IEEE 802.3 Ethernet Working Group

LMSC REVIEW DRAFT Liaison Communication

Source: IEEE 802.3 Working Group¹

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CC: Alpesh Shah  Secretary, IEEE-SA Standards Board
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From: David Law  Chair, IEEE 802.3 Ethernet Working Group

Subject: Liaison reply to ITU-T SG15: OTNT Standardization Work Plan

Approval: Agreed at IEEE 802.3 interim meeting, Annapolis, MD, USA, 16 May 2024

Dear Mr Parsons and members of ITU-T SG15,

Thank you for your liaison statement from November 2023 concerning the OTNT Standardization Workplan.

Concerning aspects of this workplan and other activity within ITU-T SG15, please be aware of the following:

The current version of the Ethernet standard is 802.3-2022. Since our last communication, one additional amendment to IEEE Std 802.3-2022 has been approved and published:

- Amendment 9: IEEE Std 802.3df-2024, Media Access Control Parameters for 800 Gb/s and Physical Layers and Management Parameters for 400 Gb/s and 800 Gb/s Operation, was approved by the Standards Board on 15 February 2024 and published on 15 March 2024.

In addition, the following amendments (communicated in previous liaison statements) remain in force:

- Amendment 1, IEEE Std 802.3dd-2022, Power over Data Lines of Single Pair Ethernet

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.
• Amendment 2: IEEE Std 802.3cs-2022, Physical Layers and Management Parameters for Increased-Reach Point-to-Multipoint Ethernet Optical Subscriber Access (Super-PON)

• Amendment 3: IEEE Std 802.3db-2022, Physical Layer Specifications and Management Parameters for 100 Gb/s, 200 Gb/s, and 400 Gb/s Operation over Optical Fiber Using 100 Gb/s Signaling

• Amendment 4: IEEE Std 802.3ck-2022, Physical Layer Specifications and Management Parameters for 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces Based on 100 Gb/s Signaling

• Amendment 5: IEEE Std 802.3de-2022, Enhancements to MAC Merge and Time Synchronization Service Interface for Point-to-Point 10 Mb/s Single-Pair Ethernet.

• Amendment 6: IEEE Std 802.3cx-2023, Media Access Control (MAC) Service Interface and Management Parameters to Support Improved Precision Time Protocol (PTP) Timestamping Accuracy

• Amendment 7: IEEE Std 802.3cz-2023, Physical Layer Specifications and Management Parameters for Multi-Gigabit Optical Automotive Ethernet

• Amendment 8, IEEE Std 802.3cy-2023, Physical Layer Specifications and Management Parameters for 25 Gb/s Electrical Automotive

The current version of the Ethernet MIBs standard is published as IEEE Std 802.3.1-2013. A maintenance project (IEEE 802.3.1b) to update this SNMP MIB document to cover the new features present in IEEE Std 802.3-2022 is in the Working Group Ballot phase.

The current version of the Ethernet YANG models is published as IEEE Std 802.3.2-2019. A maintenance project (IEEE 802.3.2a) to update this YANG model to cover the new features present in IEEE Std 802.3-2022 is in the Working Group Ballot phase.

Two new task forces within the IEEE 802.3 Working Group have been formed since our last update:

• The IEEE 802.3 Ethernet for Automotive Imaging Sensors Study Group has concluded its work, and the IEEE P802.3dm Asymmetrical Electrical Automotive Ethernet Task Force has been formed.

• The IEEE P802.3dn Multi-Gigabit Automotive MDI Return Loss Task Force, which is creating Corrigendum 1 to IEEE Std 802.3-2022, is about to progress to the Standards Association Ballot phase. This corrigendum corrects errors in some PMD specifications related to automotive Ethernet PHYs.

In addition, the following Task Forces, Study Groups, and ad hoc groups remain active within the IEEE 802.3 Working Group:

• The IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement Task Force is in the Task Force Review phase.

• The IEEE P802.3dg Physical Layer Specifications and Management Parameters for 100 Mb/s Operation and associated Power Delivery over a Single Balanced Pair of Conductors Task Force is in the proposal selection phase.

• The IEEE P802.3dj 200 Gb/s, 400Gb/s, 800Gb/s, and 1.6Tb/s Ethernet Task Force in the task force review phase. The final baselines were adopted in March 2024, and the editorial team is in the process of resolving comments on the draft. We anticipate sharing a draft with you when the project reaches the working group ballot phase.
• The IEEE P802.3dk Greater than 50 Gb/s Bidirectional Access PHYs Task Force is in the proposal selection phase.

We regret to inform you that the IEEE P802.3cw 400 Gb/s over DWDM Systems Task Force and IEEE P802.3dh Multi-Gigabit Optical Automotive Ethernet using Graded-Index Plastic Optical Fiber Task Force have both been discontinued.

Concerning Issue 33 of the OTNT Standardization work plan itself:

• The text in clause 4.6.1.13 can be updated to reflect the status of work as indicated above.

• In clause 5.1, the URL for the link to the IEEE 802 LAN/MAN standards committee should be made into an active link like all the other URLs in this section.

• Table 3 in clause 6.1 can be updated to reflect the publication of IEEE Std 802.3df-2024, which may be relevant in the context of OTN systems.

Thank you for the opportunity to review and comment on this workplan. We look forward to continued collaboration between ITU-T Study Group 15 and the IEEE 802.3 Working Group.

Sincerely,

David Law
Chair, IEEE 802.3 Ethernet Working Group