IEEE 802.3 Ethernet Working Group Liaison Communication

Source: IEEE 802.3 Working Group¹

To: Klaus Holger-Otto Technical Committee Chair, OIF

Kimberly Naughton Project Manager, OIF

CC: Konstantinos Karachalios Secretary, IEEE-SA Standards Board

Secretary, IEEE-SA Board of Governors

Paul Nikolich Chair, IEEE 802 LMSC

Adam Healey Vice-chair, IEEE 802.3 Ethernet Working Group

Jon Lewis Secretary, IEEE 802.3 Ethernet Working Group

John D'Ambrosia Chair, IEEE P802.3df Task Force

From: David Law Chair, IEEE 802.3 Ethernet Working Group

Subject: Liaison Reply to Liaison "800LR IA Project update", dated 29 August 2022

Approval: Agreed to at IEEE 802.3 plenary meeting, Bangkok, Thailand, 17 November 2022

Dear Mr Otto and members of the OIF,

We would like to thank the OIF for its ongoing communications regarding the status of the 800LR IA Project.

As previously communicated, the IEEE P802.3df Task Force has been spending this year in the process of baseline selection. A summary of all key decisions made by the Task Force may be found at https://www.ieee802.org/3/df/KeyMotions-3df-221005.pdf. As it pertains to the objective targeting 800 Gb/s Ethernet operation over 10 km of single mode fiber, presentations related to both IMDD and coherent optics have been shared with the Task Force, but no decisions regarding the baseline have been made.

¹ 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.

Overall, the IEEE P802.3df Task Force has made rapid progress on the objectives addressing 100 Gb/s per lane PMDs and electrical interfaces targeting 400 GbE and 800 GbE. All baselines related to these objectives have been adopted.

Based on this progress, and the perceived schedule differences between efforts targeting 100 Gb/s per lane PMDs and those targeting 200 Gb/s or greater per lane PMDs, the IEEE P802.3df Task Force requested at the IEEE 802 November 2022 Plenary:

- The scope of the IEEE P802.3df Project Authorization Request (PAR) be modified to address physical layer specifications and interfaces based on 100 Gb/s per lane for 400 Gb/s and 800 Gb/s.
- The creation of the IEEE P802.3dj PAR with a scope to address PMD objectives for 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet operation that leverage 200 Gb/s or greater per lane signaling.

The modified IEEE P802.3df PAR and the new IEEE P802.3dj PAR were approved by the IEEE SA Standards Board on Saturday, 3 December 2022. The approved IEEE P802.3df PAR Modification, related objectives, and adopted timeline may be found at https://www.ieee802.org/3/df/index.html. The approved IEEE P802.3dj PAR and objectives may be found at the new IEEE P802.3dj Task Force webpage, https://www.ieee802.org/3/dj/index.html.

The IEEE P802.3df Task Force has completed the first task force review and initiated the second task force review with Draft 1.1 (attached). This draft includes definition of the 800 GbE PCS, which may be of interest in the development of the OIF's 800G IA projects.

The first meeting of the IEEE P802.3dj Task Force will be held at the IEEE 802.3 January 2023 Interim that will be held the week of 16 January 2023. Information regarding this interim may be found at https://www.ieee802.org/3/interims/index.html. Upon formation, the Task Force will begin the process of determining baseline selections and consider its project timeline.

We look forward to the continued collaboration between our two organizations.

Sincerely,
David Law
Chair, IEEE 802.3 Ethernet Working Group