

IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group Informal Communication

Source: IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group ¹

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Subject: Informal communication to ITU-T SG15 Q6 & Q11 from IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group

From: Mark Nowell, Chair IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group (mnowell@cisco.com)

Approval: Agreed to at IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group meeting, January 28, 2010

Dear Mr Maeda and members of ITU-T Study Group 15,

Given the ongoing communications between the ITU-T Study Group 15 and the IEEE P802.3ba 40Gb/s and 100Gb/s Ethernet Task Force, we would like to inform you that the initial meeting of the IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group was held in New Orleans, La, the week of Jan 25 -29th, 2010. This group was formed to study the need for an amendment to the IEEE 802.3 standard to specify a 40Gb/s Ethernet Single-mode Fiber PMD optimized for client applications in the carrier environment.

Of particular interest to the members of ITU-T SG15, it should be noted that the Study Group adopted the following objectives with final approval anticipated by the IEEE 802.3 Working Group at the IEEE 802 March 2010 Plenary:

- Preserve the IEEE 802.3 / Ethernet frame format utilizing the IEEE 802.3 MAC
- Preserve minimum and maximum FrameSize of current IEEE 802.3 standard
- Support a BER better than or equal to 10^{-12} at the MAC/PLS service interface
- Support a MAC data rate of 40 Gb/s
- Use the 40GBASE-R PCS and PMA

¹ This document solely represents the views of the IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group, and does not necessarily represent a position of the IEEE, the IEEE Standards Association, or IEEE 802.3

- Use only existing electrical and logical interfaces from IEEE Std 802.3 as modified by IEEE P802.3ba
- Provide Physical Layer specification which support 40 Gb/s operation over at least 2 km on SMF.
- Provide optical compatibility with existing carrier 40Gb/s client interfaces (OTU3/STM-256/OC-768/40G POS).

For your information, the presentations reviewed by the Study Group at this meeting are available for review at <http://www.ieee802.org/3/40GSMF/public/jan10/index.html>.

As the Study Group evolves and potentially becomes a Task Force, we look forward to close cooperation with ITU-T SG15 and we encourage SG15 members to contribute to such a project.

Sincerely,

Mark Nowell,

Chair, IEEE 802.3 40Gb/s Ethernet Single-mode Fibre PMD Study Group

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