

Agenda and General Information

IEEE 802.3 100 Gb/s Wavelength Short Reach PHYs Study Group

Robert Lingle, Jr
Acting Chair
OFS

Geneva, Switzerland, January 23-24, 2020

Agenda

- Appointment of Recording Secretary
- Confirmation of Chair
- Welcome and Introductions
- Approve Agenda
- Goals for this meeting
- Reflector and Web
- Ground Rules
- IEEE
 - Structure, Bylaws and Rules
 - Call for Patents
 - IEEE Standards Process
- Liaisons and Communications
- Ad hocs
- Presentations
- Motions and Closing Business
- Future Meetings

Study Group Decorum



- An officer is permitted to make an audio or slideshow recording of this meeting exclusively for the purpose of generating minutes which shall not be copied or distributed. **IEEE 802.3 meetings do not use this option.** Recording of the proceedings by any other participant or observer, in part or in whole, via any means, is prohibited. (January 2020 IEEE-SA Standards Board Ops Manual 5.3.3.2)
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (January 2020 IEEE-SA Standards Board Ops Manual 5.3.3.3)
- Cell phone ringers off
- 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

Goals for the meeting

- Develop a set of objectives for the Study Group
 - Develop responses for the CSD (Criteria for Standards Development)
 - Develop PAR
 - Review presentations substantiating the above
-
- Lay the groundwork for the next meeting

Reflector and Web

- To subscribe to the 100 Gb/s Wavelength Short Reach PHYs Study Group reflector, send an email to:

ListServ@ieee.org

with the following in the body of the message (do not include “<>”):

subscribe stds-802-3-100GSR <yourfirstname> <yourlastname>
end

- Send 100 Gb/s Wavelength Short Reach PHYs Study Group reflector messages to:

stds-802-3-100GSR@listserv.ieee.org

- Study Group web page URL:

