IEEE 802.3 400 Gb/s Ethernet Study Group
Informal Communication

Source:	IEEE 802.3 400 Gb/s Ethernet Study Group[1]	
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Subject:	Informal communication in response to 25N2202 on the status of standards to support parallel single mode optical fibre cabling	
Approval:	Agreed to at IEEE 802.3 400 Gb/s Ethernet Study Group meeting, Indian Wells, 21 January 2014	

Dear Dr Oehler,

Thank you for the liaison letter from your meeting in Kista, Sweden 2013-09-30/10-03. This was assigned to the IEEE 802.3 400 Gb/s Study Group which was established in March 2013. Project documentation may be found at http://www.ieee802.org/3/400GSG/index.html.

We would like to inform you of the plan to seek approval for a new standards project for 400 Gb/s Ethernet at the March 2014 802.3 meeting in Beijing.

The proposed objectives for the 400 Gb/s Ethernet project are as follows:

1. Support a MAC data rate of 400 Gb/s
2. Support a BER of better than or equal to 10^{-13} at the MAC/PLS service interface (or the frame loss ratio equivalent)
3. Support full-duplex operation only
4. Preserve the Ethernet frame format utilizing the Ethernet MAC
5. Preserve minimum and maximum FrameSize of the current Ethernet standard

[1] This document solely represents the views of the IEEE 802.3 400 Gb/s Ethernet Study Group, and does not necessarily represent a position of the IEEE, the IEEE Standards Association, IEEE 802 or the IEEE 802.3 Working Group

6. Provide appropriate support for OTN
7. Specify optional Energy Efficient Ethernet (EEE) capability for 400 Gb/s PHYs
8. Support optional 400 Gb/s Attachment Unit Interfaces for chip-to-chip & chip-to-module applications
9. Provide physical layer specifications which support link distances of:
   - at least 100 m over MMF
   - at least 500 m over SMF
   - at least 2 km over SMF
   - at least 10 km over SMF

If a new project for 400 Gb/s Ethernet is approved, the inaugural Task Force meeting will take place in May 2014 in Norfolk, VA. We will keep you informed of relevant decisions on architecture and PMD implementations, and any requirements they imply for the fiber plant or connectors, as they occur during the Task Force phase.

Sincerely,

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