

IEEE 802.3 Ethernet Working Group
EC REVIEW DRAFT 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 plenary teleconference meeting, 23rd July 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 additional Amendments have been approved to IEEE Std 802.3-2018:

- 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

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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 25 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.

There are now nine 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 5th February 2020.

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 P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces Task Force is currently in Task Force Review.
- The IEEE P802.3cr Isolation (Maintenance #14) Task Force is in the Standards Association ballot phase.
- The IEEE P802.3cs Increased-reach Ethernet optical subscriber access (Super-PON) Task Force is in the Task Force Review phase.
- The IEEE P802.3ct 100 Gb/s over DWDM systems Task Force is in the Working Group ballot phase.
- The IEEE P802.3cu 100 Gb/s and 400 Gb/s over SMF at 100 Gb/s per Wavelength Task Force has just initiated Standards Association ballot.
- The IEEE P802.3cv Power over Ethernet (Maintenance #15, focusing on 4-pairs) Task Force is in the Working Group ballot phase.
- The IEEE P802.3cw 400 Gb/s over DWDM Systems Task Force is in the proposal selection phase.

- The IEEE P802.3cx Improving Precision Time Protocol (PTP) Timestamping Accuracy Task Force is in the proposal selection 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 proposal selection 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 proposal selection phase.

At present, there are no 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. There are some new ideas under discussion in the New Ethernet Applications ad hoc group concerning possible new efforts.

Concerning Issue 27 of the OTNT Standardization work plan itself:

- In Clause 4.7.1.1, note that the IEEE P802.3cw PAR has now been approved, so this and IEEE P802.3db (an additional new project) can be added to the list of active projects developing high-speed interfaces.
- In Clause 4.7.1.2, note that IEEE Std 802.3ca-2020 has now been approved, so this can be updated to show this approval. We don't see that you have listed the already-standardized PON PHY types from IEEE Std 802.3-2018, but note that there are now additional PON PHY types described in the IEEE Std 802.3ca-2020 amendment that use 25 Gb/s or 50 Gb/s signalling in the upstream and/or downstream directions, in addition to those already included in the 2018 base standard.
- The list of approved amendments in clause 4.7.1.13 can be extended to include Amendments 6-9 described above, as well as filling in the publication date for IEEE Std 802.3cg-2019. The list of active projects can also be updated per the information described above.
- Table 3 in clause 6.1 can be extended to include Amendments 6-9 as described above.
- We note that you have described relationship to several IEEE 802.1 projects and standards with respect to time synchronization, but there is no current relationship indicated regarding IEEE 802.3. Please note our currently active project, IEEE P802.3cx, Improved Precision Time Protocol (PTP) Timestamping Accuracy Task Force <<http://ieee802.org/3/cx/index.html>>, is working in this area, and consider whether this is relevant for any of your work.

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