

Agenda and General Information

IEEE 802.3

Greater than 10 Mb/s Long-Reach Single-Pair Ethernet Study
Group

George Zimmerman (Chair)

CME Consulting / ADI, APL Group, Cisco, CommScope, Marvell, SenTekse

(Electronic Interim) 19 January 2022

Agenda

- Appointment of Recording Secretary
- Welcome and Introductions
- Approve Agenda
- Approve minutes from last meeting
- Goals for this meeting
- Big Ticket Items
- Reflector and Web
- Ground Rules
- IEEE
 - Structure, Bylaws and Rules
 - Call for Patents
 - IEEE Standards Process
- Attendance
- Liaisons and Communications
- Presentations
- Straw Polls 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)
- The conference tool in use for this meeting has a chat function. Public, and in some cases private chats, are available to the teleconference host after the meeting, and should be treated as a public statement that could appear in the minutes. The public chat function shall only be used for official business related to the meeting, as determined by the Chair.
- Cell phone ringers off
- Please observe proper decorum in meetings –**MUTE WHEN NOT TALKING**

Goals & Big Ticket Items

- Goals for the meeting
 - Ensure PAR, CSDs, and Objectives are ready for presubmission
- Big ticket items
 - Latency objective for 100 Mb/s PHY

Reflector and Web

- To subscribe to the Enhancements to Point-to-Point Single Pair Ethernet 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-SPEP2P <yourfirstname> <yourlastname>
end*

- Send Greater than 10 Mb/s SPE reflector messages to:

STDS-802-3-SPEP2P@listserv.ieee.org

- Please put GT10MSPE in the subject

- Study Group web page URL:

<https://www.ieee802.org/3/SPEP2P/index.html>

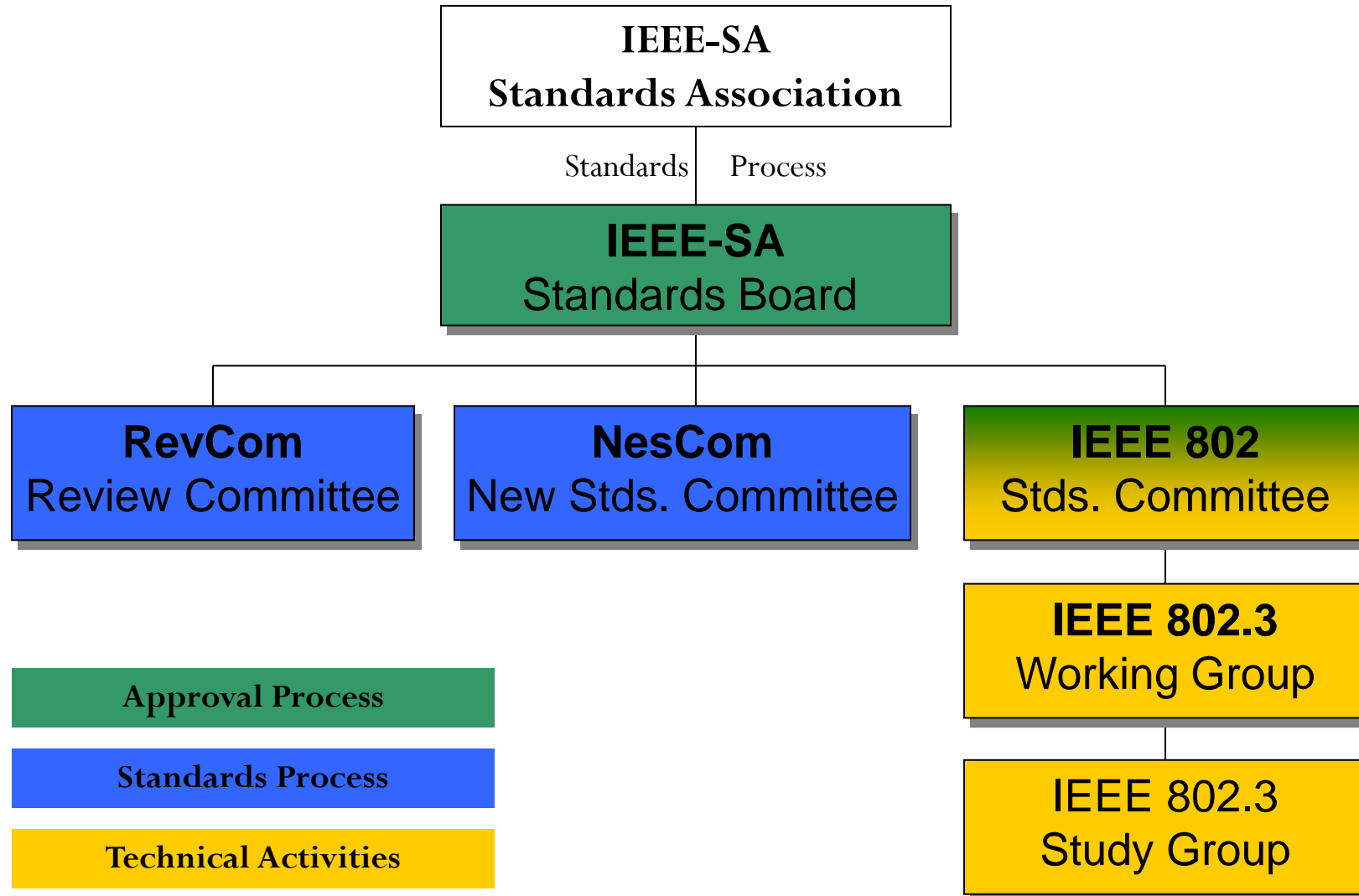
Study Group Private Area

- NONE

Ground Rules

- Based upon IEEE 802.3 Rules
 - Foundation based upon Robert's Rules of Order
 - Anyone in the room may speak
 - In-person: Anyone in the room may vote
 - Electronic: Only 802.3 voters vote in electronic meetings
