Agenda and General Information

IEEE P802.3bm

40 Gb/s and 100 Gb/s Fiber Optic Task Force

Dan Dove

Dove Networking Solutions

Affiliated with Huawei

Kanata, Ontario CA – 10-12, September 2014

Agenda

- Welcome and Introductions
- Appointment of Secretary
- Approve Agenda
- Approve Minutes of July CLI and Plenary Meetings
- Reflector and Web
- Ground Rules
- IEEE
  - Structure, Bylaws and Rules
  - Call for Patents
  - IEEE Standards Process
- Liaisons and Communications
- Review of Action Items from July Meeting
- Discuss Goals for this meeting
  - Big Ticket Items
- Ad Hoc Reports
- Comment Resolution (Led by Pete Anslow, Chief Editor)
- Motions, Discussions and Closing Business
- Future Meetings

Task Force Decorum

- Photography or recording by permission only (2012 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

Reflector and Web

- To subscribe to the *Next Generation 40 Gb/s and 100 Gb/s Optical Ethernet* reflector, send an email to: **ListServ@ieee.org**

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

  subscribe stds-802-3-100Goptx <yourfirstname> <yourlastname>

  end

- Send *Next Generation 40 Gb/s and 100 Gb/s Optical Ethernet* reflector messages to:

  STDS-802-3-100Goptx@LISTSERV.IEEE.ORG

- Task Force web page URL:

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

Task Force Private Area

- *The User ID / Password is available to all Task Force Participants, and the minimum requirement to be considered part of the Task Force is to be signed up to the reflector.*

- URL: http://www.ieee802.org/3/bm/private/index.html
  - Username xxxxxx
  - Password: xxxxxxx

- 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.
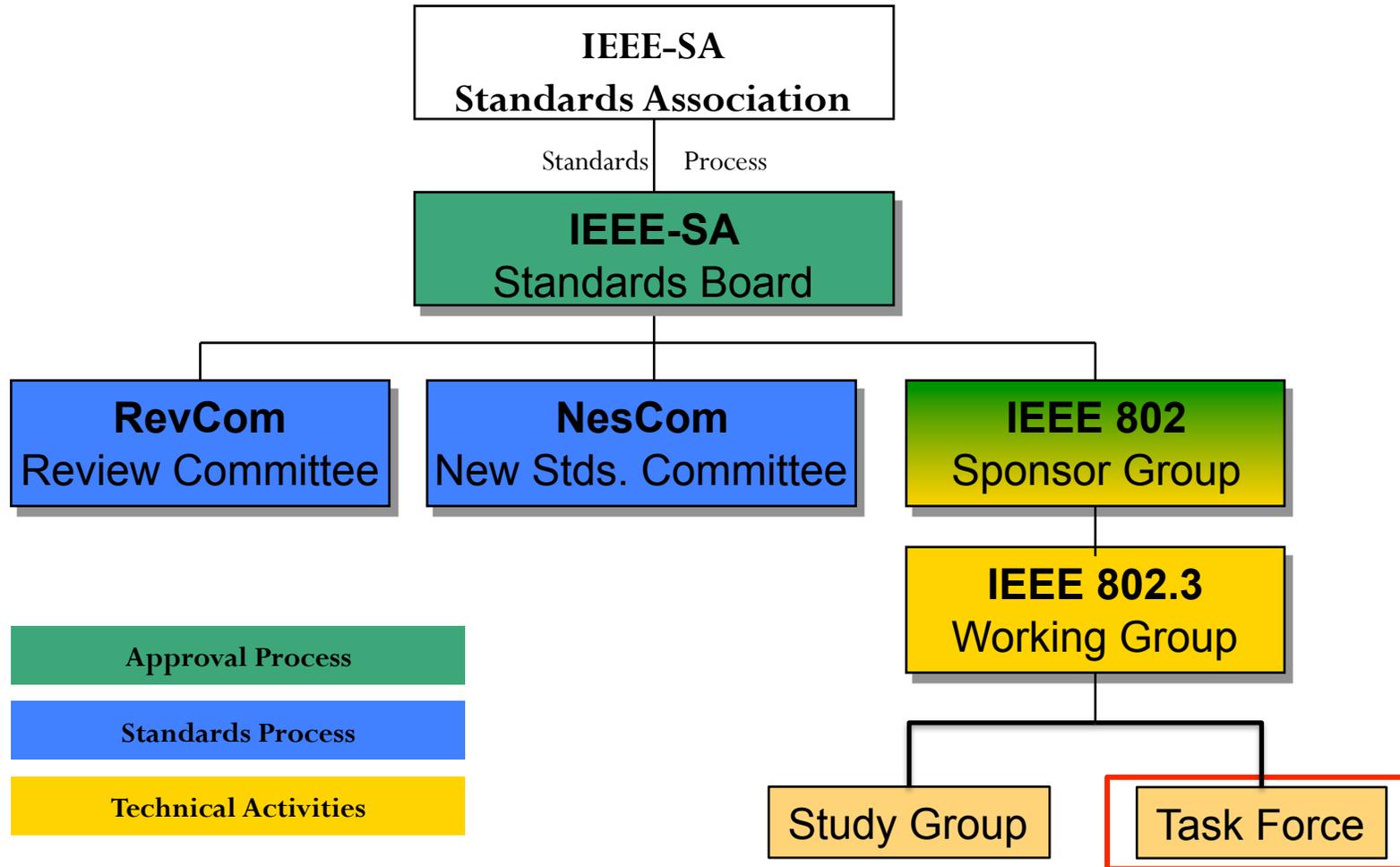
Attendance

