## IEEE 802.3 Ethernet Working Group Liaison Communication

Source: IEEE 802.3 Working Group<sup>1</sup>

To:	Klaus-Holger Otto	OIF Technical Committee Chair <u>klaus-holger.otto@nokia.com</u>
	Ed Frlan	OIF Technical Committee Vice-Chair efrlan@semtech.com
	Kimberly Chiu	Project Manager, OIF <u>liaisons@oiforum.com</u>
CC:	Konstantinos Karachalios	Secretary, IEEE-SA Standards Board Secretary, IEEE-SA Board of Governors sasecretary@ieee.org
	Paul Nikolich	Chair, IEEE 802 LMSC <u>p.nikolich@ieee.org</u>
	Adam Healey	Vice-chair, IEEE 802.3 Ethernet Working Group adam.healey@broadcom.com
	Pete Anslow	Secretary, IEEE 802.3 Ethernet Working Group panslow@ciena.com
	John D'Ambrosia	Chair, IEEE 802.3 beyond 10 km Optical PHYs Study Group jdambrosia@ieee.org
From:	David Law	Chair, IEEE 802.3 Ethernet Working Group <u>dlaw@hpe.com</u>

Subject: Liaison letter to OIF on 400ZR Interop Project

Approval: Agreed to at IEEE 802.3 Plenary meeting, Orlando, FL, USA, 9th November 2017

Dear Mr. Otto, Mr. Frlan, and members of the OIF,

This liaison is to acknowledge receipt of your liaison dated 6<sup>th</sup> November 2017 with subject *400ZR Interop Project*. We wish to thank you for the substantive nature of the liaison and your efforts to define 400ZR in a fashion similar to an Ethernet PHY. Given that effort, we would like to provide our feedback regarding the block diagrams and listed decisions.

Given the efforts to define 400ZR as an Ethernet PHY, we would recommend using the abstraction approach used for Ethernet standards, and changing the "to/from 400ZR PCS" at the bottom of the diagram to "400GMII." It was also noted that instead of labeling the overall figure as "400G PCS (partial processes)" you might label it as "400G PHY XS," which was stated in the paragraph prior to the block diagram to describe it.

In the subsequent block diagram, we note the selection of +/-20 ppm for the clocking accuracy. We would comment that traditionally Ethernet specifications have used +/-100 ppm. We would like to understand the technical motivation for selecting +/-20 ppm, and request supporting material that led you to this decision.

<sup>&</sup>lt;sup>1</sup> This document solely represents the views of the IEEE 802.3 Working Group, and does not necessarily represent a position of the IEEE, the IEEE Standards Association, or IEEE 802.

Additionally, we observed the selection of GMP in the block diagram. We wish to bring to your attention that GMP has never been used in Ethernet. We would like to understand the technical factors that drove this decision, and request any supporting material that you are prepared to share with our members.

Finally, we observe that no statement appears to be made regarding the distance supported by (passive) single channel ZR. We would like to request if there is any update regarding this reach as it is of keen interest to the *Beyond 10 km Optical PHYs Study Group*, which has not yet chosen objectives.

We would also like to inform you that the scope of the Study Group has been expanded to include optical solutions beyond 10 km at 100 Gb/s. The presentation explaining the need for this scope expansion may be found at <<u>http://www.ieee802.org/3/cfi/1117\_2/CFI\_02\_1117.pdf</u>>.

We thank you for your attention in reading our liaison and look forward to continued liaisons between our organizations on this subject.

Sincerely, David Law Chair, IEEE 802.3 Ethernet Working Group