IEEE 802.3 Ethernet Working Group EC REVIEW DRAFT Liaison Communication

Source: IEEE 802.3 Working Group¹

To: Steve Trowbridge Chair, ITU-T SG15

steve.trowbridge@nokia.com

Hiroshi Ota Advisor, ITU-T SG15

hiroshi.ota@itu.int

Naotaka Morita Rapporteur, ITU-T Q3/15

naotaka.morita@ntt-at.co.jp

CC: Konstantinos Karachalios Secretary, IEEE-SA Standards Board

Secretary, IEEE-SA Board of Governors

sasecretary@ieee.org

Paul Nikolich Chair, IEEE 802 LMSC

p.nikolich@ieee.org

Adam Healey Vice-chair, IEEE 802.3 Ethernet Working Group

adam.healey@broadcom.com

Pete Anslow Secretary, IEEE 802.3 Ethernet Working Group

panslow@ciena.com

From: David Law Chair, IEEE 802.3 Ethernet Working Group

dlaw@hpe.com

Subject: Liaison response to ITU-T SG15 on OTNT Standardization Workplan

Approval: Agreed to at IEEE 802.3 Plenary meeting, Orlando, FL, USA, 9th November 2017

Dear Mr. Trowbridge and members of ITU-T Study Group 15,

Thank you for your liaison statement on the OTNT Standardization Workplan of June 2017.

We are pleased to inform you that two additional IEEE 802.3 amendments have been approved since our last communication:

- IEEE Std 802.3bs-2017 Media Access Control Parameters, Physical Layers, and Management Parameters for 200 Gb/s and 400 Gb/s Operation, was approved on 7th December 2017.
- IEEE Std 802.3cc-2017 Physical Layers and Management Parameters for Serial 25 Gb/s Operation Over Single-Mode Fiber, was approved on 7th December 2017.

The following are the IEEE 802.3 standards currently in force:

- The base standard, IEEE Std 802.3-2015, was approved by the Standards Board on 3rd September 2015 and was published on 4th March 2016.
- Eleven amendments and a corrigendum are currently in force: the two recently approved documents mentioned above, plus:

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.

- IEEE Std 802.3bw-2015 Physical Layer Specifications and Management Parameters for 100 Mb/s Operation over a Single Balanced Twisted Pair Cable (100BASE-T1) which was approved by the Standard Board on 26th October 2015 and published on 8th March 2016.
- o IEEE Std 802.3by-2016 − *Media Access Control Parameters, Physical Layers, and Management Parameters for 25 Gb/s Operation*, which was approved on 30th June 2016 and published on 29th July 2016.
- o IEEE Std 802.3bq-2016 Physical Layer and Management Parameters for 25 Gb/s and 40 Gb/s Operation, Types 25GBASE-T and 40GBASE-T which was approved on 30th June 2016 and published on 8th September 2016.
- IEEE Std 802.3bp-2016 Physical Layer Specifications and Management Parameters for 1 Gb/s Operation over a Single Twisted Pair Copper Cable – which was approved on 30th June 2016 and published on 9th September 2016.
- IEEE Std 802.3br-2016 Specification and Management Parameters for Interspersing Express Traffic – which was approved on 30th June 2016 and published on 14th October 2016.
- IEEE Std 802.3bn-2016 Physical Layer Specifications and Management Parameters for Ethernet Passive Optical Networks Protocol over Coax, was approved on 22nd September 2016 and published on 7th December 2016.
- IEEE Std 802.3bu-2016 Physical Layer and Management Parameters for Power over Data Lines (PoDL) of Single Balanced Twisted-Pair Ethernet, was approved on 7th December 2016 and published on 7th February 2017.
- IEEE Std 802.3bv-2017 Physical Layer Specifications and Management Parameters for 1000 Mb/s Operation Over Plastic Optical Fiber, was approved on 14th February 2017 and published on 14th March 2017.
- IEEE Std 802.3bz-2016 Media Access Control Parameters, Physical Layers, and Management Parameters for 2.5 Gb/s and 5 Gb/s Operation, Types 2.5GBASE-T and 5GBASE-T, was approved on 22nd September 2016 and published on 18th October 2016.
- IEEE Std 802.3-2015 Cor 1-2017 Multi-lane Timestamping, was approved on 23rd March 2017 and published on 21st April 2017.
- The current version of the Ethernet MIBs standard is published as IEEE Std 802.3.1-2013.

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

- The IEEE P802.3bt DTE Power via MDI over 4-Pair Task Force is currently in the Sponsor Ballot phase.
- The IEEE P802.3ca 25 Gb/s, 50 Gb/s, and 100 Gb/s Passive Optical Networks Task Force is in the proposal selection phase.
- The IEEE P802.3cb 2.5 Gb/s and 5 Gb/s Backplane Task Force is in the Sponsor ballot phase.
- The IEEE P802.3cd 50 Gb/s, 100 Gb/s, and 200 Gb/s Ethernet Task Force has just begun the Sponsor ballot phase.
- The IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet Task Force has just initiated the Task Force Review phase. A CFI held during this meeting expands the scope of this project to include backplane media.

- 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 is in the Task Force review phase.

In addition to the projects described above, the next revision project, which is expected to become IEEE Std 802.3-2018 once completed, has just begun the sponsor ballot phase. This is expected to update IEEE Std 802.3-2015 by including the eleven approved amendments, the corrigendum, and all ready-for-ballot maintenance requests. Most other active projects are expected to become amendments to IEEE Std 802.3-2018.

There are three 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 Beyond 10 km Optical PHYs Study Group was chartered to consider optical PHYs for operation at 50 Gb/s, 200 Gb/s, and 400 Gb/s with reach greater than 10 km. A CFI held during this meeting expands the scope of the group to consider optical PHYs with reach beyond 10 km operating at 100 Gb/s.
- The 100 Gb/s per Lane for Electrical Interfaces and PHYs Study Group will study new AUI, copper cable and backplane PHY opportunities using 100 Gb/s per lane electrical signaling.
- The Next-generation 200 Gb/s and 400 Gb/s MMF PHYs Study Group will study opportunities for operation over fewer MMF pairs than existing Ethernet projects and standards.

Some specific comments on the document which you sent to us in June 2017:

- In Table 1, the status of the IEEE P802.3bs, IEEE P802.3cc and IEEE P802.3cd projects can be updated per the information provided above.
- The 2nd bullet of clause 4.2 can be updated as IEEE P802.3bs has been approved and is no longer under development.
- The list of high bit-rate interfaces in 4.5.1.1 can now include 200GBASE-DR4/FR4/LR4 and 400GBASE-SR16/DR4/FR8/LR8 with the completion of the IEEE P802.3bs project.
- The status of IEEE 802.3 projects as indicated in clause 4.5.1.11 can be updated per the above information.
- The list of in-force IEEE 802.3 standards in Table 6 can be updated per the above information.

We wish to thank the leadership and members of ITU-T SG15 for the opportunity to coordinate references to our work programs and we look forward to such continuing cooperation with ITU-T SG15 in the future.

Sincerely,
David Law
Chair, IEEE 802.3 Ethernet Working Group