Agenda and General Information

IEEE P802.3bj

100 Gb/s Backplane and Copper Cable Task Force

Dallas, TX, USA

November 2013

Adam Healey

LSI Corporation

Agenda

- Welcome and introductions
- Approve agenda
- Approve September 2013 minutes
- Goal for this meeting
- Reflector and web
- Ground rules
- IEEE
  - Structure
  - Bylaws and Rules
  - Call for Patents
  - IEEE Standards Process
- Review of action items
- Liaisons and communications
- Working Group ballot results
- Motions and closing business
- Future meetings

Task Force decorum

- Photography or recording by permission only (2010 SASB Op Manual 5.3.3.4)
- Cell phone ringers off
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (5.3.3.5)
- 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

Goal for this meeting

- Progress the draft to LMSC Sponsor Ballot

Reflector and web

- To subscribe to the 100GCU reflector, send an email to:

    ListServ@ieee.org

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

    subscribe stds-802-3-100GCU <yourfirstname> <yourlastname> end

- Send 100GCU reflector messages to:

    STDS-802-3-100GCU@listserv.ieee.org

- Task Force web page URL:

    http://www.ieee802.org/3/bj/index.html

Task Force private area

- URL: http://www.ieee802.org/3/bj/private/index.html
  - Username: thisisnottheusername
  - Password: thispasswordwontwork

- 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.
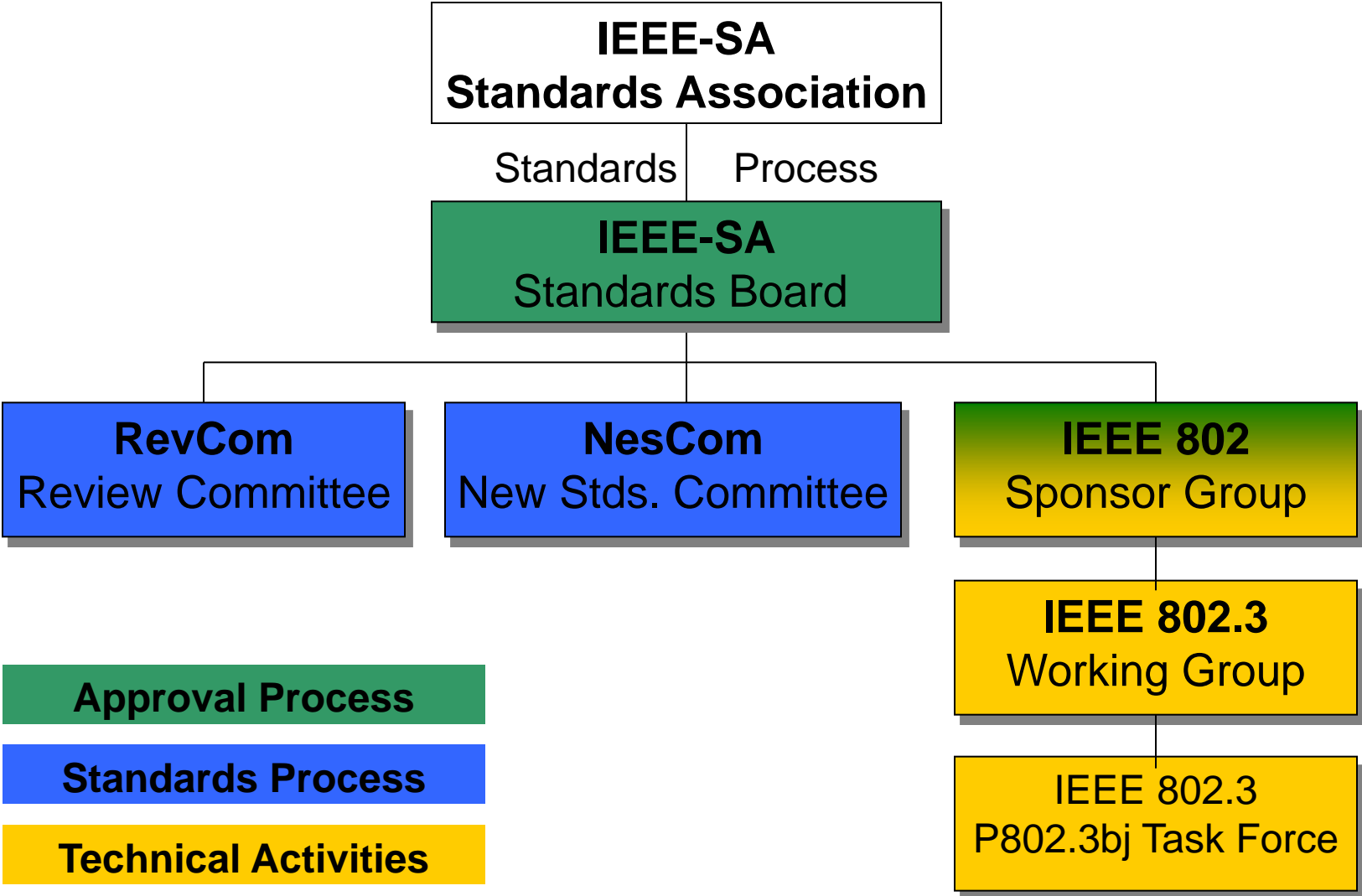
Meeting attendance

