

Agenda and General Information

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments
Enhancement Task Force

Chad Jones

Cisco Systems, Inc.

Teleconference, 23 March 2022

Agenda

- ~~Welcome and Introductions~~
- Approve Agenda
- Approve 23 FEB and 9 MAR 2022 Minutes
- Attendance
- Goals for this meeting
- Big Ticket Items
- Reflector and Web
- Ground Rules
- IEEE
 - Structure, Bylaws and Rules
 - Call for Patents
 - IEEE Standards Process
- ~~Liaisons and Communications~~
- ~~Comment resolution~~
- Presentations
- Timeline/Work List review
- Motions and Closing Business
- Future Meetings

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. (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**

Affiliation

- If you have not edited your Webex profile to show your employer and/or affiliation, please type it in the chat window so the secretary can add to the minutes.
- If you do not announce your affiliation, you will be removed from the meeting

Attendance

- Taken from the WebEx log and ~~IMAT~~
- ~~Tutorial Material on attendance tool~~
 - ~~http://ieee802.org/3/minutes/attendance_procedures.pdf~~
 -
- ~~Access details~~
 - URL: ~~<http://imat.ieee.org/>~~
 - ~~Password: none, registration fee required to attend~~

Goals and big ticket items

- BASELINE TEXT
- Resolving work items

Reflector and Web

- To subscribe to the P802.3da reflector, send an email to:

ListServ@ieee.org

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

*subscribe stds-802-3-SPMD <yourfirstname> <yourlastname>
end*

- Send P802.3da reflector messages to:

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

- Task Force web page URL:

