

IEEE 802.3 Ethernet Working Group  
**DRAFT** Liaison Communication

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

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From: David Law Chair, IEEE 802.3 Ethernet Working Group  
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Subject: Liaison to OIF, Response to "800LR IA Project update" dated 16 May 2023  
Approval: Agreed to at IEEE 802.3 plenary meeting, Berlin, 13 July 2023

Dear Mr. Otto and members of the OIF,

Thank you for your liaison "800LR IA Project Update", dated 16 May 2023.

As the IEEE P802.3df and IEEE P802.3dj projects are both addressing 800 Gb/s Ethernet, status updates for both projects are provided.

The IEEE P802.3dj Task Force is in the midst of selecting baselines. As previously communicated, one of the objectives of this task force is to define a physical layer specification that supports 800 Gb/s operation over one wavelength over a single SMF in each direction with lengths up to at least 10 km. At the IEEE 802.3 May 2023 Interim DP-16QAM modulation was selected for this interface.

The IEEE P802.3dj Task Force met at the IEEE 802 July 2023 Plenary. At the meeting the following decisions were made:

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<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.

1. A baseline was adopted that specifies the use of concatenated FEC based on RS(544,514) and BCH(126,110). Discussion continues on whether to use a wavelength in the O band or C band.
2. The task force adopted a DER\_0 value of 2.67e-5 for AUIs within a PHY using 200 Gb/s PAM4 signaling. BER division between chip-to-chip and chip-to-module AUIs is a topic for further discussion.

For further information on task force activities, please see <https://www.ieee802.org/3/dj/index.html>.

The IEEE P802.3df Task Force also met at the IEEE 802 July 2023 Plenary, addressed comments submitted against IEEE P802.3df D2.1, and approved the generation of D3.0 (attached). Additionally, the draft was approved to progress to the next level of balloting. For further information please see <https://www.ieee802.org/3/df/index.html>.

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

Sincerely,

David Law

Chair, IEEE 802.3 Ethernet Working Group