# IEEE P802.3cm 400G over MMF Task Force Agenda & General Information

Robert Lingle Jr, OFS
Chair, IEEE P802.3cm 400G over MMF Task Force
IEEE 802 Plenary July 2018
San Diego, CA USA

### Agenda

- Welcome / Introductions
- Approval of Agenda
- Approve Previous Task Force Minutes
- IEEE 802 Participation
- Patent Policy
- Task Force Information
- Attendance
- Ground Rules
- The Role of the Chair
- IEEE
  - Structure
  - Bylaws and Rules
  - IEEE 802.3 Standards Process
  - Study Group Chartering Motion
- Goals for the Week
- Presentations
- Discussion, Straw Polls, Motions
- Closing Business
- Future Meetings

### Task Force Decorum



- Photography or recording by permission only (2016 SASB Op Manual 5.3.3.2)
- Cell phone ringers off
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (5.3.3.3)
- Wear your badges at all times in meeting areas
  - Help the hotel security staff improve the general security of the meeting rooms
  - PCs HAVE BEEN STOLEN at previous meetings
  - DO NOT assume that meeting areas are secure
- Please observe proper decorum in meetings

### Approve Previous Task Force Minutes

- Move to approve previously posted meeting minutes from Pittsburgh March Interim IEEE P802.3cm Task Force meeting:
- http://www.ieee802.org/3/cm/public/May18/unapproved meeting minutes 3cm 01 0518.pdf

### **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 <a href="https://standards.ieee.org/develop/policies/bylaws/sb\_bylaws.pdf">https://standards.ieee.org/develop/policies/bylaws/sb\_bylaws.pdf</a> 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)

IEEE 802 Executive Committee

### Participants have a duty to inform the IEEE

- Participants <u>shall</u> inform the IEEE (or cause the IEEE to be informed) of the identity of each holder of any potential Essential Patent Claims of which they are personally aware if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
- Participants <u>should</u> inform the IEEE (or cause the IEEE to be informed) of the identity of any other holders of potential Essential Patent Claims

### Early identification of holders of potential Essential Patent Claims is encouraged

### Ways to inform IEEE

- Cause an LOA to be submitted to the IEEE-SA (patcom@ieee.org); or
- Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible; or
- Speak up now and respond to this Call for Potentially Essential Patents

If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance, please respond at this time by providing relevant information to the WG Chair

### Other guidelines for IEEE WG 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 of different technical approaches that include relative costs of patent licensing terms may be discussed in standards development meetings.
      - Technical considerations remain the 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.

For more details, see *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and *Antitrust and Competition Policy: What You Need to Know* at http://standards.ieee.org/develop/policies/antitrust.pdf

### Patent-related information

The patent policy and the procedures used to execute that policy are documented in the:

- IEEE-SA Standards Board Bylaws
  (http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6)
- IEEE-SA Standards Board Operations Manual (http://standards.ieee.org/develop/policies/opman/sect6.html#6.3)

Material about the patent policy is available at <a href="http://standards.ieee.org/about/sasb/patcom/materials.html">http://standards.ieee.org/about/sasb/patcom/materials.html</a>

If you have questions, contact the IEEE-SA Standards
Board Patent Committee Administrator at
patcom@ieee.org

# IEEE 802.3cm 400G over MMF Task Force Information

- Robert Lingle Jr, Chair
- Home Page <a href="http://www.ieee802.org/3/cm/index.html">http://www.ieee802.org/3/cm/index.html</a>
- Reflector Information http://www.ieee802.org/3/cm/reflector.html
- Editors
  - Jonathan King, Finisar SR8 & Chief Editor
  - Jonathan Ingham, FIT SR4.2 clause
- Recording Secretary
  - Mabud Choudhury, OFS

### Attendance

- Tutorial Material on attendance tool
  - http://ieee802.org/3/minutes/attendance\_procedures.pdf

- Access details
  - URL: <a href="http://imat.ieee.org/">http://imat.ieee.org/</a>
  - Use your IMAT login (must be on meeting SSID no VPN)
- Attendance books
  - Please ALSO use the attendance book
  - Keeps track of attendance in room
  - Used to support requests to verify attendance by chair if IMAT not used.

