Agenda and General Information

IEEE P802.3cp 10, 25, and 50 Gb/s bidirectional optical access PHYs

Frank Effenberger
Futurewei technologies
Teleconference, 10-11 Nov 2020

Meeting coordinates

- Task force will hold two 3-hour sessions
  - Nov 10, 8:00 to 11:00 EST
  - Nov 11, 8:00 to 11:00 EST
- Meeting link is: https://futurewei.zoom.us/j/8940903884

Task Force 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. (June 2018 IEEE-SA Standards Board Ops Manual 5.3.3.2)
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (June 2018 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

Agenda

- Welcome and Introductions
- Approve Agenda
- Approve previous meeting minutes
- Goals for this meeting
- Reflector and Web
- Ground Rules
- IEEE
  - Structure, Bylaws and Rules
  - Call for Patents
  - IEEE Standards Process
- Comment resolution on the draft
- Future Meetings
- Motions and Closing Business

Initial motions

- Move to approve this agenda
  - M: Peter Stassar S: Ruoxu Wang
  - Motion result: Approved by acclamation (no objections)
- Move to approve the minutes from Sep 2020, located at: https://www.ieee802.org/3/cp/public/2009/P802.3cp_unapproved_minutes_2009_Telecon.pdf
  - M: Yuanqiu Luo S: Lemon Geng
  - Yes: No: Abs:
  - Motion result: Approved by acclamation (no objections)

Goals for the meeting

- Resolve comments against 2.2
- Generate D2.3 for recirculation
- Assess readiness for SA ballot

Big ticket items

- Resolve all 31 comments

Reflector and Web

- To subscribe to the BIDI reflector, send an email to:
  ListServ@ieee.org

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

  subscribe stds-802-3-NGBIDI <yourfirstname> <yourlastname>

  end

- Send <<*Task Force name*>> reflector messages to:
  stds-802-3-NGBIDI@listserv.ieee.org

- Task Force web page URL:
  http://www.ieee802.org/3/cp/

Task Force Private Area

- URL: http://www.ieee802.org/3/cp/private/
  - Username: 802.3cp
  - Password: <<>>
- Write it down…

- Note - The draft, and any other content, is posted for your review only, and neither the content nor access information should be copied or redistributed to others in violation of document copyrights.