<http://www.ieee802.org/3/100GSR/index.html>

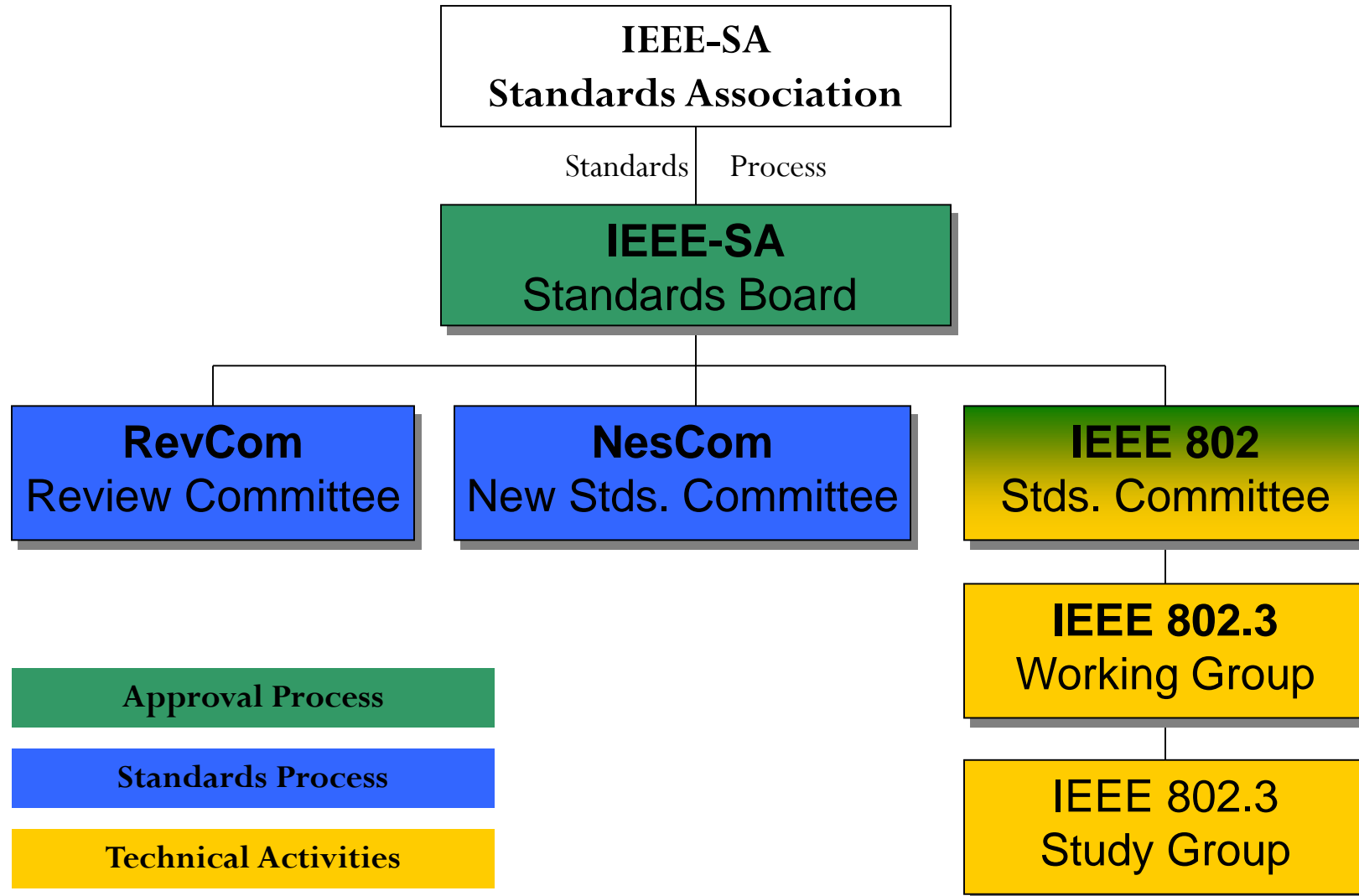
Ground Rules

- 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

Attendance

- Tutorial Material on attendance tool
 - http://ieee802.org/3/minutes/attendance_procedures.pdf
- Access details
 - URL: <http://imat.ieee.org/>
 - (For interim) Password will be provided:

IEEE Structure



Important Bylaws and Rules

- **IEEE-SA Operations Manual**
http://standards.ieee.org/develop/policies/sa_opman/
- **IEEE-SA Standards Board Bylaws**
<http://standards.ieee.org/develop/policies/bylaws/>
- **IEEE-SA Standards Board Operations Manual**
<http://standards.ieee.org/develop/policies/opman/>
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Policies and Procedures**
<https://ieee.app.box.com/v/PandP-LMSC>
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Operations Manual**
<http://www.ieee802.org/devdocs.shtml>
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Working Group (WG) Policies and Procedures**
<http://www.ieee802.org/devdocs.shtml>
- **IEEE 802.3 Working Group Operating Rules**
http://ieee802.org/3/rules/P802_3_rules.pdf

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 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>

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

INSTRUCTIONS FOR CHAIRS OF STANDARDS DEVELOPMENT ACTIVITIES

At the beginning of each standards development meeting the chair or a designee is to:

- Show the following slides (or provide them beforehand)
- Advise the standards development group participants that:
 - IEEE SA's copyright policy is described in Clause 7 of the IEEE SA Standards Board Bylaws and Clause 6.1 of the IEEE SA Standards Board Operations Manual;
 - Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy;
- Instruct the Secretary to record in the minutes of the relevant meeting:
 - That the foregoing information was provided and that the copyright slides were shown (or provided beforehand).

IEEE SA COPYRIGHT POLICY

By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy.

- Previously Published material (copyright assertion indicated) shall not be presented/submitted to the Working Group nor incorporated into a Working Group draft unless permission is granted.
- Prior to presentation or submission, you shall notify the Working Group Chair of previously Published material and should assist the Chair in obtaining copyright permission acceptable to IEEE SA.
- For material that is not previously Published, IEEE is automatically granted a license to use any material that is presented or submitted.

IEEE SA COPYRIGHT POLICY

- The IEEE SA Copyright Policy is described in the IEEE SA Standards Board Bylaws and IEEE SA Standards Board Operations Manual
 - IEEE SA Copyright Policy, see
 - Clause 7 of the IEEE SA Standards Board Bylaws
<https://standards.ieee.org/about/policies/bylaws/sect6-7.html#7>
 - Clause 6.1 of the IEEE SA Standards Board Operations Manual
<https://standards.ieee.org/about/policies/opman/sect6.html>
- IEEE SA Copyright Permission
 - <https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/permissionltrs.zip>
- IEEE SA Copyright FAQs
 - <http://standards.ieee.org/faqs/copyrights.html/>
- IEEE SA Best Practices for IEEE Standards Development
 - http://standards.ieee.org/develop/policies/best_practices_for_ieee_standards_development_051215.pdf
- Distribution of Draft Standards (see 6.1.3 of the SASB Operations Manual)
 - <https://standards.ieee.org/about/policies/opman/sect6.html>

Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct

- All participants in IEEE-SA activities are expected to adhere to the core principles underlying the:
 - [IEEE Code of Ethics](#)
 - [IEEE Code of Conduct](#)
- The core principles of the IEEE Codes of Ethics & Conduct are to:
 - *Uphold the highest standards of integrity, responsible behavior, and ethical and professional conduct*
 - *Treat people fairly and with respect, to not engage in harassment, discrimination, or retaliation, and to protect people's privacy.*
 - *Avoid injuring others, their property, reputation, or employment by false or malicious action*
- The most recent versions of these Codes are available at <http://www.ieee.org/about/corporate/governance>

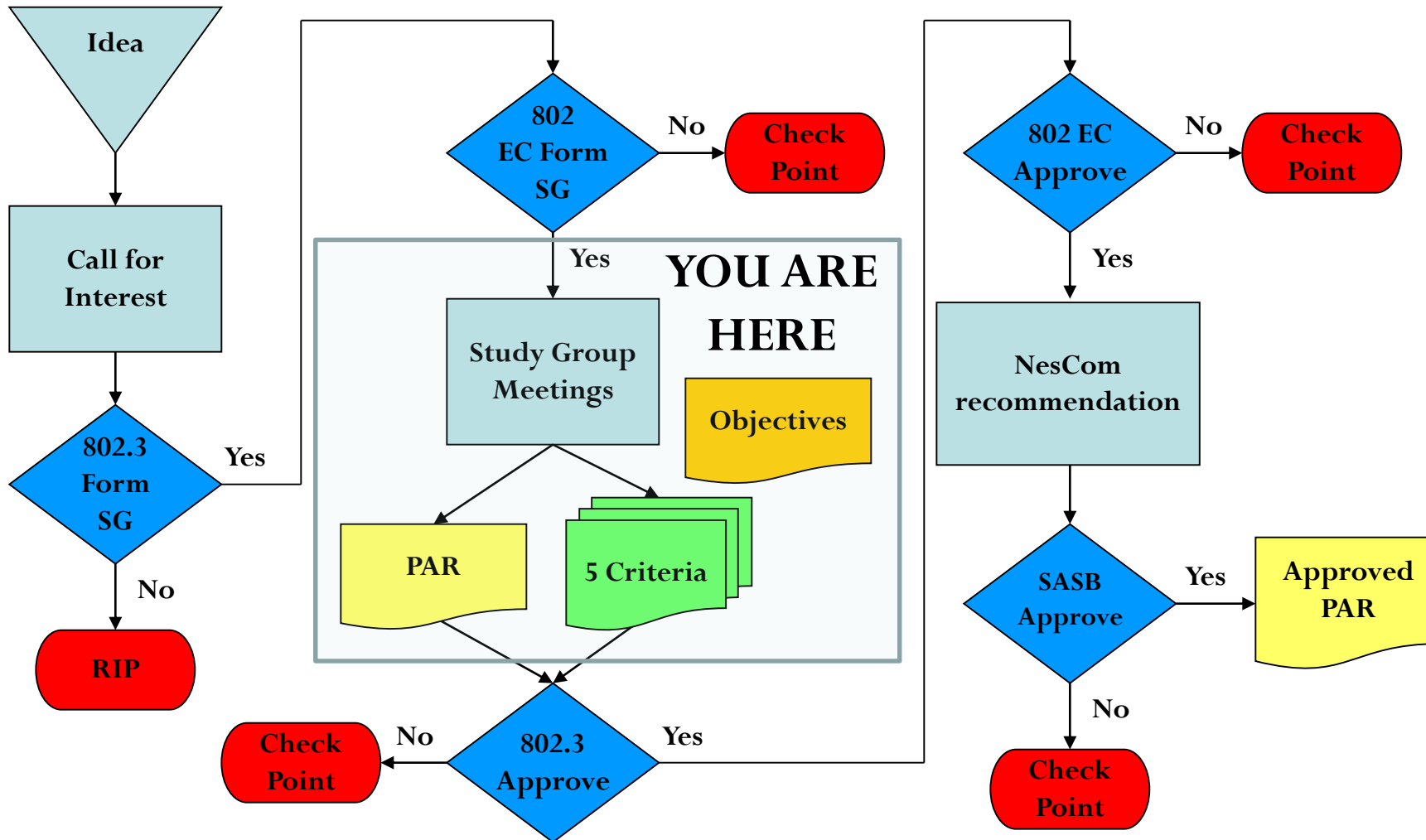
Participants in the IEEE-SA “*individual process*” shall act independently of others, including employers

