panduit	Panduit Corp.
21	Joshua Kihong	Kim	Hirose Electric	Hirose Electric, Inc.
22	Kae	Dube	UNH-IOL	UNH-IOL
23	Karen	Liu	Nubis Communications	Nubis Communications
24	Leon	Bruckman	Huawei	Huawei
25	Mabud	Choudhury	OFS	OFS
26	Mark	Gustlin	Cisco	Cisco Systems, Inc.
27	Mark	Kimber	Semtech	Semtech Limited
28	Mark	Nowell	Cisco	Cisco Systems, Inc.
29	Massimo	Sorbara	Global Foundries	Global Foundries
30	Mike	Dudek	Marvell	Marvell
31	Mike	Klempa	Amphenol	Amphenol
32	Mike	Li	Intel	Intel Corporation
33	Pavel	Zivny	Tektronix	Tektronix
34	Phil	Sun	Credo	Credo
35	Piers	Dawe	Nvidia	Nvidia
36	Ramana	Murty	Broadcom	Broadcom
37	Ray	Nering	Cisco	Cisco Systems, Inc.
38	Richard	Mellitz	Samtec	Samtec
39	Rick	Pimpinella	Panduit Corp.	Panduit Corp.
40	Robert	Lingle, Jr.	OFS	OFS
41	Roger	King	TRUMPF Photonics	TRUMPF Photonics
42	Roman	Shubochkin	OFS	OFS
43	Ruoxu	Wang	Huawei Technologies Co.,Ltd.	Huawei Technologies Co.,Ltd.
44	Ryan	Latchman	MACOM	MACOM
45	Sam	Sambasivan	AT&T	AT&T
46	Sami	Akin	Volkswagen AG	Volkswagen AG
47	Stephen	Didde	Keysight	Keysight
48	Steve	Swanson	Corning Incorporated	Corning Incorporated
49	Tadashi	Takahashi	Nitto Denko	Nitto Denko
50	Tom	Palkert	Samtec, Macom	EIC
51	Vera	Koleva	II-VI	II-VI
52	Vipul	Bhatt	II-VI	II-VI
53	Xiang	He	Huawei	Huawei Technologies Co.,Ltd.
54	Xiaobin	Sun	Huawei	Huawei Technologies Co.,Ltd.
55	Yi	Sun	OFS	OFS
56	Yi	Tang	Cisco	Cisco Systems, Inc.
57	Youxi	Lin	Huawei	Huawei Technologies Co.,Ltd.
58	Yu	Quan	Huwaei	Huawei Technologies Co.,Ltd.
59	Yuichi	Tsujita	Nitto, Inc.	Nitto Denko
60	Yung	Son	Optomind Inc.	Optomind Inc.