

**Approved Minutes**  
**IEEE P802.3cm 400 Gb/s over Multimode Fiber Task Force Ad Hoc Web/Teleconference**  
**January 10, 2019**

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

**Date/Location:** Thursday, January 10, 2019. Web/Teleconference

**Chair:** Robert Lingle, Jr., P802.3cm TF Chair

**Recording Secretary:** Mabud Choudhury

**Meeting Participants:**

	<b>Name</b>	<b>Employer</b>	<b>Affiliation</b>
1	Adrian Young	Leviton Mfg.	Leviton Mfg.
2	David Piehler	Dell EMC	Dell EMC
3	Earl Parsons	CommScope	CommScope
4	Flavio Marques	Furukawa Electric LatAm	Furukawa Electric LatAm
5	John Abbott	Corning Inc	Corning Inc
6	John Kamino	OFS	OFS
7	Jonathan Ingham	Foxconn Interconnect Technology	Foxconn Interconnect Technology
8	Mabud Choudhury	OFS	OFS
9	Mike Dudek	Marvell	Marvell
10	Piers Dawe	Mellanox	Mellanox
11	Ramana Murty	Broadcom	Broadcom
12	Raymond Nering	Cisco	Cisco
13	Rick Pimpinella	Panduit	Panduit
14	Rita Horner	Synopsys	Synopsys
15	Robert Lingle	OFS	OFS
16	Steve Swanson	Corning Inc	Corning Inc
17	Tom Mitcheltree	US Conec	US Conec
18	Vipul Bhatt	Finisar	Finisar
19	Yi Sun	OFS	OFS

19 attendees participated in the December 07, 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](mailto:mchoudhury@ofsoptics.com) with a correction.

**Call to order/Meeting Start Time:** 12:03 pm Eastern Standard Time/EST (UTC -5)

**Chair's remarks:**

- Reminder for participants to record their attendance along with employer/affiliation to Mabud Choudhury at [mchoudhury@ofsoptics.com](mailto:mchoudhury@ofsoptics.com)
- Reviewed Agenda, Slide 3 of:  
[http://www.ieee802.org/3/cm/public/adhoc/lingle\\_3cm\\_adhoc\\_01\\_120718.pdf](http://www.ieee802.org/3/cm/public/adhoc/lingle_3cm_adhoc_01_120718.pdf)

**Approval of agenda:** Agenda was approved.

- Participation in IEEE 802 Meetings and Guidelines for IEEE-SA Meetings, including Patent Policy, reviewed (Slides 4 - 8 of link above). No one indicated being unfamiliar with these policy slides.
- Approved Unapproved Minutes for August 23<sup>rd</sup>, August 30<sup>th</sup>, September 27<sup>th</sup>, October 11<sup>th</sup> and October 25<sup>th</sup>, 2018 ad hoc meetings
- Chair indicated that there would be an additional draft under TF review, D1.2, to provide adequate time to resolve 3 big ticket open technical items (covered below under technical topics). The current adopted timeline, Slide 11 of [http://www.ieee802.org/3/cm/public/adhoc/lingle\\_3cm\\_adhoc\\_01\\_120718.pdf](http://www.ieee802.org/3/cm/public/adhoc/lingle_3cm_adhoc_01_120718.pdf) . Target date for authorizing WG review, D2.0 will now be March, 2019. Discussion if 2 or 3 drafts will be required under WG review.
- Discussion of Big Ticket items for advancing to WG ballot (also, see Technical Topics below):
  - Modal noise penalty
  - Tx transition time
  - RMS spectral width for 910nm wavelength
- Deadlines for requesting agenda time and submitting presentations (Slide 14 of above link):
  - Request time by midnight Thursday, January 3<sup>rd</sup>, 2019 (AoE)
  - Submit presentation by midnight Thursday, January 10<sup>th</sup>, 2019 (AoE)
  - Chair indicated updated request time deadline of **Friday, January 4<sup>th</sup>** and presentation submission deadline of **Friday, January 11<sup>th</sup>** during the meeting.
- TF Interim meeting dates:
  - **Thursday January 17th, 2019, 13h00 - 18h00** and **Friday, January 18th, 2019, 08h00 - 12h00**
- Reviewed preparation and goals for January Interim TF meeting:
  - Primary focus: comment resolution against D1.1
  - Consensus building on Big Ticket items
  - Motion to formally modify the timeline

## Technical Topics:

### 1. Editors' update – Jonathan Ingham, Acting Chief Editor:

- Slide 10 of [http://www.ieee802.org/3/cm/public/adhoc/lingle\\_3cm\\_adhoc\\_01\\_120718.pdf](http://www.ieee802.org/3/cm/public/adhoc/lingle_3cm_adhoc_01_120718.pdf) :
  - Draft 1.1 open for review from November 30th, 2018 through midnight AoE on New Years' Eve December 31st, 2018.
  - Links for access to D1.1 provided. Username and password for 802.3cm Private area provided.
  - Comment files sent to Robert Lingle, Jr., TF Chair, Jonathan Ingham, Acting Chief Editor and Pete Anslow, 802.3 Secretary, editorial advisor for 802.3cm TF.
  - Editorial team will provide proposed responses to comments before Long Beach Interim TF meeting
  - Comments will be resolved at Long Beach Interim TF meeting, January 17-18, 2019

### 2. RMS spectral width on the 900 – 918 nm:

- Ramana Murty indicated that he would submit comment against D1.1, clause (now) 150, to change maximum RMS spectral width on the 900 – 918 nm from 0.60 to 0.65 nm
- Discussion on impact of a change in RMS spectral width on MPN penalty and TDECQ filter reference response

- Discussion indicated that some more work is necessary to build consensus
- Chair suggested a presentation on this topic for next ad hoc meeting

### **3. Tx transition time:**

- Discussion about changing the max Tx transition time from 34 to 32 ps
- Need for further study and consensus building discussed
- Piers Dawe indicated that he may bring in contribution on this topic for next ad hoc meeting

### **4. “Modal Noise Measurements with 25G VCSELs” – Jose Castro:**

- Discussion and feedback on previous contribution:  
[http://www.ieee802.org/3/cm/public/November18/castro\\_3cm\\_01\\_1118.pdf](http://www.ieee802.org/3/cm/public/November18/castro_3cm_01_1118.pdf)
- Experimental method and initial data for estimating the magnitude of modal noise produced by lateral misalignment of fibers
- Extensive technical discussion and suggestions to build on and improve experiment. Authors welcomed suggestions and comments. Additional experimental measurements will be made
- General discussion. Clarifying questions were asked and answered
- Chair suggested using reflector to further technical discussion on this topic
- Suggestion to invite Prof. Stephen Ralph of Georgia Tech for next ad hoc meeting to add his expertise on the topic

**Meeting closed:** 1:26 pm Eastern Standard Time/EST (UTC -5)

**Next Meeting:** Thursday, January 17, 2019, 1 pm to 6 pm Pacific Standard Time/PST (UTC -8) and Friday, January 18, 2019, 8 am to 12 pm Pacific Standard Time/PST (UTC -8), Task Force Meeting, Long Beach, CA, US.