IEEE 802.3 Ethernet Working Group Liaison Communication

Source: IEEE 802.3 Working Group[1]

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Subject: Liaison reply to ITU-T SG15 regarding the ANT Standardization Work Plan

Approval: Agreed to at IEEE 802.3 Plenary meeting, Orlando, FL, USA, 21st March 2013

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

Following the liaison exchange between our groups on the topic of Access Network Transport (ANT) Standardization Work Plan in July 2012, we would like to update you on the activities within the IEEE 802.3 Working Group, which might be of interest for the ANT group.

There are currently two active groups working on access-related projects:

- The Extended EPON IEEE P802.3bk Task Force, which is adding new PMDs for 1G-EPON and 10G-EPON:

    o PX30 for 1G-EPON, for operation at the distance of 20 km (or more) and the split of 1:32 (or more);

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[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.

- PX40 for 1G-EPON, for operation at the distance of 20 km (or more) and the split of 1:64 (or more);
- PR40 for 10/10G-EPON, for operation at the distance of 20 km (or more) and the split of 1:64 (or more);
- PRX40 for 10/1G-EPON, for operation at the distance of 20 km (or more) and the split of 1:64 (or more);

Since our last communication, the IEEE P802.3bk Task Force completed the stages of Task Force review of the draft versions D1.0 and D1.1, as well as the IEEE 802.3 Working Group Ballot on the draft versions D2.0 and D2.1. The IEEE P802.3bk Task Force will open the last stage of the draft review process at the end of March 2013, starting the IEEE Sponsor Ballot on D3.0.

More information about the IEEE P802.3bk Task Force can be found at the following URL: http://www.ieee802.org/3/bk/index.html, including the PAR (with changes from the November 2012 plenary meeting of IEEE 802.3 Working Group), 5 Criteria and Objectives for this project.

- The EPON Protocol over Coax (EPoC) IEEE P802.3bn Task Force working on the development of a PHY for the operation of EPON protocols over coaxial distribution networks. The EPoC PHY is intended to support:
  - symmetric and asymmetric (downstream / upstream) data rates;
  - symmetric and asymmetric (downstream / upstream) spectrum allocation;
  - independent configuration of downstream and upstream link parameters;
  - a baseline data rate of 1 Gbit/s downstream and upstream, when operating within up to 120 MHz of allocated spectrum, under defined baseline plant conditions;
  - a data rate lower than the baseline data rate when transmitting in less than 120 MHz of assigned spectrum or under poorer than defined plant conditions;
  - a data rate higher than the 1 Gbit/s baseline data rate and up to 10 Gbit/s when transmitting in assigned spectrum and in channel conditions that permit.

Moreover, one of the primary requirements for this project is to maintain compatibility with 1G-EPON and 10G-EPON, as currently defined in IEEE Std 802.3-2012, with minimal augmentation to MPCP and/or OAM if needed to support the new PHY.

More information about the IEEE P802.3bn Task Force can be found at following URL: http://www.ieee802.org/3/bn/index.html, including the PAR (with changes from the November 2012 plenary meeting of IEEE 802.3 Working Group), 5 Criteria and Objectives for this project.

Moreover, we would like to suggest the following updates to Table 3.2 and Table 4.2 of the ANT Work Plan you kindly shared with us:

- In Table 3.2, replace entries for "IEEE p802.3", "IEEE p802.16", and "IEEE p802" as follows:

IEEE 802 LAN/MAN Standards Committee	Mr. Paul Nikolich p.nikolich@ieee.org	http://ieee802.org	Established with Q2/15 and Q4/15	Use these liaisons for review of the ANT.
IEEE 802.3 Ethernet Working Group	Mr. David Law dlaw@hp.com	http://ieee802.org/3	Established with Q2/15 and Q4/15	Use these liaisons for review of the ANT.
IEEE 802.16 Working Group on Broadband Wireless Access	Dr. Roger B. Marks chair@wirelessman.org	http://ieee802.org/16	Established	Use these liaisons for review of the ANT.

- In Table 4.2, update items 9 and 10, to reflect the current status of IEEE P802.3bk Task Force and IEEE P802.3bn Task Force;

We would also like to suggest the following updates to the ANT Standards Overview:

- Modify definitions of SNI_{C5} and SNI_{C6}, replacing reference to "IEEE 802.3ah" with "IEEE 802.3 1G-EPON or 10G-EPON"
- Modify the definition of Passive Optical Network for "Broadband (above 2Mbit/s)" for SNI Interfaces and XNI Interfaces to read as follows: Passive Optical Network ("BPON" and "GPON" according to ITU-T G.983 series and G.984 series, or IEEE 802.3 1G-EPON or 10G-EPON)

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