- IEEE-SA Meeting Attendance Tool
- http://imat.ieee.org

- Tutorial material
- http://www.ieee802.org/3/minutes/nov13/1113_imat.pdf

- Also be sure to sign the book

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

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
P802.3bj Task Force

Approval Process

Standards Process

Technical Activities

Bylaws and Rules

- IEEE-SA Operations Manual
  - http://standards.ieee.org/sa/sa-om.pdf
- IEEE-SA Standards Board Bylaws
  - http://standards.ieee.org/guides/bylaws/sb-bylaws.pdf
- IEEE-SA Standards Board Operations Manual
  - http://standards.ieee.org/guides/opman/sb-om.pdf
- 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/PNP/2010-07/IEEE_802_LMSC_OM_approved_100716.pdf
- IEEE 802 LAN/MAN Standards Committee (LMSC) Working Group (WG) Policies and Procedures
  - http://www.ieee802.org/PNP/2010-07/IEEE_802_LMSC_WG_PandP_approved_100716.pdf
- IEEE 802.3 Working Group Operating Rules
  - http://ieee802.org/3/rules/P802_3_rules.pdf

Instructions for the WG Chair

The IEEE-SA strongly recommends that at each WG meeting the chair or a designee:

- **Show slides #1 through #4 of this presentation**
- **Advise the WG attendees that:**
  - The IEEE's patent policy is described in Clause 6 of the *IEEE-SA Standards Board Bylaws*;
  - Early identification of patent claims which may be essential for the use of standards under development is strongly encouraged;
  - There may be Essential Patent Claims of which the IEEE is not aware. Additionally, neither the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development.

- **Instruct the WG Secretary to record in the minutes of the relevant WG meeting:**
  - That the foregoing information was provided and that slides 1 through 4 (and this slide 0, if applicable) were shown;
  - That the chair or designee provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which the participant is personally aware and that may be essential for the use of that standard
  - Any responses that were given, specifically the patent claim(s)/patent application claim(s) and/or the holder of the patent claim(s)/patent application claim(s) that were identified (if any) and by whom.

- The WG Chair shall ensure that a request is made to any identified holders of potential essential patent claim(s) to complete and submit a Letter of Assurance.
- It is recommended that the WG chair review the guidance in *IEEE-SA Standards Board Operations Manual* 6.3.5 and in FAQs 12 and 12a on inclusion of potential Essential Patent Claims by incorporation or by reference.

  Note: **WG** includes Working Groups, Task Groups, and other standards-developing committees with a PAR approved by the IEEE-SA Standards Board.

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(Optional to be shown)

Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

- **Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]:**
    - **"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**
        - **"Personal awareness" means that the participant "is personally aware that the holder may have a potential Essential Patent Claim," even if the participant is not personally aware of the specific patents or patent claims**
    - **"Should inform the IEEE (or cause the IEEE to be informed)" of the identity of "any other holders of such potential Essential Patent Claims" (that is, third parties that are not affiliated with the participant, with the participant's employer, or with anyone else that the participant is from or otherwise represents)**
- **The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group**
- **Early identification of holders of potential Essential Patent Claims is strongly encouraged**
- **No duty to perform a patent search**

25 March 2008 (updated January 2012)

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Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards 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 or visit http://standards.ieee.org/about/sasb/patcom/index.html

**This slide set is available at
https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt**

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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:

    - Either speak up now 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
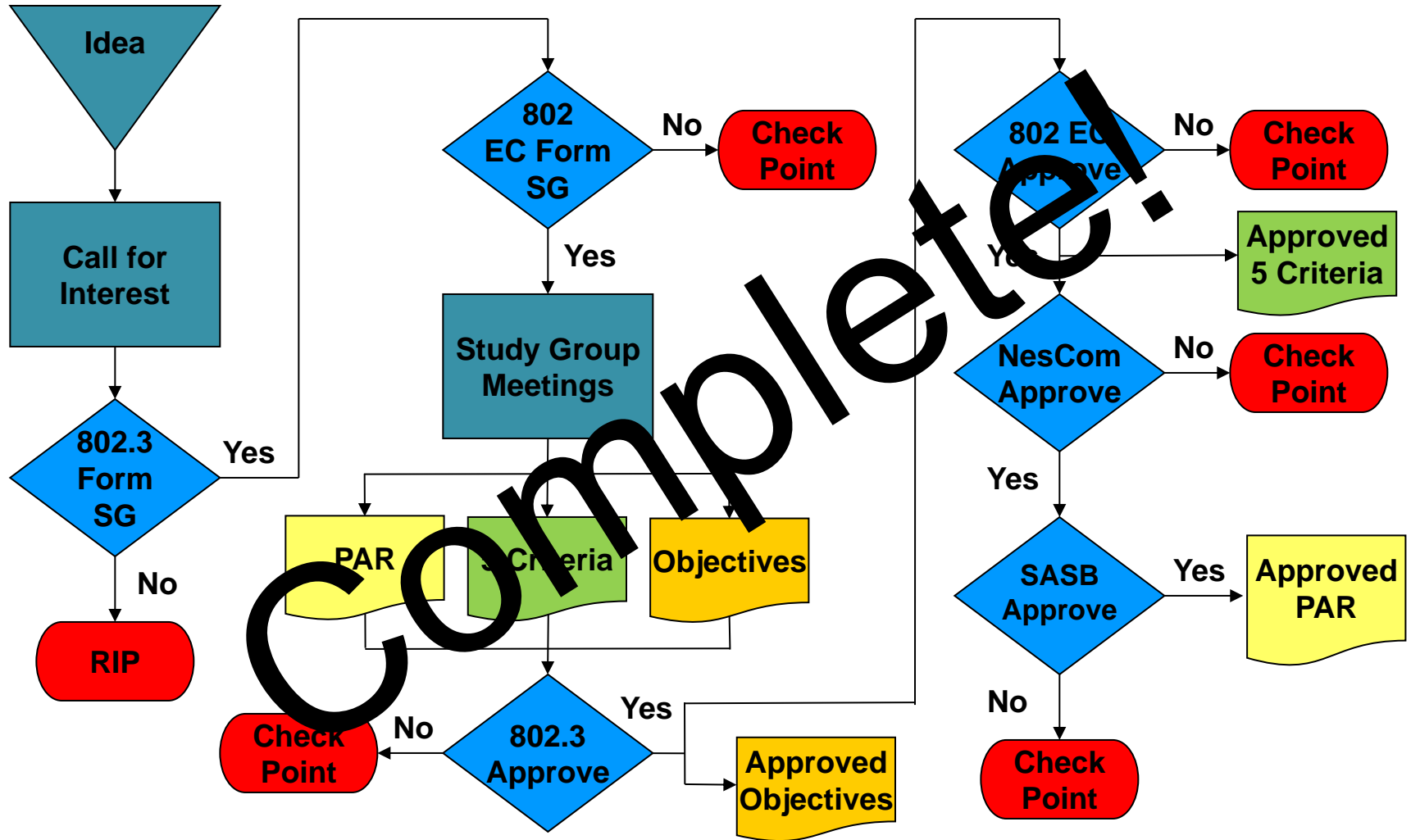   - Cause an LOA to be submitted