Ground Rules

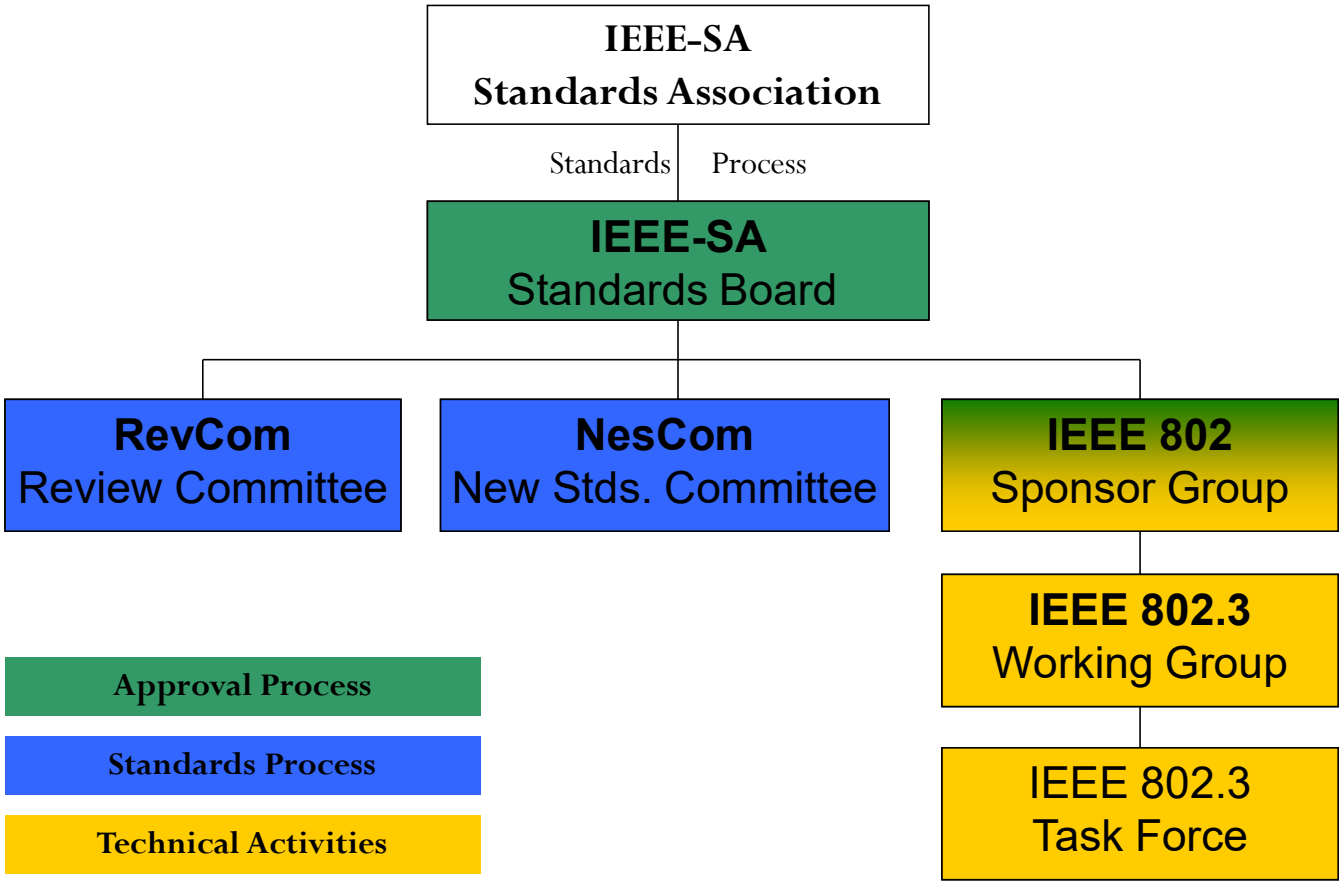
- Based upon IEEE 802.3 Rules
  - Foundation based upon Robert's Rules of Order
  - Anyone in the room may speak
  - Anyone in the room may vote
- **RESPECT**… give it, get it
- NO product pitches
- NO corporate pitches
- NO prices!!!
  - This includes costs, ASPs, etc. no matter what the currency
-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

Participants have a duty to inform the IEEE

- Participants shall 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 should 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
http://standards.ieee.org/about/sasb/patcom/materials.html

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

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 STANDARDS ASSOCIATION

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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

IEEE SA STANDARDS ASSOCIATION

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Participant behavior in IEEE-SA activities