- The [IEEE-SA Standards Board Bylaws](#) require that “*participants in the IEEE standards development individual process shall act based on their qualifications and experience*”
- This means participants:
 - **Shall act & vote** based on their personal & independent opinions derived from their expertise, knowledge, and qualifications
 - **Shall not act or vote** based on any obligation to or any direction from any other person or organization, including an employer or client, regardless of any external commitments, agreements, contracts, or orders
 - **Shall not direct** the actions or votes of other participants or retaliate against other participants for fulfilling their responsibility to act & vote based on their personal & independently developed opinions
- By participating in standards activities using the “*individual process*”, you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation

IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints

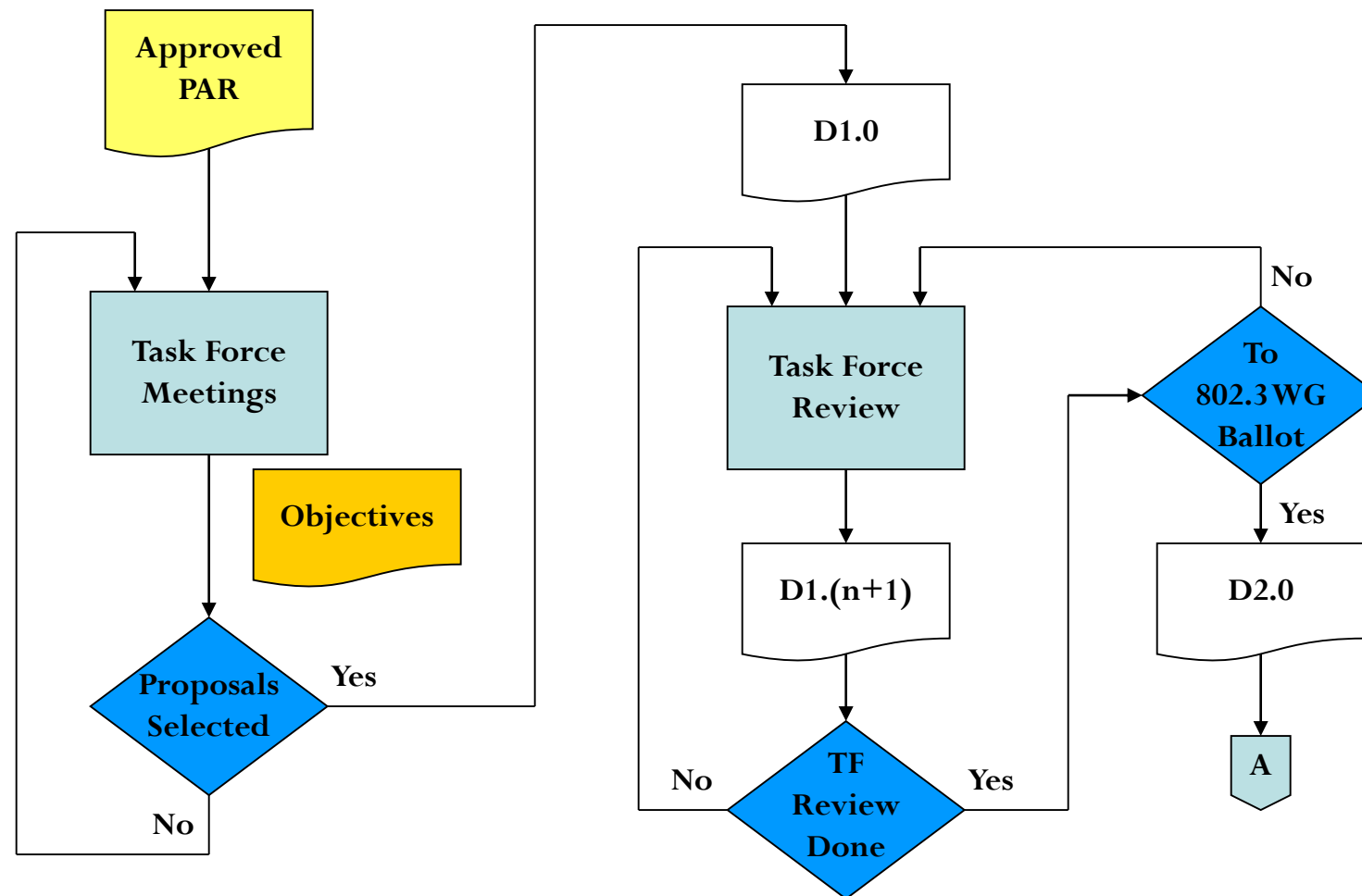
- The [IEEE-SA Standards Board Bylaws](#) (clause 5.2.1.3) specifies that “*the standards development process shall not be dominated by any single interest category, individual, or organization*”
 - This means no participant may exercise “*authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints*” or “*to hinder the progress of the standards development activity*”
- This rule applies equally to those participating in a standards development project and to that project’s leadership group
- Any person who reasonably suspects that dominance is occurring in a standards development project is encouraged to bring the issue to the attention of the Standards Committee or the project’s IEEE-SA Program Manager

