Agenda and General Information

IEEE 802.3 100 Gb/s per lane optical PHYs Study Group

Mark Nowell, Cisco

Long Beach, CA, USA

Week of Jan 14th, 2019

Agenda

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

100G Lambda Study Group organization

- Chair: Mark Nowell, Cisco
- Recording Secretary: Kenneth Jackson, Sumitomo (covering this week for Kohichi Tamura, Lumentum)
- Chief Editor: Gary Nicholl, Cisco
- Ad hoc chair: TBD

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. (December 2017 IEEE-SA Standards Board Ops Manual 5.3.3.2)
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (December 2017 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

Reflector and Web

- To subscribe to the Study Group's reflector, send an email to:

  ListServ@ieee.org

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

  subscribe stds-802-3-100G-OPTX *<yourfirstname> <yourlastname>*

  end

- Send Study Group reflector messages to:

  stds-802-3-100G-OPTX@listserv.ieee.org

- Study Group's web page URL:

  http://www.ieee802.org/3/100G_OPTX/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/
    - Use your imat login
        - (must be on meeting SSID – no VPN)

IEEE Structure

IEEE-SA
Standards Association

Standards | Process

IEEE-SA
Standards Board

RevCom
Review Committee

NesCom
New Stds. Committee

IEEE 802
Sponsor Group

IEEE 802.3
Working Group

IEEE 802.3
Study Group

Approval Process

Standards Process

Technical Activities
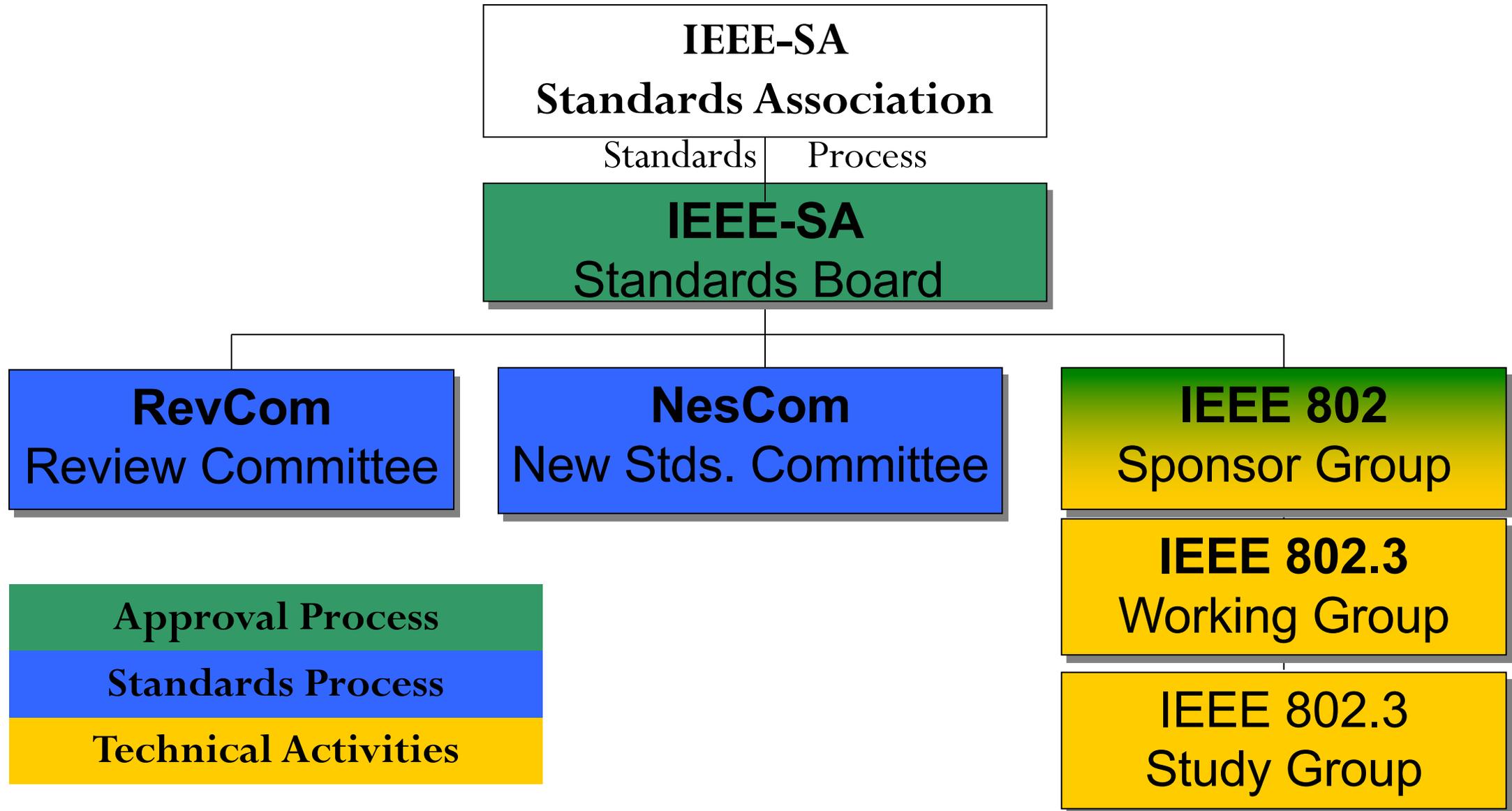
Important Bylaws and Rules

