

Agenda and General Information

IEEE P802.3bt 4-Pair Power over Ethernet (4PPoE)

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Agenda

- Welcome and Introductions (Secretary – Volunteer?)
- Approve Agenda
- Approve March 2015 Minutes
- Goals for this meeting
- Reflector and Web
- Ground Rules
- IEEE
 - Structure, Bylaws and Rules
 - Call for Patents
 - IEEE Standards Process
- Liaisons and Communications
- Ad hoc Report
- Comment Resolution
- Presentations
- Motions and Closing Business
- Schedule review

Task Force Decorum



- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (December 2013 IEEE-SA Standards Board Ops Manual 5.3.3.5)
- Photography or recording by permission only (December 2013 IEEE-SA Standards Board Ops Manual 5.3.3.4)
- 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

Goals for the meeting

- CLOSE ALL TECHNICAL ISSUES
- Resolve all comments (143 total)
- Review presentations submitted
- Review Ad hoc progress
- Adopt baseline text
- Direct editor to create D0.5/ D1.0
- Initiate review of D0.5/D1.0
- Review October off cycle options

Reflector and Web

- To subscribe to the 4PPoE reflector, send an email to:

ListServ@ieee.org

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

```
subscribe stds-802-3-4PPOE <yourfirstname> <yourlastname>  
end
```

- Send 4PPoE reflector messages to:

stds-802-3-4PPOE@listserv.ieee.org

- Task Force web page URL:

<http://www.ieee802.org/3/bt/>

Reflector and Web

Private Area

– <http://www.ieee802.org/3/bt/private/index.html>

- Username:
- Password:

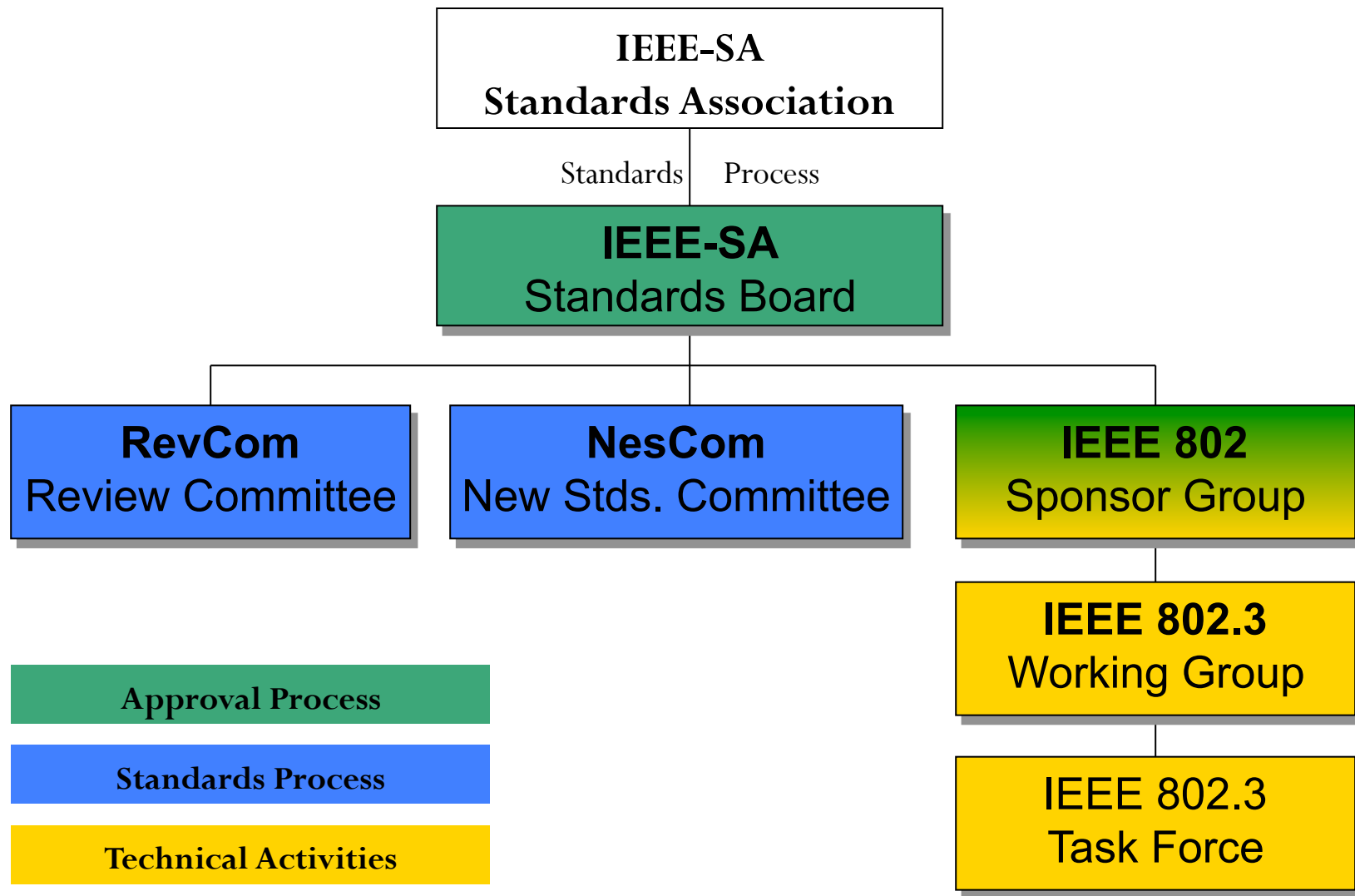
Ground Rules

- 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://www.ieee802.org/3/minutes/attendance_procedures.pdf
- Access details
 - URL: <http://imat.ieee.org/>
 - Session access code:

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**
<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

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
 - “Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of 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

