

Meeting Minutes

Group: IEEE P802.3cs Physical Layers for increased-reach Ethernet optical subscriber access (Super-PON) Task Force

Event: Interim meeting

Date: September 10, 2019

Location: Indianapolis, IN – USA

Opening

9:07 AM: The meeting was called to order by Claudio DeSanti, the Task Force chair. These minutes were taken by Liang Du and Claudio DeSanti, due to lack of a secretary.

Note: all URLs prefaced with <http://www.ieee802.org/3/cs/public/201909/> unless otherwise noted.

Motion #1

Move to approve the agenda as recorded in 20190910-Agenda.pdf

Moved: Marek Hajduczenia Second: Frank Effenberger

Procedural (>50%) Passed by voice without opposition

Motion #2

Move to approve the minutes of the past meetings

– July 17, 2019: http://www.ieee802.org/3/cs/public/201907/20190717-Minutes_P802d3cs_Vienna.pdf

– August 22, 2019: <http://www.ieee802.org/3/cs/public/AdHoc/20190822-Minutes.pdf>

Moved: Glen Kramer Second: Curtis Knittle

Procedural (>50%) Passed by voice without opposition

The Chair gave his opening report including decorum, goals, big ticket items, reflector, web site, process, etc.

9:16 AM: The chair made a call for patents; no response was made.

The Chair reviewed the IEEE Participation guidelines. It was suggested that an informal liaison be established with ITU-T Q2/SG15 for the G.9807.3 project.

Presentations

All presentations are in the following format:

Presentation #

Title	Presenter	affiliation
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Comments

Filename: FileRef

Presentation # 1

Super-PON PMD Parameters Definition	Liang Du	Google
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This contribution provided definitions taken from G.698.2 for the parameters used to define the black link. The task force feedback was that it is better to reference those definitions, rather than re-define them. In addition some of them appear to be already present in 802.3. The next step for this contribution is to leverage what is already in 802.3 and reference G.698.2 for what is not present.

Filename: 20190910-Super-PON_PMD_Parameters_Definition.pdf

Presentation # 2

Super-PON PMD Parameters Values	Liang Du	Google
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This presentation showed proposed initial values for multiple tables in the P802.3cs draft. It was proposed to have each PMD table (link, Tx, Rx) as a complete set of parameters. In this way, a transmitter manufacturer can see exactly what their requirements are, as well as a receiver manufacturer or a link manufacturer. Updated values have been agreed for inclusion in the next draft.

Filename: 20190910-Super-PON_PMD_Parameters_Values_1.pdf

10:30 AM Break, reconvened at 10:50ish.

Presentation # 3 (after deadline)

Max DGD Penalty	Vince Ferretti	Corning
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This presentation proposed to align with P802.3cu for lower Max DGD values, based on deployment of primarily G.652.B and D fiber over the last 10-15 years. This results in the value of 12 ps as Max DGD for 50 km fiber. The task force accepted to align with the P802.3cu approach.

Filename: 20190910_Max_DGD_Penalty.pdf

Presentation # 4

Super-PON PCS Proposal	Claudio DeSanti	Google
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Building on the consideration that both 10G-EPON and 25G-EPON PCS can be leveraged as Super-PON PCS, this presentation proposed to define a base PCS, based on 10G-EPON PCS and supporting both the 10G/10G and 10G/2.5G speeds, and an advanced PCS, based on 25G-EPON PCS and providing additional margin for the 10G/10G speed only. The idea is along the lines of IEEE 802.3 clause 74, defining a FEC option for 10GBASE-R PHYs. The presentation showed how to enhance the 10G-EPON and 25G-EPON Discovery processes to support ONU tunable transmitters and the 2.5G upstream speed.

The task force requested further investigation to support TDM coexistence between the 2 upstream speeds, 10G and 2.5G. In terms of PCS options, the task force consensus was in the direction of defining only one PCS option, not two. To facilitate the decision, the task force requested to create a detailed comparison table to list all pros and cons.

Filename: 20190910-Super-PON_PCS_Proposal.pdf

Comment Resolution

The 9 received comments were reviewed and resolved (See 802d3cs_D0_2_approved.pdf).

Motions and Closing

Motion #3

Move to instruct the editor to generate P802.3cs draft 0.3, using draft 0.2 as baseline and incorporating all accepted material

Moved: Marek Hajduczenia Second: Frank Effenberger

For: 9 Against: 0 Abstain: 0

Technical (≥75%) Motion Passed

The Chair proposed a teleconference for October 10, 2019 @ 10:30am PDT.

The Chair recorded the normal future meeting polls.

Motion #4

Move to adjourn.

Moved: Frank Effenberger Second: Curtis Knittle

Procedural (>50%) Passed by voice without opposition

12:20 PM: The meeting was adjourned.

Attendees

Name	Employer	Affiliation
Bill Powell	Nokia	Nokia
Claudio DeSanti	Google	Google
Curtis Knittle	Cablelabs	Cablelabs
Erick Pelletier	Teraxion	Teraxion
Frank Effenberger	Futurewei	Futurewei
Gary Bernstein	Leviton	Leviton
Glen Kramer	Broadcom	Broadcom
Liang Du	Google	Google
Marek Hajduczenia	Charter	Charter
Mark Laubach	Broadcom	Broadcom
Vince Ferretti	Corning	Corning
Yuanqiu Luo	Futurewei	Futurewei