- 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
  - http://standards.ieee.org/about/sasb/audcom/pnp/LMSC.pdf

- 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

Participation in IEEE 802 Meetings

Participation in any IEEE 802 meeting (Sponsor, Sponsor subgroup, Working Group, Working Group subgroup, etc.) is on an individual basis

- Participants in the IEEE standards development individual process shall act based on their qualifications and experience. (https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf   section 5.2.1)

- IEEE 802 Working Group membership is by individual; "Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives". (subclause 4.2.1 "Establishment", of the IEEE 802 LMSC Working Group Policies and Procedures)

- Participants have an obligation to act and vote as an individual and not under the direction of any other individual or group. A Participant's obligation to act and vote as an individual applies in all cases, regardless of any external commitments, agreements, contracts, or orders.

- Participants shall not direct the actions or votes of any other member of an IEEE 802 Working Group or retaliate against any other member for their actions or votes within IEEE 802 Working Group meetings, see https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf   section 5.2.1.3 and the IEEE 802 LMSC Working Group Policies and Procedures, subclause 3.4.1 "Chair", list item x.

By participating in IEEE 802 meetings, you accept these requirements. If you do not agree to these policies then you shall not participate.

(Latest revision of IEEE 802 LMSC Working Group Policies and Procedures: http://www.ieee802.org/devdocs.shtml)

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
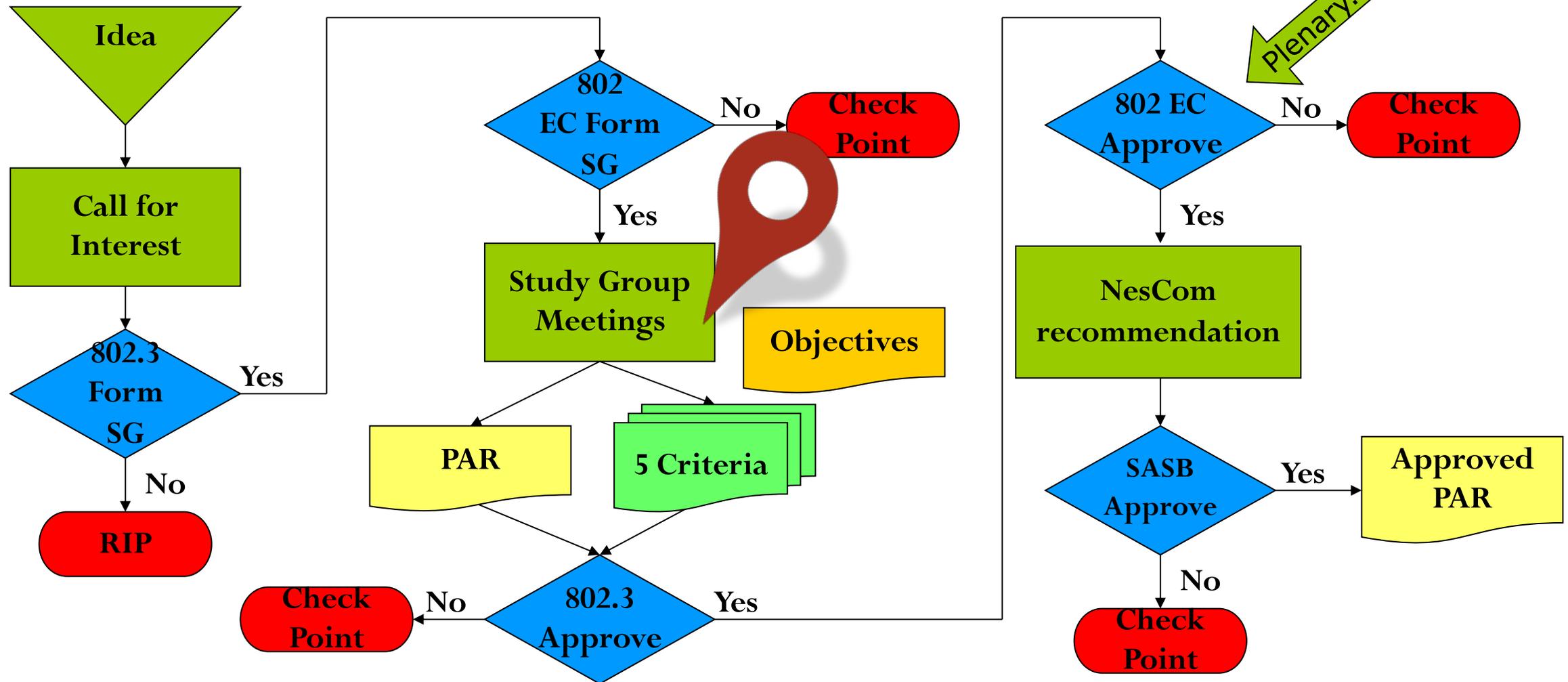
◆IEEE

