

Meeting Minutes

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

Event: Interim meeting

Date: January 21, 2019

Location: Geneva, Switzerland

Opening

9:00 AM: The meeting was called to order by Claudio DeSanti, the Task Force chair.

Note: all URLs prefaced with <http://www.ieee802.org/3/cs/public/202001/> unless otherwise noted.

Motion #1

Move to approve the agenda as recorded in 20200121-Agenda.pdf

Moved: Marek Hajduczenia Second: Liang Du

Procedural (>50%) Passed by voice without opposition

Motion #2

Move to approve the minutes of the past meetings

- November, 12 2019 [http://www.ieee802.org/3/cs/public/201911/20191112-](http://www.ieee802.org/3/cs/public/201911/20191112-Minutes_P802d3cs_Waikoloa_Village.pdf)

[Minutes_P802d3cs_Waikoloa_Village.pdf](http://www.ieee802.org/3/cs/public/201911/20191112-Minutes_P802d3cs_Waikoloa_Village.pdf)

Moved: Vince Ferretti Second: Marek Hajduczenia

Procedural (>50%) Passed by voice without opposition

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

9:12 AM: The chair made a call for patents; no response was made.

The Chair reviewed the IEEE Participation guidelines.

Chair informed the group that our timeline would push out by one meeting cycle as establishing baseline data is taking longer than expected.

Presentations

All presentations are in the following format:

Presentation #

Title	Presenter	affiliation
Comments		
Filename:	FileRef	

Presentation # 1

Information about cabled fiber link attributes used for system design Vince Ferretti Corning

This informative Annex was presented as a draft for the editor to provide description, methodology, and examples of how cabling link attenuation attributes can be statistically estimated. The Annex includes link design attenuation data for single mode fiber links across a wavelength range from 1490nm to 1625nm. The task force agreed to add it to the next version of the draft.

Filename: 20200121-Ferretti_3cs_01a

Presentation # 2

Super-PON PCS Proposal Claudio DeSanti Google

This presentation proposed leveraging the 25G-EPON PCS for Super-PON for both 10/10G symmetric and 10/2.5G asymmetric speeds. It also proposed providing an informative annex describing how 10G-EPON ONUs and OLTs could be enhanced to support tunable symmetric Super-PON PMDs. This second proposal was deferred until later in the meeting.

Filename: 20200121-DeSanti_3cs_01

Presentation # 3

Super-PON enhancements for clause 142 Claudio DeSanti Google

This presentation proposed changes to clause 142 that would be needed to adapt 802.3ca clause for SuperPON.

Filename: 20200121-DeSanti_3cs_02

10:23 AM Break, reconvened at 10:48 AM

Presentation # 4

Super-PON enhancements for clause 143 Claudio DeSanti Google

This presentation proposed changes to clause 143 that would be needed to adapt 802.3ca clause for SuperPON.

Filename: 20200121-DeSanti_3cs_03

Presentation # 5

Super-PON enhancements for clause 144 Claudio DeSanti Google

This presentation proposed changes to clause 144 that would be needed to adapt 802.3ca clause for SuperPON.

Filename: 20200121-DeSanti_3cs_04

Presentation # 6

Using Super-PON PMDs with 10G-EPON ONUs and OLTs Claudio DeSanti Google

This informative Annex proposal was presented as a draft for the editor to add an optional PCS option of

SuperPON. The Task Force decided to wait until the next meeting to facilitate more discussion prior to adding to the draft.

Filename: 20200121-DeSanti_3cs_05

Presentation # 7

Super-PON linear fit for US power Liang Du Google

This presentation proposed a linear fit to estimate ONT launch power at 10 Gb/s US with low loss AWG. The Task Force agreed that a linear fit was appropriate due to the small differences (<0.3dB) generated by using this method.

Filename: 20200121-Du_3cs_01

Presentation # 8

Super-PON Link Budget Analysis Effect of Raman Liang Du Google

This presentation analyzed the effects of Raman on link budgets. It suggested that Raman penalty for operation of only Gen X can be absorbed by using the 802.3ca FEC, especially in the signal-ASE limited US. The task force asked that the FEC gains be re-examined prior to entering into the draft. The presentation also showed that Raman penalties can be mostly avoided if we place the high launch power DS signals in the C-band and the lower power US signals in the L-band when implementing Gen Y. The task force agreed to this switch.

Filename: 20200121-Du_3cs_02

12:40 PM Lunch break, reconvened at 2:05 PM

Discussion continued on Presentation #8 on Link Budget and margin. Author will incorporate feedback into future presentation.

Comment Resolution

No comments were submitted during this period.

Motions and Closing

Motion #3

Move to instruct the editor to generate P802.3cs draft 0.5, using draft 0.4 as baseline and all accepted material:

- Flip the downstream/upstream wavelength allocations for FSR set 2 in table 200-4
- Incorporate Annex Y - Information about cabled fiber link attributes used for system design

Moved: Eric Pelletier Second: Liang Du

For: 4 Against: 0 Abstain: 1

Technical (≥75%) Motion Passed

Motion #4

Move that the IEEE 802.3 Working Group approve 20200121-IEEE_802d3cs_to_Q2SG15_0120_draft_v1 with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to ITU-T Q2/SG15