- Tutorial Material on attendance tool
  - http://www.ieee802.org/3/minutes/attendance_procedures.pdf
- To register attendance at this meeting;
  - http://imat.ieee.org/
  - Password: xxxxxxxx
- In addition, attendance will be taken via a sign-up sheet. Please be sure to sign in.
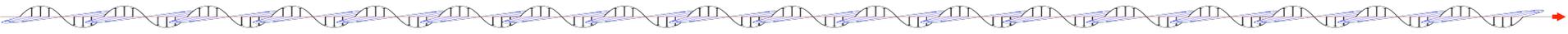
Ground Rules

- 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 – Do unto others…
- NO product pitches (ex: "LightZippyDoo is the best!")
- NO corporate pitches (ex: "We Illuminate Your Networks!")
- 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     │
                    └─────────────────────────┘
```

IEEE-SA
Standards Association

Standards | Process

IEEE-SA
Standards Board

RevCom	**NesCom**	**IEEE 802**
Review Committee	New Stds. Committee	Sponsor Group

IEEE 802.3
Working Group

Study Group	Task Force

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

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, 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.**

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

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.

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

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**

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
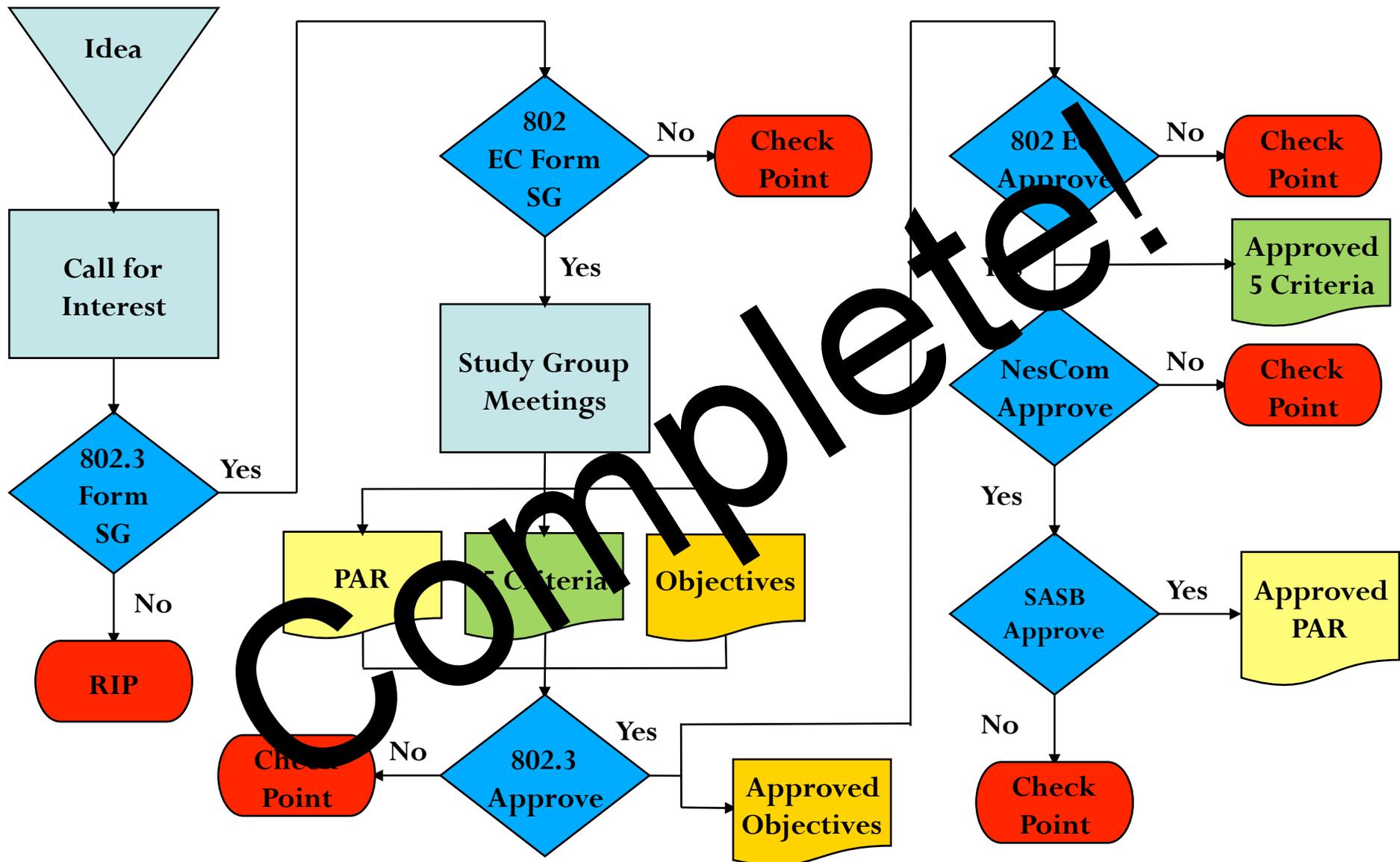
Call for Potentially Essential Patents

- 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

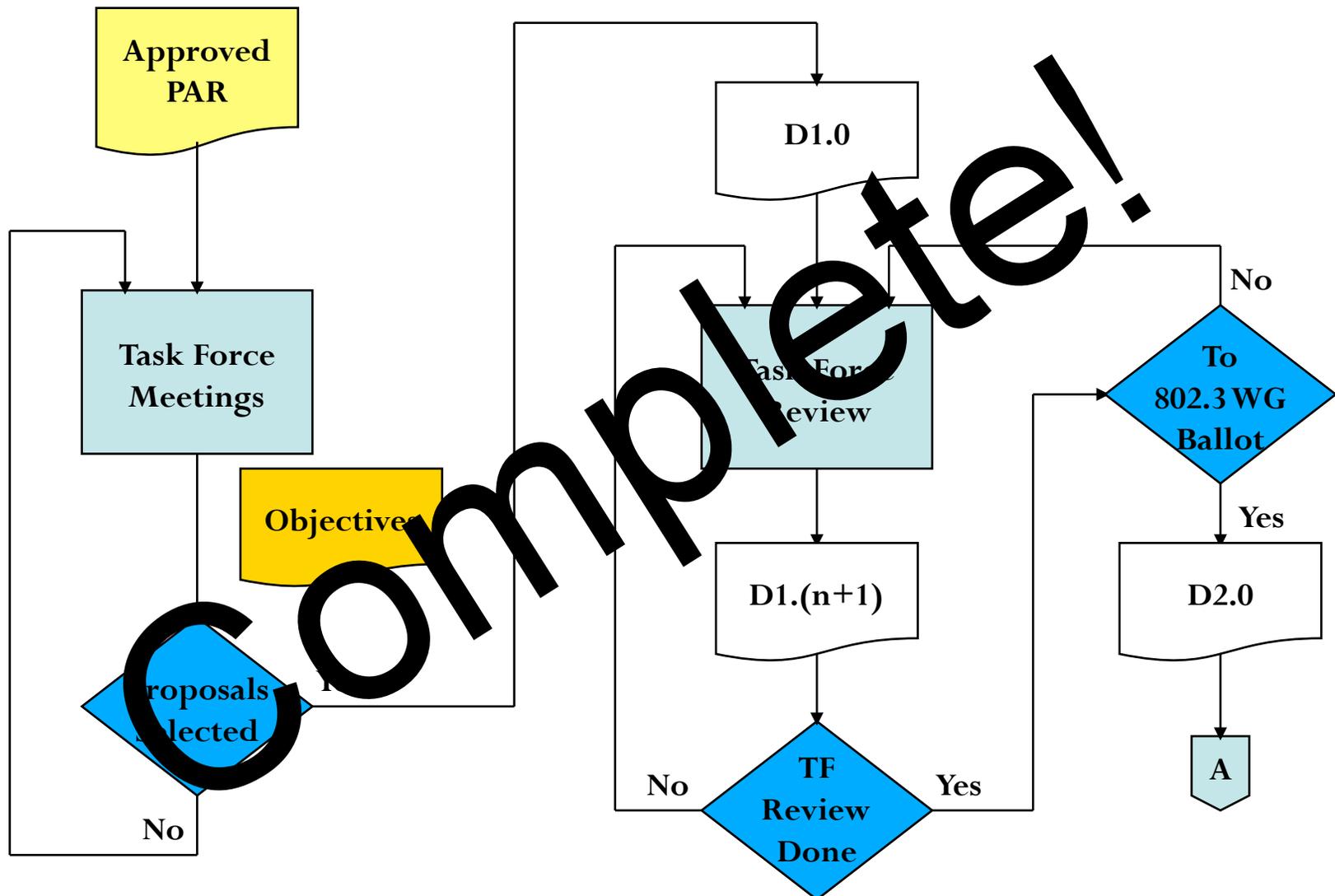 ❖ NOTE TO SECRETARY – Record this Call & Response to Call

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

Idea → **Call for Interest** → **802.3 Form SG**

802.3 Form SG: No → **RIP**; Yes →

802 EC Form SG: No → **Check Point**; Yes → **Study Group Meetings**

Study Group Meetings → **PAR**, **5 Criteria**, **Objectives**

802.3 Approve: No → **Check Point**; Yes → **Approved Objectives**

802 EC Approve: No → **Check Point**; → **Approved 5 Criteria**

NesCom Approve: No → **Check Point**; Yes →

SASB Approve: Yes → **Approved PAR**; No → **Check Point**

(Watermark: Complete!)

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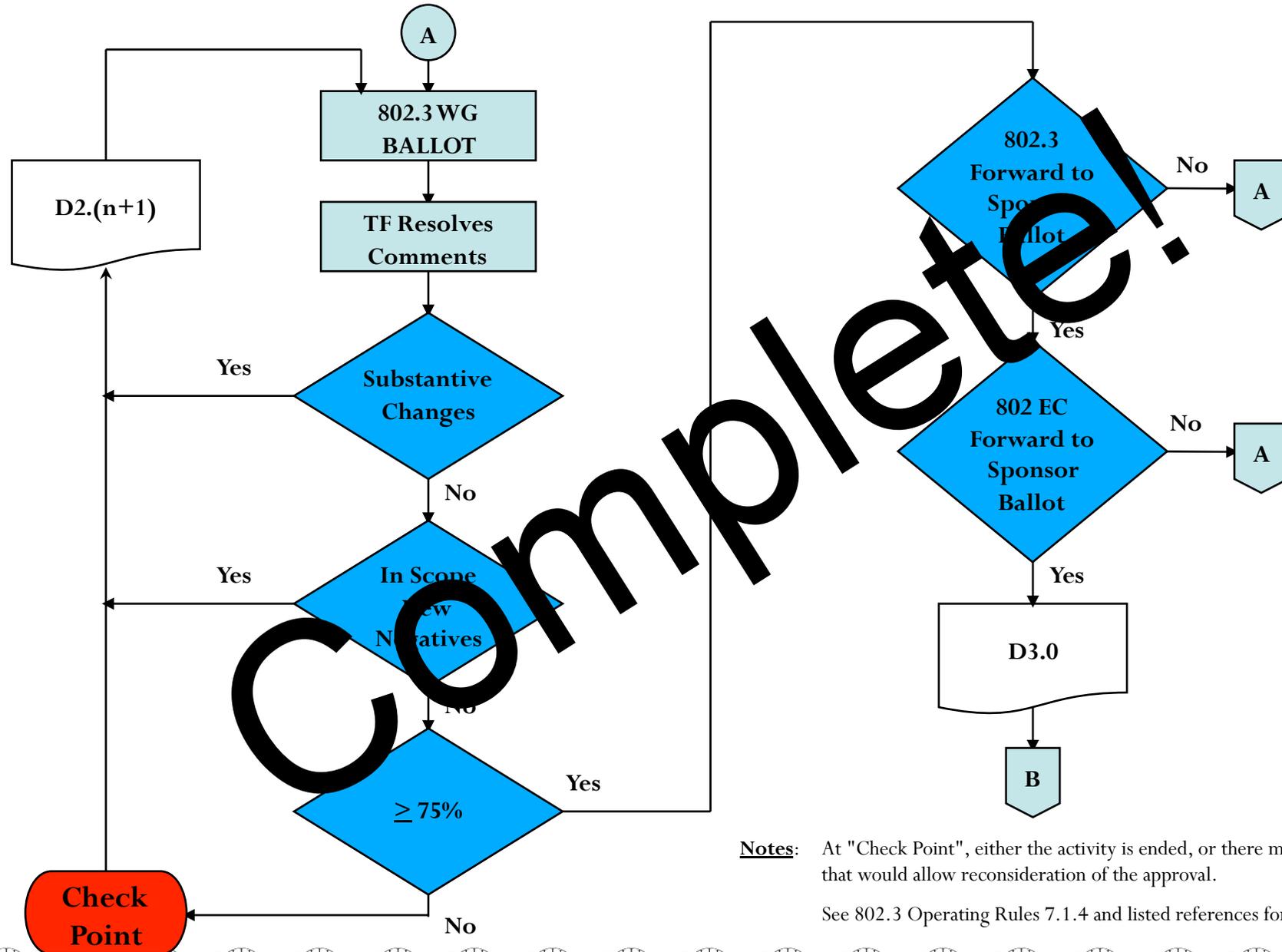
A

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

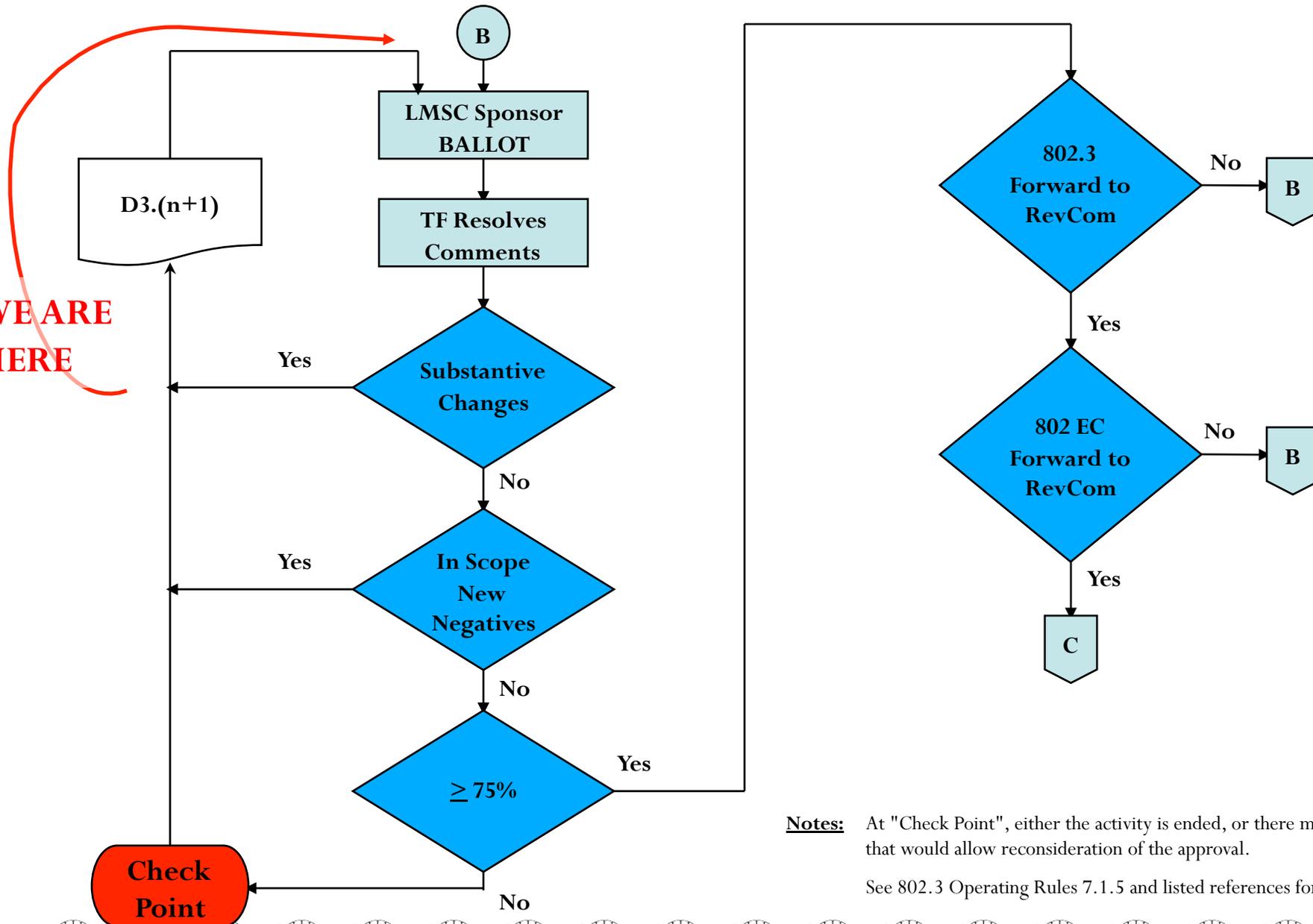Complete!