- 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

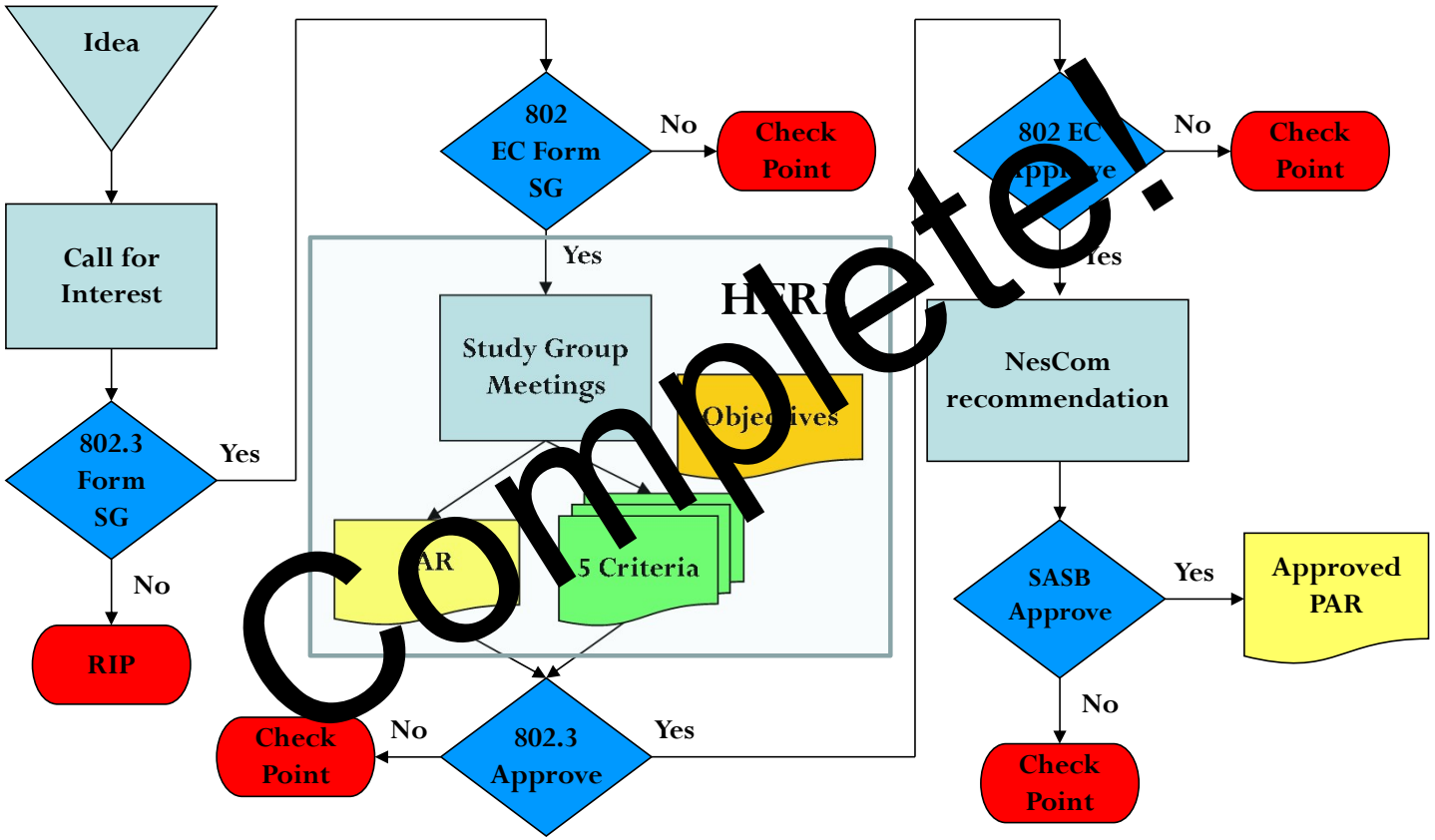
Participants in the IEEE-SA "*individual process*"

- 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

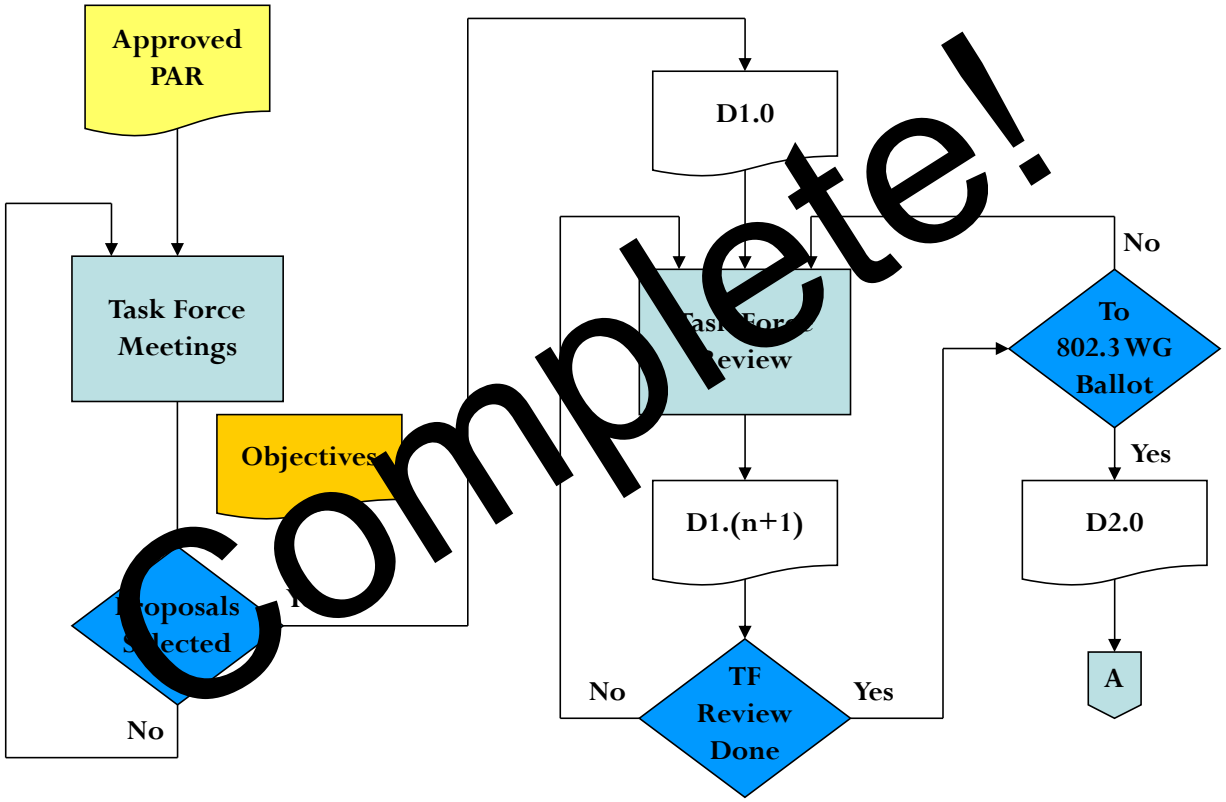
- The IEEE-SA Standards Board Bylaws (clause 5.2.1.3) specifies that "*the standards development process shall not be dominated by any single interest category, individual, or organization*"
  - This means no participant may exercise *"authority, leadership, or influence by reason of superior leverage, 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



