

IEEE 802.3 Ethernet Working Group Liaison Communication

Source: IEEE 802.3 Working Group¹

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Subject: Liaison to ITU-T Study Group 15 from IEEE 802.3

From: David Law – Chair, IEEE 802.3 Ethernet Working Group (dlaw@hp.com)

Approval: Agreed to at IEEE 802.3 Plenary meeting, Atlanta, GA, USA 10 November 2011

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

The IEEE 802.3 Ethernet Working Group thanks ITU-T Study Group 15 for your liaison and the opportunity to review and comment on the “Optical Transport Networks & Technologies Standardization Work Plan” coming out of your February 2011 meeting. We have reviewed the OTNT Plan content in consideration of the standardization activities in progress within the IEEE 802.3 working group and have the following comments:

Since the last full revision of IEEE Std 802.3-2008, the following work has been completed within the IEEE 802.3 working group:

- IEEE Std 802.3ax-2008/802.1AX (Link Aggregation) was published on 3 November 2008
- IEEE Std 802.3av-2009 (10G EPON) was published on 30 October 2009
- IEEE Std 802.3bc-2009 (LLDP) was published on 28 September 2009
- IEEE Std 802.3at-2009 (DTE power enhancements) was published on 30 October 2009
- IEEE Std 802.3-2008/Cor1-2009 was published on 1 February 2010
- IEEE Std 802.3ba-2010 (40Gb/s and 100Gb/s Ethernet) was published on 22 June 2010
- IEEE Std 802.3az-2010 (Energy Efficient Ethernet) was published on 27 October 2010
- IEEE Std 802.3bg-2011 (Serial 40 Gb/s Ethernet) was published on 31 March 2011
- IEEE Std 802.3bf-2011 (Time Synchronization Protocol Support) was published on 15 July 2011

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 802.3.1-2011(Ethernet MIBs) was published on 5 July 2011. This incorporates and updates all Ethernet MIBs previously under the responsibility of IETF for managing all capabilities in the base version of the standard IEEE Std 802.3-2008.
- IEEE Std 802.3bd-2011 (MAC Control Frame for Priority-based Flow Control) was published on 10 August 2011

The final four of these (IEEE Std 802.3bg-2011, IEEE Std 802.3bf-2011, IEEE Std 802.3.1-2011, and IEEE Std 802.3bd-2011) have been published since our previous liaison statement on the OTNT SWP. If these are of relevance for ITU-T Study Group 15, please consider adding these to Table 7-1-3 on page 37 and elsewhere in the document as appropriate.

The following projects are currently active within the IEEE 802.3 working group:

- IEEE P802.3 (P802.3bh) (Revision to IEEE Std 802.3-2008 Task Force), is currently in the working group ballot phase. This is expected to lead to a 2012 revision of the standard, incorporating the amendments 802.3av, 802.3bc, 802.3at, 802.3-2008/Cor 1, 802.3ba, 802.3az, 802.3bg, 802.3bf, plus maintenance items into the text of IEEE 802.3.
- IEEE P802.3.1 (IEEE P802.3.1a) (Revision to IEEE Std 802.3.1-2011 Ethernet MIBs Task Force), is expected to lead to a revision of IEEE Std 802.3.1-2011 which incorporates MIBs for all of the amendments to IEEE Std 802.3-2008. This project has just begun the working group ballot phase.
- IEEE P802.3bj (100 Gb/s Backplane and Copper Cable Task Force) is currently considering technical choices that will lead to a first draft for task force review.
- The Next Generation 100 Gb/s Optical Ethernet Study Group is studying approaches to reducing the size, cost and power of the next generation of Optical Ethernet Interfaces.
- The Extended EPON Study Group is adding new power budget class(es) for 1G-EPON, 10/1G-EPON, and/or 10/10G-EPON, including extension to PMD specs and alternative mechanisms such as reach extenders to achieve longer reach and/or higher split ratios. This Study Group has proposed a PAR, 5-criteria responses, and objectives which have been endorsed by the 802.3 working group, to be considered by the IEEE 802 Executive Committee at the March 2012 plenary before Standards Board approval of the PAR.
- A new EPON over Coax PHY Study Group has been created to investigate the possibility to specify a new PHY for operating the EPON protocol over Coaxial Distribution Networks (EPoC).

Specific suggestions concerning the content of your document include:

- Clause 5.5.1.1 on High bit rate and long reach interfaces should include discussion of the new 40GBASE-FR (2km serial) interface standardized by IEEE Std 802.3bg-2011. This interface was specified expecting that devices compliant with this specification could also be used for application VSR2000-3R2 as defined in ITU-T G.693.
- The status of work as described above should be reflected in clause 5.5.1.9.
- The row “Management Aspects” in Table 5-3 on page 19 could change “P802.3.1” to “802.3.1” now that the initial version of this standard has been published as IEEE Std 802.3.1-2011.

- The row “Physical Layer Characteristics” in Table 5-3 on page 19 could add 802.3ba and 802.3bg.
- Table 5-3 does not currently contain a row for timing and synchronization aspects, but if such a row were included in a future revision, it should include 802.3bf.

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 J. Law
Chair, IEEE 802.3 Ethernet Working Group