

IEEE P802.3cu Task Force Ad Hoc meeting – April 17, 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)
 - “Editorial Update” – Gary Nicholl (5 mins)
 - “Considerations on wavelength choices for 400GBASE-LR4” – Peter Stassar (20 mins)
 - “400G-10km Feasibility With 4λ x 100G-PAM4 on CWDM Grid” – David Lewis (20 mins)

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_cu_adhoc_041719.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. Chair asked if there was any objection to approving the minutes as written. 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 now approved by SASB
- 1st Task Force F2F meeting will be during May interim:
 - Week of May 20th
 - <http://www.ieee802.org/3/interims/may19/index.html>
 - P802.3cu TF will meeting all-day Thurs and Friday morning
 - This will be the first opportunity to make technical decisions

Verbal update: “Editorial Update” – Gary Nicholl

- Provided update on preparations of editorial team towards preparing an initial draft for Task Force review.

Presentation #1:

“Considerations on wavelength choices for 400GBASE-LR4” – Presented by Pete Anslow

See: http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/stassar_cu_adhoc_041719.pdf

- Reviewed some analysis on the options around addressing the dispersion challenges of the 10km 400G specification
- Considered impact of a reduced fiber specification for dispersion zero range
- Considered impact of a tightened transmitter wavelength range
- Reviewed some analysis of an installed fiber data set from telecom operators that was previously contributed to ITU but isn't public.
- A tightened dispersion zero range of 1305-1320nm (versus worst case G.652 spec of 1300-1324nm) would represent 98% of the data set.
- Showed how a combination of these approach for certain devices could result in a 10km specification

Presentation #2:

400G-10km Feasibility With 4λ x 100G-PAM4 on CWDM Grid” – David Lewis

See: http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/lewis_cu_adhoc_041719.pdf

- Presented some experimental BER and TDECQ results using EMLs over “10km” dispersion. Longer reaches used to emulate worst case fiber.
- Able to show TDECQ-SECQ and Dispersion penalty results
 - Worst dispersion penalty measured was 0.57 dB
 - Worst TDECQ-SECQ was 0.85 dB
- Concluded that results demonstrated feasibility of 4x100G CWDM over 10 km.

- Request for wavelength info of channels
- Question if cooling CWDM negates value vs. LWDM. CWDM still provides implementation optimization

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

List of attendees (captured from Webex tool)

Dave Lewis (Lumentum)	lumentum
bill kirkland	semtech
Dominic Lapierre (EXFO)	exfo
Gary Nicholl	cisco
BRIAN WELCH	cisco
Vince Ferretti	corning
Pete Anslow (Ciena)	ciena
Hideki Isono	jp.fujitsu
rhorer	synopsys
Steve Trowbridge (Nokia)	nokia
Stephen Didde	keysight
Mike Dudek	marvell
Hai-Feng	intel
David Chen (AOI)	ao-inc
Frank Chang	gmail
Shimon Mueller	axalume
Jialong Shuai (Tony)	huawei
Greg McSorley	amphenol
phong pham	usconec
Matt Brown	macom
Mark Nowell	cisco
DREW GUCKENBERGER	cisco
Derek Cassidy	bt
Mark Kimber	semtech
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Yoshiaki Sone	nel-america
Raymond Nering	cisco