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

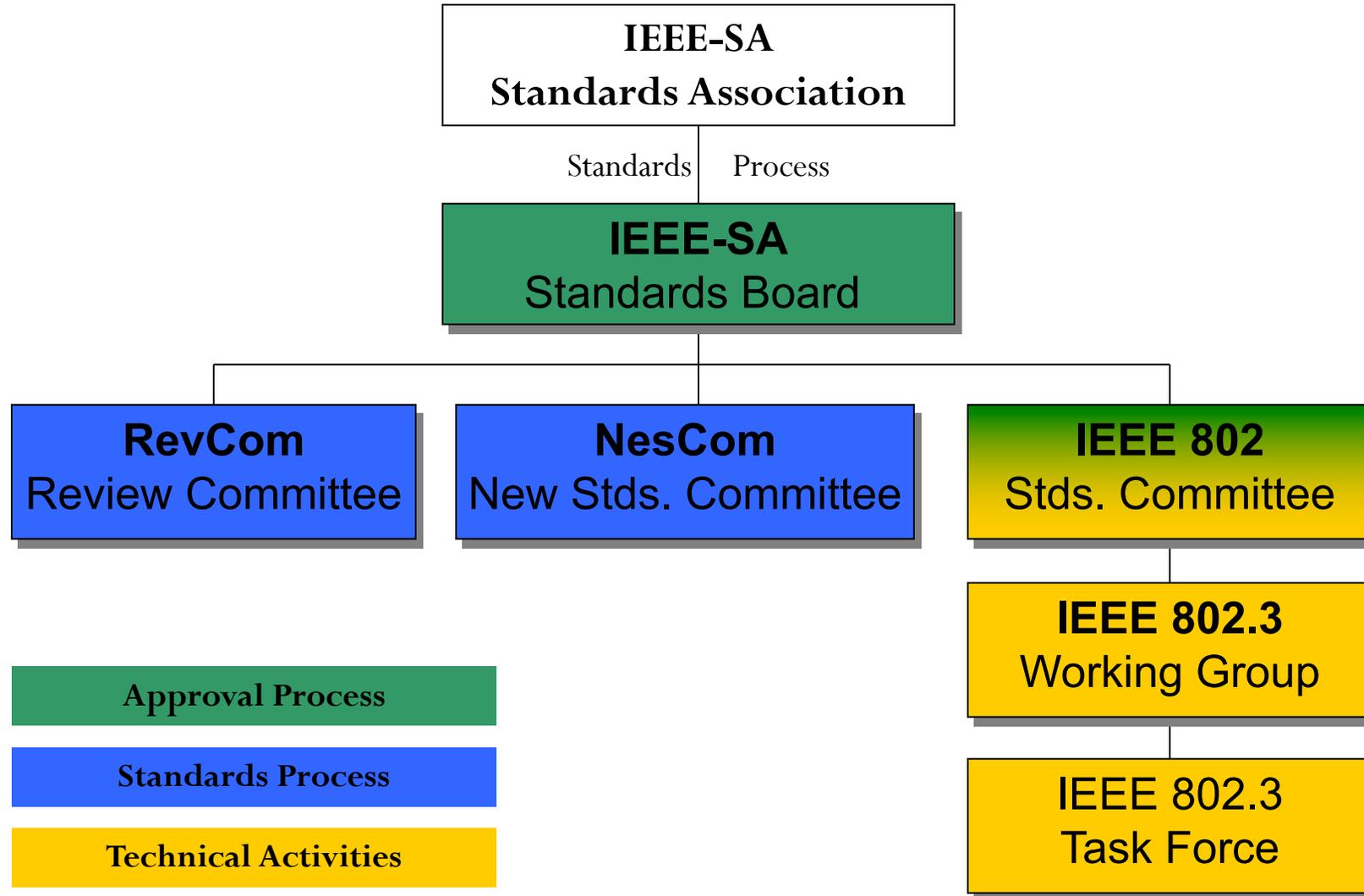
Task Force Private Area

- URL: <https://www.ieee802.org/3/da/private/index.html>
- 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

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 WORKING GROUP 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