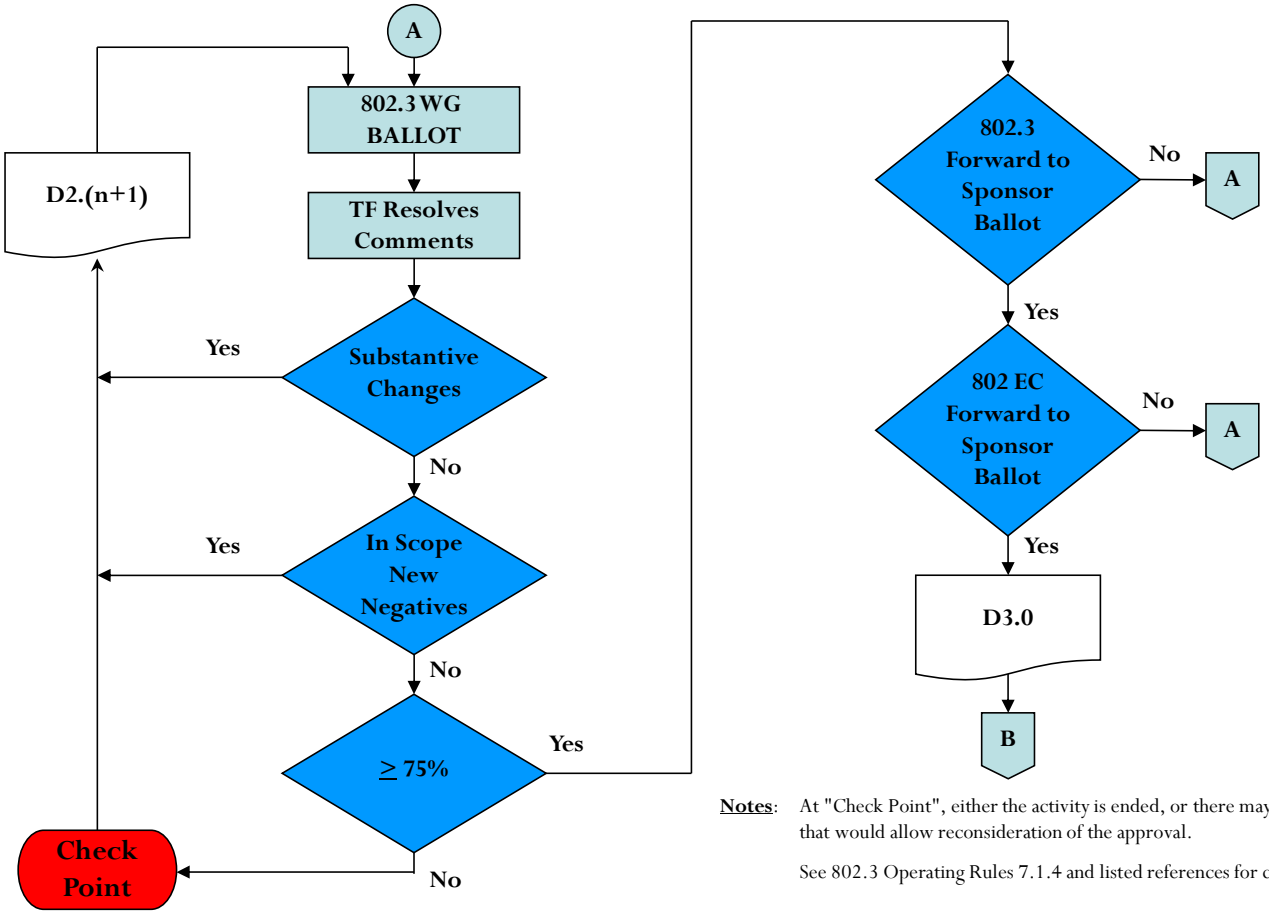
Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

