

Meeting Minutes

Group: IEEE Greater than 50G bidirectional optical access PHYs task force meeting

Location: Honolulu, Hawaii.

Date: Nov 13, 2023

Opening

14:00 (GMT-10) The meeting was called to order by Yuanqiu Luo, chair. Frank Effenberger volunteered to be the Recording Secretary.

The task force chair gave her opening introduction on decorum, and an attendance list will be passed around.

Motion 1

- Move to approve the agenda, located at:
 - https://grouper.ieee.org/groups/802/3/dk/public/2311/8023dk_2311_Task_Force_agenda.pdf
- M: John Johnson S: Earl Parsons
- Motion result: Approved by voice without opposition.

Motion 2

- Move to approve the minutes from Sep 2023, located at:
 - https://grouper.ieee.org/groups/802/3/dk/public/2311/2309_8023dk_unapproved_minutes.pdf
- M: Ken Jackson S: Xiang Liu
- Motion result: Approved by voice without opposition.

The study group chair gave her opening introduction on goals, big ticket items, ground rules, process, attendance tool, and patent policy.

14:15 The task force acting chair made a call for patents; no response was made.

14:18 The task force chair reviewed the IEEE Participation guidelines and the IEEE SA Copyright policy.

All the usual IEEE policies and procedures were reviewed.

Goals for the November meeting were to consider the first draft of the 100G clause and discuss contributions on various technical issues.

Draft review/Presentations	Contributor	Affiliation
802.3dk Draft 0.1	Sisi Tan	Huawei

The draft 0.1 was reviewed. This is given as a change marked version of the in-force text of the existing sections. Clause 157 (the introduction to bidi PHYs) was modified to add the 100G and 200G items.

Then there is a new clause (number not specified yet) that will describe the 100G PMDs. The PMD parameters that were subject of meeting motions are captured.

It was noted that the detailed wavelengths might have a small typo. The intention is that the wavelength bands should be the same as those used in 100GBASE-LR PMDs (for example).

[Mid Span Connector Specification](#) Earl Parsons CommScope

The background here is that some bidi links in the field have failed. The implied fault mechanism is the bad reflections from things like dirty connectors. The proposal is to specify that the in-link connectors should also comply with IEC 61853-1. It was generally agreed that we need to improve the guidance on how to build optical links (to avoid the MPI issues, amongst other things). This might be good for an informative annex or note. There definitely seems to be an education issue for the users of these PMDs.

The group took a 25 minute break.

[Update on G.652 Fiber Chromatic Dispersion, and How to Do 200 Gb/s](#) Frank Effenberger Futurewei

This discussed the possibilities for 200 Gb/s bidi. This used some of the preliminary results from the ITU-T correspondence activity on G.652 fiber. For 10 and 20 km, doing 100G per lambda looks feasible. 40 km is harder. There are several solutions to consider there:

- 1) 100 Gb/s per channel, using 400 GHz spacing with 1 nm passbands
- 2) 100 Gb/s per channel, using 600 GHz spacing with 1.5 nm passbands
- 3) 100 Gb/s per channel, using 800 GHz spacing with 2 nm passbands, with 30 km non-engineered link, and 40 km would require an engineered link.
- 4) 50 Gb/s per channel, using 800 GHz spacing with 2 nm passbands
- 5) Do not specify a 40km 200G bidi PMD.

It was premature to have a straw poll on this topic. The group is invited to consider and discuss these options (or others) to

[Proposed Tables in 999.1 to 999.3 for 100G BiDi](#) Sisi Tan Huawei

This proposed some of the clause reference tables. The base of these was from clause 140. Some of these clauses are perhaps not so relevant to our work here (e.g., the CAUI-10).

Motion #3: Adopt tables 999-2 and 999-3 from presentation [Proposed Tables in 999.1 to 999.3 for 100G BiDi](#) into the draft.

Moved: Sisi Tan. Seconded: Ray Nering

Approved by voice without opposition

[Proposed Subclause 999.5 for 100G BiDi](#) Sisi Tan Huawei

This considered clauses 140 and 160, and highlighted the differences between them.

[Proposed Subclause 999.8 for 100G BiDi](#) Sisi Tan Huawei

This again looked at the differences of clause 140 and 160.

Motion 4

Move to adopt [Proposed Subclause 999.5 for 100G BiDi](#) and [Proposed Subclause 999.8 for 100G BiDi](#) as baselines for clauses 999.5 and 999.8 respectively.

M: Sisi Tan S: Frank Effenberger
Passed by voice vote without opposition.

Liaison to ITU-T SG-15 https://www.ieee802.org/3/dj/public/23_11/stassar_3dj_01_2311.pdf

This draft liaison was considered. The first bullet at the end was modified to begin, "Methodology and results..."

Motion 5

Move to send the liaison response to ITUI-T SG15 regarding G.652 fiber in https://www.ieee802.org/3/dj/public/23_11/stassar_3dj_01_2311.pdf with adding ""Methodology and"" to the beginning of the first bullet and give the WG chair editorial license to respond to further comments.

M: John Johnson S: Ken Jackson
Approved by voice without opposition.

Future meeting plan

The plans for our next meetings were discussed.
Teleconference Dec 12, 8-9am EST.
The January 22-25 interim will be in St. Petersburg, Florida. Our group will meet on Monday 1/22.
The March 11-14 plenary will be in Denver, Colorado.

That brought us to the end of the agenda. The chair thanked all our participants.

Motion 6

Move to adjourn the meeting.
M: John Johnson S: Earl Parsons
Motion passes by voice without opposition.

17:20 (GMT-10) Meeting adjourned

[Attendees \(17\)](#)

<u>Name</u>	<u>Affiliation</u>	<u>11/13/2023</u>
<u>Andy Shen</u>	<u>Futurewei</u>	<u>X</u>
<u>David Piehler</u>	<u>Dell</u>	<u>X</u>
<u>Earl Parsons</u>	<u>Commscope</u>	<u>X</u>
<u>Frank Effenberger</u>	<u>Futurewei</u>	<u>X</u>
<u>Guangcan Mi</u>	<u>Huawei</u>	<u>X</u>
<u>John Johnson</u>	<u>Broadcom</u>	<u>X</u>
<u>Jose Castro</u>	<u>Panduit</u>	<u>X</u>

Kenneth Jackson	Sumitomo	<u>X</u>
Limin Geng	Huawei	<u>X</u>
Patrycja Jarosz	IEEE-SA	<u>X</u>
Ray Nering	Cisco	<u>X</u>
Roberto Rodes	Coherent	<u>X</u>
Sisi Tan	Huawei	<u>X</u>
Tomoo Takahara	Fujitsu	<u>X</u>
Xiang Liu	Huawei	<u>X</u>
Yuanqiu Luo	Futurewei	<u>X</u>
Yuefeng Cai	Huawei	<u>X</u>