IEEE SA STANDARDS ASSOCIATION *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 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>

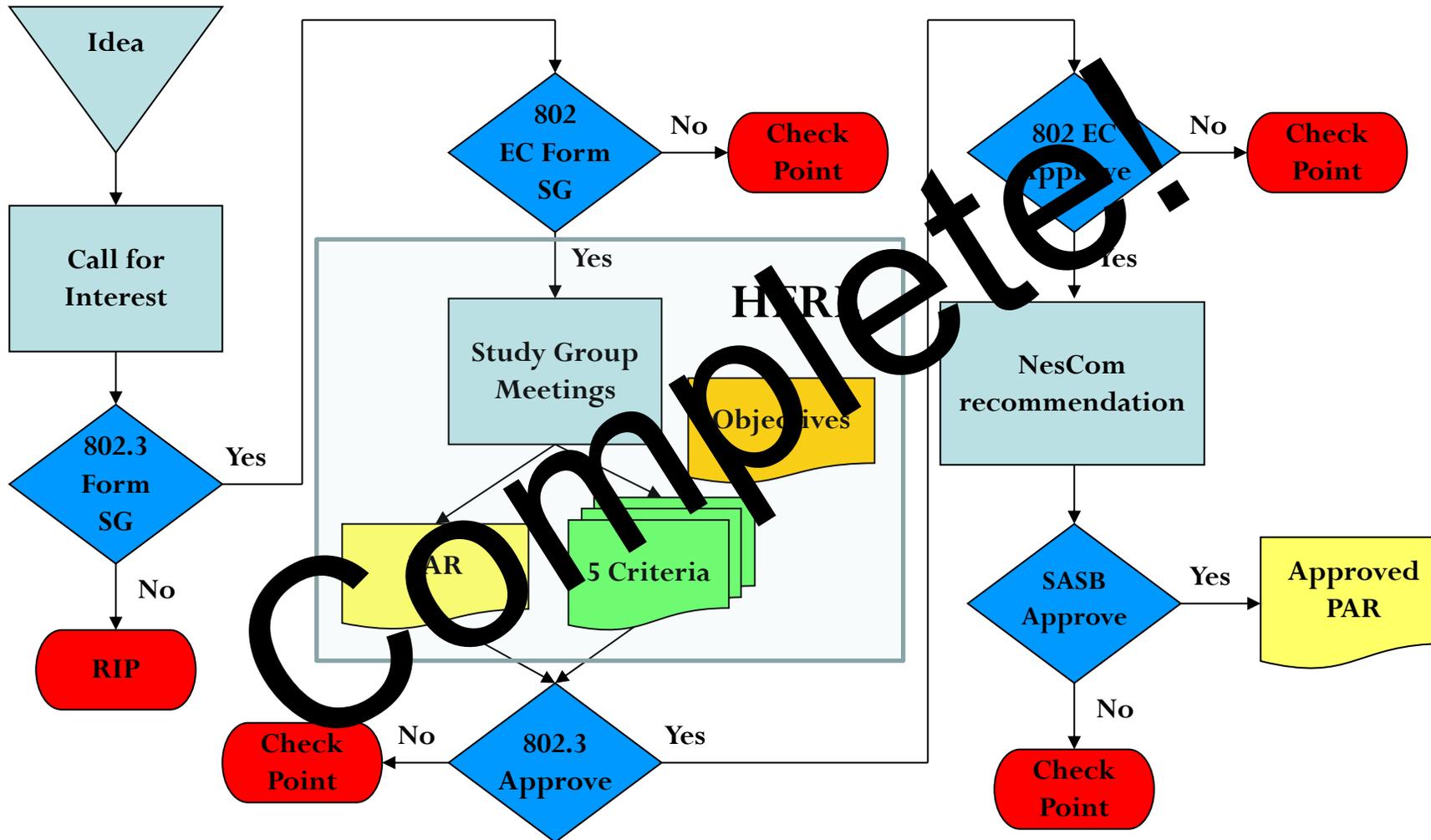
Participants in the IEEE-SA “*individual process*” shall act independently of others, including employers