Plenary. March 2019

Idea

Call for Interest

802.3 Form SG

Yes →

No → RIP

802 EC Form SG

No → Check Point

Yes → Study Group Meetings

Objectives

PAR

5 Criteria

802.3 Approve

No → Check Point

Yes →

802 EC Approve

No → Check Point

Yes → NesCom recommendation

SASB Approve

Yes → Approved PAR

No → Check Point

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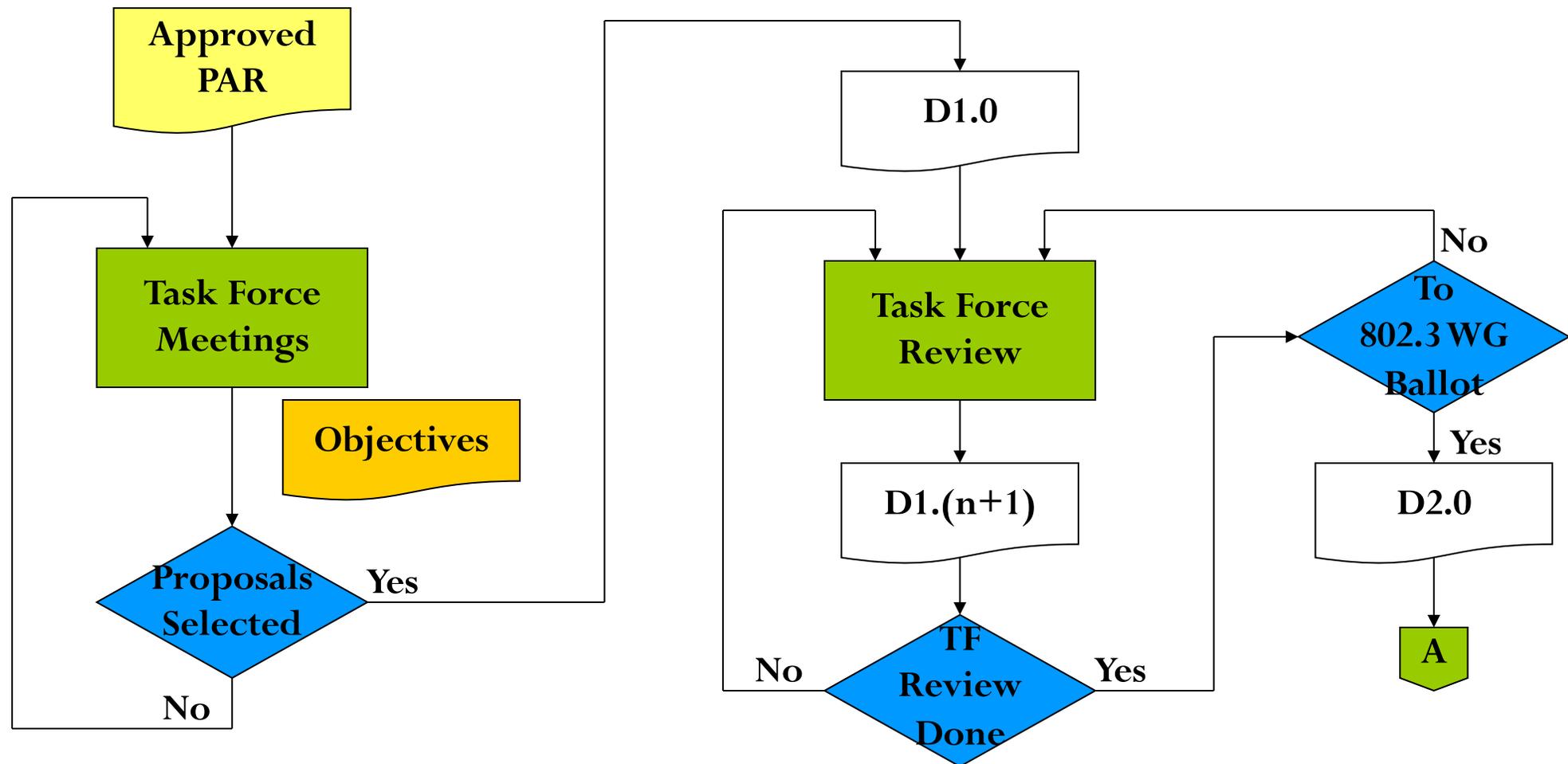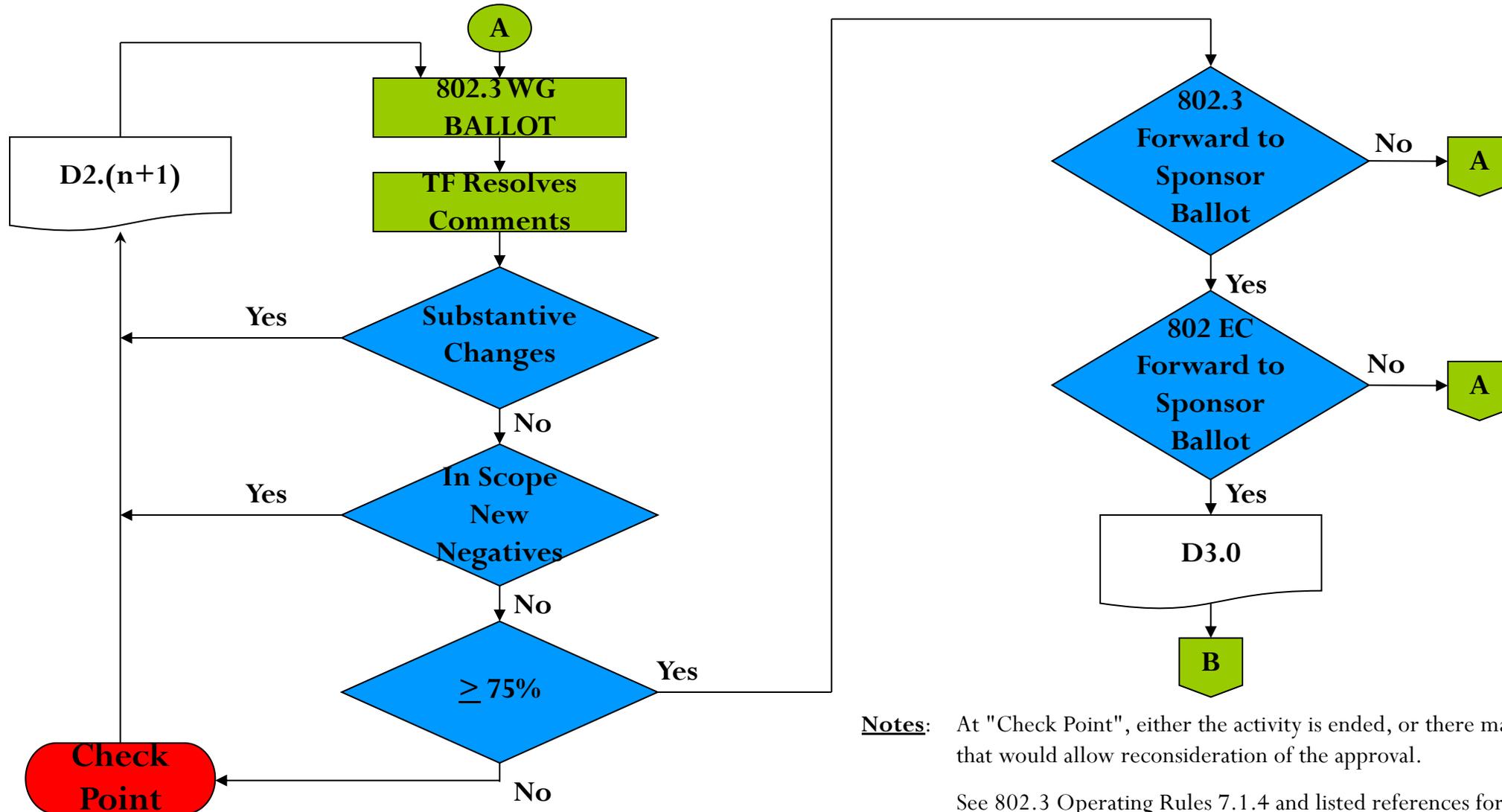
Notes: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

