## Approved minutes 40 Gb/s and 100 Gb/s Fiber Optic TF SMF Ad Hoc Teleconference 23 Oct 2012

## Minutes taken by Pete Anslow, Ciena

The meeting started at 8:05 am Pacific chaired by Pete Anslow, the attendee list was taken from the Webex attendee list.

Documentation for the call can be found at the Ad Hoc web page: http://www.ieee802.org/3/bm/public/smfadhoc/meetings/index.html

Pete reminded everyone of the IEEE patent policy (<a href="http://www.ieee802.org/3/patent.html">http://www.ieee802.org/3/patent.html</a>).

Pete asked if anyone had any corrections to the draft minutes from the 4 September call. No one responded, so these minutes are approved by the Ad Hoc.

Pete asked if anyone had any objection to the draft agenda sent to the group reflector on 23 October. There were no objections.

## Presentation #1

Title: 40km Link budget suggestion

By: Weigiang Cheng and Lu Huang, China Mobile

See cheng\_01\_1012\_smf

Jonathan King asked if data is available for the distribution of link lengths, connector losses, and connector numbers for the China Mobile network. Huang responded that he would try to provide this data at the next meeting.

Pete asked if there was any objection to him presenting the analysis of loss data that was made in response to Paul Kolesar's question at the Geneva meeting and sent to him privately. As there was no objection, Pete shared the following results:

Working back from the 18.5 dB maximum channel insertion loss and subtracting 2 dB for connectors we get 16.5 dB for a 40km link at 1264.5 nm. This is equivalent to 0.219 dB/km at 1550 nm which covers about 25% of 40 km installed links on Figure 10-8 of G.Sup39.

Looking at the data in another way (taking the links that were used to generate Figure 10-8 of G.Sup39) the 10GBASE-ER value of 9 dB at 1550 nm covers 83% of the links

with lengths between 10km and 40km. 18.5 dB for 40GBASE-ER4 is equivalent to 8.75 dB at 1550 nm which covers 79% of the links with lengths between 10km and 40km.

Pete offered to repeat the latter calculation for 19 dB loss budget.

It was agreed to hold a second SMF Ad Hoc meeting on Tuesday 30 October at 8:00 am Pacific.

Dan Dove reminded the meeting that we need to build consensus towards meeting the objective:

Define a 100 Gb/s PHY for operation up to at least 500 m of SMF

And that it would be helpful to bring in presentations towards this at the next SMF Ad Hoc meeting.

The meeting closed at 8:35 am Pacific.

Attendee list (taken from Webex attendee list)

Jon Anderson, Oclaro

Pete Anslow, Ciena

Weiqiang Cheng, China Mobile

Hsu-Feng Chou, Source Photonics

Dan Dove, Applied Micro

Mike Dudek, Qlogic

Arash Farhood, Cortina

Jan Filip, Maxim

Hiro Iwadate, SEI

Jonathan King, Finisar

Ryan Latchman, Mindspeed

Greg D Le Cheminant, Agilent

Kevin Lefebvre, Eigenlight

Shmuel Levy, Mellanox

Dave Lewis, JDSU

Huang Lu, China Mobile

Sharon Lutz, US Conec

Tom Palkert, Xilinx, Luxtera, Molex

Rick Pimpinella, Panduit

Liang Qiu, Nexans

Michael Ressl, Hitachi Cable

Kapil Shrikhande, Dell

Andre Szczepanek, Inphi

Eddie Tsumura, SEI

Alexander Umnov, Huawei

CK Wong, FCI

Yu Xu, Huawei