- **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.

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- 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>

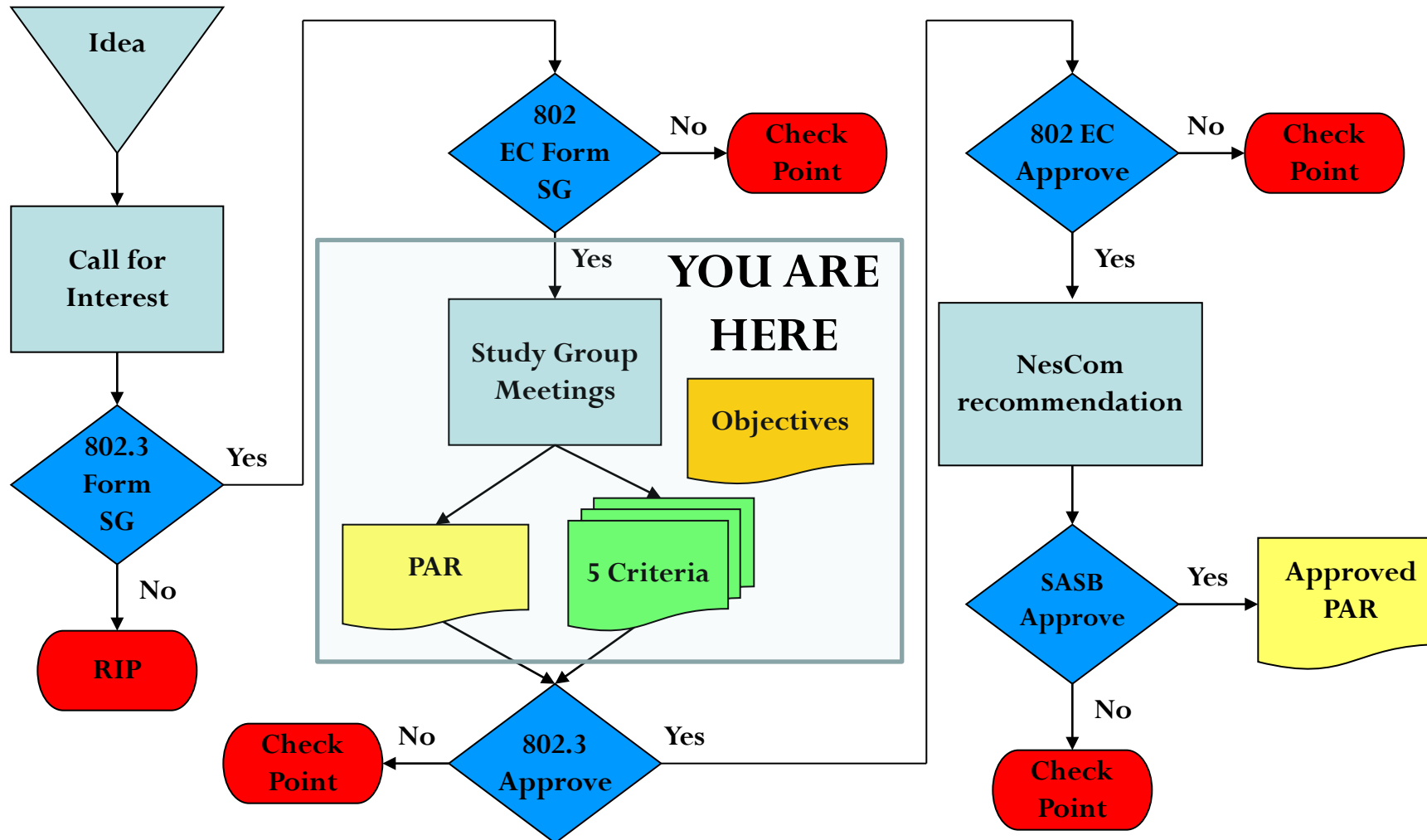
Participants in the IEEE-SA “*individual process*” shall act independently of others, including employers