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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, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.

      - Technical considerations remain 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.**

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy" for more details.

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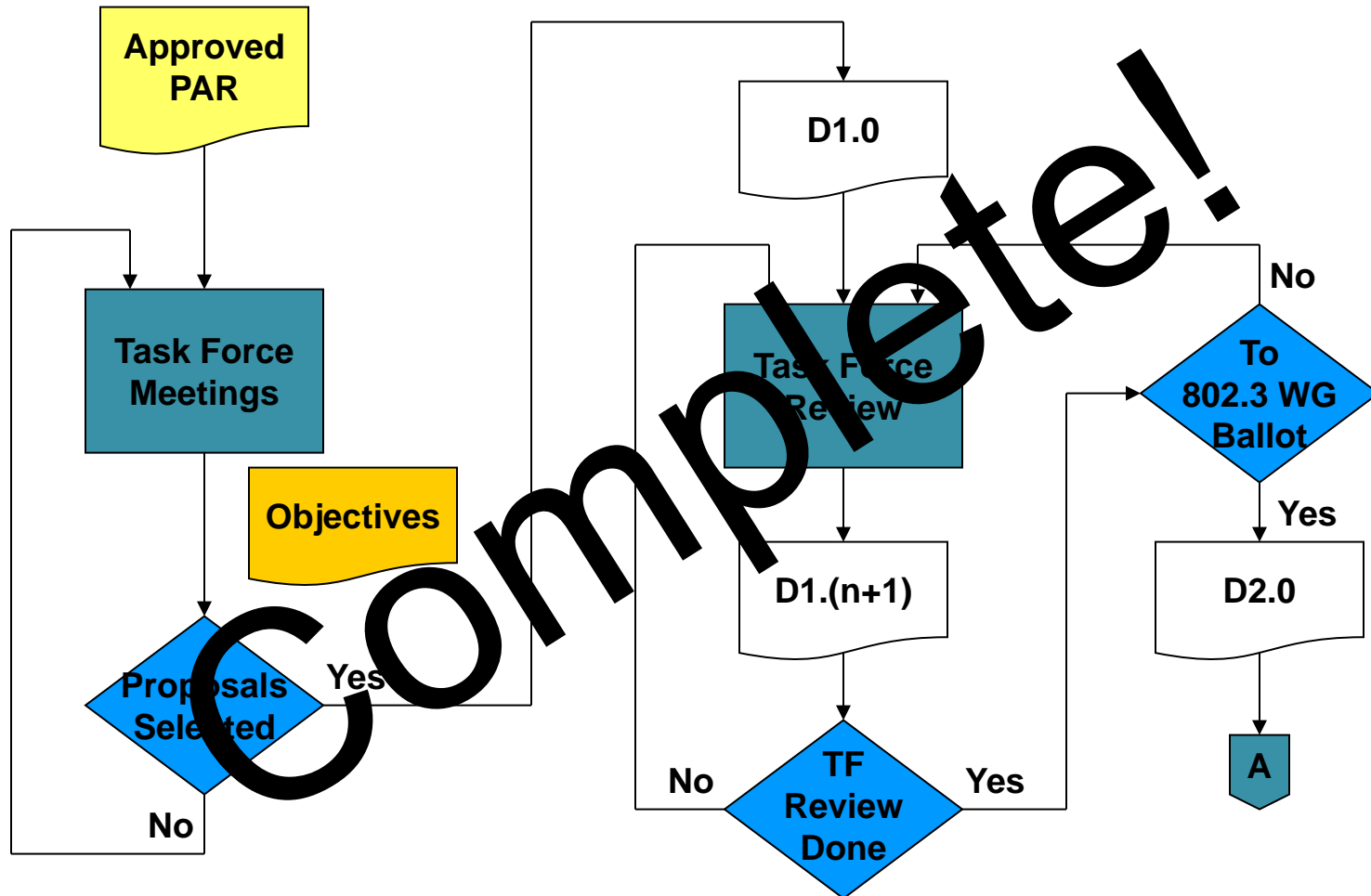# Overview of IEEE 802.3 Standards Process (1/5) Study Group Phase

Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.
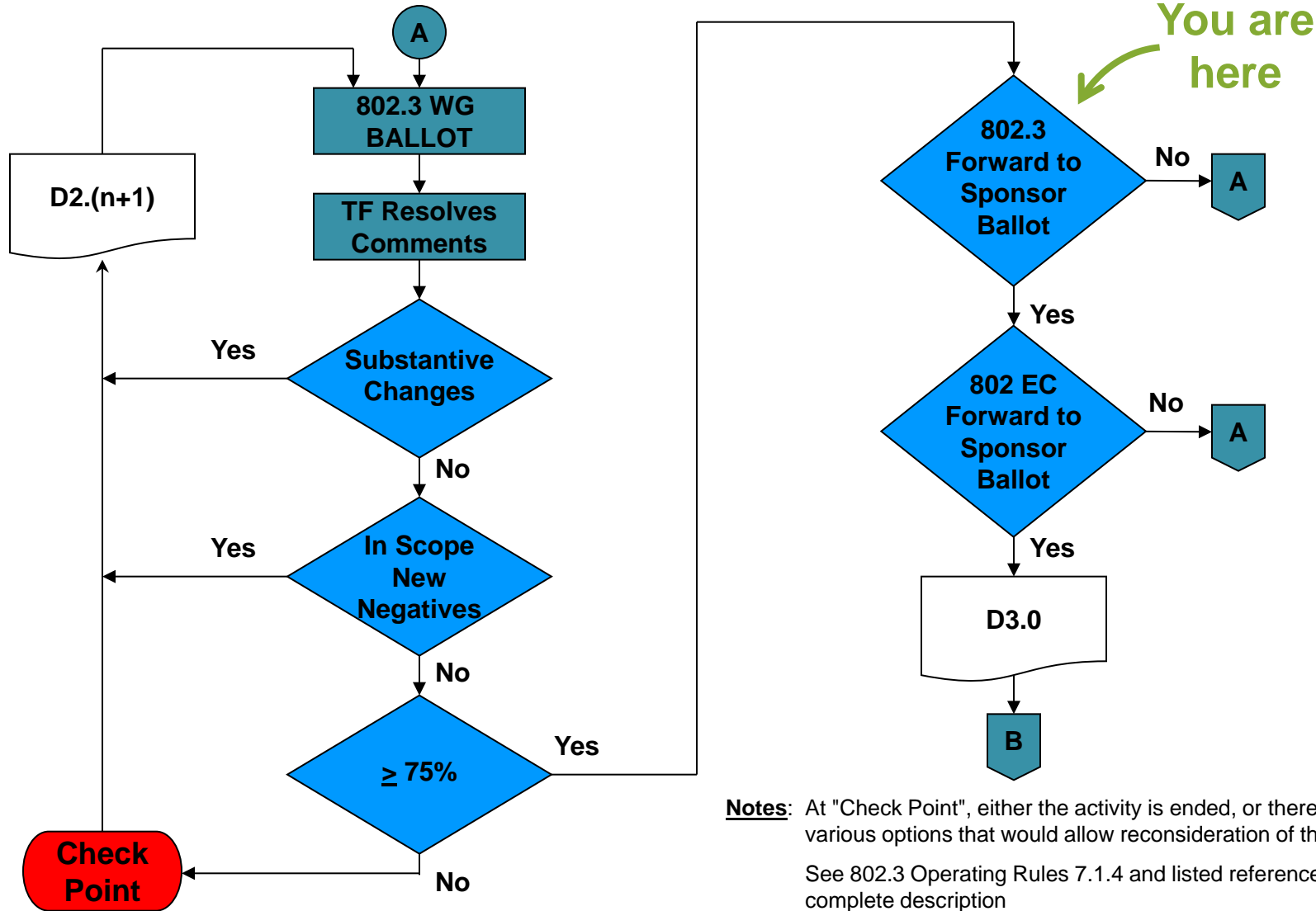
Overview of IEEE 802.3 Standards Process (2/5)
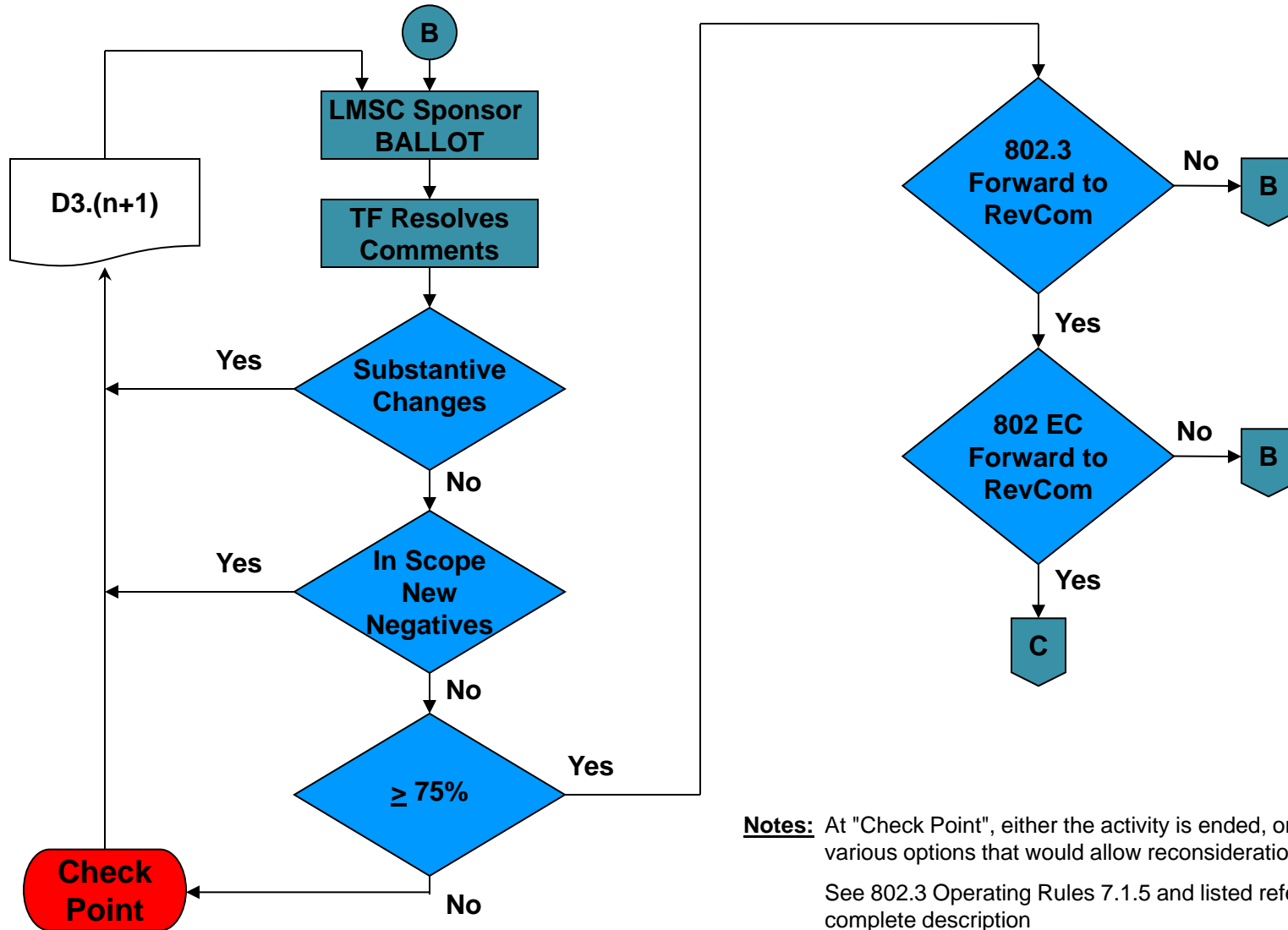# Task Force Comment Phase

