Approved Minutes
IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force Telephonic Interim Meeting
WebEx Meeting
June 11, 2020
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, June 11, 2020. WebEx meeting.
Chair: Robert Lingle, Jr, affiliated with OFS
Recording Secretary: Mabud Choudhury, affiliated with OFS
Meeting Participants: Attendance is listed in Appendix A (43 attendees)

Call to order:
IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force (TF) Telephonic Interim meeting was convened at 12:02 PM Eastern Daylight Time (EDT/ UTC -4), Thursday, June 11, 2020 by David Law, affiliated with HPE, 802.3 Working Group Chair.

Mr. Law welcomed attendees to the IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber TF meeting.

David Law appointed Mabud Choudhury as the recording secretary for the meeting.

As announced at January 2020 Plenary, David Law intends to appoint Robert Lingle, Jr. as the Chair of the IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber TF.

Mr. Lingle made a brief statement to the TF.

At 12:06 PM EDT/UTC-4 Mr. Lingle dropped off from the TF telephonic interim, as following motion was conducted.

Motion #1:
Move to confirm Robert Lingle, Jr. as the IEEE 802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force Chair
- Moved by James Young
- Seconded by David Malicoat
- Approved by unanimous consent. (>= 75% by rule)

Mr. Choudhury asked Mr. Lingle to rejoin the TF telephonic interim meeting upon approval of the motion.
Mr. Law turned the meeting over to Task Force Chair Robert Lingle, Jr at 12:09 PM.
Mr. Lingle thanked the TF for confirming him as TF Chair.

Mr. Lingle welcomed attendees. He requested that each attendee indicate their name and employer/affiliation in an e-mail to the ad hoc recording secretary: Mabud Choudhury (mchoudhury@ofsoptics.com) for the meeting minutes.

Presentation #1:
Title: "Agenda and General Information"
Presenter: Robert Lingle, Jr. (OFS)
agenda_3db_01a_0620.pdf

Mr. Lingle then proceeded with reviewing the **Agenda** and asked if there any modifications, additions, or deletions? Mr. Lingle added the following items to the agenda (the link above is the updated agenda):
- Work of the Task Force
- Discussion of key items for the Task Force

Updated Agenda:
- Appointment of Recording Secretary – Mr. Law
- Confirmation of Chair – Mr. Law
- Welcome and Introductions
- Approve Agenda
- Goals for this meeting
- Big Ticket Items
- Reflector and Web
- Ground Rules
- IEEE
  - Structure, Bylaws and Rules
  - Call for Patents
  - IEEE Standards Process
- Liaisons and Communications
- Work of the Task Force
- Discussion of key items for the Task Force
- Future Meetings

Motion #2:
Move to approve the Agenda for Interim TF Teleconference,
Slide 4 of agenda_3db_01a_0620.pdf
- M: Ali Ghiasi
- S: David Malicoat
- Approved by unanimous consent. (Procedural > 50%)

Chair reviewed Task Force decorum

He then reviewed Goals for the meeting:
- Review work of a Task Force
- Discuss issues the Task Force may need to consider
- Lay the groundwork for the next meeting

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.

Chair reviewed the IEEE structure, important bylaws, and rules.

Chair reviewed the **Guidelines for IEEE SA Meetings**

IEEE SA Patent Policy: Mr. Lingle provided overview of slides 13-16 of agenda_3db_01a_0620.pdf. Chair made call of essential patents at 12:27 PM. No one indicated any essential patents.

IEEE SA Copyright Policy: Mr. Lingle provided overview of slides 18-19 of agenda_3db_01a_0620.pdf entitled "IEEE SA Copyright Policy"

IEEE SA Participation Policy: Mr. Lingle showed the participation policy slides 20-22 of agenda_3db_01a_0620.pdf .

Mr. Lingle provided overview on the IEEE 802.3 standards process, indicating that we had successfully completed the Study Group phase, and that we were initiating the Task Force phase.

Chair indicated that there were no liaisons, no action items at this time.

The Chair provided links for Draft PAR, CSD and Objectives.
- PAR
- Criteria for Standards Development
- Objectives

Mr. Lingle reviewed the work and activities of the Task Force. He indicated that the scope of IEEE P802.3db is limited by the PAR.

Chair reviewed the SG approved Objectives.

