

Agenda and General Information

IEEE 802.3

Pin-Optimized PHY Interface Study Group

Jason Potterf – Cisco

Plenary Meeting

2025-07-30

IEEE Participation Requirements

Participation Requirements

Important: To optimize our use of time, the IEEE SA Policies and Procedures are made available to you now at the following address: <https://ieee802.org/3/policies.html>.

Please do not join the meeting unless you have first reviewed the IEEE SA Patent Policy, the IEEE SA Copyright Policy, and the IEEE SA Participation Policy.

Invitations to the WebEx meeting have been sent to the reflector as well as posted on the IEEE 802.3 Call and Meeting Calendar (<https://www.ieee802.org/3/calendar.html>).

See <https://www.ieee802.org/3/POPI/public/presentproc.html> for presentation procedures. At this time, presentations requests and PDF slide submissions are to be made via email to the Study Group Chair.

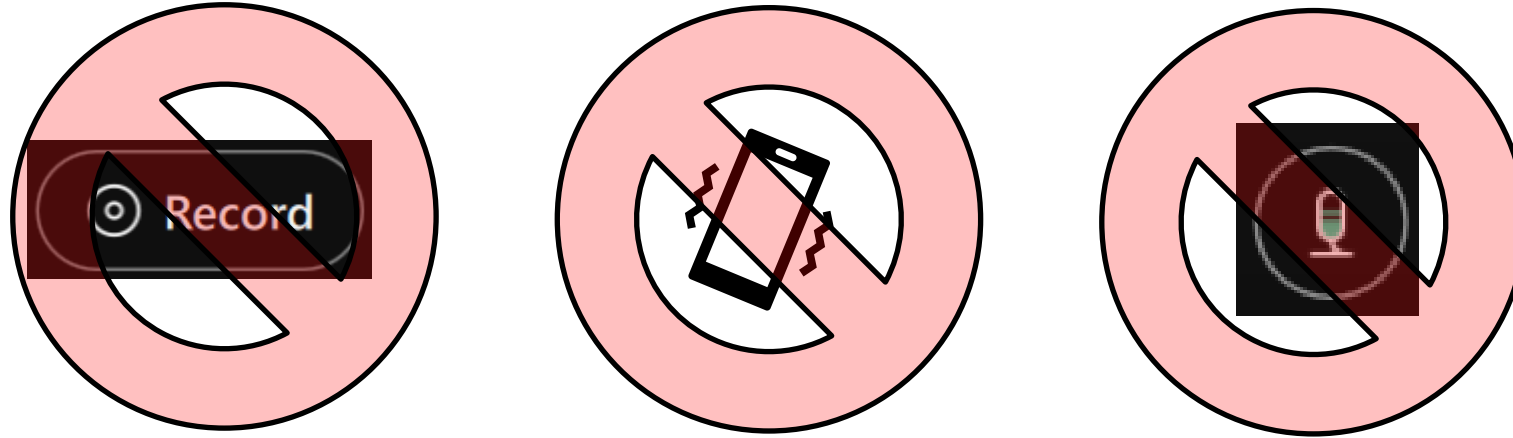
Agenda

- Welcome and Introductions
- Approve Agenda
- Approve Prior Minutes
- Goals for this meeting
- Big Ticket Items
- Reflector and Web
- Ground Rules
- IEEE
 - Structure, Bylaws and Rules
 - Patent Policy Pointer
 - IEEE Standards Process
- Liaisons and Communications
- Review of Action Items from Prior Meeting
- PAR / CSD / Objective Discussion
- ~~Presentations~~
- Motions and Closing Business
- Future Meetings

General Decorum

- An officer of the Working Group or one of its subgroups, unless prohibited by the P & P of the Standards Committee or Working Group, is permitted to record the proceedings of an IEEE standards development meeting for which they are responsible by making an audio or slideshow recording or by producing a transcript using software or an artificial intelligence (AI) application approved by IEEE. **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. Software or AI shall not be used if it enables persons other than the officer making the recording or authorized Standards Department staff to initiate or obtain the transcription or recording. (March 2025 IEEE-SA Standards Board Operations Manual 5.3.3.2)
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (March 2025 IEEE-SA Standards Board Operations Manual 5.3.3.3)