See 802.3 Operating Rules 7.1.4 and listed references for complete description

B

LMSC Sponsor BALLOT

D3.(n+1)

TF Resolves Comments

Substantive Changes — Yes / No

In Scope New Negatives — Yes / No

≥ 75% — Yes / No

Check Point

802.3 Forward to RevCom — No → **B** / Yes

802 EC Forward to RevCom — No → **B** / Yes

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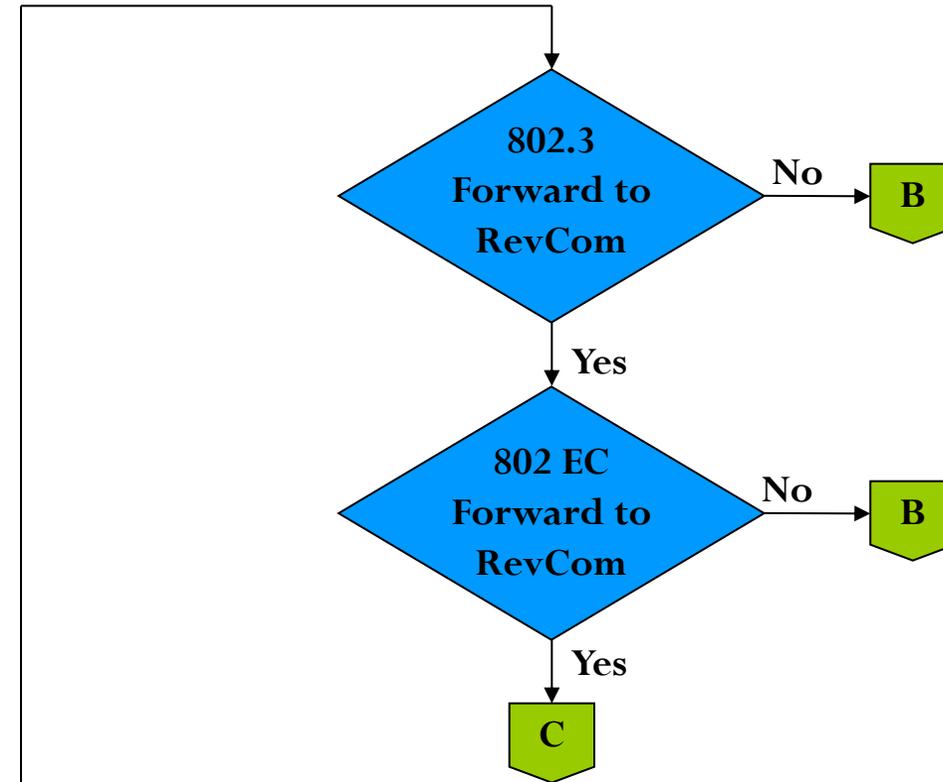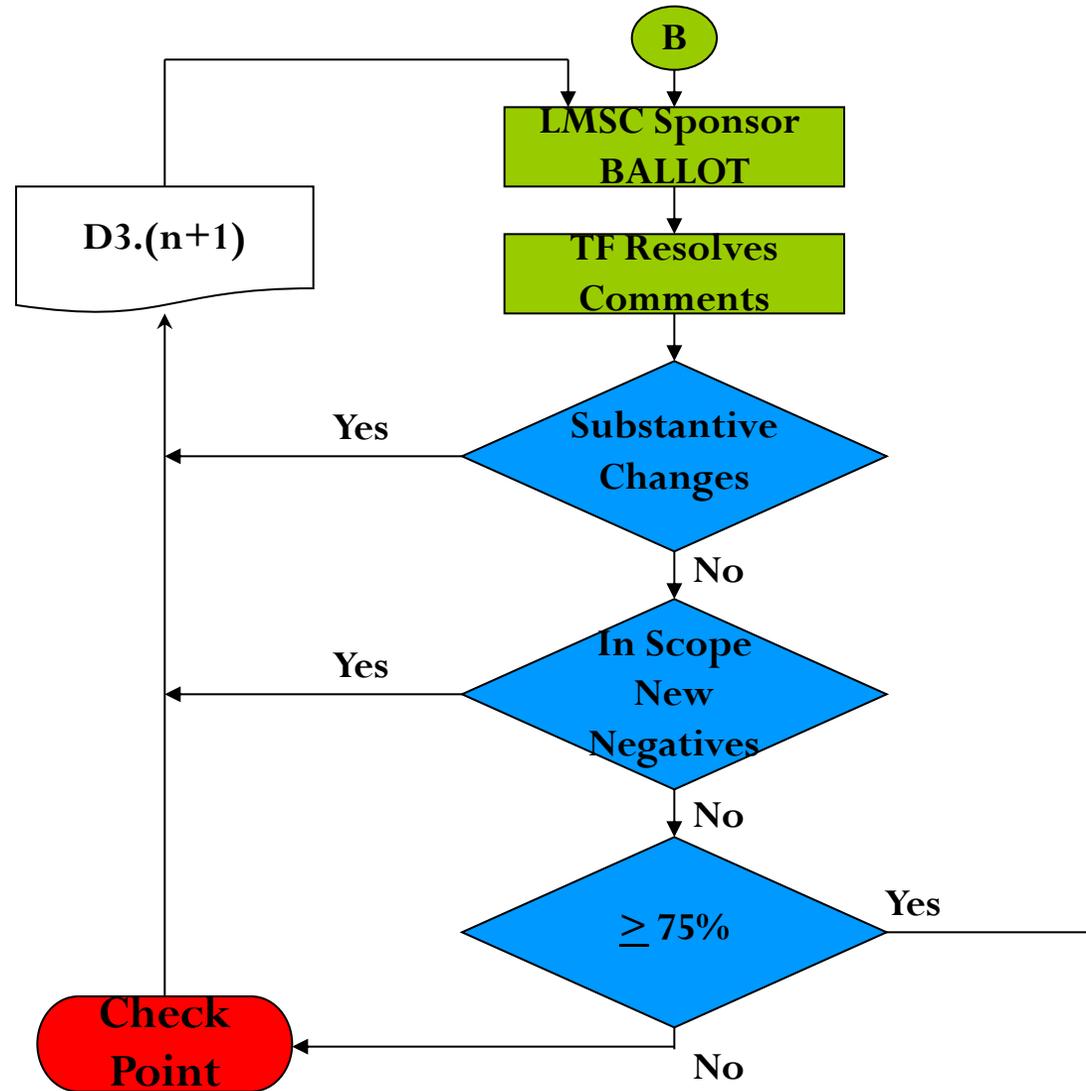
Notes: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