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 Operating Rules 7.1.4 and listed references for complete description

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

B

LMSC Sponsor BALLOT

D3.(n+1)

TF Resolves Comments

Substantive Changes — Yes

In Scope New Negatives — Yes

No

No

≥ 75% — Yes

No

Check Point

802.3 Forward to RevCom — No → **B**

Yes

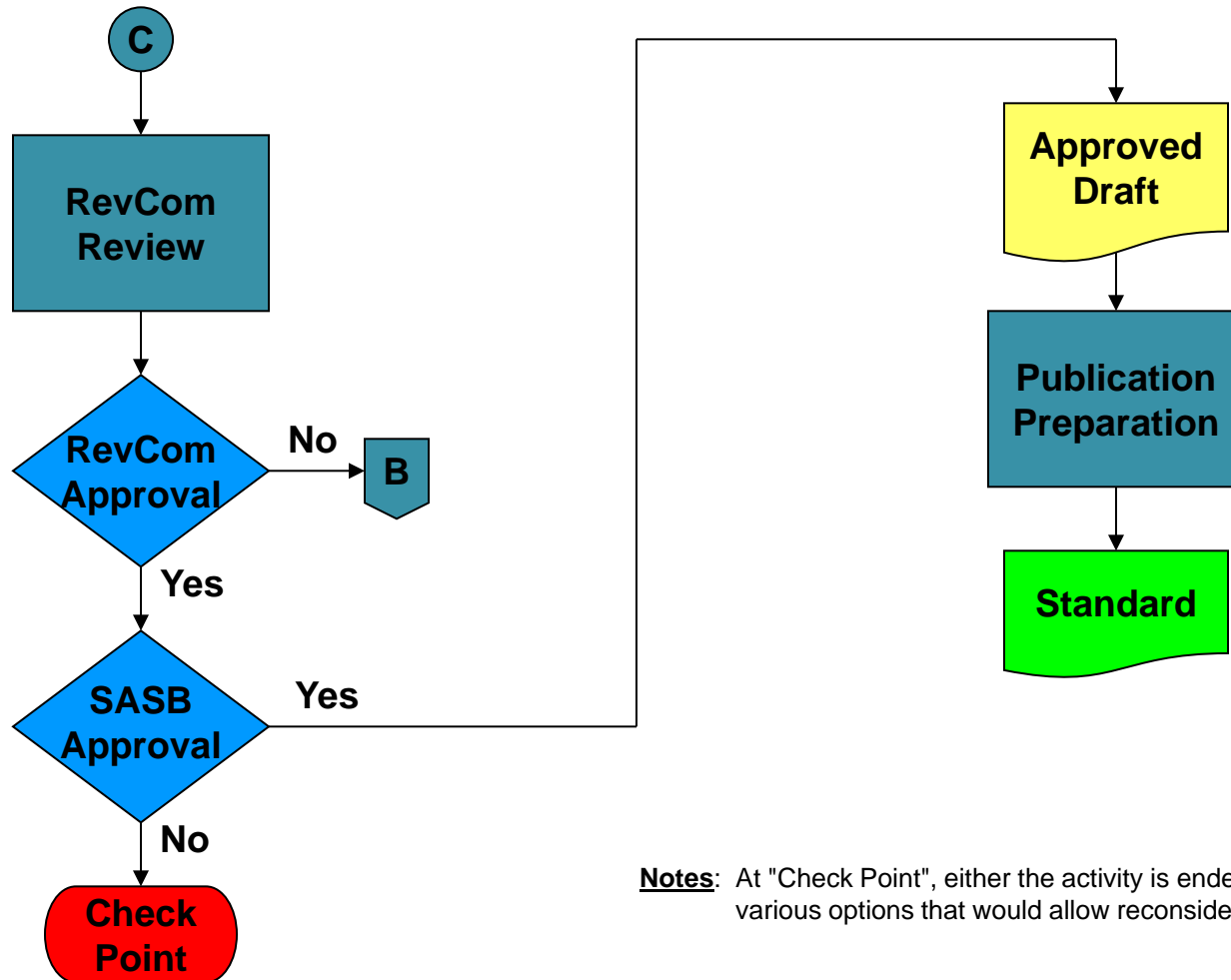**802 EC Forward to RevCom** — No → **B**

