

IEEE 802.3 Ethernet Working Group Liaison Communication

Source: IEEE 802.3 Working Group¹

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

Approval: Agreed at IEEE 802.3 plenary meeting, Honolulu, HI, USA, 16 November 2023

Dear Mr Parsons and members of ITU-T SG15,

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

Concerning aspects of this workplan and other activity within Study Group 15, please be aware of the following:

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

- 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, was approved by the Standards Board on 30 March 2023 and published on 21 April 2023.
- Amendment 7: IEEE Std 802.3cz-2023, Physical Layer Specifications and Management Parameters for Multi-Gigabit Optical Automotive Ethernet, was

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.

approved by the Standards Board on 30 March 2023 and published on 28 April 2023.

- Amendment 8, IEEE Std 802.3cy-2023, Physical Layer Specifications and Management Parameters for 25 Gb/s Electrical Automotive Ethernet was approved by the Standards Board on 29 June 2023 and published on 11 August 2023.

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
- 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.

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.

The following Task Forces, Study Groups, and ad hoc groups are currently active within the IEEE 802.3 Working Group:

- The IEEE P802.3cw 400 Gb/s over DWDM Systems Task Force is starting the Standards Association ballot phase.
- The IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement Task Force is in the Task Force Review phase.
- The IEEE P802.3df 400 Gb/s and 800Gb/s Ethernet Task Force is nearing completion of the Standards Association ballot phase and is expected to be approved in the first quarter of 2024.
- 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 P802.3dh Multi-Gigabit Optical Automotive Ethernet using Graded-Index Plastic Optical Fiber Task Force is in the proposal selection phase.
- The IEEE P802.3dj 200 Gb/s, 400 Gb/s, 800 Gb/s, and 1.6 Tb/s Ethernet Task Force was split out of the original IEEE P802.3df task force. This task force will define PHYs based on 200 G/lane IMDD signalling or single-carrier coherent detection. This task force is in the proposal selection phase. Several baselines, including 1.6 T PCS architecture, the use of a concatenated FEC, the 'inner code' for concatenated FEC applications, and have been adopted.

- The IEEE P802.3dk Greater than 50 Gb/s Bidirectional Access PHYs Task Force is in the proposal selection phase.
- The Ethernet for Automotive Imaging Sensors Study Group was formed in July 2023 and met for the first time in September 2023.

Concerning Issue 32 of the OTNT Standardization work plan itself:

- We would note that the cross-reference for IEEE 802.3 in table 1 points to clause 4.7.1.13, whereas the material regarding IEEE 802.3 appears in clause 4.6.1.13
- The text in clause 4.6.1.13 can be updated to reflect the status of work as indicated above.
- Table 3 in clause 6.1 can be updated to reflect the publication of IEEE Std 802.3cx-2023, 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