See 802.3 Operating Rules 7.1.5 and listed references for complete description

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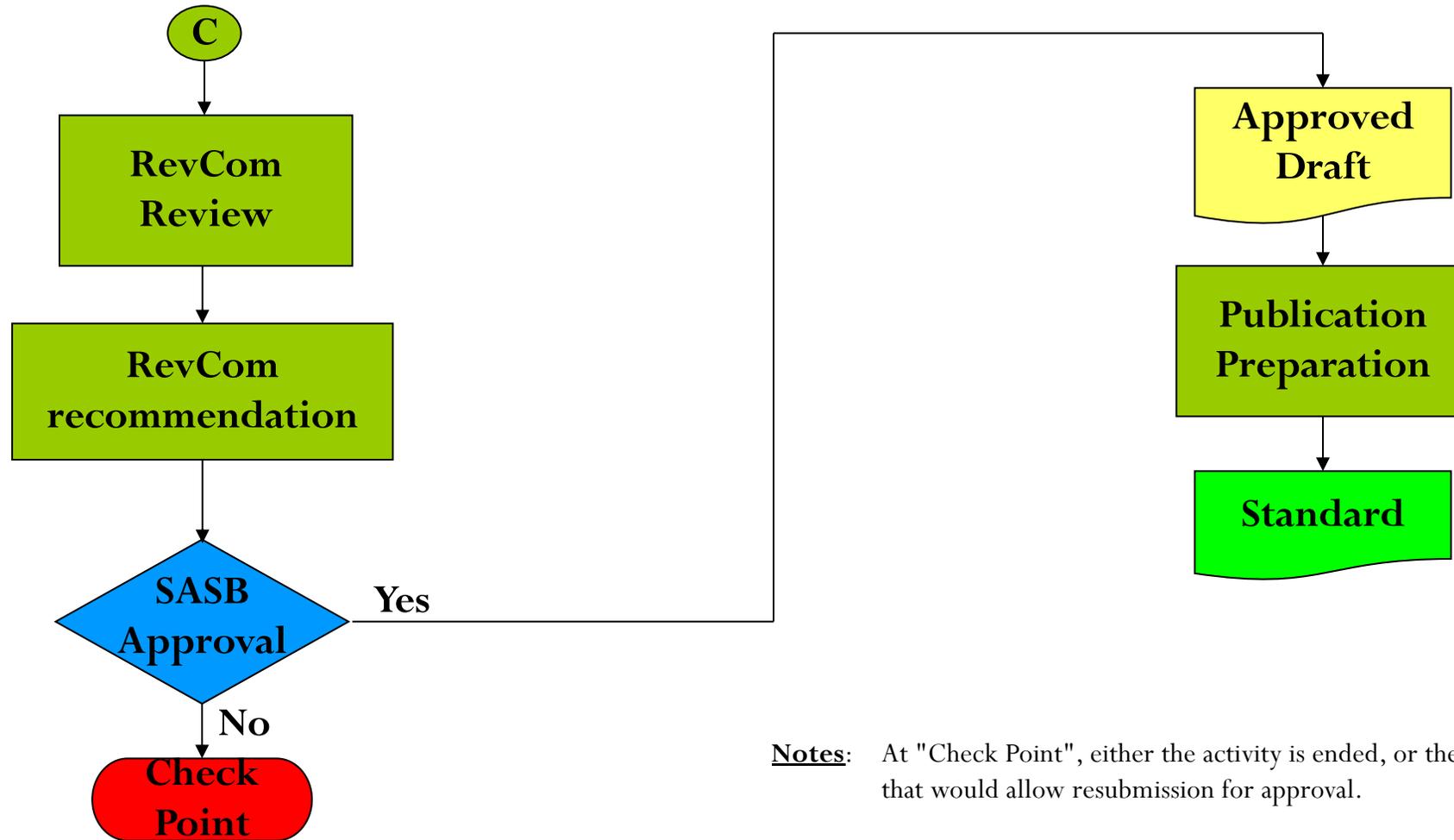
Notes: At "Check Point", either the activity is ended, or there may be various options that would allow resubmission for approval.

Liaisons and Communications

Ad hocs

Charter: To discuss the different areas of work that will fall under the work of the study group and to prepare content and contributions towards the study group's goals of developing the required documentation of objectives, PAR and CSD

Chair: Mark Nowell (provisional)

http://www.ieee802.org/3/100G_OPTX/public/adhoc/

Expected to continue the regular cadence.

- Timeslot TBD

CFI Motion @ November Closing Plenary

- 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 100 Gb/s per lane optical PHYs for 2 km and 10 km for 100 GbE and 400 GbE

- M: Mark Nowell

- S: David Lewis

- (> 50%)

- Y: 85   N: 0   A: 1

Crash course on Study Group goals

For an excellent overviews of the Study Group activities please refer to:

Overview of the Process – Wael Diab
http://www.ieee802.org/3/400GSG/public/13_05/diab_400_01_0513.pdf

Review of the 5 Criteria – Howard Frazier
http://www.ieee802.org/3/400GSG/public/13_05/frazier_400_01_0513.pdf

Guidelines for Project Objectives – Howard Frazier
http://www.ieee802.org/3/400GSG/public/13_05/frazier_400_02_0513.pdf

The following slides are taken from these excellent presentations

What does the Study Group produce?