Teleconference Decorum



- Please **MUTE** unless actively speaking
- Send a chat message to “Everyone” to be placed into the queue
- The chat can only send to “Everyone” or the officers
- Please observe proper decorum in meetings

Goals for the meeting

- Vote on submittal of Project Authorization Request (PAR) Responses and Criteria for Standards Development (CSD) Responses to move our Study Group to the Task Force phase

Big ticket items

- Project Authorization Request (PAR) Responses
- Criteria for Standards Development (CSD) Responses
- Objectives

Reflector and Web

- To subscribe to the Pin-Optimized PHY Interface 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-POPI@listserv.ieee.org <yourfirstname> <yourlastname>
end

- Send Pin-Optimized PHY Interface Study Group reflector messages to:

stds-802-3-POPI@listserv.ieee.org

- Study Group web page URL:

<https://www.ieee802.org/3/POPI/index.html>

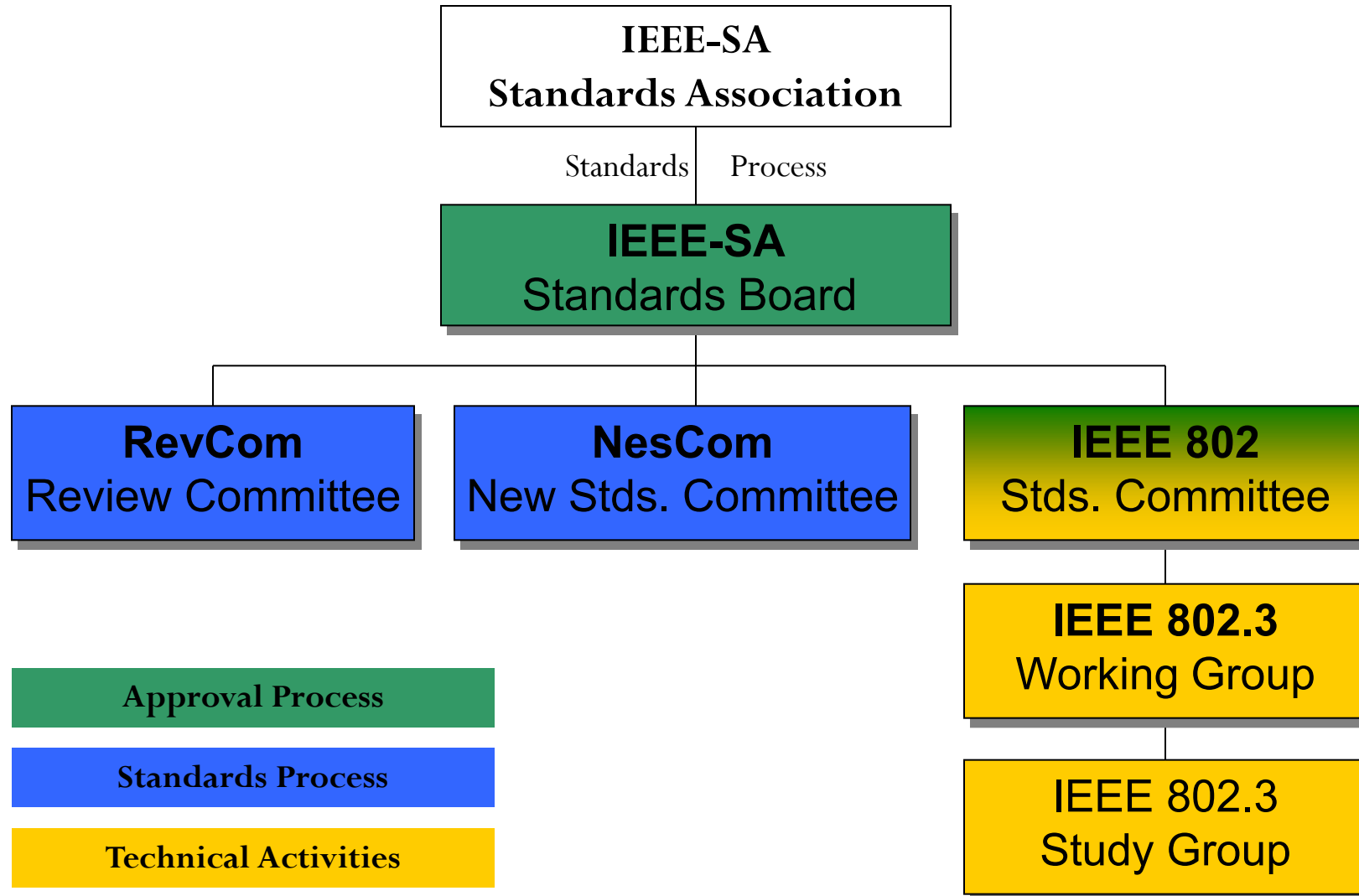
Study Group Private Area

- No private area at this time

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

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. Formally object to the discussion immediately.

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

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/>
- 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>

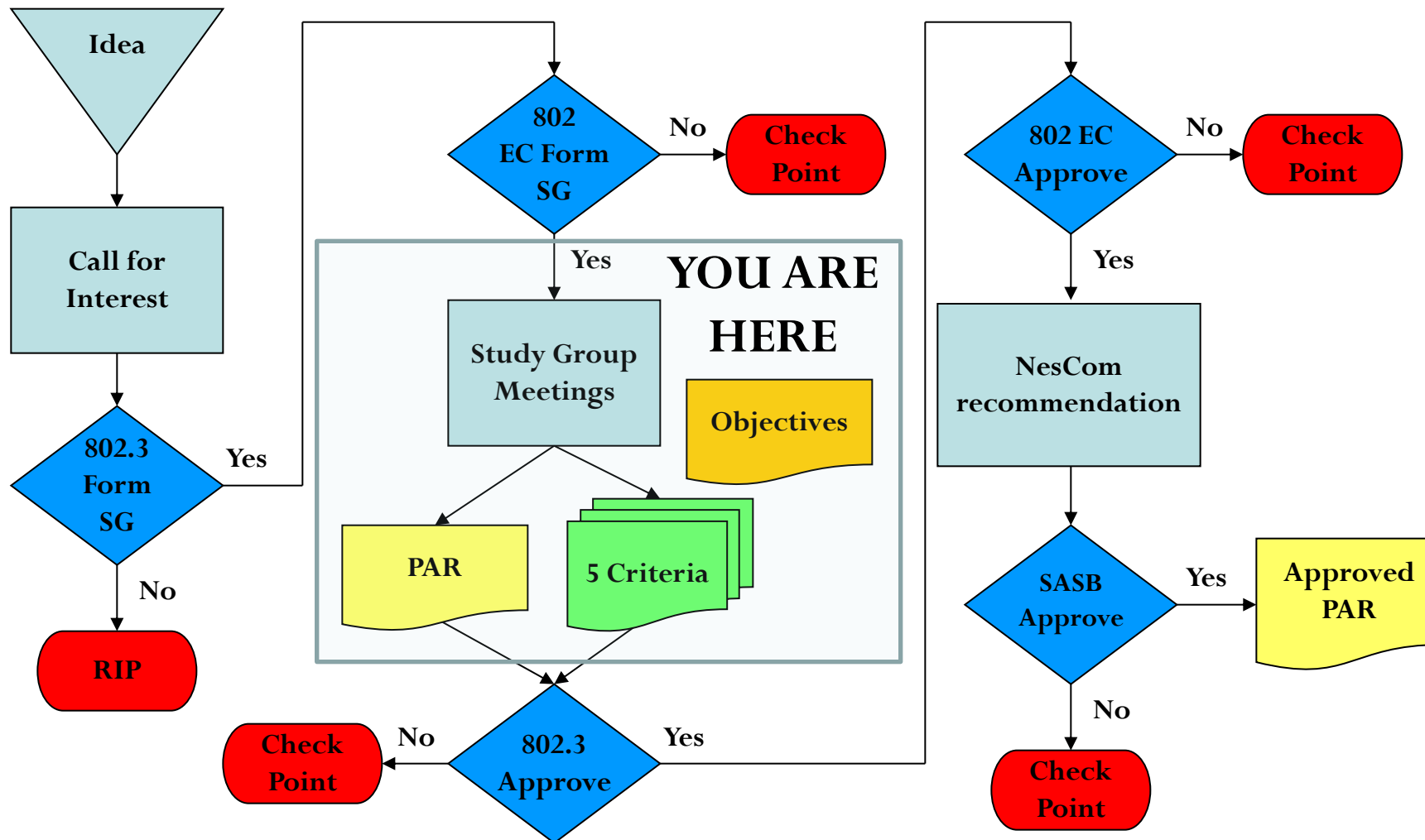
Participants in the IEEE-SA “*individual process*” shall act independently of others, including employers