- 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

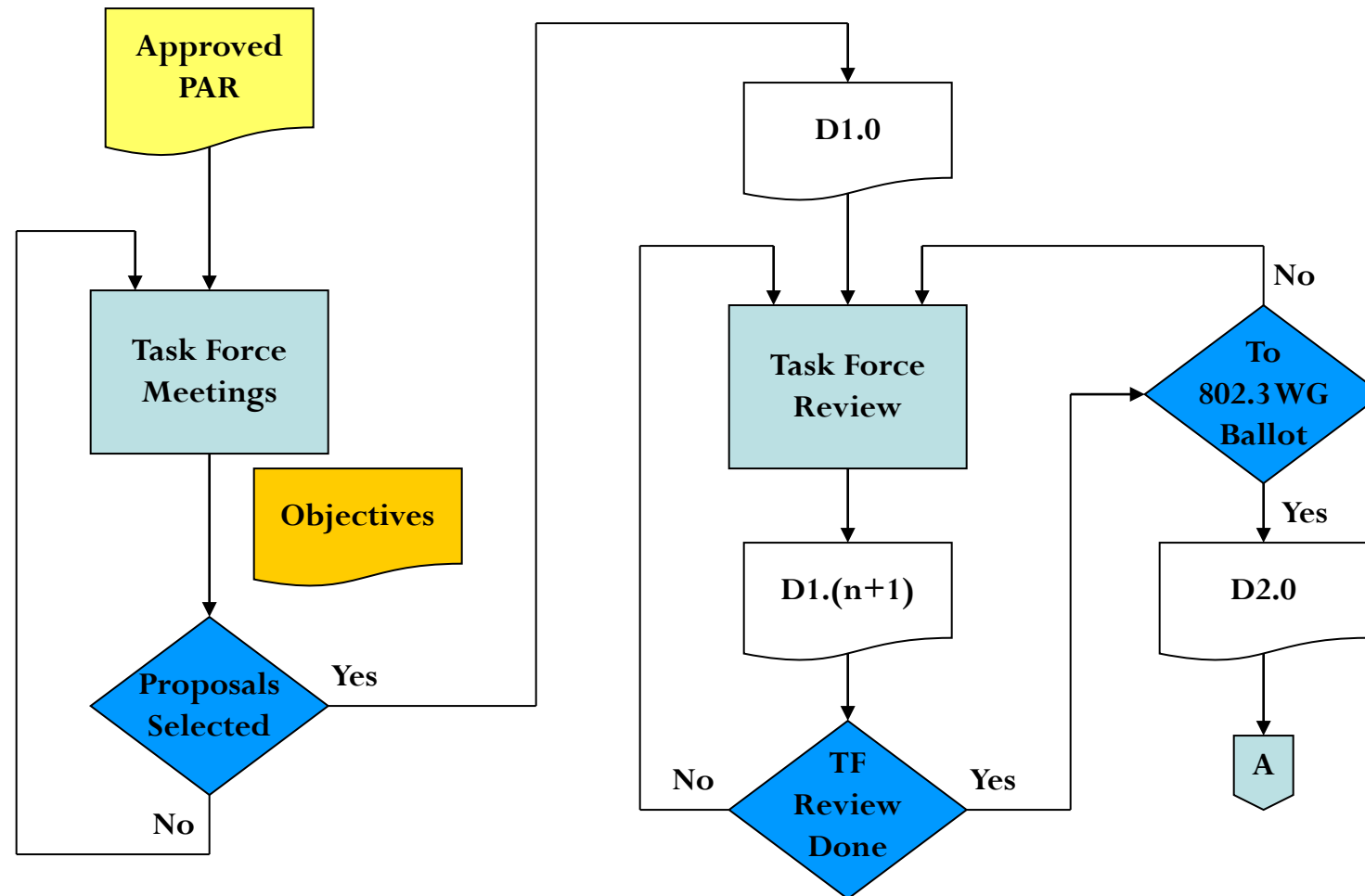
- The [IEEE-SA Standards Board Bylaws](#) (clause 5.2.1.3) specifies that “*the standards development process shall not be dominated by any single interest category, individual, or organization*”
 - This means no participant may exercise “*authority, leadership, or influence by reason of superior leverage,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