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

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 reconsideration of the approval.

Working Group 3rd recirculation ballot results

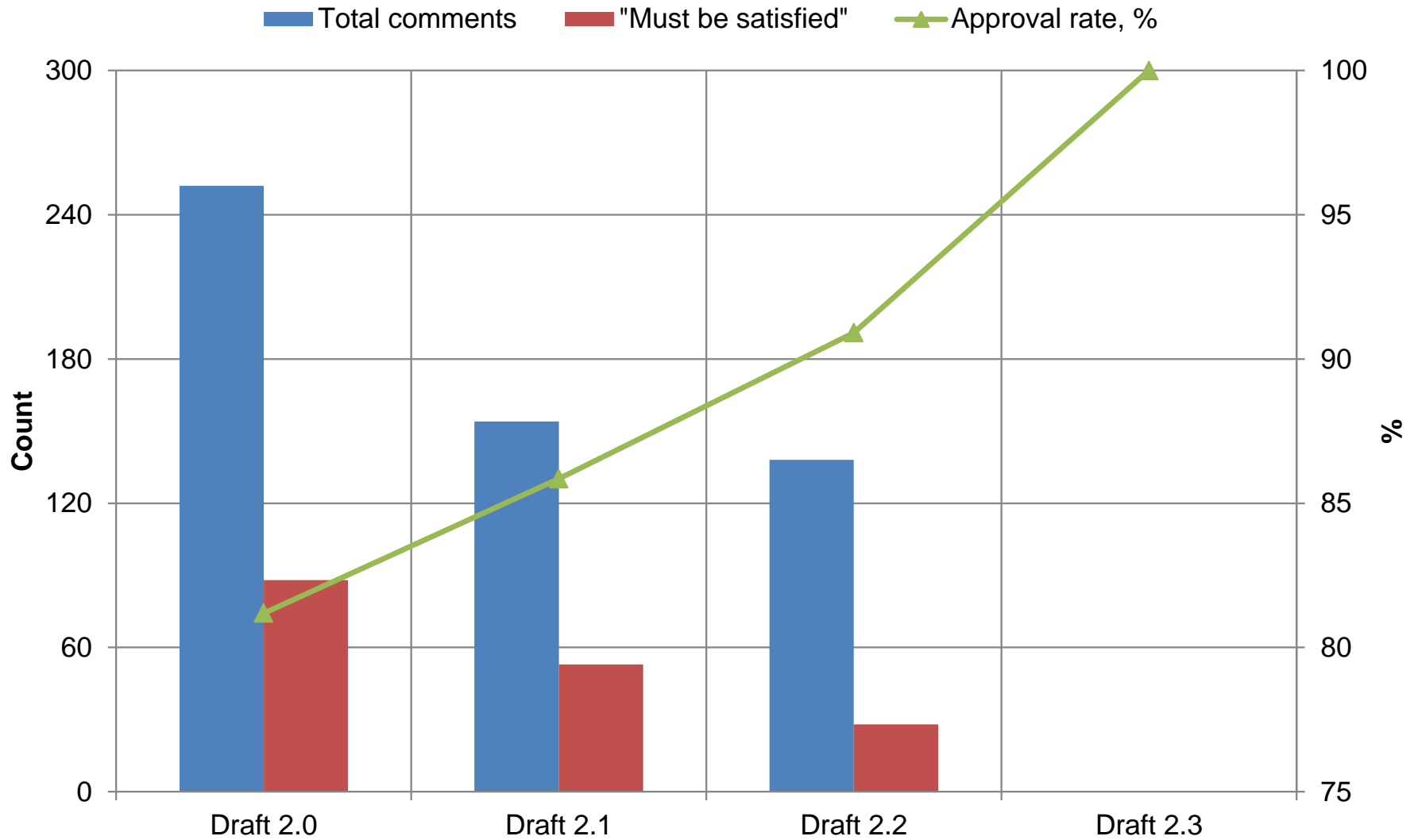- Opened 11 October, closed 25 October
- No comments received

