

IEEE P802.3cu Task Force Ad Hoc meeting – July 3rd, 2019

Prepared by Mark Nowell

Proposed Agenda:

- Approve agenda
- Approve previous ad hoc minutes
- Patent reminder
- <http://www.ieee802.org/3/patent.html>
- Participant reminder
- P802.3cu Task Force Ad hoc:
 - “Task Force Update” – Mark Nowell (5 mins)
 - “802.3cu: 400GBASE-LR4 fiber propagation penalty” – Marco Mazzini (15 mins)
 - “PMD Naming Proposal Update” – Chris Cole (15 mins)
 - “PMD penalty for single link 400GBASE-LR4” – Jose Castro (15mins)
 - “Suggested P802.3cu SMF specification” – Rick Pimpinella (presentation posted but we may not have time to review).

Presentations posted at:

http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/index.html

Meeting began at ~8:00 a.m. Pacific

Meeting began with the agenda presentation:

http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/agenda_3cu_adhoc_070319_v2.pdf

The ad hoc chair reminded participants to indicate full names and employer/affiliation correctly for the meeting minutes. He reminded participants to mute lines when not speaking and reviewed the steps to unmute.

Showed the links to the IEEE 802.3cu Task Force ad hoc page and the email reflector.

Presented the proposed agenda and asked if there was objection as written. The agenda was approved by the ad hoc.

Chair asked if there were any changes needed to the minutes from the last meeting that were posted. One typo mentioned. Chair asked if there was any objection to approving the minutes with the typo corrected. The minutes were approved by the ad hoc.

Reminded participants of the IEEE patent policy. He asked if anyone was unfamiliar with the IEEE patent policy. No one responded.

Reminded participants of the IEEE Participation Requirements and showed the slide with the Participation requirements. Chair asked if anyone was unfamiliar with the IEEE Participation Requirements. No one responded.

Agenda Items

P802.3cu Task Force update, Mark Nowell

Task Force F2F meeting will be during July Plenary:

- <http://802world.org/plenary/>
- P802.3cu TF will meet:
 - Mon 7/15
 - 8-10am
 - 1pm-6pm
 - Tues 7/16
 - 8am to ~ 9/10am. (.3ck start time @ 9am in same room will be delayed if .3cu TF has work to finish)
- Review technical proposals – final 400G 10km baseline left to be adopted
- Deadlines:
 - Presentation request: Friday July 5th (Extension to Mon July 8th possible but priority to those that meet earlier date)
 - Presentation deadline: Tues July 9th

Presentation #1:

“802.3cu: 400GBASE-LR4 fiber propagation penalty” – Marco Mazzini

See: http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/mazzini_3cu_adhoc_070319.pdf

- Experimental investigation into 10km transmission @ 100 Gb/s PAM4
- Investigated the impact of predistortion of the PAM4 eye on the chromatic dispersion penalty
- CD has larger impact on the upper eye, so predistortion is used to close the lower eye (and open the upper eye) before transmission
- Used multiple fiber links to assess different negative dispersion values. Setup used a PDFA to ensure same SNR into the receiver
- Showed that predistortion can be used to compensate for chromatic dispersion
- No change required in IEEE specification methodology
- Approach is not restricted to SiPhotonics transmitter even though experimental results were done with SiPhotonics.

Presentation #2:

“PMD Naming Proposal Update” – Chris Cole

See: http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/cole_3cu_adhoc_070319_v3.pdf

- Indicated that despite the previous decision in May to adopt 100GBASE-FR and 100GBASE-LR nomenclature, that there is a consistent naming preference from individuals representing most of the hyper-scale cloud providers is to include the “1” after the reach.

- Provided some history of naming
- Encouraged others to solicit equivalent feedback from end-users
- 100GBASE-DR is outside the scope of 802.3cu so not part of his proposal but presenter expects to propose a motion to change in Vienna.
- Chair indicated that the motion will happen near end of meeting in order to allow maximal discussion.
- Slides updated to v3 after the meeting to clarify the presented information was from individuals associated with the companies listed – not the company official position.

Presentation #3:

“PMD penalty for single link 400GBASE-LR4” – Jose Castro

See: http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/castro_3cu_adhoc_070319.pdf

- Presenter did not join the call due to some confusion on start time
- Some light discussion on posted presentation. Appears to confirm the previous analysis.

Presentation #4:

“Suggested P802.3cu SMF specification” – Rick Pimpinella

See: http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/pimpinella_3cu_adhoc_070319.pdf

- Presenter did not join the call due to some confusion on start time
- Some discussion on posted presentation.
- Proposed to reference the ITU specifications rather than the IEC documents.
 - G.652D and G.657 Category A
- Specifics on how this would be editorially implemented discussed

The ad hoc meeting ended at ~9 a.m. Pacific.

List of attendees (captured from Webex tool)

Ed Ulrichs	sourcephotonics
Yoshiaki Sone	nel-america
inho kim	marvell
Thomas Palkert	gmail
Jeffery Maki	juniper
Gary Nicholl	cisco
Paul Kolesar	gmail
Hideki Isono	jp.fujitsu
Vince Ferretti	corning
Jialong Shuai (Tony)	huawei
Pirooz Tooyserkani	cisco
Ali Ghiasi	ghiasi quantum
Marco Mazzini	cisco
R. Okabe	fujitsu
guangcan	huawei
Dave Lewis	lumentum
James Young	commscope
Mike Dudek	marvell
Peter Stassar	huawei
Kenneth Jackson	sei-device
Pete Anslow	ciena
Eric Maniloff	ciena
Stephen Didde	keysight
Mark Nowell	cisco
Raymond Nering	cisco
BRIAN WELCH	cisco
Greg LeCheminant	keysight
Chris Cole	finisar
DREW GUCKENBERGER	cisco
bill kirkland	semtech
Piers Dawe	mellanox
David Chen	ao-inc
Drew Guckenberger	cisco
david malicoat	independent
Shimon Mueller	axalume
David Piehler	dell