- 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

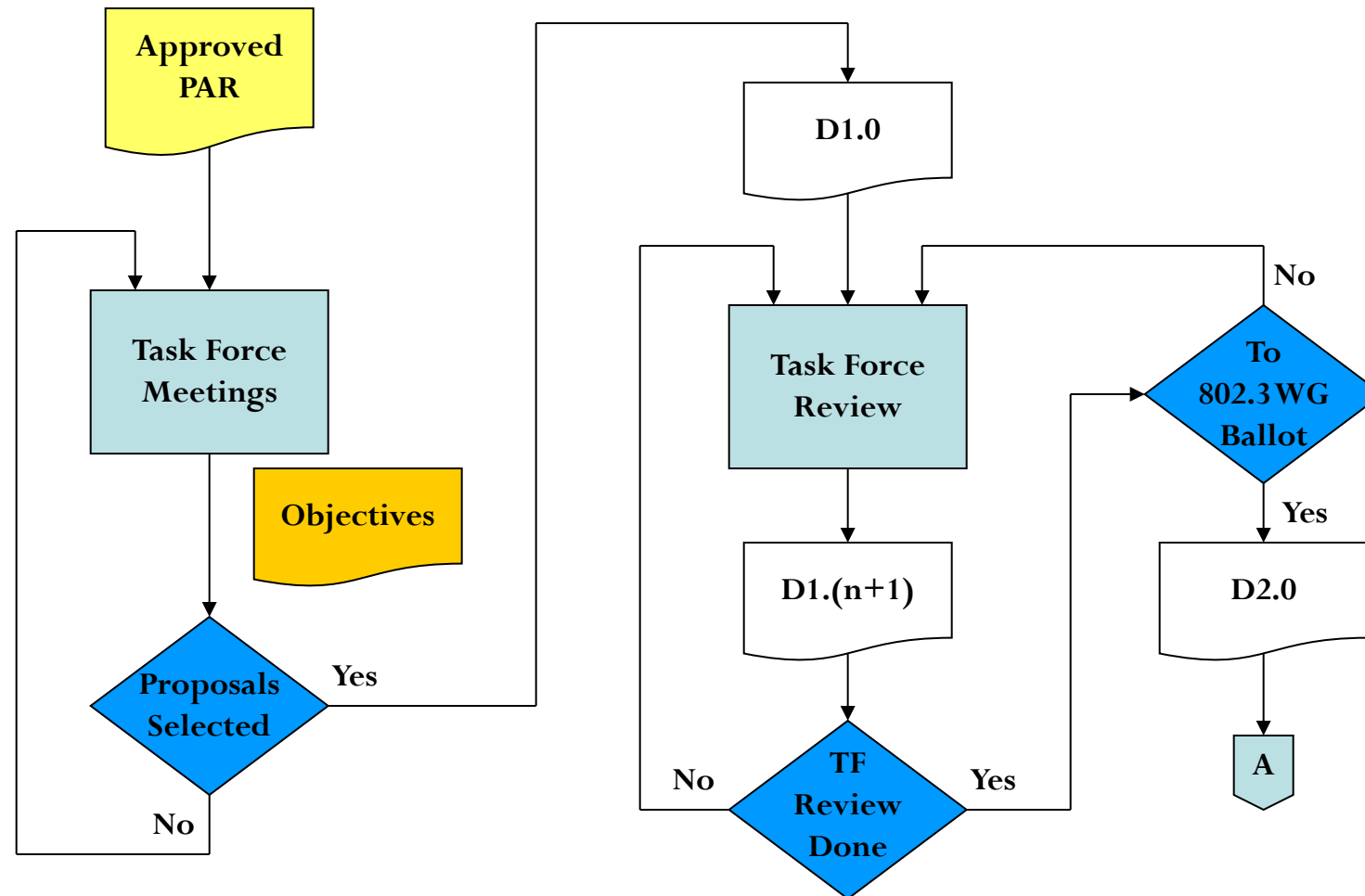
- The [IEEE-SA Standards Board Bylaws](#) (clause 5.2.1.3) specifies that *“the standards development process shall not be dominated by any single interest category, individual, or organization”*
 - This means no participant may exercise *“authority, leadership, or influence by reason of superior leverage,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