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

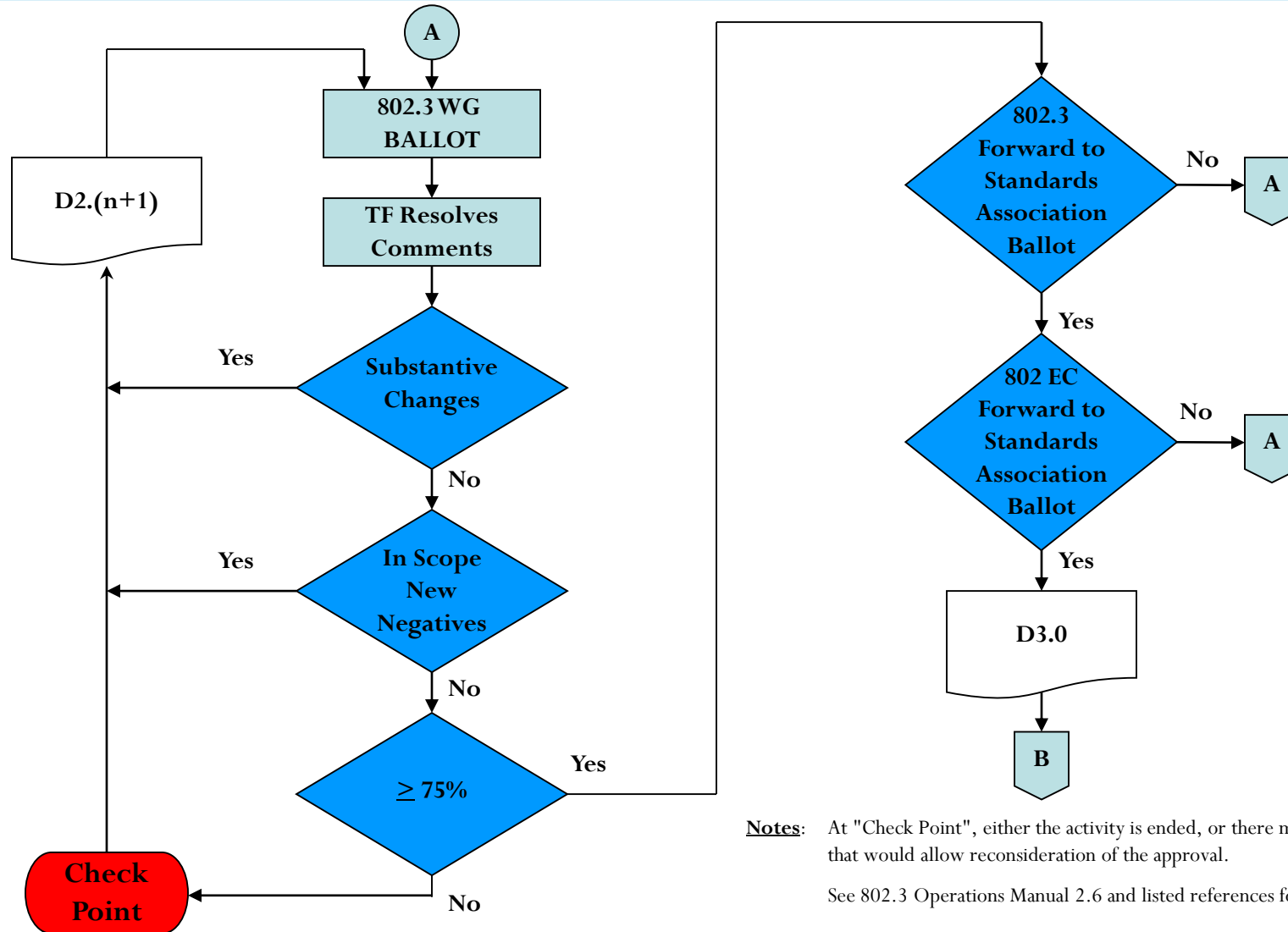


Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