Voters	245	Response rate	57.55%
Approve	112	Approval rate	99.12%
Disapprove with comment	1	Abstain rate	19.86%
Disapprove without comment	0		
Abstain	28		
Returns	141	Comments	0

Update to the ballot results

- After the close of the 3rd recirculation ballot, the remaining disapprove voter…
- …indicated the remaining required comment (from D2.0) has been satisfied
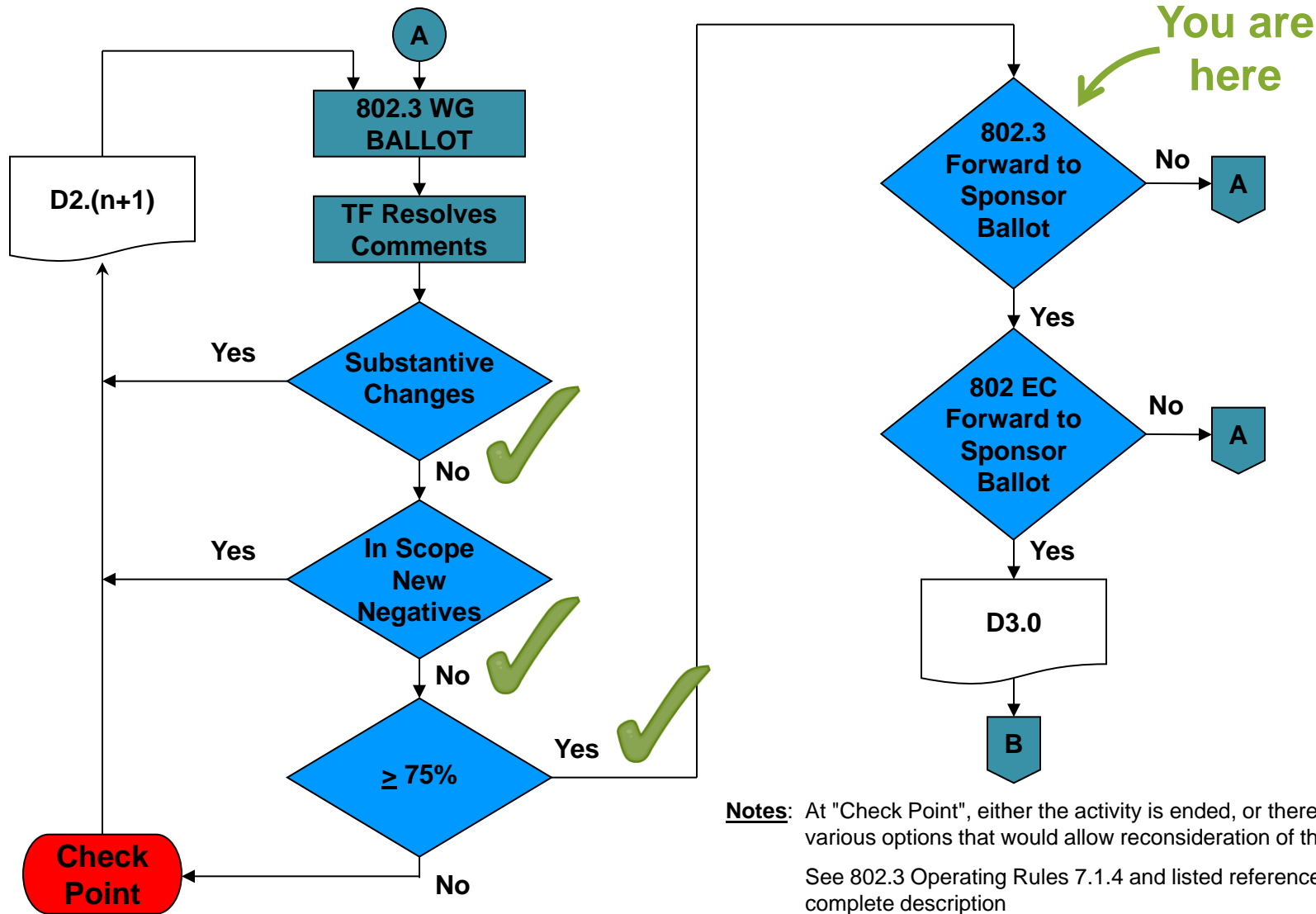- …and changed vote to "approve"

Voters	245	Response rate	57.55%
Approve	113	Approval rate	100.00%
Disapprove with comment	0	Abstain rate	19.86%
Disapprove without comment	0		
Abstain	28		
Returns	141	Comments	0

Ballot dashboard

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

You are here

A

802.3 WG BALLOT

TF Resolves Comments

D2.(n+1)