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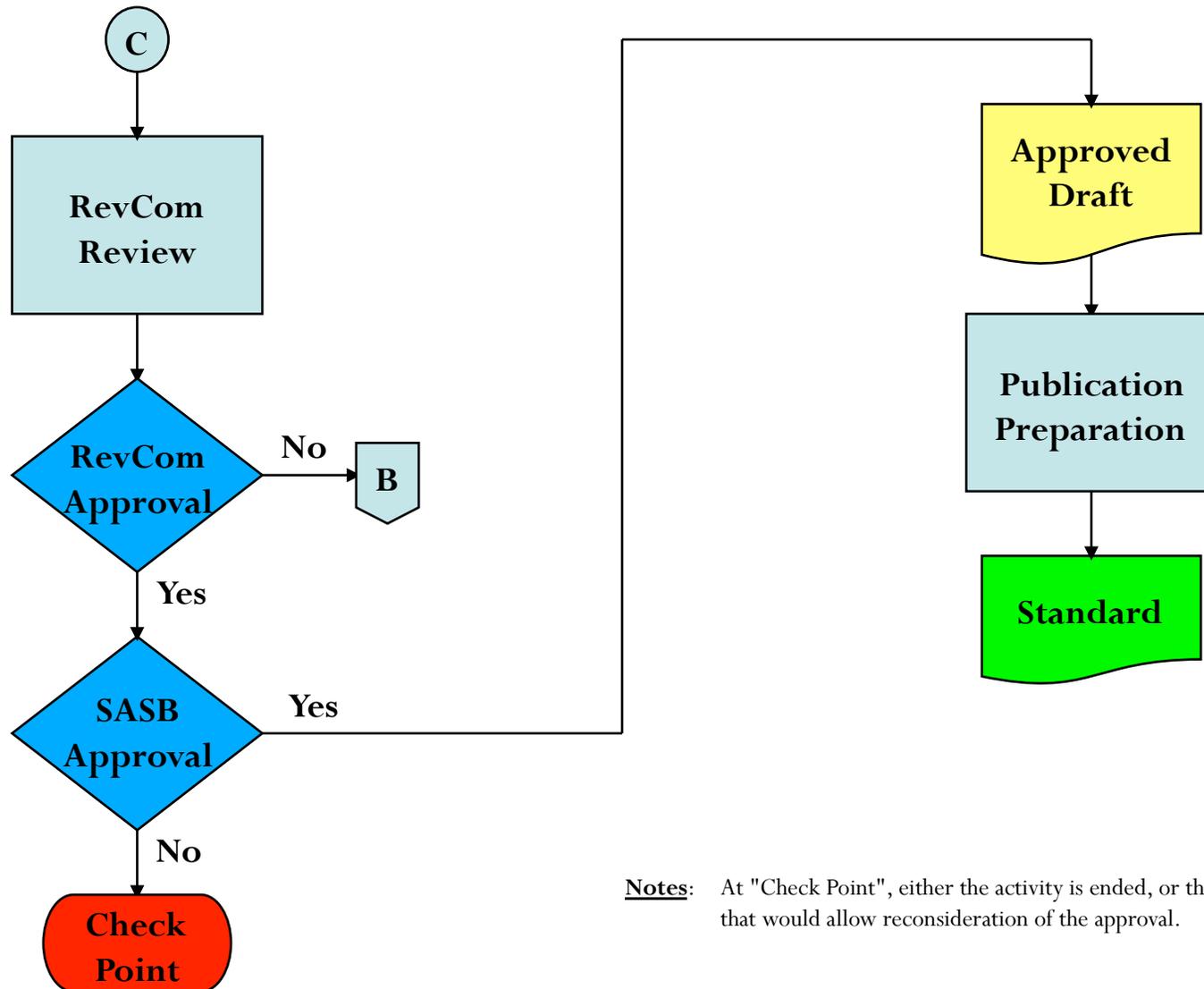
Overview of IEEE 802.3 Standards Process (4/5)- Sponsor Ballot Phase

B

LMSC Sponsor BALLOT

TF Resolves Comments

D3.(n+1)

WE ARE HERE

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

Overview of IEEE 802.3 Standards Process (5/5)
Final Approvals / Standard Release

C

RevCom
Review

RevCom
Approval → **No** → B

Yes

SASB
Approval → **Yes**

No

Check
Point

Approved
Draft

Publication
Preparation

Standard

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

Liaisons and Communications

- OIF
  - Ongoing communications between OIF and IEEE 802.3 initiated by IEEE P802.3ba project
  - In regards to OIF CEI-25G-LR, CEI-28G-SR, CEI-28G-VSR
  - Currently being operated through 802.3 Working Group
  - No new communications to report

- ITU-T
  - No new communications to report

- INCITS TC T11
  - No new communications to report

Goals for the meeting

- Review Task Force Operation & Schedule

- Review ad hoc Activities & Reports

- Review comments on the draft

- Consider Motions & Discussions
    - Authorize generation of D3.2 and prepare for recirculation ballot
