

IEEE 802.3 Ethernet Working Group Liaison Communication

Source: IEEE 802.3 Working Group¹

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Subject: IEEE 802.3 response to Liaison on OTNT standardization work plan

Approval: Agreed to at IEEE 802.3 interim meeting, Spokane, WA, USA, 13th September 2018

Dear Mr Trowbridge and members of ITU-T SG15,

Thank you for your liaison statement from February 2018 concerning the Optical Transport Networks & Technologies (OTNT) Standardization Workplan.

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

The latest IEEE 802.3 revision project was approved by the Standards Board on 14th June 2018 and was published on 31st August 2018. This project incorporates and supersedes the eleven in-force amendments and corrigendum that have been produced since IEEE Std 802.3-2015, in particular, IEEE Std 802.3bw-2015, IEEE Std 802.3bp-2016, IEEE Std 802.3bq-2016, IEEE Std 802.3br-2016, IEEE Std 802.3by-2016, IEEE Std 802.3bz-2016, IEEE Std 802.3bn-2016, IEEE Std 802.3bu-2016, IEEE Std 802.3bv-2017, IEEE Std 802.3bs-2017, IEEE Std 802.3cc-2017, and IEEE Std 802.3-2015-Cor1-2017. Please replace any specific references to any of these amendments or corrigenda in the OTNT

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.

Standardization Workplan and in any ITU-T Recommendations with a reference to IEEE Std 802.3-2018.

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, however, there is a current project that has just begun the sponsor ballot process (the IEEE P802.3.2 Task Force) developing YANG models for Ethernet.

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

- The IEEE P802.3bt Power via MDI over 4-Pair Task Force has completed the sponsor ballot process and the draft was approved by the Standards Board on 27th September 2018.
- The IEEE P802.3ca 25 Gb/s, 50 Gb/s, and 100 Gb/s Passive Optical Networks Task Force is in the Task Force review phase. The IEEE 802.3 working group has agreed to modification of the objectives to remove 100 Gb/s from the scope of the project, and corresponding PAR modifications are pending approval by the Standards Board.
- The IEEE P802.3cb 2.5 Gb/s and 5 Gb/s Backplane Task Force has completed the Sponsor ballot process and the draft was approved by the Standards Board on 27th September 2018.
- The IEEE P802.3cd 50 Gb/s, 100 Gb/s, and 200 Gb/s Ethernet Task Force is in the Sponsor ballot phase, and is seeking conditional approval to proceed to RevCom for approval after the sponsor ballot process is complete.
- The IEEE P802.3cg 10 Mb/s Single Pair Ethernet Task Force is in the Working Group ballot phase.
- The IEEE P802.3ch Multi-Gig Automotive PHY Task Force is in the proposal selection phase.
- The IEEE P802.3.2 (IEEE 802.3cf) YANG Data Model Definition Task Force has just initiated the Sponsor ballot phase.
- The IEEE P802.3ck 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces Task Force is in the proposal selection phase.
- The IEEE P802.3cm 400 Gb/s over Multimode Fiber Task Force has begun the Task Force Review phase.
- The IEEE P802.3cn Beyond 10km Optical PHYs Task Force is in the proposal selection phase.

There are two 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 IEEE 802.3 Bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs Study Group is studying proposed new PHY types at the indicated rates of operation using signaling in both directions over a single fiber.
- The IEEE 802.3 Physical Layers for increased-reach Ethernet optical subscriber access Study Group is studying possible new access architectures to support larger reach and split ratios of current PON systems using a combination of WDM and power splitters, while using only passive components between the CO and the subscriber.

Concerning the OTNT Standardization work plan itself:

- We assume that Part I Section 2, “Reports from other organizations” will be replaced with information from the latest communications at your next meeting, and there is no need to comment to transform information sent in November 2017 to the information we are providing in this response.
- Page 10, Clause 4.2, 2nd bullet contains a reference to the IEEE 802.3bs project, which has since been completed, but also has been integrated into the now approved IEEE Std 802.3-2018 as noted above.
- Page 13, Clause 4.4, the penultimate paragraph contains two lists of physical interface data rates. The first is of those included in existing IEEE 802.3 standards, while the second was new data rates under development. All data rates with the exception of 50 Gb/s (under development in the IEEE P802.3cd project) are now provided by PHY types included in the approved IEEE Std 802.3-2018, and can be moved to the first list (so 2.5 Gb/s, 5 Gb/s, 25 Gb/s, 200 Gb/s, and 400 Gb/s are now part of the approved standard).
- Page 13, Clause 4.5.1.1, the reference can be updated to IEEE Std 802.3-2018 and the new PHY types introduced by IEEE P802.3bs (200GBASE-DR4/FR4/LR4 and 400GBASE-SR16/DR4/FR8/LR8) can be mentioned under high-rate interfaces.
- Page 13, Clause 4.5.1.2, the reference can be updated to IEEE Std 802.3-2018. The only completed PON project since IEEE Std 802.3-2015 is IEEE P802.3bn, which added the 10GPASS-XR PHY type. Note that this is over coaxial cable rather than optical infrastructure, so may not be of interest to ITU-T SG15. Additional optical PON PHY types are under development by the currently active IEEE P802.3ca project.
- Page 15, Clause 4.5.1.10 refers to the Interspersing Express Traffic (IEEE P802.3br) project. The provisions of the amendment developed in this project are now integrated into IEEE Std 802.3-2018, clause 99, “MAC Merge sublayer”. The term “Interspersing Express Traffic”, while the name of the project, isn’t present in the approved standard.
- Clause 4.5.1.12 beginning on page 18 can be replaced in its entirety with information provided earlier in this liaison statement.
- Table 4 on page 27 – please update the reference to IEEE Std 802.3-2018 and delete the rows for the approved amendments and corrigenda. The reference for IEEE Std 802.3.1-2013 should be retained.

Sincerely,

David Law

Chair, IEEE 802.3 Ethernet Working Group