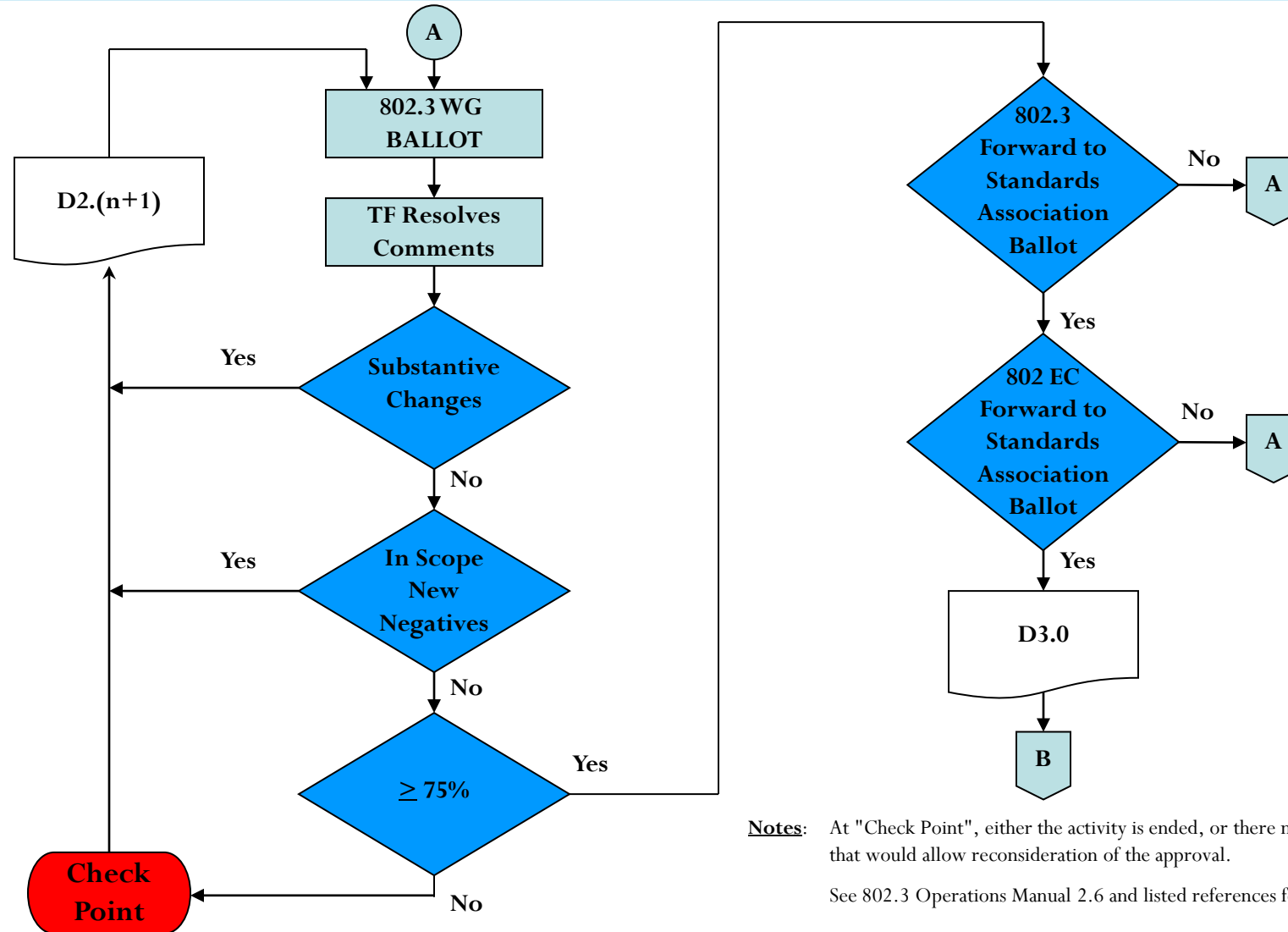


Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

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



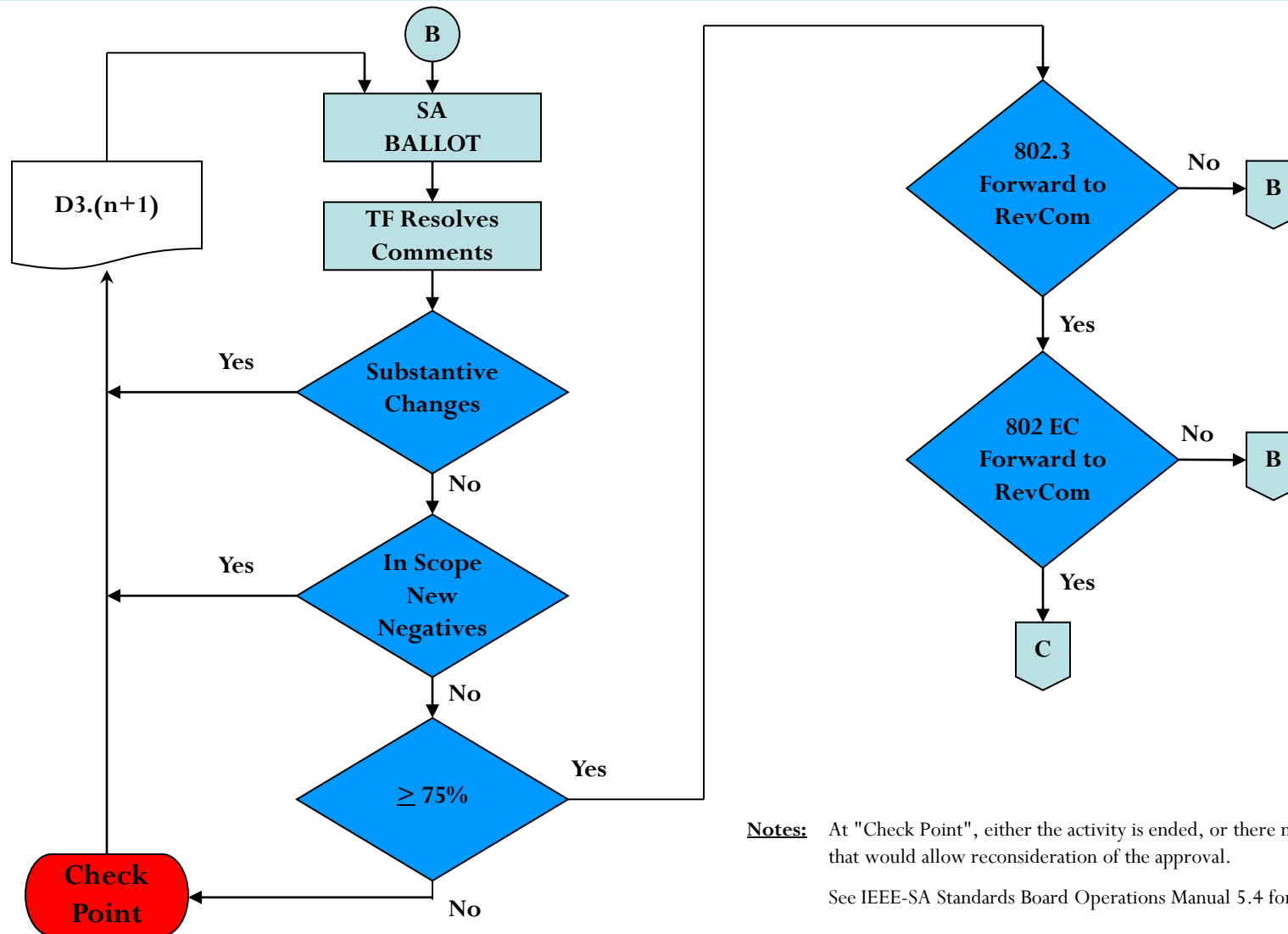
Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase



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

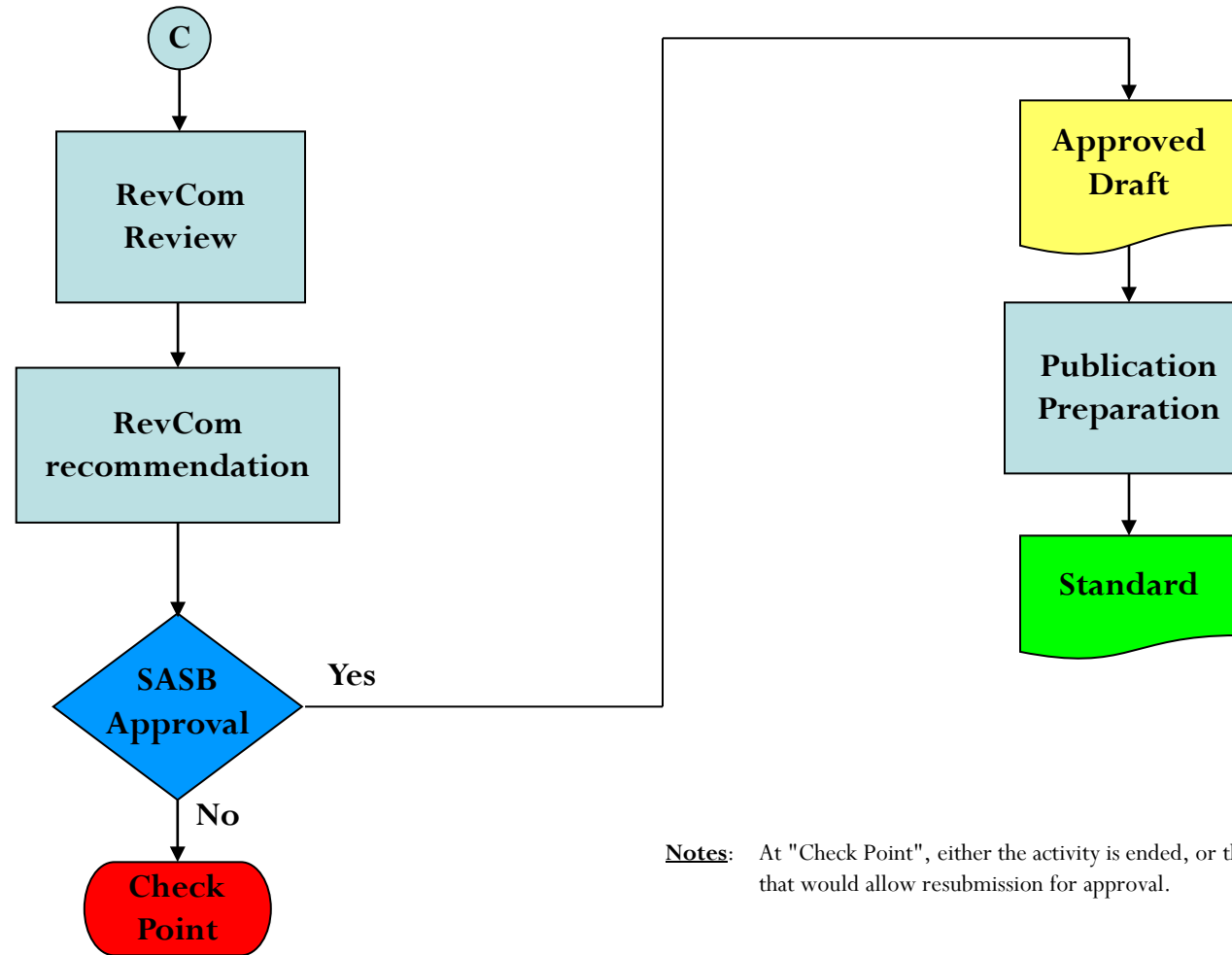
Overview of IEEE 802.3 Standards Process (4/5)- IEEE Standards Association (SA) Ballot Phase



