August 23, 2019

To: David Law and members of the IEEE 802.3 Working Group
cc: Peter Anslow, IEEE 802.3 WG Secretary
    John D’Ambrosia – IEEE P802.3ct Task Force

Subject: 400ZR Interop Project

From: Klaus-Holger Otto, OIF Technical Committee Chair (klaus-holger.otto@nokia.com)

Dear Mr. Law and participants of IEEE 802.3 Working Group,

We thank the IEEE for the 18th July 2019 Liaison reply to the OIF liaison letter concerning OIF 400ZR project with updated input from the 802.3ct Task Force project.

The OIF Q3 Technical and MA&E Committees meetings were held in Montreal, Canada from July 30th through August 1st. The 400ZR project is well along in development with the digital datapath and optical specifications considered stable. We are also aware of significant ongoing development in this space based on this specification.

During this meeting we acknowledged and reviewed your concern related to the “Inter-Channel Crosstalk”. This resulted in harmonizing the Inter-Channel Crosstalk definition with the definition in ITU G.sup39 and an update to this parameter value more in-line with this definition.

The EVM definition for DP-16QAM signals was discussed and concerns were raised whether the notation of EVM_{\text{RMS}} could be confused with an EVM that uses the RMS reference vector for normalization instead of the peak reference vector. While this was not relevant for DP-DQPSK, it makes a difference for DP-16QAM. Proposals were received to either change the notation to EVM_{m,\text{RMS}}, where the additional subscript ‘m’ hints to the peak reference vector normalization or to change the EVM definition to use RMS reference vector for normalization. OIF would appreciate hearing your thoughts and position on these.

We very much appreciate our ability to liaise with the IEEE P802.3ct Task Force on the 400ZR applications. Please keep us updated on any decisions or directions in the 400GBASE-ZR project that would indicate synergistic or divergence from the 400ZR IA. We would also appreciate any comments and feedback you may have on the attached 400ZR IA draft (oif2017.245.13). We will continue to update the IEEE 802.3 on the progress of the 400ZR IA. Our next meeting is in Singapore the week of October 20th, 2019.

Note: Attention is called to the possibility that use or implementation of this OIF document, oif2017.245.13, may require use of subject matter covered by IPR. By providing access to this document, no position is taken with respect to the existence or validity of any IPR in connection herewith. The OIF shall not be responsible for identifying all IPR which is required in order to utilize this document or the information contained herein, or for conducting inquiries into the legal validity or scope of such IPR that is brought to its attention. This draft is not a contribution nor is it a submission on an IEEE Standards draft and therefore the IEEE-SA copyright and patent policies do not apply.

Sincerely,

Klaus-Holger Otto,
OIF Technical Committee Chair (klaus-holger.otto@nokia.com)