### **Ground Rules**

- Based upon IEEE 802.3 Rules
  - Foundation based upon Robert's Rules of Order
  - Anyone in the room may speak
  - Anyone in the room may vote
- RESPECT... give it, get it
- NO product pitches
- NO corporate pitches
- NO prices!!!
  - This includes costs, ASPs, etc. no matter what the currency
- NO restrictive notices

### The Role of the Chair

- Per the IEEE 802.3 Ethernet WG Operations Manual (<a href="http://www.ieee802.org/3/rules/P802\_3\_rules.pdf">http://www.ieee802.org/3/rules/P802\_3\_rules.pdf</a>)
  - The operation of the TF has to be balanced between democratic procedures that reflect the desires of the TF members and the TF Chair's responsibility to produce a draft standard, recommended practice, or guideline in a reasonable amount of time for review and approval by the WG. Robert's Rules of Order shall be used in combination with these operating rules to achieve this balance.
  - The full responsibilities of the chair are specified in 3.4.3 Task Force Chair's Responsibilities.
- Reminder individual standards activities within the WG are, at the discretion of the WG, carried out by Task Forces (TF) operating under, and reporting to, the WG.

#### **IEEE Structure IEEE-SA Standards Association** Standards **Process IEEE-SA** Standards Board **RevCom NesCom IEEE 802 Review Committee** New Stds. Committee **Sponsor Group IEEE 802.3**