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



Complete!

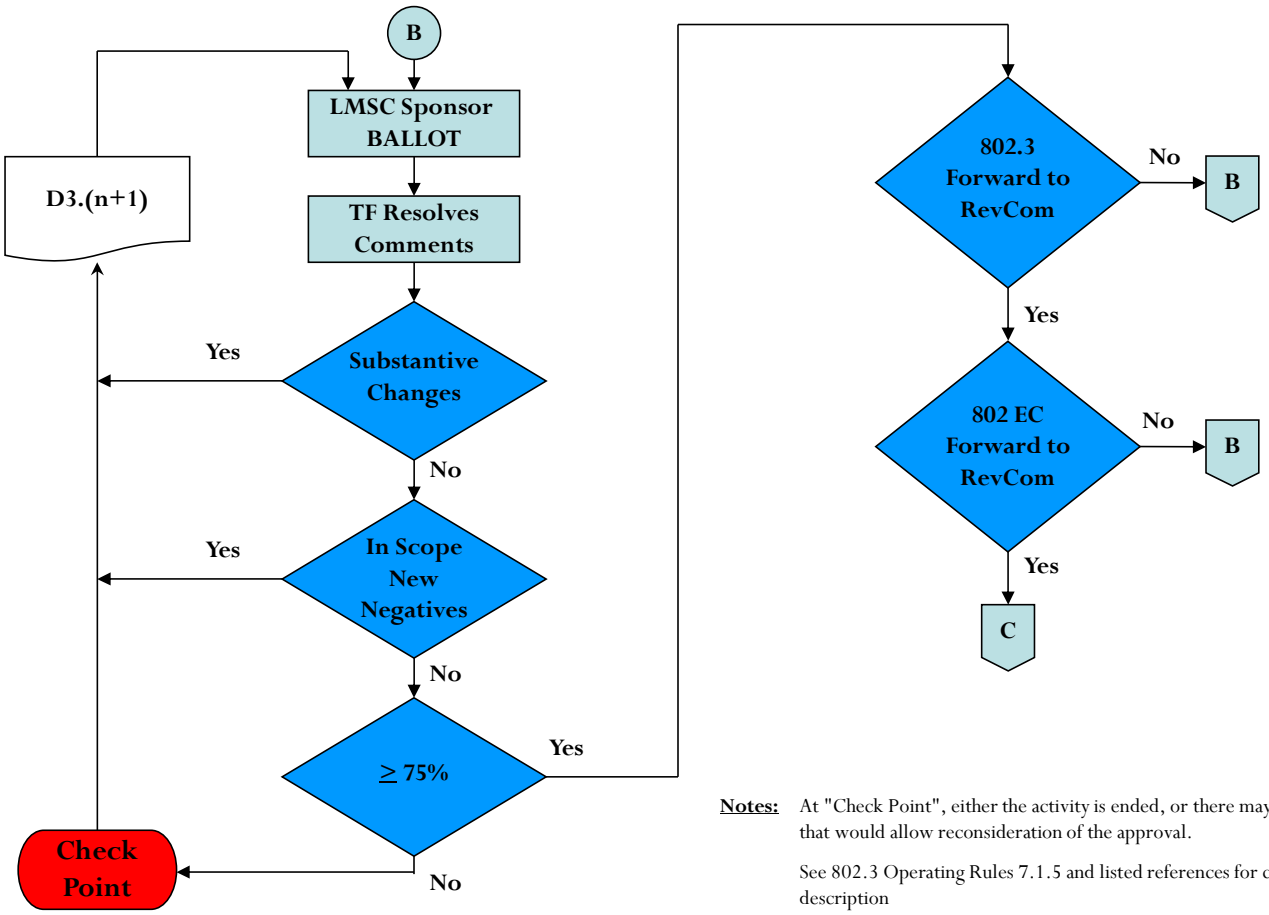
Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase



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 Operating Rules 7.1.4 and listed references for complete description

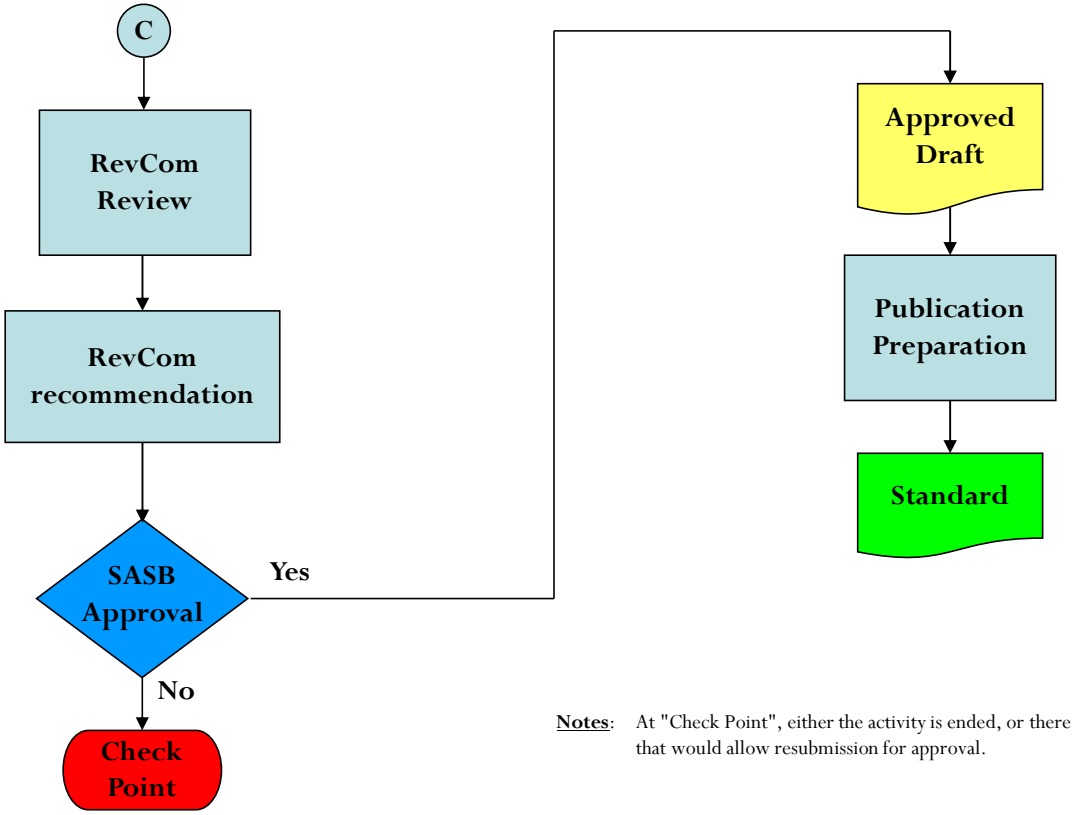
Overview of IEEE 802.3 Standards Process (4/5)- Sponsor Ballot Phase



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 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.