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



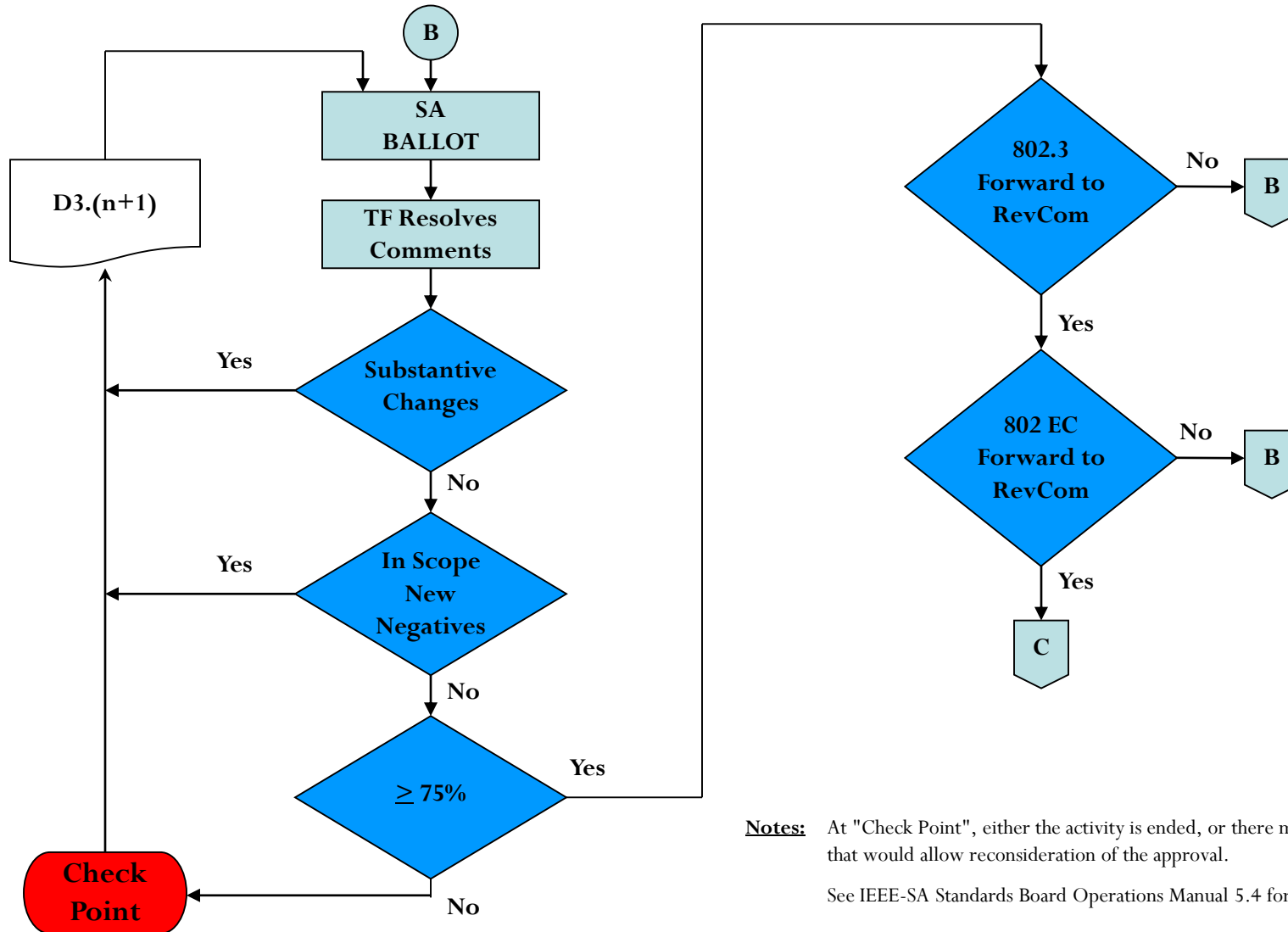
Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase



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

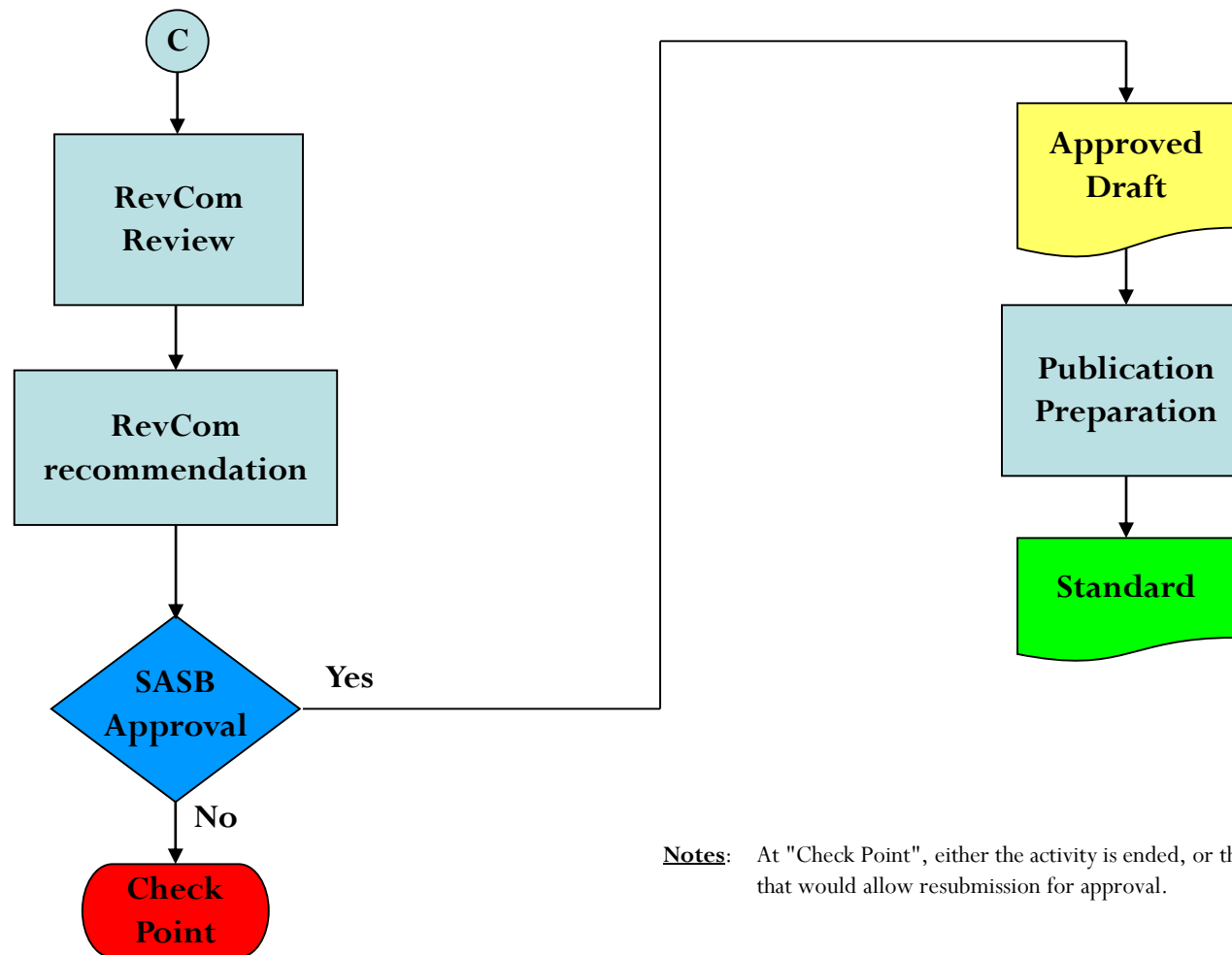
See 802.3 Operations Manual 2.6 and listed references for complete description

Overview of IEEE 802.3 Standards Process (4/5)- IEEE Standards Association (SA) 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 IEEE-SA Standards Board Operations Manual 5.4 for complete description

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



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

Request for Formation of Study Group (as per November Plenary Motion)

- Move that the IEEE 802.3 Ethernet Working Group authorizes the formation of a study group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for "Lower cost, short reach, optical PHYs using 100 Gb/s wavelengths."
- M: Mabud Choudhury
- S: Kent Lusted
- >50%
- 802.3 Voters Y: 78 N: 0 A: 2

The Study Group

- Normal function is to draft a complete PAR and Five Criteria
- Provide a plenary week tutorial to the LMSC.
- Gain approval at the IEEE 802.3 WG, IEEE 802 EC, IEEE-SA NesCom and IEEE-SA Standards Board.
- SG only exists for 6 months
 - Extensions can be requested
 - Voted on by IEEE 802.3
 - Ratified by IEEE 802 EC
- Development of Objectives helps set the goals for the Task Force
- Consensus required to move forward

- Not a goal – choosing a solution.