IEEE P802.3cm 400G over MMF Task Force

July 2018 Plenary, San Diego, CA USA

**Approval Process** 

**Standards Process** 

**Technical Activities** 

**Working Group** 

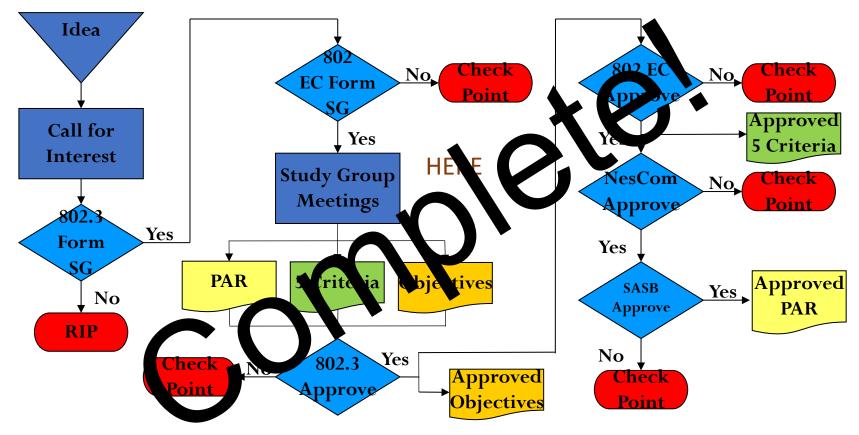
IEEE P802.3cm 400 Gb/s over MMF

Task Force

### Important Bylaws, Rules, & References

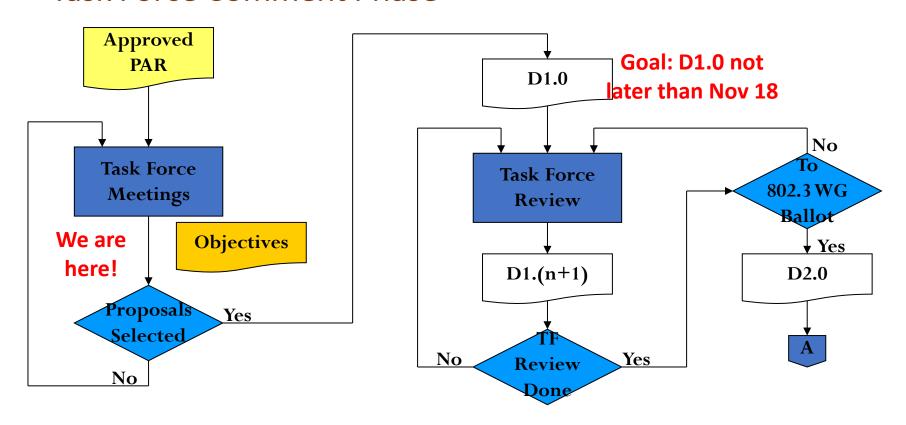
- IEEE-SA Operations Manual http://standards.ieee.org/sa/sa-om.pdf
- IEEE-SA Standards Board Bylaws http://standards.ieee.org/guides/bylaws/sb-bylaws.pdf
- IEEE-SA Standards Board Operations Manual <a href="http://standards.ieee.org/guides/opman/sb-om.pdf">http://standards.ieee.org/guides/opman/sb-om.pdf</a>
- IEEE 802 LAN/MAN Standards Committee (LMSC) Policies and Procedures
   http://standards.ieee.org/about/sasb/audcom/pnp/LMSC.pdf
- IEEE 802 LAN/MAN Standards Committee (LMSC) Operations Manual <a href="http://ieee802.org/PNP/approved/IEEE\_802\_OM\_v19.pdf">http://ieee802.org/PNP/approved/IEEE\_802\_OM\_v19.pdf</a>
- IEEE 802 LAN/MAN Standards Committee (LMSC) Working Group (WG) Policies and Procedures
  - http://standards.ieee.org/about/sasb/audcom/pnp/LMSC.pdf
- IEEE 802.3 Working Group Operating Rules http://ieee802.org/3/rules/P802\_3\_rules.pdf
- "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy" http://standards.ieee.org/develop/policies/antitrust.pdf

#### Overview of IEEE 802.3 Standards Process (1/5)- Study Group Phase

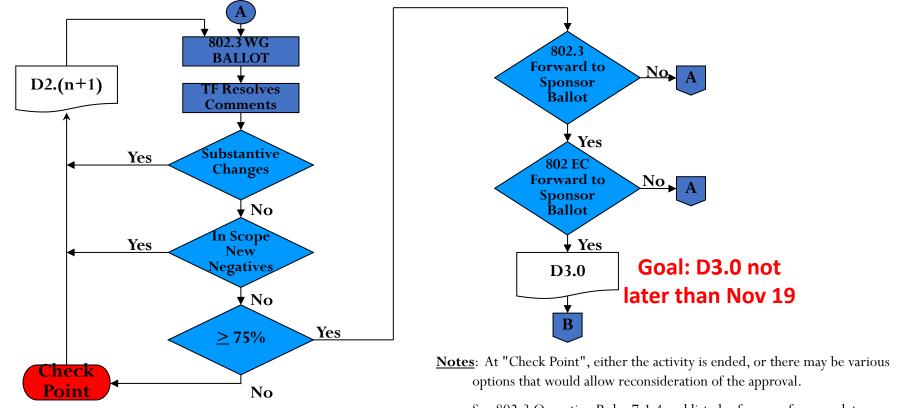


Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

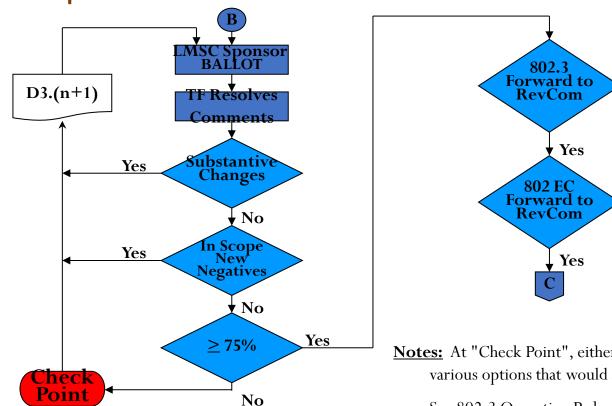
# Overview of IEEE 802.3 Standards Process (2/5) – Task Force Comment Phase



# Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase



### Overview of IEEE 802.3 Standards Process (4/5)-Sponsor Ballot Phase



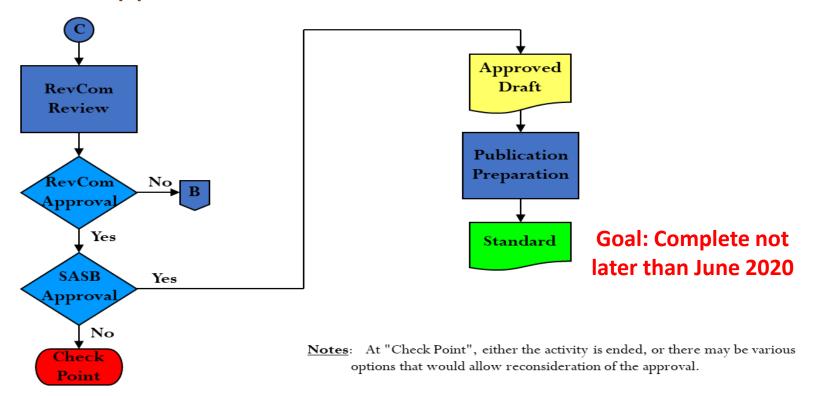
**Notes:** At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

See 802.3 Operating Rules 7.1.5 and listed references for complete

No B

No B

# Overview of IEEE 802.3 Standards Process (5/5) – Final Approvals / Standard Release



# Our PAR and Objectives

http://www.ieee802.org/3/cm/P802 3cm PAR 140518.pdf

Approved PAR for the "400G over MMF Task Force"

• Full title: Standard for Ethernet Amendment Physical Layer and Management Parameters for 400 Gb/s over Multimode Fiber

http://www.ieee802.org/3/cm/Adopted Objectives NGMMF 01 08mar18.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 Baseline adopted by TF in May Interim in Pittsburgh
- Define a physical layer specification that supports 400 Gb/s operation over 4 pairs of MMF with lengths up to at least 100m

## Ad Hoc Report

http://www.ieee802.org/3/cm/public/adhoc/index.shtml

- June 21, 2018: 28 attendees
  - Reviewed updated SR4.2 baseline proposal, with extensive discussion of the VCSEL wavelength ranges near 850 and 910 nm.
- June 28, 2018: 24 attendees
  - Reviewed contribution showing the impact of VCSEL wavelength range near 850 and 910 nm on effective bandwidth, in support of consensus.

### Goals for the Week

- Adopt a baseline for 4-pair objective if possible
- Discuss next steps for generating D1.0 by November Plenary

# Big Ticket Items

- 400GBASE-SR4.2 PMD type
  - Consider baseline proposals
  - Wavelengths is this resolved?
  - Discuss optical mux/demux architecture

### Schedule

Tuesday: Harbor C - 2nd Level> please check online schedule for updates!				
Time	Presenter	Affiliation	Title	File Name
1:15 PM	Robert Lingle, Jr	OFS	Agenda & General Information	agenda_3cm_01_0718.pdf
1:45 PM	Jonathan King	Finisar	400G-SWDM4.2	king_3cm_01a_0718.pdf
			Baseline proposal for a 400 Gb/s optical	
2:15 PM	Jonathan Ingham	FIT	PMD supporting four MMF pairs	ingham_3cm_01_0718.pdf
2:45 PM	Coffee Break			
3:15 PM			Extended discussion of contributions on 4-pair objective	
4:15 PM			Straw Polls & Motions on baseline for 4-pair objective	
6:00 PM			Break for the Day	
Wednesday: Harbor C - 2nd Level> please check online schedule for updates!				
Time	Presenter	Affiliation	Title	File Name
	Robert Lingle Jr.			
8:30 AM	Mabud Choudhury	OFS	Review our progress, challenges & draft timeline	choudhury_3cm_01_0718.pdf
	Jonathan King	Finisar		
8:45 AM	Jonathan Ingham	FIT	Discussion of next steps & timeline with our Editors	
9:45 AM			Adopt timeline	
10:00 AM	Coffee Break			
10:30 AM			Extended discussion, straw polls, motions (if needed)	
Noon	Adjourn			

Check room assignments at <a href="http://schedule.802world.com/schedule/schedule/show#">http://schedule.802world.com/schedule/schedule/show#</a>

### Future Meetings

See: <a href="http://www.ieee802.org/3/interims/index.html">http://www.ieee802.org/3/interims/index.html</a>

#### • Sept 2018

- Week of September 10, 2018
- Davenport Historic Hotel
- Spokane, Washington, USA

#### Nov 2018

- Week of November 12, 2018
- Marriott Marquis Queen's Park
- Bangkok, Thailand

#### • Jan 2019

- Week of January 14, 2019
- TBD

# Thank You!