

**IEEE P802.3cm 400 Gb/s over Multimode Fiber Task Force Ad Hoc Web/Teleconference Minutes
June 28, 2018**

Group Name: IEEE P802.3cm 400 Gb/s over Multimode Fiber Task Force Ad Hoc

Date/Location: Thursday, June 28, 2018. Web/Teleconference

Chair: Robert Lingle, Jr., Chair NGMMF SG

Recording Secretary: Mabud Choudhury

Meeting Participants:

	Name	Employer	Affiliation
1	Adrian Young	Leviton Mfg.	Leviton Mfg.
2	Bruce Chow	Corning Inc	Corning Inc
3	Darryl Heckle	Corning Inc	Corning Inc
4	Dean Wallace	Cavium	Cavium
5	Flavio Marques	Furukawa Electric LatAm	Furukawa Electric LatAm
6	Gary Nicholl	Cisco	Cisco
7	Greg McSorley	Amphenol	Amphenol
8	John Kamino	OFS	OFS
9	Jonathan Ingham	Foxconn Interconnect Technology	Foxconn Interconnect Technology
10	Jonathan King	Finisar	Finisar
11	Kenneth Jackson	Sumitomo	Sumitomo
12	Mabud Choudhury	OFS	OFS
13	Mark Nowell	Cisco	Cisco
14	Mike Dudek	Cavium	Cavium
15	Paul Kolesar	CommScope	CommScope
16	Paul Neveux	Superior Essex	Superior Essex
17	Pete Pondillo	Corning Inc	Corning Inc
18	Phong Pham	US Conec	US Conec
19	Piers Dawe	Mellanox	Mellanox
20	Rakesh Sambaraju	Nexans	Nexans
21	Ramana Murty	Broadcom	Broadcom
22	Robert Lingle	OFS	OFS
23	Sunny Xu	CommScope	CommScope
24	Vipul Bhatt	Finisar	Finisar

24 attendees participated in the June 28, 2018 web call. If you participated in the meeting but are not listed or if you attended and company employer/affiliation is incorrect, please email Mabud Choudhury, mchoudhury@ofsoptics.com with a correction.

Call to order/Meeting Start Time: 1:09 pm Eastern Daylight Time/EDT (UTC -4)

Chair's remarks:

- Reminder for participants to record their attendance along with employer/affiliation to Mabud Choudhury at mchoudhury@ofsoptics.com
- Reviewed Agenda, Slide 3 of:
http://www.ieee802.org/3/cm/public/adhoc/linge_3cm_adhoc_01_062818.pdf

Approval of agenda: Agenda was approved.

- Participation in IEEE 802 Meetings and Guidelines for IEEE-SA Meetings, including Patent Policy, reviewed (Slides 4 & 5 of link above). No one indicated being unfamiliar with these policy slides.
- Reviewed deadlines for requesting agenda time and submitting presentations (Slide 6 of above link):
 - Request time by midnight Thursday, June 28th, 2018 (AoE)
 - Submit presentation by midnight Thursday, July 5th, 2018 (AoE)
- Reviewed key adopted objectives and status of baselines:
 - Adopted a baseline in Pittsburgh to define a physical layer specification that supports 400 Gb/s operation over 8 pairs of MMF with lengths up to at least 100m
 - Need to adopt a baseline in July to define a physical layer specification that supports 400 Gb/s operation over 4 pairs of MMF with lengths up to at least 100m
- Chair's goal is to advance D1.0 at the November Bangkok plenary
- Encourage consensus building for 400G-SR4.2 baseline proposal.

Technical Topics:**1. Channel wavelength ranges for 400GBASE-4.2 OM3 and OM4 effective bandwidth, modal and chromatic dispersion included, Jonathan King:**

- http://www.ieee802.org/3/cm/public/adhoc/king_3cm_adhoc_01_062818.pdf
- Model to calculate OM3/OM4 effective bandwidth for channel wavelength ranges:
 - Fiber bandwidth was calculated from combining the TIA proposed worst case EMB for OM3 and OM4, and an effective chromatic dispersion bandwidth, BW_{CD} , as used in the 10GE spreadsheet model
 - The effective bandwidth BW_{eff} , in MHz.km, is calculated for a 0.6 nm rms spectral width transmitter, following the method used in the 10GE spreadsheet model
- Conclusions/Recommendations:
 - Nominal 850 nm channel should extend from 844 nm to 863 nm
 - Nominal 910 nm channel should extend from 900 nm to 918 nm
- Discussion:
 - Consensus wavelength ranges established for 400G-SR4.2 baseline proposals
 - Remaining technical issues to address: mux/demux directionality and eye safety

Meeting closed: 1:52 pm Eastern Daylight Time/EDT (UTC -4).

Next Meeting: Thursday, June 28, 2018, 1 pm – 2:30 pm Eastern Standard Time (US), 400G over MMF TF Ad Hoc Web/Teleconference