Liaisons and Communications

- None at this time

Ad hocs

- Intend to use the Thursday Noon to 1:30 PM Eastern US time slot that IEEE P802.3cm used for ad hoc telecons.
- The IEEE 802 WebEx will be utilized.
- Ad hocs telecons are scheduled biweekly for 1/30, 2/13, 2/27, and 3/12
- Details and Calendar invitation sent to 100GSR Reflector

Meeting Logistics

- Meeting Room: please check
 - Geneva Daily Schedule: <https://www.itu.int/en/events/Pages/Geneva-schedule.aspx?date=2020-01-20>
 - Or Daily Schedule (mobile friendly): <http://www.itu.int/today>
 - Note: Please check above links on Thursday, January 23 and Friday January 24 (ITU room assignments are announced the evening before or on the day of the meeting)
- Thursday, January 23, 2020
 - All day. Start @ 8:30am
- Friday, January 24, 2020
 - All day. Start @ 8:30am

Meeting Schedule (1 of 2)

Thursday 01/23/2020				
Time	Presenter	Affiliation	Title	Duration
8:30 AM	David Law	HPE	Appointment of Chair	0:10
8:40 AM	Robert Lingle Jr	OFS	Agenda	0:30
9:10 AM	Robert Lingle Jr	OFS	The Path Forward	0:30
9:40 AM	Mark Gustlin	Cisco	PCS, FEC and PMA Overview	0:30
10:10 AM	Brian Welch	Cisco	SMF options for short reach interconnects	0:30
10:40 AM	Morning Break			0:20
11:00 AM	David Lewis	Lumentum	Proposed objectives for 100 Gb/s short-reach PMDs	0:30
11:30 AM	Ali Ghiasi	Ghiasi Quantum	Application for 100G-SR	0:30
12:00 PM	Lunch Break			1:00
1:00 PM	Leon Bruckman	Huawei	Proposed Objectives for 100Gps/lane Short Reach	0:30
1:30 PM	Rick Pimpinella	Panduit	Use cases for 100G per lane MMF PMDs	0:30
2:00 PM	Jonathan Ingham	Broadcom	Technical feasibility of 100 Gb/s per lane MMF PMDs using VCSELs	0:30
2:30 PM	Earl Parsons	CommScope	Multimode Fiber for use with 100 Gb/s per Wavelength Short Reach PHYs	0:30
3:00 PM	Afternoon Break			0:30
3:30 PM	John Abbott	Corning	Technical Feasibility of 30m OM3 100Gb/s links	0:30
4:00 PM	Jose Castro	Panduit	Initial considerations for 100G VCSEL-MMF reaches	0:30
4:30 PM	Robert Lingle Jr.	OFS	Broad market potential, economic feasibility, and distinct identity for objectives based on 100 Gb/s lanes over MMF	0:30
5:00 PM	Study Group		Discussion, Straw Polls, Motions	1:00
6:00 PM	Break for the Day			

Check the online schedules for room assignment & changes!

<https://www.itu.int/en/event/s/Pages/Geneva-schedule.aspx?date=2020-01-20>

http://ieee802.org/3/interim/s/0120_sched_802_3_post.html

Note: Schedule subject to change

Meeting Schedule (2 of 2)

Friday 01/24/2020				
Time	Presenter	Affiliation	Title	Duration
8:30 AM	Robert Lingle Jr.	OFS	Plan for the Day	0:10
8:30 AM	Mabud Choudhury	OFS	Draft PAR review	0:45
9:15 AM	Mabud Choudhury	OFS	Draft CSD responses review	0:45
10:00 AM	Morning Break			0:20
10:20 AM	Study Group		Discussion, Straw Polls, Motions	1:40
12:00 PM	Lunch Break			1:00
1:00 PM	Study Group		Discussion, Straw Polls, Motions	2:00
3:00 PM	Afternoon Break			0:30
3:30 PM	Study Group		Discussion, Straw Polls, Motions	1:30
5:00 PM	Adjourn			

Check the online schedules for room assignment & changes!

<https://www.itu.int/en/events/Pages/Geneva-schedule.aspx?date=2020-01-20>

http://ieee802.org/3/interims/0120_sched_802_3_post.html

Note: Schedule subject to change

Future Meetings

- See: <http://www.ieee802.org/3/interims/index.html>
- March 2020 Plenary
 - Hilton Atlanta, Atlanta, GA USA
 - March 16-19, 2020
- May 2020 Interim
 - The Westin Pasadena, Pasadena, CA, USA
 - May 18-22, 2020
- July 2020 Plenary
 - Sheraton Montreal, West Montreal, QC Canada
 - July 13-16, 2020
- Anyone interested in hosting a interim meeting contact me or the IEEE 802.3 Executive Secretary [Steve Carlson](#).

Thank You!