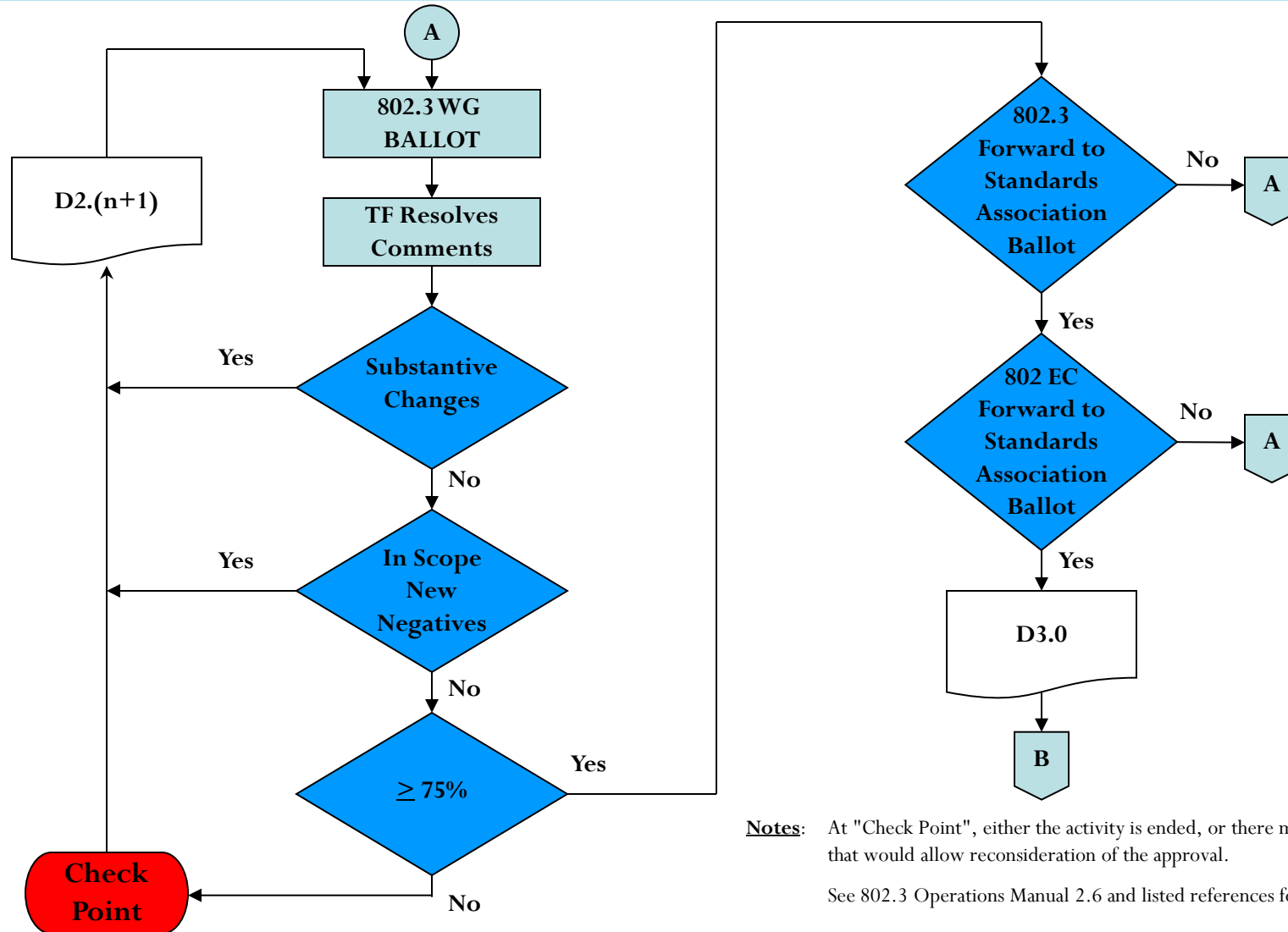


Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

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



