



May 24, 2022

To: David Law and participants of the IEEE 802.3 Ethernet Working Group
cc: John D'Ambrosia – IEEE P802.3cw Task Force Chair

Subject: 400ZR IA Maintenance Project Update

From: Klaus-Holger Otto, OIF Technical Committee Chair ([REDACTED])

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

The OIF Q2'22 Technical and MA&E Committees meetings was held from May 10th through May 12th in Porto, Portugal. The focus of this meeting's 400ZR Maintenance work session was to address all comments from the OIF2020.301.07 Straw Ballot. Principal Ballot review is expected within the next quarter. Attached please find OIF2020.301.08.

It was recognized from your "Liaison Reply to Liaison 800G Coherent Project Status", dated 17 March 2022 that the 802.3cw specification development is delayed due to lack of progress in obtaining Error Vector Magnitude (EVM) data. You also made the observation that the OIF appears to be experiencing similar difficulties in developing EVM specifications.

The primary objective of the 400ZR Maintenance project was to evolve the OIF400ZR-01.0 to normatively capture the requirements for operation on a network with 75 GHz channel spacing. Integrating EVM into the normative sections of the 400ZR IA was a secondary goal. Achieving this required that the Error Vector Magnitude testing methodology could be validated, and an EVM_{rms} max value (%) could be determined as a Transmitter Quality Metric (TQM).

Unfortunately, as you have also experienced, additional input from members has been sparse. The consensus of the group at our last meeting was that the transmitter specification methodology (fully parameterized specification) still provides the highest degree of certainty that multi-vendor interoperability can be achieved. EVM is still a potentially valuable TQM, but for this maintenance update it will remain as "informative". We will continue to monitor the availability of new information and would appreciate it if IEEE can share any additional insights this topic with us.

We very much appreciate our ability to liaise with IEEE P802.3 and look forward to any updates and further developments from the P802.3cw Task Force.

We request that access to the attached documents be restricted to participants of IEEE 802.3 Working Group only and that you acknowledge the OIF in any derivative work.

Sincerely,

Klaus-Holger Otto,
OIF Technical Committee Chair ([REDACTED])

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Attachment: OIF2020.301.08