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.

Attendance

- Attendance will be taken from the Webex log
- AND from IMAT - 62Fb3z
- If your name on the meeting does not show your affiliation, please email george@cmephyconsulting.com with your attendance and affiliation for the minutes

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.

Request for Formation of Study Group (as per July 2021 802.3 Plenary Motion)

Move that the IEEE 802.3 Working Group request the formation of a Study Group to develop Project Authorization Requests (PAR) and Criteria for Standards Development (CSD) responses for Greater than 10 Mb/s long-reach point-to-point Single-Pair Ethernet PHYs and Associated Powering

Liaisons and Communications

- None

SG Adopted Objectives, PAR, CSDs

- https://www.ieee802.org/3/GT10MSPE/Objectives_11102021_SGadopted.pdf
- <https://www.ieee802.org/3/GT10MSPE/P802.3dg.pdf>
- https://www.ieee802.org/3/GT10MSPE/CSD_3GT10M_01_11102021_out.pdf

Presentations

Title	Author(s)	Affiliation(s)
Thoughts on Objectives	Steve Carlson	High Speed Design/Robert Bosch, Ethernovia
Early proposals for AXT for 100MBPS SPE	Wayne Larsen	CommScope
Necessity of a Latency Objective (potential motion)	Dayin Xu	Rockwell Automation

Straw Poll

I would support the concept of a mode with $\leq 1.5\mu\text{sec}$ latency up to at least 100m

Y: 25

N: 2

A: 9

Straw Poll

I would support adding the following objective (worded as follows): “Define an optional link segment up to at least 100m length for operation with latency $\leq 1.5\mu\text{sec}$ ”

Y:22

N:7

A:7

Motion

Adopt a latency objective as “Define an optional link segment up to at least 100m length for operation with latency $\leq 1.5\mu\text{sec}$ ”

M: Dayin Xu

S: David Brandt

MOTION WITHDRAWN

Presubmission

- Request presubmission of the 802.3dg draft PAR and CSDs for consideration by IEEE 802.

Thank You!