

IEEE 802.3 Ethernet Working Group
EC 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 to at IEEE 802.3 plenary meeting, Virtual, 18th November 2021

Dear Mr Trowbridge and members of ITU-T SG15,

Thank you for your liaison statement from April 2021 concerning the OTNT Standardization Workplan.

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

Since our last communication, the following additional Amendments have been approved to IEEE Std 802.3-2018:

- Amendment 12: IEEE Std 802.3cv-2021, Maintenance #15: Power over Ethernet, was approved by the Standards Board on 9 May 2021 and was published on 28 May 2021.
- Amendment 13: IEEE Std 802.3ct-2021, Physical Layers and Management Parameters for 100 Gb/s Operation over DWDM Systems, was approved by the Standards Board on 16 June 2021 and was published on 9 July 2021.

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 14: IEEE Std 802.3cp-2021, Bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs, was approved by the Standards Board on 16 June 2021 and was published on 16 July 2021.

There are now fourteen approved and published Amendments in-force to IEEE Std 802.3-2018, including the above and (as we informed you last time) include:

- Amendment 1: IEEE Std 802.3cb-2018, 2.5 Gb/s and 5 Gb/s Operation over Backplane, was approved by the Standards Board on 27th September 2018 and published on 4th January 2019.
- Amendment 2: IEEE Std 802.3bt-2018, Power over Ethernet over 4 Pairs, was approved by the Standards Board on 27th September 2018 and published on 31st January 2019.
- Amendment 3: IEEE Std 802.3cd-2018, Media Access Control Parameters for 50 Gb/s and Physical Layers and Management Parameters for 50 Gb/s, 100 Gb/s, and 200 Gb/s Operation, was approved by the Standards Board on 6th December 2018 and published on 15th February 2019.
- Amendment 4: IEEE Std 802.3cn-2019, Physical Layers and Management Parameters for 50 Gb/s, 200 Gb/s, and 400 Gb/s Ethernet over Single-Mode Fiber, was approved by the Standards Board on 7th November 2019 and was published on 20th December 2019.
- Amendment 5: IEEE Std 802.3cg-2019, Physical Layer Specifications and Management Parameters for 10 Mb/s Operation and Associated Power Delivery over a Single Balanced Pair of Conductors, was approved by the Standards Board on 7th November 2019 and was published 5 February 2020.
- Amendment 6: IEEE Std 802.3cq, Maintenance #13: Power over Ethernet over 2 pairs, was approved by the Standards Board on 30th January 2020 and published on 13th March 2020.
- Amendment 7: IEEE Std 802.3cm, Physical Layer and Management Parameters for 400 Gb/s over Multimode Fiber, was approved by the Standards Board on 30th January 2020 and published on 30th March 2020.
- Amendment 8: IEEE Std 802.3ch-2020, Physical Layer Specifications and Management Parameters for 2.5 Gb/s, 5 Gb/s, and 10 Gb/s Automotive Electrical Ethernet, was approved by the Standards Board on 4th June 2020, and was published on 30th June 2020.
- Amendment 9: IEEE Std 802.3ca-2020, Physical Layer Specifications and Management Parameters for 2.5 Gb/s and 50 Gb/s Passive Optical Networks, was approved by the Standards Board on 4th June 2020, and was published on 3rd July 2020.
- Amendment 10: IEEE Std 802.3cr-2021, Maintenance #14: Isolation, was approved by the Standards Board on 9th February 2021 and was published on 24th February 2021.
- Amendment 11: IEEE Std 802.3cu-2021, Physical Layers and Management Parameters for 100 Gb/s and 400 Gb/s Operation over Single-Mode Fiber at 100 Gb/s per Wavelength, was approved by the Standards Board on 9th February 2021 and was published on 26th February 2021.

The current version of the Ethernet MIBs standard is published as IEEE Std 802.3.1-2013. There has been no proposal to update this SNMP MIB document to cover the new features present in IEEE Std 802.3-2018.

The current version of IEEE Std 802.3.2-2019, Ethernet YANG models, was approved by the Standards Board on 26th March 2019 and was published on 21st June 2019.

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

- The IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces Task Force is in the Working Group ballot phase.
- The IEEE P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON) Task Force received approval to begin the Standards Association ballot phase.
- The IEEE P802.3cw 400 Gb/s over DWDM Systems Task Force is in the Task Force Review phase.
- The IEEE P802.3cx Improving PTP Timestamping Accuracy Task Force is in the Working Group ballot phase.
- The IEEE P802.3cy Greater than 10 Gb/s Electrical Automotive Ethernet Task Force is in the proposal selection phase.
- The IEEE P802.3cz Multi-Gigabit Optical Automotive Ethernet Task Force is in the Task Force review phase.
- The IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement Task Force is in the proposal selection phase.
- The IEEE P802.3db 100 Gb/s, 200 Gb/s, and 400 Gb/s Short Reach Fiber Task Force is in the Working Group ballot phase.
- The Revision to IEEE Std 802.3-2018 (Maintenance #16, IEEE P802.3 (IEEE 802.3dc)) Task Force is in the Working Group ballot phase and received conditional approval to begin the Standards Association ballot phase (likely after the next Working Group recirculation). This is intended to incorporate the fourteen Amendments listed above, plus all “ready for ballot” maintenance requests into what is expected to become IEEE Std 802.3-2022. None of the currently active Task Forces are expected to complete their work in time to be included in this revision and will become Amendments to the 2022 base version of the standard.
- The IEEE P802.3dd Power over Data Lines of Single Pair Ethernet (Maintenance #17) Task Force has received conditional approval to begin the Standards Association ballot phase.
- The IEEE P802.3de Time Synchronization for Point-to-Point Single Pair Ethernet Task Force has begun the Working Group ballot phase.

There are two active Study Groups. A study group is an activity that has not yet reached the stage of an approved Project Authorization Request (PAR), Criteria for Standardization Development (CSD), or project objectives.

- The IEEE 802.3 Beyond 400 Gb/s Ethernet Study Group was initiated after a successful “Call for Interest” in November 2020. In this November 2021 plenary meeting, this group has submitted its draft [PAR](#), [CSD](#), and project [Objectives](#) which have been approved by the 802.3 working group. Pending IEEE SA Standards Board approval of the PAR, this is expected to become the P802.3df Task Force which would have its first meeting in January 2022.
- The IEEE 802.3 Greater than 10 Mb/s Long-Reach Single Pair Ethernet Study Group was initiated after a successful “Call for Interest” in March 2021. This Study

Group has been rechartered to continue its work and is expected to submit the P802.3dg PAR, CSD, and objectives at a future plenary meeting.

Concerning Issue 29 of the OTNT Standardization work plan itself:

- In Clause 4.7.1.1, note that IEEE Std 802.3ct-2021 been approved, so P802.3ct can be removed from the list of active projects in the final sentence, and the approved standard and the list in the 2nd sentence can add that IEEE Std 802.3ct-2021 specifies 100GBASE-ZR.
- The list of approved amendments in clause 4.7.1.13 can be extended to include Amendments 12-14 described above, as well as updating the list and status of active projects as described above.
- Table 3 in clause 6.1 can be extended to include Amendments 12-14 as described above.

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