    - Lay the ground work for the next meeting

- Wrap Up & Future Meeting Discussion

IEEE P802.3bm 40 Gb/s and 100 Gb/s Fiber Optic Task Force
Approved Project Documents

- ## PAR (as approved in May 2013)
  - http://www.ieee802.org/3/bm/P802.3bm_May2013.pdf

- ## 5 Criteria (as approved in November 2013)
  - http://www.ieee802.org/3/bm/P8023bm_5Criteria_1113.pdf

- ## Objectives (as approved in November 2013)
  - http://www.ieee802.org/3/bm/P8023bm_Objectives_1113.pdf

- ## Timeline
 - http://www.ieee802.org/3/bm/timeline_0114.pdf

IEEE P802.3bm 40 Gb/s and 100 Gb/s Fiber Optic Task Force Objectives

- ✧ Support full-duplex operation only
- ✧ Preserve the IEEE 802.3 / Ethernet frame format utilizing the IEEE 802.3 MAC
- ✧ Preserve minimum and maximum FrameSize of current IEEE 802.3 standard
- ✧ Support a BER better than or equal to 10-12 at the MAC/PLS service interface
- ✧ Provide appropriate support for OTN
- ✧ Define re-timed 4-lane 100G PMA to PMA electrical interfaces for chip to chip and chip to module applications
- ✧ Define a 40 Gb/s PHY for operation over at least 40 km of SMF
