

IEEE 802.3 Ethernet Working Group
LMSC REVIEW DRAFT Liaison Communication

Source: IEEE 802.3 Working Group¹

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From: David Law Chair, IEEE 802.3 Ethernet Working Group
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Subject: Liaison reply to ITU-T SG15: OTNT Standardization Work Plan

Approval: Agreed at IEEE 802.3 interim meeting, Minneapolis, MN, USA, 18 September 2025

Dear Mr Parsons and members of ITU-T SG15,

Thank you for your liaison statement from April 2025 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 802.3-2022. Since our last communication, one new document has been approved and awaits publication:

- IEEE Std 802.3.2-2025, IEEE Standard for Ethernet YANG Data Model Definitions, was approved by the IEEE SA Standards Board on 8 September 2025.

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

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 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.
- 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 Ethernet
- 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
- IEEE Std 802.3TM-2022/Cor 1-2025, IEEE Standard for Ethernet Corrigendum 1: Multi-Gigabit Automotive Medium Dependent Interface (MDI) Return Loss

The current version of the Ethernet MIBs standard is published as IEEE Std 802.3.1-2024.

As noted above, a revision of the YANG models has recently been approved as IEEE Std 802.3.2-2025 and awaits publication.

In addition, the following Task Forces, Study Groups, and ad hoc groups are 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 Standards Association ballot phase. Per the adopted timeline, this task force expects to complete its work in January or March 2026.
- 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 Working Group ballot phase. Per the adopted timeline, this task force expects to complete its work in June 2026.
- The IEEE P802.3dj 200 Gb/s, 400Gb/s, 800Gb/s, and 1.6Tb/s Ethernet Task Force in the Working Group ballot phase. As you may recall, we will be sharing D2.2 of this amendment with you in September 2025. Per the adopted timeline, this task force expects to complete its work in September 2026.
- The IEEE P802.3dk Greater than 50 Gb/s Bidirectional Access PHYs Task Force is in the Standards Association ballot phase. Per the adopted timeline, this task force expects to complete its work in March 2026.
- The IEEE P802.3dm Asymmetrical Electrical Automotive Ethernet Task Force is in the proposal selection phase. This task force has not yet adopted a timeline.

- The IEEE P802.3dp Ethernet Power Cabling Restrictions Task Force has been formed and is in the proposal selection phase. This task force has not yet adopted a timeline.
- The IEEE P802.3dq Pin-optimized PHY Interfaces Task Force has been formed and is in the proposal selection phase. The scope of work concerns PHYs up to 100 Mb/s with no more than 8 pins. This task force has not yet adopted a timeline.
- The IEEE P802.3-2022/Cor 2 (IEEE 802.3dr) (corrigendum 2) Optical Automotive Ethernet TDFOM Task Force has been formed to address issues found in IEEE Std 802.3cz-2023. It is in the Task Force review phase
- The 200 Gb/s per lane Multimode Fibre Optical PHYs study group has been formed to consider a project to specify new PHYs based on 200 Gb/s per lane IMDD signalling using multimode fibre and VCSELs.
- The Ethernet Metadata Services study group has been formed to consider ways to communicate both per-packet and per-link metadata without changing the definition of the MAC service interface. Potential methods include putting per-packet metadata in the preamble of packets and using ordered sets to convey per-link metadata.

A revision to the 802.3 base standard is expected in 2027 after the IEEE P802.3dj project is completed.

Concerning Issue 35 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. Specifically:
 - Approval of IEEE 802.3.2-2025
 - Changes to the status of the IEEE P802.3da, IEEE P802.3dg, and IEEE P802.3dk Task Forces
 - The IEEE P802.3dj Task Force has shared D2.0 and D2.1 with SG15
 - Formation of the IEEE P802.3dp, IEEE P802.3dq, and IEEE P802.3-2022/Cor 2 (IEEE 802.3dr) Task Forces
 - Completion of IEEE 802.3 cabling restrictions and IEEE 802.3 pin-optimized physical interfaces study groups
 - Formation of the IEEE 802.3 200 Gb/s per lane Multimode Fibre Optical PHYs and IEEE 802.3 Ethernet Metadata Services study groups
- Table 3 in clause 6.1 can be updated to reflect the approval of IEEE Std 802.3.2-2025, which may be relevant in the context of OTN systems.

Finally, we welcome your incorporation by reference of IEEE Std. 802.3-2022/Cor 1-2024 in a future edition of ITU-T G.8020.3. The summary information for this corrigendum is as follows:

IEEE Std 802.3™-2022/Cor 1-2024

Corrigendum 1—This corrigendum includes changes to IEEE Std 802.3-2022 to correct the MDI return loss specifications in Clause 149 and Clause 165.

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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