Meeting Minutes

Group: *IEEE P802.3cp 10/25/50G BiDi Task Force meeting*

Location: *Indianapolis, USA*

Date: *September 9th, 2019*

Opening

9:00 AM The meeting was called to order by Frank Effenberger, the Task Force chair. Yuanqiu Luo was volunteered to be the Recording Secretary.

Motion #1
Move to approve the agenda as recorded in
http://www.ieee802.org/3/cp/public/1909/0919_BiDi_Task_Force_agenda.pdf

Moved: Mark Laubach Second: Ray Nering
Procedural (>50%) Passed by voice without opposition

Motion #2
Move to approve the minutes of the July 2019 meeting as recorded in
http://www.ieee802.org/3/cp/public/1907/minutes_unapproved_NGBiDi_TF_071519_Vienna.pdf

Moved: Frank Effenberger Second: Yuanqiu Luo
Procedural (>50%) Passed by voice without opposition

The Chair gave his opening report including decorum, goals, big ticket items, reflector, web site, ground rules, process, etc.

9:20 AM The chair made a call for patents; no response was made.

The Chair reviewed the IEEE Participation guidelines.

Presentations

Some Baseline Specification of BiDi 10&40km for 50G Jialong Shuai Huawei
This presentation reviewed tests on 50G 10km and 40km BiDi for 5G applications. It proposes U/D wavelength for 50G 10km as 1270nm/1330nm, 40km as 1295nm/1309nm. There was a discussion on if narrower wavelength range is possible for both 10km and 40km. The presenter explained 10km can use uncooled laser, 40km has to use cooled laser to get the loss budget. Dispersion in the test was also discussed.

Simplified Loss Budget Frank Effenberger Futurewei

This presentation summarized fiber loss in ITU G.652 and connector loss in G.671. It proposed 10km, 20km, and 40km budgets as 7dB, 13dB, and 23dB, respectively. As far as wavelength is concerned, people preferred O-band.

Wavelength Considerations Ray Nering Cisco

This presentation suggested to make common BOM and consider interop when selecting wavelengths for BiDi. Options 3&5 were preferred by the presenter. People commented Option 1 benefited 10km BiDi volume. On narrowing wave windows, the presenter explained 17nm windows will shift the CWDM center wave.

Dispersion Penalty Model Xiang Liu Futurewei

This presentation summarized dispersion analysis along with modulation and chirp effect. It proposed U/D wavelengths of 1330/1270 +/-10nm for 10G or 10km. 20km and 40km for 25G and 50G were proposed to use 1300/1270 or +/-10nm.

Draft 0.3 Review

Yuanqiu Luo reviewed Draft 0.3 and pointed out major technical changes from Draft 0.2. All changes were to follow the comment resolution decisions in the July meeting.

Motions and Closing

Motion #3

Move to use 7, 13, and 23 dB as the loss budgets for the BR10, BR20, and BR40 links, respectively.

Moved: Ray Nering Second: Mark Laubach

For: 4 Against: 0 Abstain: 0

Technical (≥75%) Motion Passed

Motion #4

Move to reconsider motion#3.

Moved: Mark Laubach Second: Helen Xu

Procedural (>50%) Motion Passed by voice without opposition

Motion #5

Move to use 6.3, 13, and 18 dB as the loss budgets for the BR10, BR20, and BR40 links, respectively.

Moved: Helen Xu Second: Tony Shuai

For: 8 Against: 0 Abstain: 1

Technical (≥75%) Motion Passed

Motion #6

Move to use the existing LR and ER specs as the basis of the BR10 and BR40 links of the next draft and use the ER spec as the basis for BR20 by reducing the Tx levels by 5dB.

Moved: Mark Laubach Second: Ray Nering

For: 7 Against: 0 Abstain: 0

Technical (≥75%) Motion Passed

Motion #7

Move to use the following wavelengths as a starting point for our 9 link types.

Down / Up	10km	20km	40km
10Gb/s NRZ	1330 / 1270 ±10nm	1330 / 1270 ±10nm	1330 / 1270 ±10nm
25Gb/s NRZ	1330 / 1270 ±10nm	1310 / 1290 ±8nm	1310 / 1290 ±8nm
50Gb/s PAM4	1330 / 1270 ±10nm	1310 / 1290 ±8nm	1310 / 1290 ±8nm

Moved: Yuanqiu Luo Second: Ray Nering

For: 7 Against: 0 Abstain: 2

Technical (≥75%) Motion Passed

A draft liaison to ITU-T SG15 was reviewed. Loss budget levels and wavelengths passed by Motions #5 and #7 above were included in the liaison.

The Chair recorded the normal future meeting polls.

The Chair proposed a teleconference on October 10th at 20:00-21:00 New York time.

Motion #8

Move to create a new set of link types (BR40+), that is based on the BR40 link types, with a new link budget of 23 dB, and Tx levels increased by 5 dB.

Moved: Mark Laubach Second: Marek Hajduczenia

For: 5 Against: 0 Abstain: 0

Technical (≥75%) Motion Passed

The liaison draft was updated by including the BR40+ link budget passed by Motion #8.

Motion #9

Move to that the IEEE 802.3 Working Group approve IEEE_802d3_to_SG15_BiDi_0919_draft with editorial license granted to the Chair (or his appointed agent) as a liaison communication from the IEEE 802.3 Working Group to ITU-T SG15.

Moved: Mark Laubach Second: Marek Hajduczenia

For: 5 Against: 0 Abstain: 0

Technical (≥75%) Motion Passed

Motion #10

Move that the editor create draft 1.0 based upon draft 0.3, reflecting the motions in this meeting, and begin a 30-day review cycle

Moved:	Yuanqiu Luo	Second:	Tony Shuai		
For:	5	Against:	0	Abstain:	0
Technical (≥75%)		Motion Passed			

Motion #11

Move to adjourn.

Moved:	Marek Hajduczenia	Second:	Mark Laubach
Procedural (>50%)		Passed by voice without opposition	

3:57PM the meeting was adjourned.

Attendees

Name	Employer	Affiliation
Frank Effenberger	Futurewei Technologies, Inc.	Futurewei Technologies, Inc.
Yuanqiu Luo	Futurewei Technologies, Inc.	Futurewei Technologies, Inc.
Ray Nering	Cisco	Cisco
Joseph Coffey	Comscope	Comscope
Xiang He	Huawei	Huawei
Mark Laubach	Broadcom	Broadcom
Yu Xu	Huawei	Huawei
Frank Chang	Source	Source
Tony Shuai	Huawei	Huawei
Ayla Chang	Huawei	Huawei
Bill Powell	Nokia	Nokia
Marek Hajduczenia	Charter	Charter