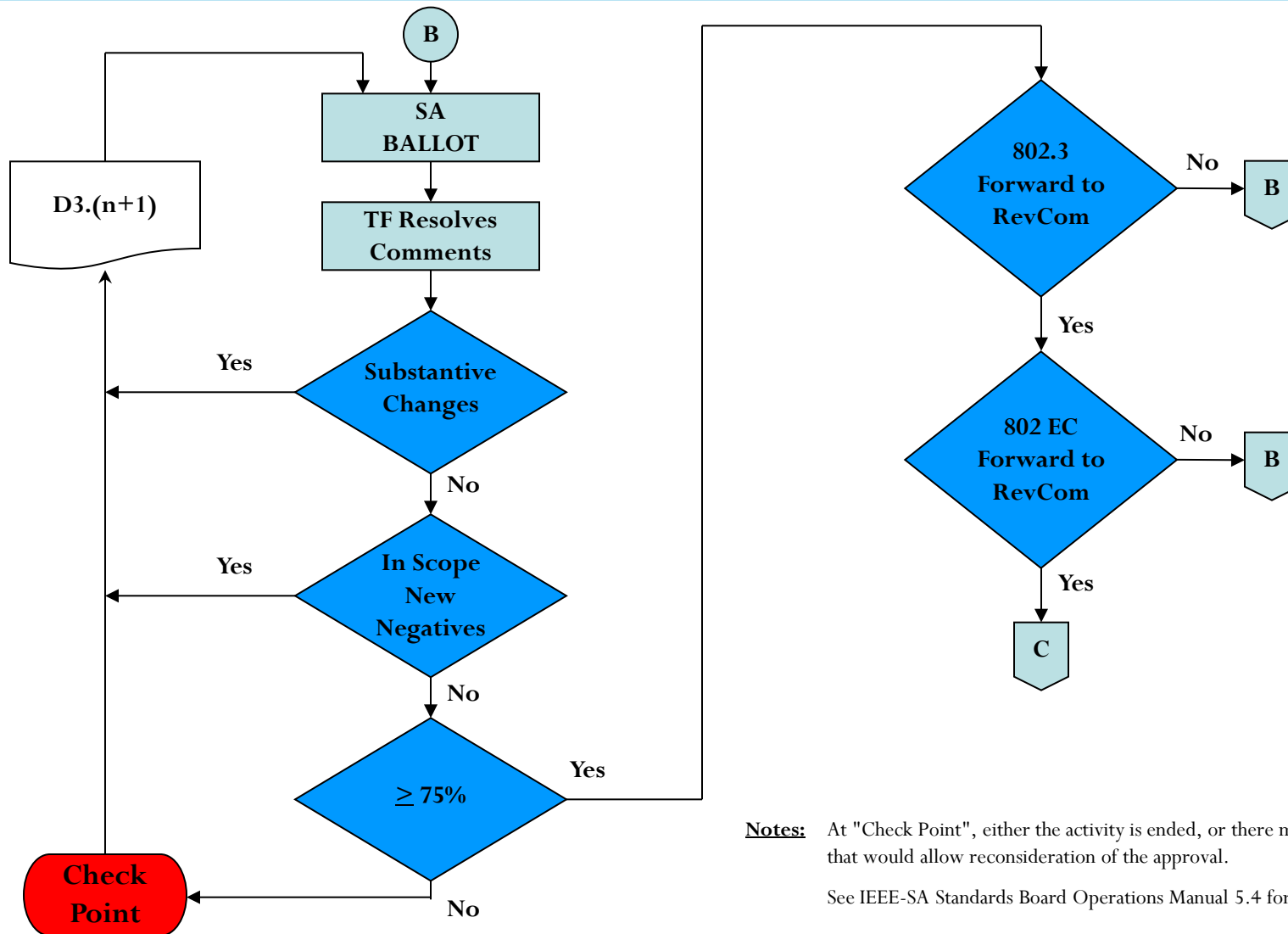
Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase



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

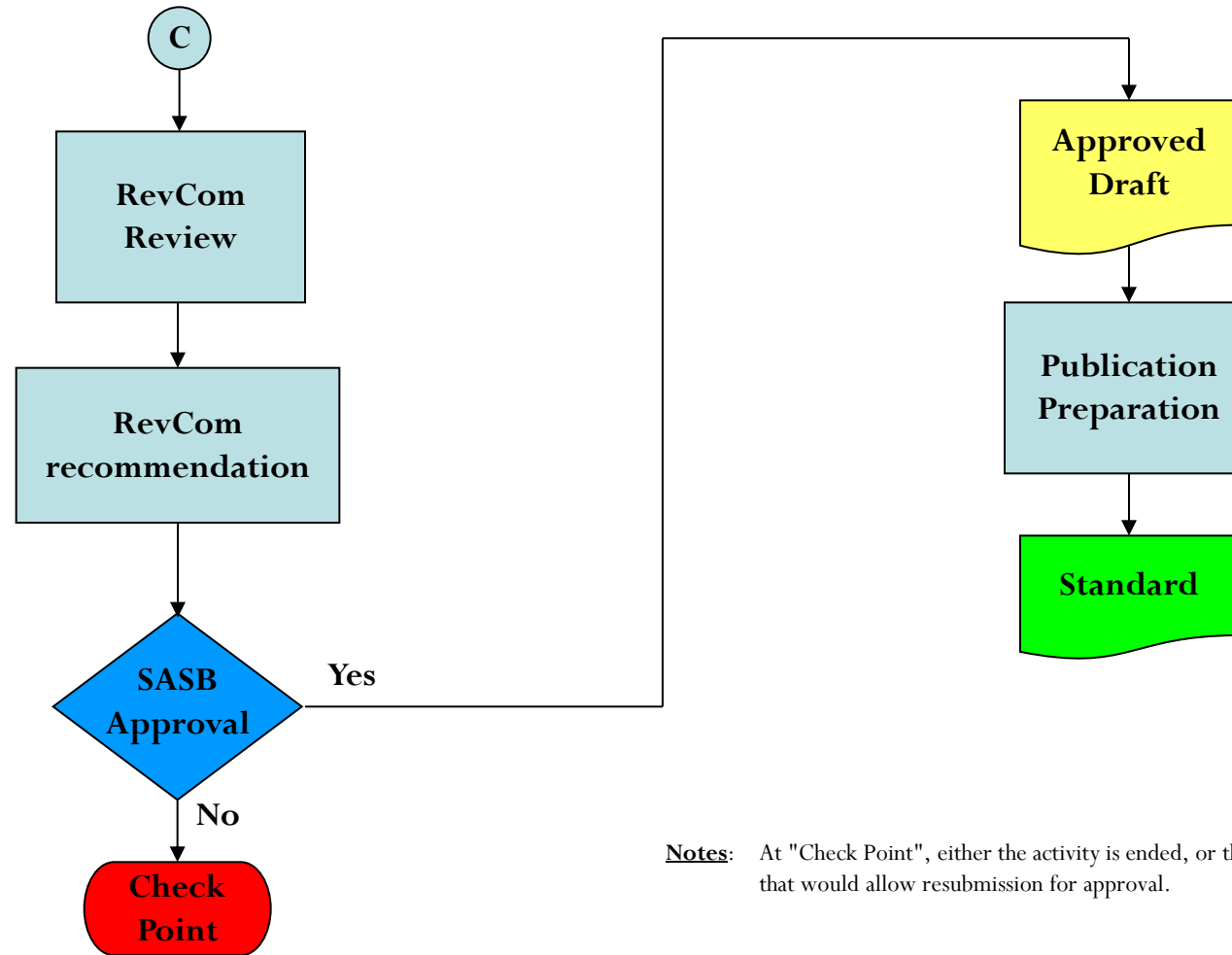
Overview of IEEE 802.3 Standards Process (4/5)- IEEE Standards Association (SA) Ballot Phase



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.