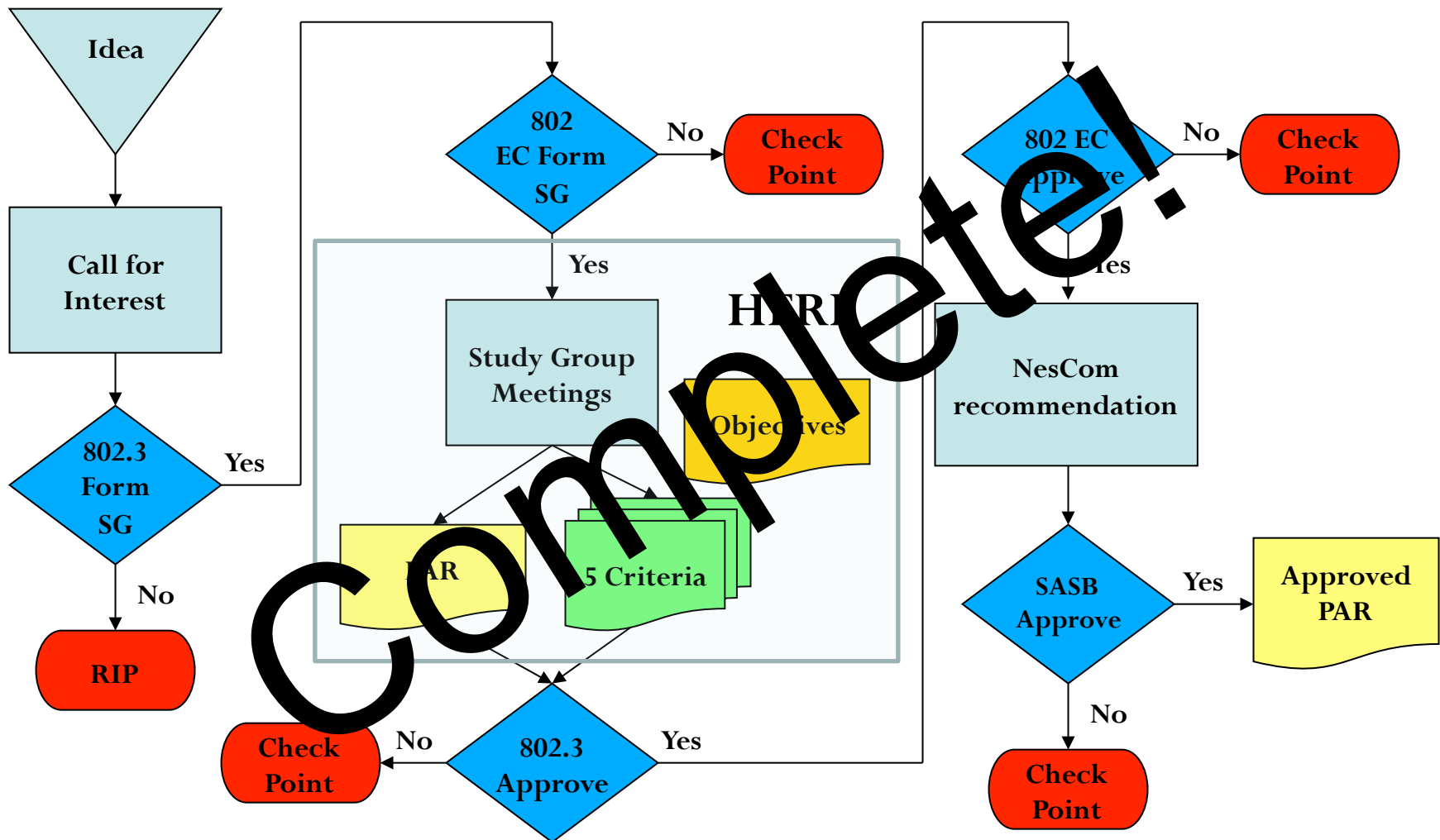
Other Guidelines for IEEE WG Meetings

- **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.