- 5 Criteria
  - Broad Market Potential, Compatibility, Distinct Identity, Technical Feasibility, Economic Feasibility

- PAR
  - Your "contract" with the IEEE-SA and "authorization" to develop a standard
  - Broadly focuses on what the standard is that group will work on including scope, purpose, broad timeline (not a project plan)
  - Good idea to look at examples of prior projects

- Objectives
  - Your "contract" with 802.3
  - At a high level it is what the group will work on (and what it will not)
  - Somewhat more specific than the scope in the PAR

Final Thoughts

- Goal is to get to a Task Force

- To do that, focus on
  - Producing the objectives
  - Producing the PAR
  - Producing the 5 criteria
  - Work on building consensus
  - Leave the rest of it to the Task Force phase
    - Plenty of time to work on solutions
    - Plenty of time to debate the text of the solutions

From:
Overview of the Process – Wael Diab
http://www.ieee802.org/3/400GSG/public/13_05/diab_400_01_0513.pdf

Audience

- The 5 criteria are drafted and approved by a study group

- They are reviewed and approved (individually) by the working group

- They are subject to review and approval by each and every other working group in IEEE 802®

- They are reviewed and approved by the IEEE 802 executive committee

4

From:
Review of the 5 Criteria – Howard Frazier
http://www.ieee802.org/3/400GSG/public/13_05/frazier_400_01_0513.pdf

Purpose

- The 5 criteria are used to evaluate proposed projects

- They are used to filter out projects that are not appropriate for standardization in IEEE 802

- They are unique to IEEE 802

- They are one of the reasons why IEEE 802 standards are relatively successful

- They help perpetuate the "IEEE 802 culture"

5

The 5 Critters

Broad Market Potential   Compatibility   Distinct Identity   Technical Feasibility   Economic Feasibility
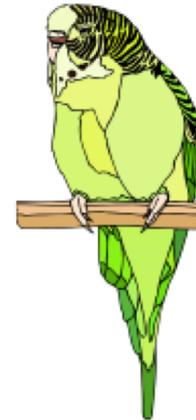
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Goals for the meeting

- 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 ground work for the next meeting

Meeting Logistics

- Main Meeting room is Intercontinetal I
- Wednesday Jan 16th
  - All day – start @ 8am

Meeting Schedule – Wed

Wednesday
16-Jan-19

Time	Presenter	Affiliation	Title	File Name	Dur.
8:00 AM	Mark Nowell	Cisco	Agenda and General Information	agenda_optx_01_0119.pdf	0:45
8:45 AM	Mark Nowell	Cisco	100G Lambda Study Group Ad-hoc report	nowell_optx_01_0119.pdf	0:10
8:55 AM	Yu Xu	Huawei	Technical Feasibility of 4*100G PAM4 10km transmission	yu_optx_01_0119.pdf	0:20
9:15 AM	Shuto Yamamoto	NTT	Information Input about 2-km/ 10-km Applications and Technologies for Enlargement of Link Budget	yamamoto_optx_01_0119.pdf	0:20
9:35 AM	Ali Ghiasi	Ghiasi Quantum	Matching Electrical Lanes to Optical Lanes	ghiasi_optx_01_0119.pdf	0:20
9:55 AM	Break				0:20
10:15 AM	David Lewis	Lumentum	Broad Market Potential & Economic Feasibility	lewis_optx_02_0119.pdf	0:30
10:45 AM	Jeffery Maki	Juniper	Foundational Objectives	maki_optx_01_0119.pdf	0:20
11:05 AM	Brian Welch	Luxtera	PHY Objectives and Technical Feasibility	welch_optx_01_0119.pdf	0:30
11:35 AM	David Lewis	Lumentum	Proposed CSD Responses	lewis_optx_01_0119.pdf	0:30
12:05 PM	Lunch				1:10
1:15 PM	Mark Nowell	Cisco	Proposed PAR	nowell_optx_02_0119.pdf	0:20
1:35 PM	Gary Nicholl	Cisco	Editorial Considerations	nicholl_optx_01_0119.pdf	0:30
2:05 PM	Discussion and Motions: Objectives, CSD, PAR				0:55
3:00 PM	Break				0:15
3:15 PM	Discussion and Motions: Objectives, CSD, PAR				2:00
5:15 PM	Adjourn				

Future Meetings & Ad hocs

- Ad-hoc meeting plans
  - On-going quasi-bi-weekly meetings, all topics (will cycle) – agendas will be published.
  - Timeslot TBD
- See: http://www.ieee802.org/meeting/index.html
- March 2019 Plenary
  - Week of March 11th, 2019. Vancouver, Canada
- May 2019 Interim
  - Week of May 20th, 2019. Salt Lake City, UT, USA
- July 2019 Plenary
  - Week of July 15th, 2019. Vienna, Austria
- Sept 2018 Interim
  - Week of Sept 9th, 2019. Indianapolis, IN, USA

- Anyone interested in hosting an interim meeting contact me or the IEEE 802.3 Executive Secretary Steve Carlson.

Thank You!