Substantive Changes — **Yes**

No

In Scope New Negatives — **Yes**

No

≥ 75% — **Yes**

No

Check Point

802.3 Forward to Sponsor Ballot — **No** → A

Yes

802 EC Forward to Sponsor Ballot — **No** → A

Yes

D3.0

B

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

Review of action items

- Task Force Secretary to review status of action items

Liaisons and communications

- None

IEEE P802.3bj project documents

- PAR
  - http://www.ieee802.org/3/bj/P802.3bj_1212.pdf

- 5 Criteria
  - http://www.ieee802.org/3/bj/5C_1112.pdf

- Objectives
  - http://www.ieee802.org/3/bj/objectives_0712.pdf

- Adopted Timeline
  - http://www.ieee802.org/3/bj/timeline_1112.pdf

IEEE P802.3bj project objectives

- Support full-duplex operation only
- Preserve the 802.3 / Ethernet frame format utilizing the 802.3 MAC
- Preserve minimum and maximum FrameSize of current 802.3 standard
- Support a BER of better than or equal to 10^{-12} at the MAC/PLS service interface
- Define a 4 lane PHY for operation over a printed circuit board backplane with a total channel insertion loss of <= 35 dB at 12.9 GHz**
- Define a 4 lane PHY for operation over a printed circuit board backplane with a total channel insertion loss of <= 33 dB at 7.0 GHz**
- Define a 4-lane 100 Gb/s PHY for operation over links consistent with copper twin-axial cables with lengths up to at least 5m.
- To define optional Energy-Efficient Ethernet operation for 100G Backplane and Twinaxial cable PHYs specified in P802.3bj*
- To define optional Energy-Efficient Ethernet operation for 100GBASE-CR10***
- To define optional Energy-Efficient Ethernet operation for 40GBASE-CR4 and 40GBASE-KR4***
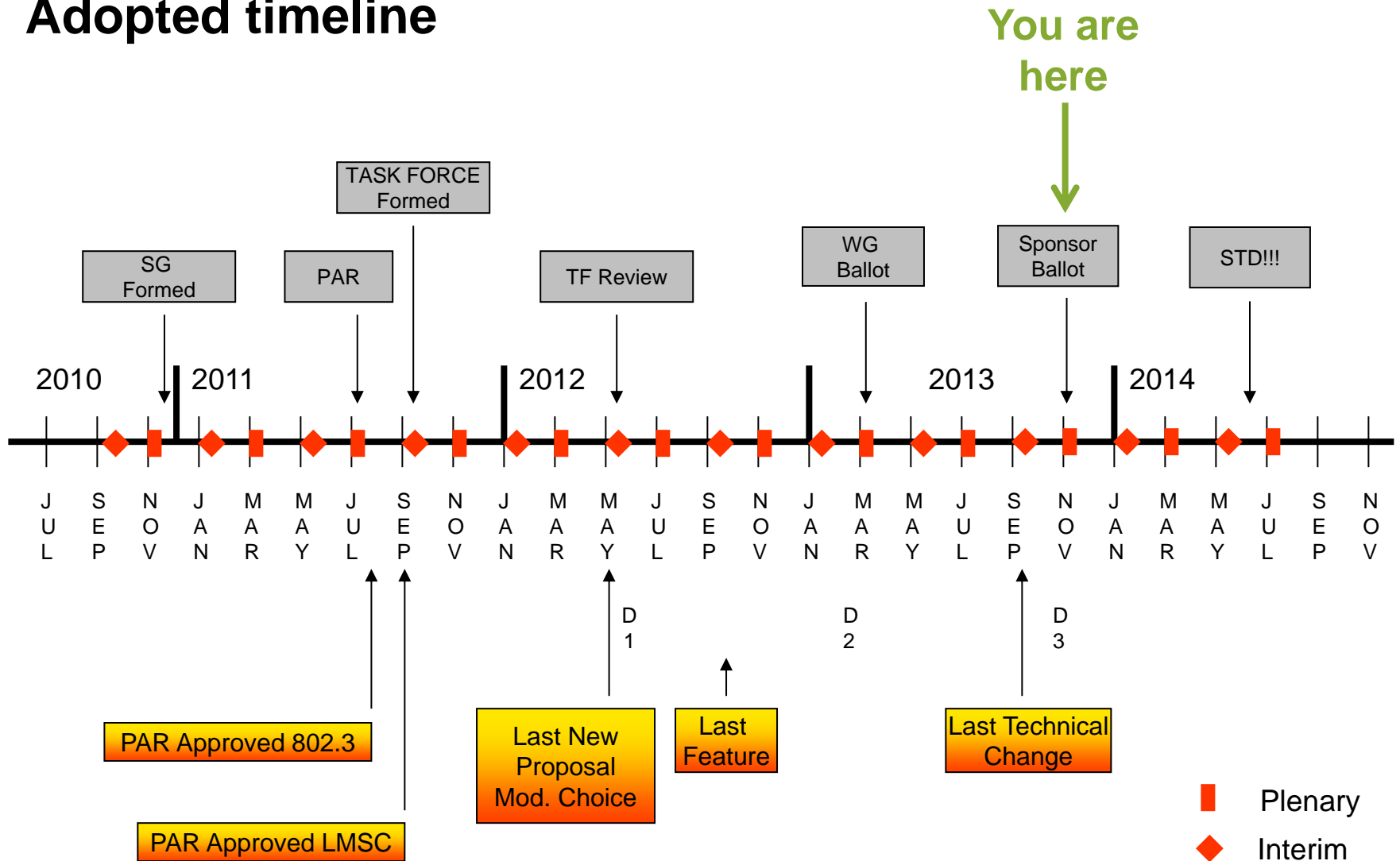
Adopted timeline

Future meetings

- See: http://www.ieee802.org/3/interims/index.html

- January 2014 Interim (hosted by Xilinx)
  - Week of January 20
  - Indian Wells, CA, USA

- March 2014 Plenary
  - Week of March 16
  - Beijing, China

- May 2014 Interim (host by Ethernet Alliance)
  - Week of May 12
  - Venue and meeting city TBD

- Anyone interested in hosting a meeting contact me

Adjourn