# Approved minutes P802.3bs 200 Gb/s and 400 Gb/s Ethernet SMF Ad Hoc Teleconference 30 August 2016

# Minutes taken by Pete Anslow, Ciena

The meeting started at 8:02 am Pacific chaired by Pete Anslow, the attendee list was taken from the Webex attendee list plus any e-mail notifications of attendance.

Documentation for the call can be found at the Ad Hoc web page: <a href="http://www.ieee802.org/3/bs/public/adhoc/smf/index.shtml">http://www.ieee802.org/3/bs/public/adhoc/smf/index.shtml</a>

Pete reminded everyone of the IEEE patent policy (<u>http://www.ieee802.org/3/patent.html</u>) and asked if anyone was unfamiliar with it. No one responded.

Pete asked if anyone had any objection or additions to the draft agenda. There was no response, so the agenda was approved by the Ad Hoc.

Pete asked if anyone had any corrections to the draft minutes from the 16 August 2016 call. No one responded, so these minutes were approved by the Ad Hoc.

# Presentation #1

Title:400GBASE-DR4 link budget discussionPresenter:Jonathan King, FinisarSeeking\_01\_0816\_smf

Page 8 of anslow\_02\_0816\_smf was also discussed under this agenda item.

During the discussion, there was consensus that an additional 0.3 dB does not need to be added to the power budget for 400GBASE-DR4 to accommodate a breakout application, but that the maximum transmit power and overload specifications should allow for the maximum transmit power for such an application. There were differing opinions as to whether there is a need to change the power levels by 0.5 dB for manufacturability.

# Presentation #2

Title:Proposed Comments Against 802.3bs Draft SpecificationPresenter:Brian Welch, LuxteraSeewelch\_01\_0816\_smf

Page 7 of anslow\_02\_0816\_smf was also discussed under this agenda item.

There was considerable discussion as to whether the dynamic range between -20 dBm and the average receive power, each lane (min) value would be large enough to permit easy

implementation of the SIGNAL\_DETECT function. However, there was no strong opposition to the principle of increasing the Average launch power of OFF transmitter, each lane (max) for the 200GBASE-DR4 and 400GBASE-DR4 applications.

#### Presentation #3

Title:P802.3bs D2.0 optical commentsPresenter:Pete Anslow, CienaSeeanslow\_02\_0816\_smf

# Page 2 (Comments #123, 124)

There was general support for reducing the damage threshold to be 1 dB above the maximum average receive power unless there is a significant risk of accidental misconnection of these PMDs with others with higher maximum average transmit power.

# Page 4 (Comments #74, 76)

While there was general discussion on the relative merits of T/2 and T-spaced equalisers, there was no consensus to make a change to the draft. It was asserted that there are impairments that a long T-spaced equaliser can compensate that a shorter T/2 spaced equaliser cannot. More information is requested on whether there are impairments that a T/2 spaced equaliser can compensate that a T-spaced equaliser cannot.

# Page 5 (Comment #168)

Regarding this comment, it was suggested that reducing the proportion of the dB value of SECQ that is required to be produced by the combination of the low-pass filter and the E/O converter might be a better option than fixing the filter bandwidth.

# Page 6 (Comment #17)

There was no clear consensus concerning this comment.

# Presentation #4

Title:P802.3bs optical reflection limitsPresenter:Pete Anslow, CienaSeeanslow\_03\_0816\_smf

Page 3 of anslow\_02\_0816\_smf was also discussed under this agenda item.

During the discussion, there was no objection to the proposal of -55 dB for the limit for a reflection to be ignored. There was also general support for changing 121.11.2.2, 122.11.2.2, and 124.11.2.2 to contain a table giving the maximum value for each discrete reflectance for a variety of numbers of discrete reflectances above -55dB. There was no clear consensus as to whether the 200GBASE-DR4 and 400GBASE-DR4 budgets should be changed by 0.1 dB to allow 2 x -35 dB reflectances.

The meeting closed at 10:05 am Pacific.

Attendee list (taken from Webex attendee list plus e-mail notifications of attendance)

Pete Anslow, Ciena Jim Barton, Hitachi Vipul Bhatt, Finisar John D'Ambrosia, Futurewei (a subsidiary of Huawei) Piers Dawe, Mellanox Mike Dudek, QLogic Ali Ghiasi, Ghiasi Quantum LLC, Huawei Raj Hegde, Broadcom Mark Kimber, Semtech Jonathan King, Finisar Bill Kirkland, Semtech Paul Kolesar, CommScope David Law, HP Enterprise Greg LeCheminant, Keysight Hanan Leizerovich, MultiPhy David Lewis, Lumentum Flavio Marques, Furukawa

Marco Mazzini, Cisco Gary Nicholl, Cisco Mark Nowell, Cisco Tom Palkert, Luxtera-Molex David Piehler, Dell R K Rannow, APIC Salvatore Rotolo, STMicroelectronics Sam Sambasivan, AT&T Peter Stassar, Huawei Phil Sun, Credo Matt Traverso, Cisco Stephen Trowbridge, Nokia Yuri Vandyshev, Cisco Brian Welch, Luxtera Martin White, Cavium Qing Xu, Belden sherom, Unknown