IEEE P802.3cp
10, 25, & 50 Gb/s bidirectional optical access PHYs

Approved Project Documents

- PAR
  - http://www.ieee802.org/3/cp/P802_3cp_PAR.pdf
- 5 Criteria
  - https://mentor.ieee.org/802-ec/dcn/18/ec-18-0245-00-ACSD-p802-3cp.pdf
- Objectives
  - http://www.ieee802.org/3/cp/180911_802d3_OBJ_BiDi_v2.pdf

IEEE P802.3cp Bidi optical access PHYs Objectives

- Support full-duplex operation only
- Support bidirectional transmission over a single strand of single mode fiber using a single wavelength in each direction
- Support MAC data rates of 10 Gb/s, 25 Gb/s, and 50 Gb/s
- Support distances of at least 10 km, at least 20 km, and at least 40 km
- Preserve the Ethernet frame format utilizing the Ethernet MAC
- Support a BER of better than or equal to 10^{-12} at the MAC/PLS service interface (or the frame loss ratio equivalent)
- Support optional Energy-Efficient Ethernet operation
- Support silent start* operation to prevent bidirectional PHYs interfering with P2MP networks

* Silent start means that the upstream-facing PHY does not transmit unless a valid downstream signal is received. This prevents the bidirectional PHY from jamming transmission on the P2MP network in cases of unintentional connection

IEEE P802.3cp Bidi optical access PHYs Working Group ballot results

- Item 1 - Date the ballot closed:
  - The First Working Group recirculation ballot on IEEE P802.3cp draft D2.2 closed on Oct 24 at 11:59 PM AOE.
- Item 2 - Vote tally:

Comments: 31	2nd Recirc Ballot D2.2			Req %
	#	%	Status	
Abstain	*19*	*13*	PASS	< 30
Disapprove with comment	*8*	-	-	-
Disapprove without comment	*0*	-	-	-
Approve	*119*	*94*	PASS	≥ 75
Ballots returned	*146*	*75*	PASS	> 50
Voters	*195*	-	-	-

IEEE P802.3cp Bidi optical access PHYs Sponsor ballot results

- Item 1 - Date the ballot closed:
  - The << [*Initial* | *X*^{xx}] >> Sponsor <<*recirculation*>> ballot on IEEE P802.3<<*xx*> draft D<<*n.n*> closed on <<*date*>> at 11:59 PM <<*EST/EDT*>>.
- Item 2 - Vote tally:

Comments: <<*nn*>>	<< [*Initial* | *X*^{xx} *recirculation*] >> Draft D <<*n.n*>			Req %
	#	%	Status	
Abstain	*nn*	*nn*	PASS/FAIL	< 30
Disapprove with comment	*n*	-	-	-
Disapprove without comment	*n*	-	-	-
Approve	*nn*	*nn*	PASS/FAIL	≥ 75
Ballots returned	*nn*	*nn*	PASS/FAIL	≥ 75
Voters	*nn*	-	-	-

Action Items from last meeting

- None

Comment review

• Draft 2.2	(Password)	Yuanqiu Luo	Futurewei
• Comments received		Task Force	
• Comment statistics by clause		Yuanqiu Luo	Futurewei
• Proposed responses		Yuanqiu Luo	Futurewei

Liaisons and Communications

- None so far

Motion #3

- Move that the editor create draft 2.3 based upon draft 2.2, reflecting the motions and comments collected in this meeting, and submit it for recirculation ballot.
- Technical (>=75%)
- M: Peter Stassar S: Yuanqiu Luo
- Results: Approved by acclamation (no objections)

Motion #4

- Move to request conditional approval to progress the 802.3cp draft to standards association ballot.
- Technical (>=75%)
- M: Vince Ferretti S: Mark Laubach
- Results : Approved by Acclamation (no objections)

Future Meetings

- See: http://www.ieee802.org/3/interims/index.html
- Meeting plan is uncertain – please check back routinely
- Anyone interested in hosting an interim meeting contact me or the IEEE 802.3 Executive Secretary Steve Carlson.

Any other issues?

Motion #5

- Move to adjourn the meeting.
- Procedural (>50%)
- M: Ray Nering S: Yuanqiu Luo
- Results : Approved by acclamation (no objections)

Thank You!