

IEEE 802.3 NGMMF Study Group Teleconference

Robert Lingle Jr, Chair

IEEE 802.3 Next-gen 200G & 400G PHYs over fewer MMF Pairs Study Group

Employer & Affiliation: OFS

May 3, 2018

WebEx & Call-in Information

Join meeting in my WebEx Personal Room

https://themeetingson.webex.com/join/webex_2220505 | 717 453 872

Join by phone

1-8007682983 Conference dial-in number

access code: 798 501 5

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Agenda

- Please record attendance with employer & affiliation to Mabud Choudhury at mchoudhury@ofsoptics.com
- Approve agenda
- IEEE 802 Participation, review pre-PAR patent slides
- NGMMF Study Group schedule at Pittsburgh Interim
 - <http://ieee802.org/3/interims/may18/index.html>
 - <http://ieee802.org/3/interims/may18/ieee-802.3.html>
 - We meet Monday & half-day Tuesday; register now!
- Nescom and IEEE-SA update on PAR approvals
- Discuss a proposed clause structure for SR8 and SR4.2 – Jonathan King
- Discuss input needed at the May Interim
- Deadlines for Requesting Agenda Time and Submitting Presentations
- Any walk-on items?

Participation in IEEE 802 Meetings

Participation in any IEEE 802 meeting (Sponsor, Sponsor subgroup, Working Group, Working Group subgroup, etc.) is on an individual basis

- **Participants in the IEEE standards development individual process shall act based on their qualifications and experience. (https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1)**
- **IEEE 802 Working Group membership is by individual; “Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives”. (subclause 4.2.1 “Establishment”, of the IEEE 802 LMSC Working Group Policies and Procedures)**
- **Participants have an obligation to act and vote as an individual and not under the direction of any other individual or group. A Participant’s obligation to act and vote as an individual applies in all cases, regardless of any external commitments, agreements, contracts, or orders.**
- **Participants shall not direct the actions or votes of any other member of an IEEE 802 Working Group or retaliate against any other member for their actions or votes within IEEE 802 Working Group meetings, see https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1.3 and the IEEE 802 LMSC Working Group Policies and Procedures, subclause 3.4.1 “Chair”, list item x.**

By participating in IEEE 802 meetings, you accept these requirements. If you do not agree to these policies then you shall not participate.

(Latest revision of IEEE 802 LMSC Working Group Policies and Procedures: <http://www.ieee802.org/devdocs.shtml>)

Guidelines for IEEE-SA Meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
- **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
- **Don't discuss specific license rates, terms, or conditions.**
 - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
 - Technical considerations remain primary focus
- **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**
- **Don't discuss the status or substance of ongoing or threatened litigation.**
- **Don't be silent if inappropriate topics are discussed... do formally object.**

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit <http://standards.ieee.org/about/sasb/patcom/index.html>

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and “Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy” for more details.

This slide set is available
at <https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.pdf>

PAR under review and approved objectives

http://ieee802.org/3/NGMMF/Draft_P802_3cm_PAR_100318.pdf

- If PAR is approved, we would become the P802.3cm “400 Gb/s over MMF Task Force”
- Full title: Standard for Ethernet Amendment Physical Layer and Management Parameters for 400 Gb/s over Multimode Fiber
- Nescom has recommended approval of the 802.3cg, 802.3ck, 802.3cm PARs. The IEEE-SA standards board will hold a 10-day email ballot now.

http://ieee802.org/3/NGMMF/public/Adopted_Objectives_NGMMF_01_23jan18.pdf

Specific objectives approved by WG

- Define a physical layer specification that supports 400 Gb/s operation over 8 pairs of MMF with lengths up to at least 100m
- Define a physical layer specification that supports 400 Gb/s operation over 4 pairs of MMF with lengths up to at least 100m

Discuss input needed at the May Interim

- Baseline proposal for SR4.2 – Jonathan Ingham and Jonathan King each offered to bring separate contributions
- Baseline proposal for SR8 – Paul Kolesar and Jonathan King offered to bring a contribution
- Eye safety issues for SR8 and SR4.2 – Jose Castro will look for someone to make a contribution from his organization
- MDI for SR8, lane assignments for two-row MPO-24, MPO-16, compatibility with structured cabling – Paul Kolesar is looking for a champion for this issue; Robert asked Jeff Maki to comment on the call on 5/3 if available
- What has to be specified/defined “somewhere” to enable use of SR8 module in breakout applications to SR4, SR2, SR? – looking for input from expert
- Spreadsheet link model – Jose Castro
- Concerns over MPI? Any other items anyone wants addressed.
- Others?

Deadlines for Requesting Agenda Time and Submitting Presentations

- The presenter shall request time, sending email to the Chair at rlingle@ofsoptics.com , by **TUESDAY, MAY 8th, 2018** (AoE).
 - If the "requesting presentation time" deadline is missed, time will be provided on a best-effort basis following the completion of the regular agenda (or as deemed appropriate by the chair).
- The presenter shall submit a PDF, soft-copy version of the presentation, by e-mailing it to the Chair at rlingle@ofsoptics.com . This shall be done by **WEDNESDAY MAY 16th, 2018** (AoE)
 - If the "presentation submission" deadline is missed, time will be provided on a best-effort basis following the completion of the regular agenda (or as deemed appropriate by the chair).
- Additional details on information to be included for Request, Presentation Style Guidelines, Submitting Presentation, Document Information Fields can be found at <http://www.ieee802.org/3/NGMMF/public/presentproc.html>