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.



MOST IMPORTANT PART

Request for Formation of Study Group (as per November 2024 Vancouver Plenary Motion)

Move that the IEEE 802.3 Working Group request the formation of a Study Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for an Ethernet Media Independent Interface (MII) optimized for an exposed interconnect.

M: Jason Potterf – Cisco

S: Brian Murray – Analog Devices

Liaisons and Communications

- None

Minutes to Approve

To be approved at next Interim

- June 18, 2025 Electronic Interim Meeting:
 - https://www.ieee802.org/3/POPI/public/2025-06-18/POPI_Minutes_DRAFT_2025-06-18_v01.pdf

Minutes approved without objection

Attendance

- Attendance Gathered from IMAT and the WebEx Meeting Records

PAR / CSD WG Review Comments

- Comments received from:
 - 802.1
 - 802.11

802.1 COMMENTS

Comments on IEEE P802.3dq PAR & CSD

From IEEE 802.1

Contact:

[Mark Hantel](#)

802.1 Maintenance TG Chair

[Glenn Parsons](#)

802.1 Working Group Chair

- These comments are on the PAR and CSD found in:
 - <https://mentor.ieee.org/802-ec/dcn/25/ec-25-0127-00-LMSC-ieee-p802-3dq-draft-par.pdf>
 - <https://mentor.ieee.org/802-ec/dcn/25/ec-25-0128-00-LMSC-ieee-p802-3dq-draft-csd.pdf>

PAR

- Scope 5.2.b
 - Suggest removing “may” and reword to "Each interface supports... and a multiport PHY as applicable".

CSD

- Overall: Suggest using the latest template document for the CSD
<https://mentor.ieee.org/802-ec/dcn/18/ec-18-0064-02-0PNP-csd-template-in-doc-format.doc>
- Page 7: Suggest rewording "and counts that" in the first sentence to "and counts than"
- Page 8: End of Bullet point two "such as RMII, RGMII, SGMII, etc.", etc. is superfluous in addition to "such as", suggest removing "etc."

802.11 COMMENTS

P802.3dq - Amendment - Pin-Optimized PHY Interfaces, PAR and CSD

PAR:

2.1 – Suggest changing “a Pin” to “an”.

The use of Pin in the Title, but it is not in the scope of the project. Pin should be used in both the Title and the Scope.

Another alternative: The title could also incorporate “optimized for exposed interconnects.”.

5.5 There is a list of PHYs: 10BASE-T1L, 10BASE-T1S, proposed 100BASE-T1L, proposed 10BASE-T1M. Each of the standards behind them should be listed in 8.1. This would give insight into 802.3 for the reader.

CSD:

Distinct Identity: The use of “8 pins” may be better redescribed in terms of “optimized exposed interconnects”, or interconnection points or electrical contacts.

Economic Feasibility: Expand the first use of Acronyms: RMII, RGMII, SGMII, GMII, or XAUI.

Were done!

LET'S VOTE!

Study Group Motion

Move to approve the revised PAR and CSD responses.

Links TBD

Links TBD

M:

S:

Technical (> 75%)

~~Motion passed by unanimous consent~~

Presentations

- None

Note –Times listed are subject to change.

Future POPI Meetings

There are no future Study Group meeting planned as the study group's work is (hopefully) done.

When a Task Force is formed, meetings will be announced through the usual channels.

Future 802.3 In Person Meetings

- See: <http://www.ieee802.org/3/interims/index.html>
- No future study group meetings planned
- Anyone interested in hosting a interim meeting contact me or the IEEE 802.3 Executive Secretary [Chad Jones](#).

Thank You!