- 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

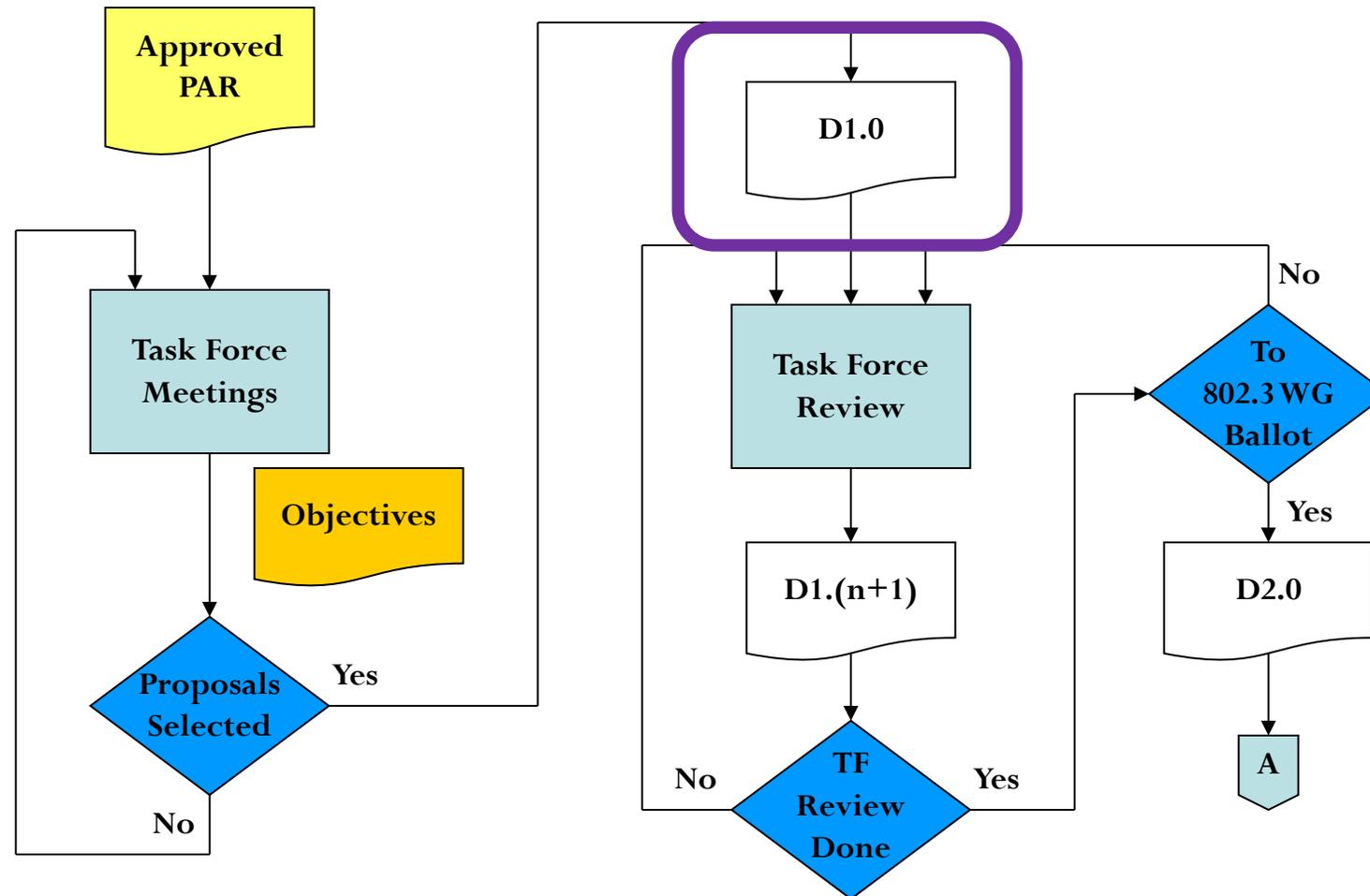
- The [IEEE-SA Standards Board Bylaws](#) (clause 5.2.1.3) specifies that *“the standards development process shall not be dominated by any single interest category, individual, or organization”*
 - This means no participant may exercise *“authority, leadership, or influence by reason of superior leverage,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

