

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 to at IEEE 802.3 interim meeting, Geneva, Switzerland, 23rd January 2020

Dear Mr Trowbridge and members of ITU-T SG15,

Thank you for your liaison statement from October 2019 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 Amendments have been approved to IEEE Std 802.3-2018:

- 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 is awaiting publication

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.

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

- 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.

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, which 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 P802.3ca 25 Gb/s and 50 Gb/s Passive Optical Networks Task Force is currently in the Standards Association ballot phase.
- The IEEE P802.3ch Multi-Gig Automotive PHY Task Force is currently in the Standards Association ballot phase.
- The IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces Task Force is currently in Task Force Review.
- The IEEE P802.3cm 400 Gb/s over Multimode Fiber Task Force has completed the Standards Association ballot phase and is currently awaiting IEEE-SA Standards Board approval.
- The IEEE P802.3cq Power over Ethernet over 2 pairs (Maintenance #13) Task Force has completed the Standards Association ballot phase and is currently awaiting IEEE-SA Standards Board approval.
- The IEEE P802.3cr Isolation (Maintenance #14) Task Force is in the Working Group ballot phase.
- The IEEE P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON) Task Force is in the proposal selection/Task Force Review phase.
- The IEEE P802.3ct 100 Gb/s and 400 Gb/s over DWDM systems Task Force is in the Task Force Review phase. The IEEE 802.3 Working Group has agreed to a split of this project, with 100 Gb/s operation remaining in the IEEE P802.3ct project, and 400 Gb/s operation moving to a new IEEE P802.3cw project, to allow 100 Gb/s to proceed on an earlier timeline. The new IEEE P802.3cw project is currently awaiting IEEE-SA Standards Board approval.
- The IEEE P802.3cu 100 Gb/s and 400 Gb/s over SMF at 100 Gb/s per Wavelength Task Force is expected to initiate Working Group ballot soon.
- The IEEE P802.3cv Power over Ethernet (Maintenance #15, focusing on 4-pairs) Task Force is in the Task Force review phase.

There are several active Study Groups, which are study activities that have not yet reached the stage of an approved Project Authorization Request (PAR), Criteria for Standardization Development (CSD), or project objectives:

- The Greater than 10 Gb/s Automotive Ethernet Electrical PHYs Study Group
- Multi Gigabit Automotive Optical PHYs Study Group
- Improving PTP Timestamping Accuracy Study Group. Note that this group submitted a PAR, CSD, and Objective which were approved by the IEEE 802.3 Working Group and IEEE 802 Executive Committee at the November 2019 plenary, but the project is currently awaiting IEEE-SA Standards Board approval (expected in February) before creating what is anticipated to be the IEEE P802.3cx Task Force.
- 10Mb/s Single Pair Ethernet Multidrop Enhancements Study Group
- 100 Gb/s Wavelength Short Reach PHYs Study Group

Concerning the OTNT Standardization work plan itself:

- Clause 4.7.1.1 could also add that IEEE Std 802.3cd-2018 specifies 200GBASE-SR4, and IEEE Std 802.3cn-2019 specifies 200GBASE-ER4 and 400GBASE-ER8. This clause could also indicate that additional high bit rate interfaces are under development by the currently active IEEE P802.3cp, IEEE P802.3ct, IEEE P802.3cu, and (pending IEEE-SA Standards Board approval expected in early February) IEEE P802.3cw projects.
- Clause 4.7.1.2 could be enhanced to indicate that additional PON PHY types are under development by the currently active IEEE P802.3ca and IEEE P802.3cs projects.
- The recently approved Amendments 4 and 5 described above can be added to clause 4.7.1.12 and to Table 4. The list of active IEEE 802.3 projects and study groups in clause 4.7.1.12 can also be updated with the information from this liaison letter.

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