The TF then engaged in a brainstorming discussion of **items the TF may need to address**:
- Discuss whether longer reach than 50m is technically/economically feasible
- Short-reach lower cost PMD plus longer reach PMDs?
- MDI topics
    - Angled MPO? Technical need, market reality, relative cost
    - Smaller form factor duplex connectors?
    - Consider defining optical lane assignments for breakout applications?
- Develop "reference model" for a 100G VCSEL? MATLAB code, analogy with COM?
- Review work from Fibre Channel on Tx EQ with training
- Are there options for lower power links?
- Are there options for lower latency links?
- Bidirectional PMDs with two wavelengths? (as in SR4.2)
- Eye safety considerations with 100G VCSEL Tx power?
- Modal noise and mode-partition noise penalties for 100G VCSEL links?
- Can we re-use existing PCS/FEC/PMA? Validation of error statistics
- Consider the length of Reference EQ, esp. for longer reach than 50m

Chair encouraged continued discussion on topics for TF on reflector.
Some TF participants also indicated the benefit of establishing a liaison with T11 Fibre Channel as that group develops FC-PI-8, 128GFC standard. A specific contribution on chip-to-module link training presented in T11.2 FC-PI-8 ad hoc meeting was seen as potentially useful topic for IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force.

Action Item 1: Tom Palkert, affiliated with Macom, who is also T11.2 Chair, indicated that he would draft liaison letter for TF review.

Future meetings:

See: http://ieee802.org/3/calendar.html and http://ieee802.org/3/interims/index.html
- P802.3db Ad Hoc Teleconferences are currently scheduled biweekly on Thursdays at Noon Eastern US (EDT/UTC -4).
- There was a request prior to the meeting from some participants from Asia to move the time to 10am Eastern US. That time slot is already crowded with other SG and TF meetings. The Chair will pursue a potential solution. Including conducting a poll of TF participants on best time for TF meetings for most participants.

Action Item 2: Chair will conduct poll of TF participants on best time for TF meetings.

Motion #3:
Move to Adjourn TF Telephonic Interim Meeting
- M: David Malicoat
- S: James Young
- Approved by unanimous consent. (Procedural > 50%)

The Task Force Telephonic Interim meeting was adjourned at 1:48 PM EDT/ UTC -4, Thursday, June 11, 2020.

Next Meeting:
Scheduled (pending contributions) P802.2db TF Ad Hoc Webex meeting for Thursday, June 25, 2020 at 12:00 noon – 2:00 PM EDT/UTC -4.

Appendix A: Attendees at the IEEE 802.3 100 Gb/s Wavelength Short Reach PHYs Study Group Telephonic Interim Meeting, 11 June 2020.
43 individuals attended on Thursday, 11 June 2020, 12:02 PM – 1:48 PM EDT/UTC -4

	Last Name	First Name	Employer	Affiliation
1	Abbott	John	Corning Incorporated	Corning Incorporated
2	Akbaba	Enis	Maxim Integrated	Maxim Integrated
3	Bhatt	Vipul	II-VI	II-VI
4	Bruckman	Leon	Huawei	Huawei
5	Castro	Jose	Panduit	Panduit
6	Chalupsky	David	Intel	Intel
7	Chen	Chan Chih (David)	AOI (Applied Optoelectronics, INC.)	AOI
8	Choudhury	Mabud	OFS	OFS
9	Dawe	Piers	Mellanox Technologies	Mellanox Technologies
10	Ferretti	Vince	Corning	Corning
11	Ghiasi	Ali	Ghiasi Quantum	Ghiasi Quantum

12	He	Xiang	Huawei	Huawei
13	Hoser	Mirko	II-VI	II-VI
14	Ingham	Jonathan	Broadcom	Broadcom
15	Jackson	Kenneth	Sumitomo Electric	Sumitomo Electric
16	Kamino	John	OFS	OFS
17	Law	David	HPE	HPE
18	LeCheminant	Greg	Keysight Technologies	Keysight Technologies
19	Ledentsov	Nikolay N.	VI Systems GmbH	VI Systems GmbH
20	Lewis	David	Lumentum	Lumentum
21	Lingle, Jr.	Robert	OFS	OFS
22	Lusted	Kent	Intel	Intel
23	Lyubomirsky	Ilya	Inphi	Inphi
24	Malicoat	David	Malicoat Networking Solutions	Senko Advanced Components
25	Murty	Ramana	Broadcom	Broadcom
26	Nering	Ray	Cisco	Cisco
27	Nicholl	Gary	Cisco	Cisco
28	Palkert	Tom	Macom	Samtec
29	Parsons	Earl	CommScope	CommScope
30	Pham	Phong	KITCO Fiber Optics	KITCO Fiber Optics
31	Piehler	David	Dell Technologies	Dell Technologies
32	Pimpinella	Rick	Panduit	Panduit
33	Sorbara	Massimo	GlobalFoundries	GlobalFoundries
34	Stassar	Peter	Huawei	Huawei
35	Summers	Robert	Maxim Integrated	Maxim Integrated
36	Swanson	Steve	Corning Incorporated	Corning Incorporated
37	Thompson	Lance	II-VI	II-VI
38	Ulrichs	Ed	Source Photonics	Source Photonics
39	Wang	Ruoxu	Huawei	Huawei
40	Welch	Brian	Cisco	Cisco
41	Young	James	CommScope	CommScope
42	Young	Dianna	Corning Incorporated	Corning Optical Fiber and Cable
43	Zhang	Bo	Inphi	Inphi