- ✧ Define a 100 Gb/s PHY for operation up to at least 100 m of MMF
- ❑ Specify optional Energy Efficient Ethernet (EEE) for 40 Gb/s and 100 Gb/s operation over fiber optic cables.

- ✧ (approved by 802.3 July 2011)
- ❑ (approved by 802.3 November 2012)

IEEE P802.3bm Next Generation 40 Gb/s and 100 Gb/s Optical Ethernet
Timeline (adopted in Jan 2014)
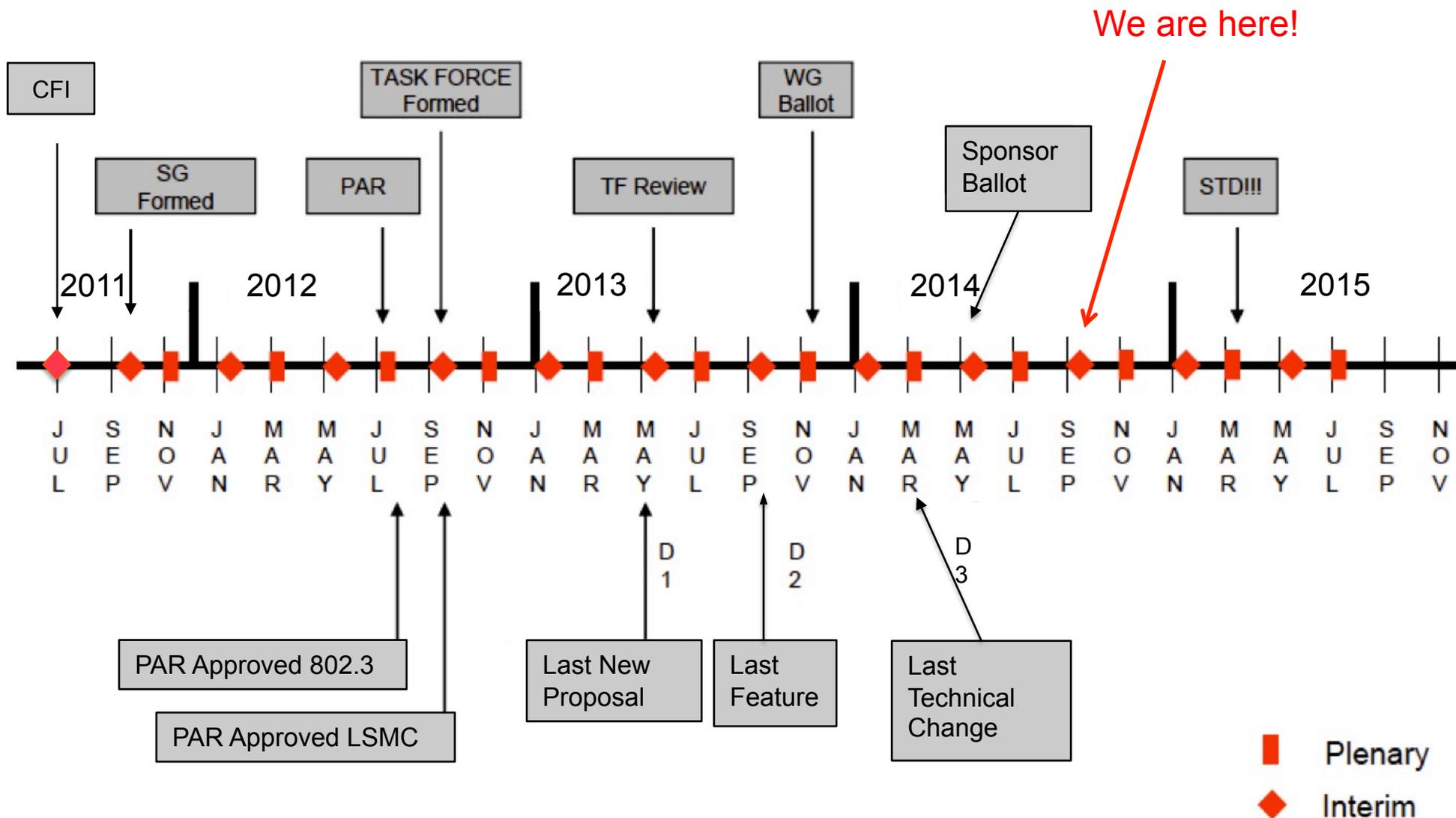
Wednesday Agenda

Wednesday 10 – September - 2014

Wednesday		Start Time	13:00	Discussion Time	15
Presentation Time	Duration	Presenter	Affiliation	Title	Filename
13:00	20	Dan Dove	Huawei	Introduction & Agenda	dove_01_0914_optx.pdf
13:20	10	Jonathan King	Finisar	MMF Ad hoc report	king_01_0914_optx.pdf
13:30	10	Ryan Latchman	Macom	CAUI-4 Ad hoc Report	latchman_01_0914_optx.pdf
13:40	10	Pete Anslow	Ciena	Editor's Opening Report	anslow_01_0914_optx.pdf
14:05	55	Pete Anslow	Ciena	Comment Resolution	P802d3bm_d3p1_comments_rec_ID.pdf
15:00	15	BREAK			
15:15	105	Pete Anslow	Ciena	Comment Resolution	P802d3bm_d3p1_comments_rec_ID.pdf
17:00	0	Recess			

Thursday Agenda

Thursday 11 – September - 2014

Note –Times listed are subject to change.