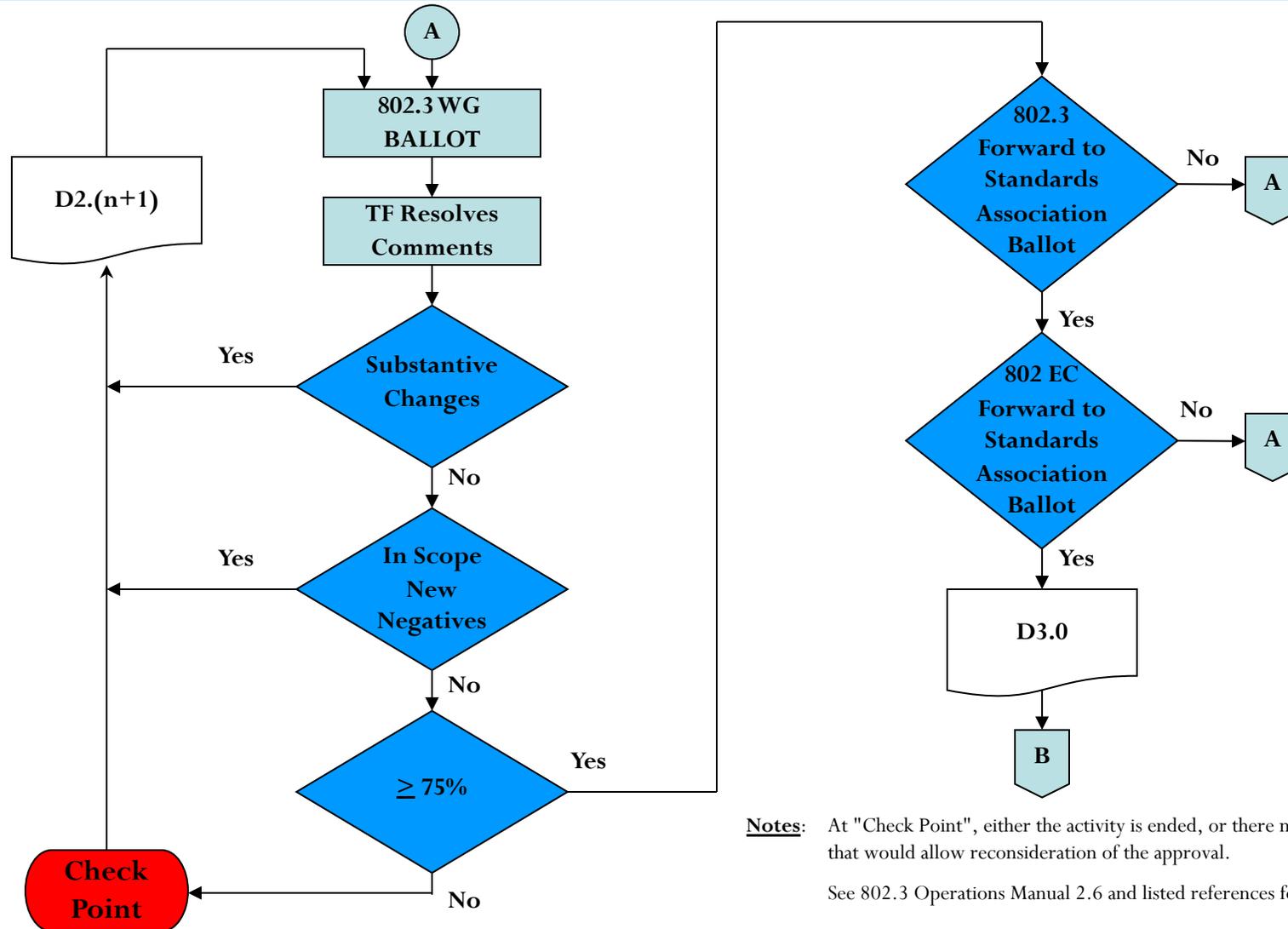


Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

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



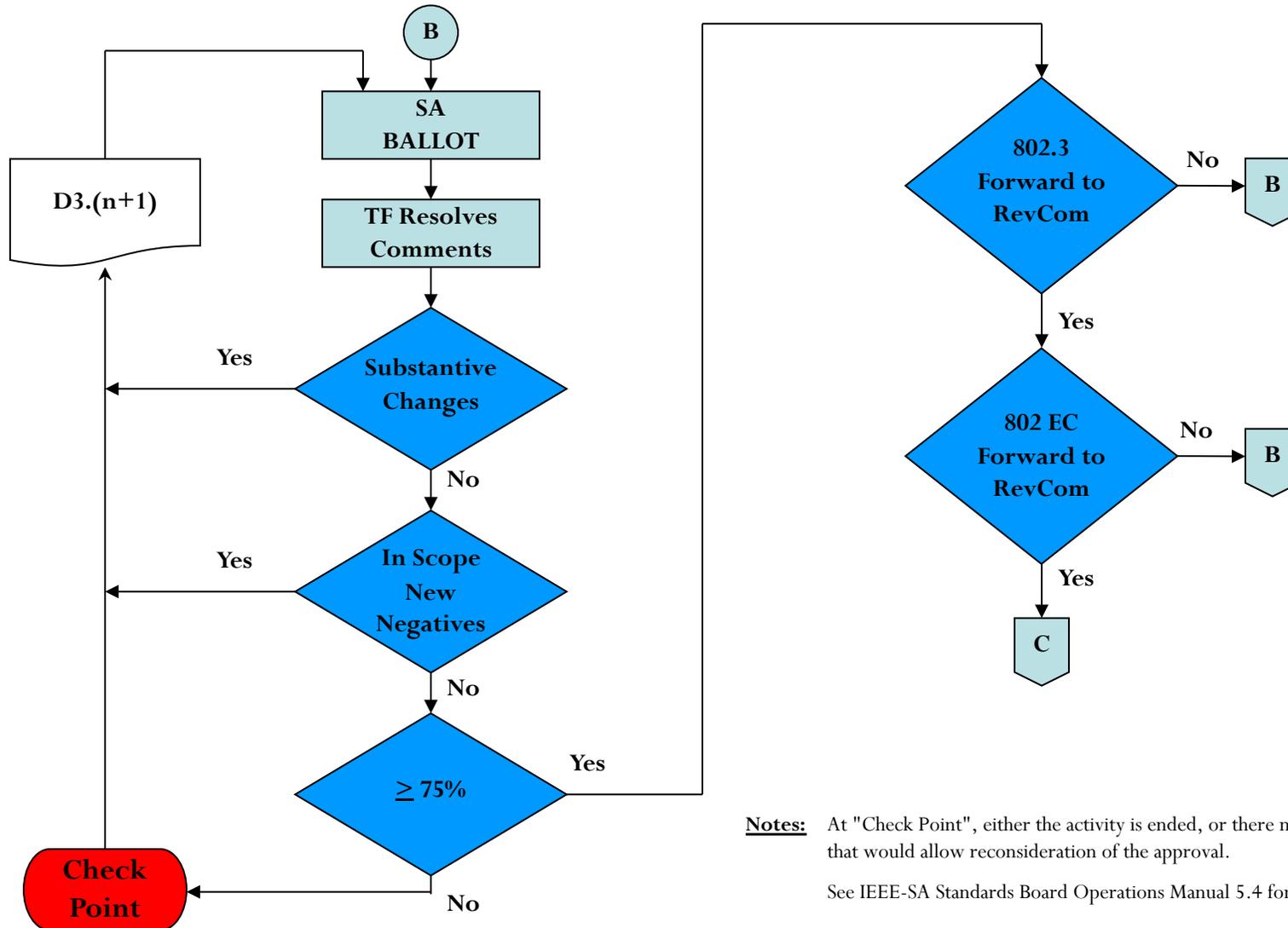
Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase



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

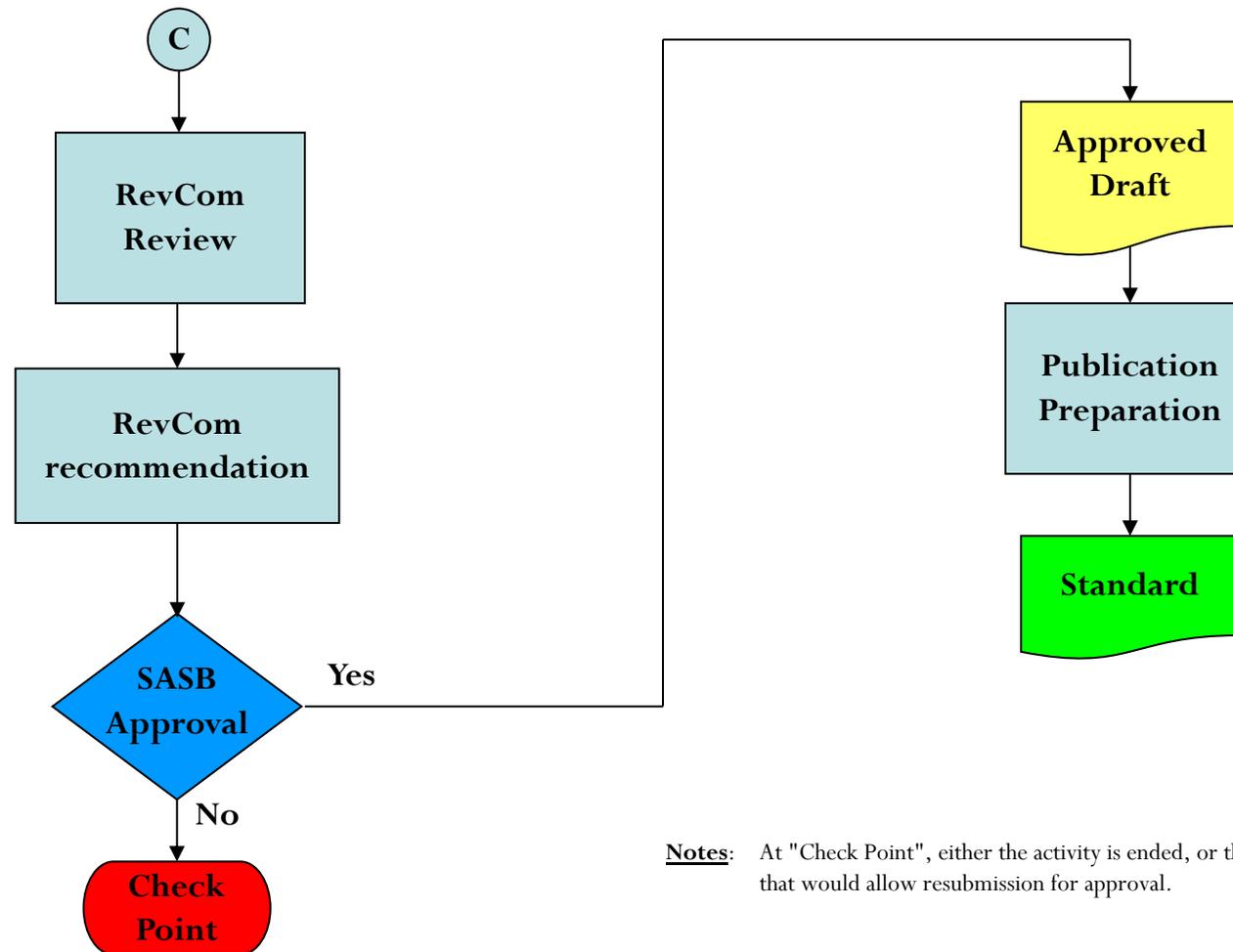
See 802.3 Operations Manual 2.6 and listed references for complete description

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.

