

IEEE P802.3cu Task Force Ad Hoc meeting – Sept 4th, 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
 - “Task Force Update” – Mark Nowell (5 mins)
 - “Feasibility Of 400GBASE-LR4 Using EML Transmitters On CWDM Grid Over 10 km (6.3 dB Channel Loss) of Single Mode Fiber” – Kohichi Tamura (15 mins)
 - “400GBASE-LR4 Link Budget Proposal” – Chris Cole (15 mins)
 - “400GBASE-LR4 Baseline Proposal” – David Lewis (15 mins)

Presentations posted at:

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

Meeting began at ~8:05 a.m. Pacific

Meeting began with the agenda presentation:

http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/agenda_3cu_adhoc_090419.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. 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

Draft update:

- D0.4 has been uploaded here: <http://www.ieee802.org/3/cu/private/index.html>
- Editorial team is looking for ad hoc feedback
- Deadline Friday

The next Task Force F2F meeting will be during Sept Interim:

- <http://www.ieee802.org/3/interims/index.html>
- P802.3cu TF will meet all day Monday Sept 9th. 8am Start
- Deadlines are past. Any late submissions will be handled by Task Force but send request asap.

Presentation #1:

“Feasibility Of 400GBASE-LR4 Using EML Transmitters On CWDM Grid Over 10 km (6.3 dB Channel Loss) of Single Mode Fiber” – Kohichi Tamura

See:

http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/tamura_3cu_adhoc_090419.pdf

- Data was presented that demonstrates the feasibility of 53.125 Gbaud PAM4 optical transmission of EML over 10 km of single mode fiber with chromatic dispersion that exceeds the worst-case value
- Actual setup had excess positive dispersion due to fiber availability
- Presented that results support EML’s feasibility of 400GBASE-LR4 10km specification using CWDM grid

Presentation #2:

“400GBASE-LR4 Link Budget Proposal” – Chris Cole

See: http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/cole_3cu_adhoc_090419.pdf

- Presented link budget proposal with the emphasis on lowest cost to meet the market need
- Presented that market need is for loss budget equivalent to previous 10km reach specifications but that actual reach of 10km not a market requirement
- Presented a proposed reach of 6km
- Presented a history of past LR and SR specifications pointing to the consistency in loss budget and naming

Presentation #3:

“400GBASE-LR4 Baseline Proposal” – David Lewis

See: http://www.ieee802.org/3/cu/public/cu_adhoc/cu_archive/lewis_3cu_adhoc_090419.pdf

- Presented a baseline proposal that included a reduction in reach on worst case fiber to 7km with an engineered link specification for 10km
- The proposal would have a common Tx/Rx spec, so one PHY, but that 10km reach possible with knowledge on better quality fiber
- Concerns raised about the feasibility of this approach due to most G.652 type fibers not meeting the specification.

The ad hoc meeting ended at 9:00 a.m. Pacific.

List of attendees (captured from Webex tool)

Vipul Bhatt	finisar
Hideki Isono	jp.fujitsu
Marco Vitali	sicoya
bill kirkland	semtech
Mark Nowell	cisco
James Young	commscope
Paul Kolesar	gmail
Pete Anslow	ciena
Kohichi	cigtech
david malicoat	gmail
guangcan	huawei
Dominic Lapierre	exfo
Piers Dawe	mellanox
Inho Kim	marvell
Mark Kimber	semtech
Kiyo Hiramoto	cigtech
Dave Lewis	lumentum
Mike Dudek	marvell
Stephen Didde	keysight
Gary Nicholl	cisco
Raymond Nering	cisco
BRIAN WELCH	cisco
James Young	commscope
Marco Mazzini	cisco
Steve Trowbridge	nokia
Peter Stassar	huawei
Vince Ferretti	corning
Phil Sun	credosemi
Derek Cassidy	bt
Jeffery Maki	juniper
Xinyuan Wang	huawei
Yoshiaki Sone	nel-america
David Piehler [Dell EMC]	dell
Shimon	axalume
Ed Ulrichs	sourcephotonics
kohichi Tamura	cigtech