Thursday		Start Time	9:00	Discussion Time	15
Presentation Time	**Duration**	**Presenter**	**Affiliation**	**Title**	**Filename**
9:00	90	Pete Anslow	Ciena	Comment Resolution	P802d3bm_d3p1_comments_rec_ID.pdf
10:30	15	BREAK			
10:45	75	Pete Anslow	Ciena	Comment Resolution	P802d3bm_d3p1_comments_rec_ID.pdf
12:00	60	LUNCH			
13:00	120	Pete Anslow	Ciena	Comment Resolution	P802d3bm_d3p1_comments_rec_ID.pdf
15:00	15	BREAK			
15:15	165	Pete Anslow	Ciena	Comment Resolution	P802d3bm_d3p1_comments_rec_ID.pdf
18:00	0	Recess		We may run longer if necessary	

Friday Agenda

Friday 12 – September - 2014

Friday		Start Time	9:00	Discussion Time	15
Presentation Time	**Duration**	**Presenter**	**Affiliation**	**Title**	**Filename**
9:00	60	Pete Anslow	Ciena	Comment Resolution	P802d3bm_d3p1_comments_rec_ID.pdf
10:00	20	BREAK			
10:20	45	Dan Dove	Huawei	Motions, Discussion	
11:05	45	Pete Anslow	Ciena	Editor's Closing Report	anslow_02_0914_optx.pdf
11:50	10	Dan Dove	Huawei	Wrap Up	
12:00	0	Adjourn			

Presentations & Supporting Files

Presentation Requests

Duration	Presenter	Affiliation	Title	Filename
20	Piers Dawe	Mellanox	Revised 100GBASE-SR4 Tx and Rx specifications	dawe_01_0914_optx.pdf