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement Approved Project Documents

- PAR
 - http://www.ieee802.org/3/da/P802d3da_PAR.pdf
- 5 Criteria
 - <https://mentor.ieee.org/802-ec/dcn/20/ec-20-0096-00-ACSD-p802-3da.pdf>
- Objectives
 - http://www.ieee802.org/3/da/802d3da_objectives.pdf

Presentations

| Title | Presenter |
|------------------------|--------------------|
| PLCA Corner-case Fixes | Piergiorgio Beruto |
| | |
| | |
| | |

IEEE P802.3da 10 Mb/s Single Pair Multidrop Segments Enhancement Timeline, V3



| year | month | output | event |
|------|-------|-----------|-----------------|
| 2021 | jan | D0.2 | |
| | may | D0.3 | Quasi TF review |
| | jul | D0.51 | Quasi TF review |
| | sep | D0.6 | Quasi TF review |
| 2022 | jan | | |
| | mar | | |
| | may | D0.9 | |
| | jul | D1.0 | TF review |
| | sep | D1.1 | |
| | nov | D1.2 | |
| 2023 | jan | D1.3/D2.0 | |
| | mar | D2.1 | WG Ballot |
| | may | D2.2 | |
| | jul | D2.3 | |
| | sep | D3.0 | SA Ballot |
| | nov | D3.1 | |
| 2024 | jan | D3.2 | |

Work Items

| | | 2021 | | | | | | | | | | | | 2022 | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|---|-----|-----|-----|-----|------|-----|-----|-------------|-----|-----|-----|------|-----|-----|-----|----|---|----|----|----|------|----|---|----|---|----|---|----|----|----|----|--|--|--|--|
| | | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | | | | | | | | | | | | | | | | | | | | |
| | | 24 | 7 | 21 | 19 | 26 | 16 | 30 | 14 | 19 | 11 | 25 | 8 | 22 | 6 | 20 | 3 | 17 | 1 | 15 | 18 | 23 | 9 | 23 | 6 | 20 | 4 | 18 | 1 | 15 | 29 | 13 | 27 | | | | |
| finish first | Consensus Model | X | | X | X | | | | | | | | | | | | | | | | | | | x | | | | | | | | | | | | | |
| | Topology, spur/stub length | Bob Voss | x | x | x | | | | | | | x | | | | | | | | | | | | | | | | | | | | | | | | | |
| | connection (inductance, capacitance, resistance) - MDI loading | Chris Diminico | x | | | | | | X | Chris: done | | x | | | x | | | | | | | x | | | | | | | | | | | | | | | |
| | specifications (IL, RL, mode conversion, etc.), MDI specs (tighter than CG?) [redundant to line 8,9?] | Chris Diminico | | | | | | | | | | | x | | | | | | | | | | | | | | | | | | | | | | | | |
| dependent on 7-10 | Power Coupling Network definition | Chris Diminico, Michael Paul | | | | | | | | | | x | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Hot insertion, removal and ramifications | Bob Voss, Peter Jones, Jason Potterf, Heath Stewart | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | power specifications (max & min voltages / power levels / max currents / loop resistances) and what regulations set these limits | Michael Paul | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Startup Sequence | Michael Paul | | | | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Reach extension / validation, interacts with mixing segment spec (dependent) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LLDP | Jason Potterf, Peter Jones | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependent on PHY decision | Backwards compatible noise immunity (e.g., FEC) | Gergely Huszak | | | | X | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Sleep/standby/EEE/EEE signaling | George Zimmerman | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Failure modes and preferred behavior (potential to defer until after 1.0) | Gergely Huszak, George Zimmerman | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Definition of backward compatibility / review of backward compatibility objective | Peter Jones, Jason Potterf | | | | | | | | | | | x | | x | | | | | | | | | | | | | | | | | | | | | | |
| Closed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Additional requirements for TSN support? (supporting 1588) | Peter Jones | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mixing Segment data membership & PLCA ID | Peter Jones, Piergiorgio Beruto, Kamal Dalmia | one | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Definitions section | None Needed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EEE signaling (consolidated into other EEE item) | George Zimmerman | | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Topology, allow Y connections? - NO | Bob Voss | x | x | x | | | | | | | | x | | | | | | | | | | | done | | | | | | | | | | | | | | |

Future Meetings

- See: <http://www.ieee802.org/3/interims/index.html>
 - May 2022 Interim
 - Date: May 16-26
 - Meeting 5/18
 - July 2022 Plenary
 - Date: July 11-24
 - Montreal, Quebec
 - Interim series meetings
 - Every other Wednesday: 4/6, 4/20, 5/4, 5/18, 6/1, 6/15, 6/29
 - Anyone interested in hosting an interim meeting contact me or the IEEE 802.3 Executive Secretary [Steve Carlson](#).
- 802.3 Call and Meeting Calendar:
<http://www.ieee802.org/3/calendar.html>

Thank You!