20	Piers Dawe	Mellanox	Stressed receiver conformance signal for 100GBASE-SR4	dawe_02_0914_optx.pdf
20	John Petrilla	Avago	100G SR4 TxVECReviewComment r01-43	petrilla_01_0914_optx.pdf
20	Jonathan King	Finisar	Draft changes to 95 to include TxVEC as main metric for SRS, CRU change to SRS diagram	king_02_0914_optx.pdf

Future Meetings

- See: http://www.ieee802.org/3/interims/index.html
- See: http://802world.org/plenary/future-plenary-sessions/

- **Week of November 2-7, 2014 (Plenary)**
  - **All IEEE 802.3 and 802.1 Task Force and Study Groups will meet**
  - **Grand Hyatt, San Antonio TX, USA**
- **Week of January 12, 2015 (Interim)**
  - **All IEEE 802.3 Task Force and Study Groups will meet**
  - **Location Hyatt Regency Atlanta**
- **Week of March 9-12, 2015 (Plenary)**
  - **All IEEE 802.3 Task Force and Study Groups will meet**
  - **Estrel Hotel & Convention Center, Berlin Germany**
- **Week of May 18, 2015 (Interim)**
  - **IEEE P802.3/802.1 joint interim session**
  - **Omni William Penn Hotel - Pittsburgh, PA, USA**
- Anyone interested in hosting a meeting contact Steve Carlson.

Thank You!