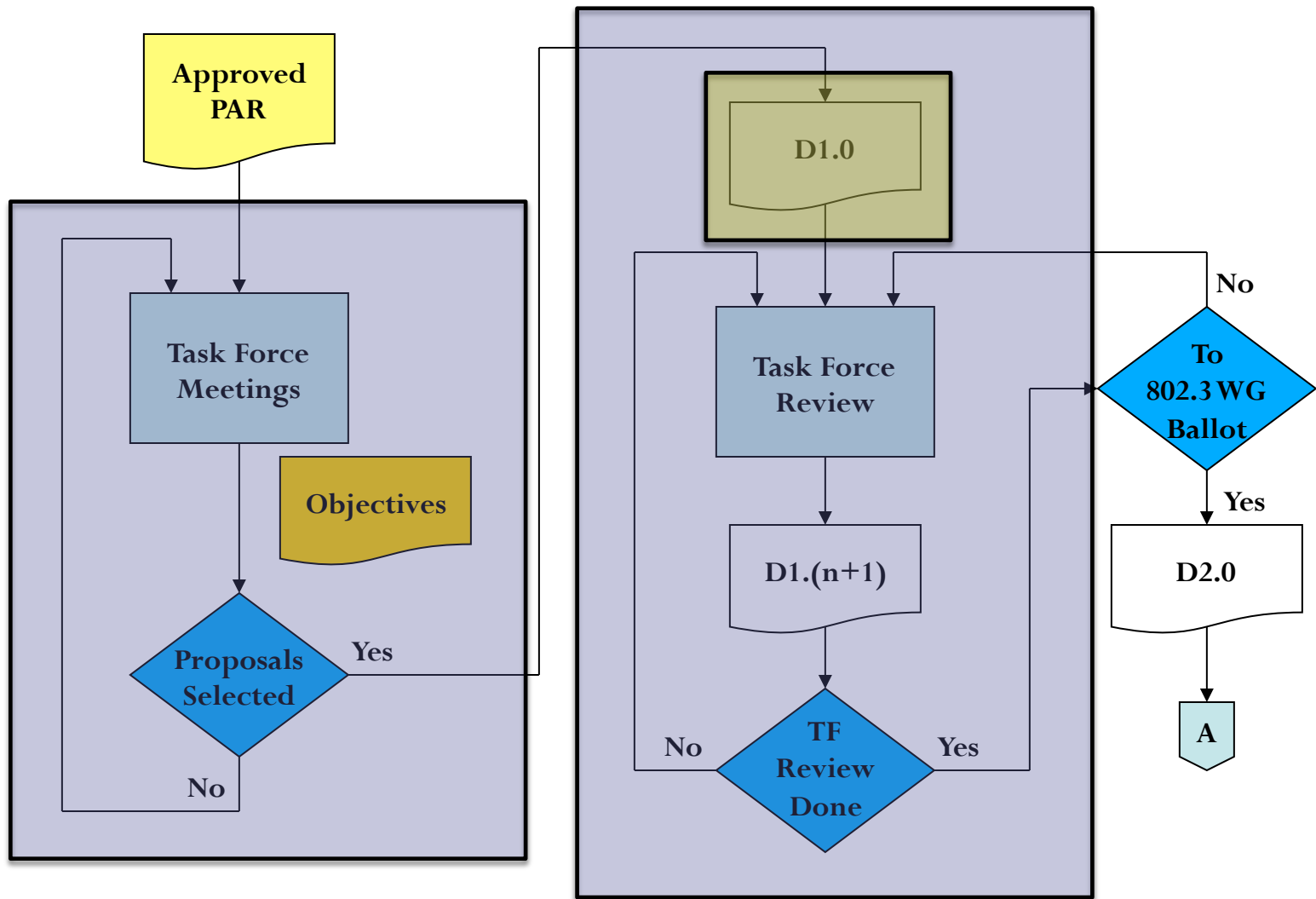


Overview of IEEE 802.3 Standards Process (1/5)- Study Group Phase

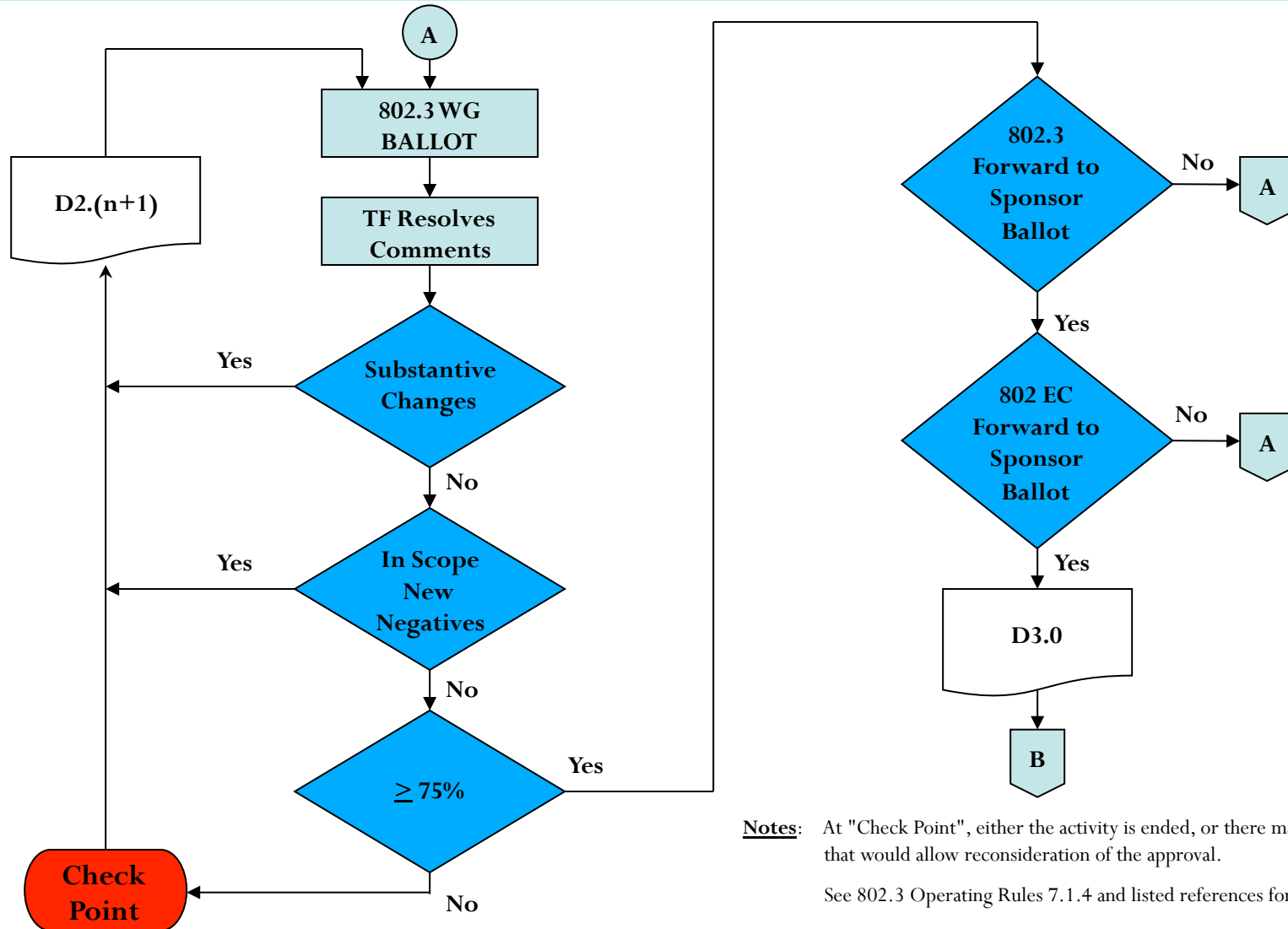


Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

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

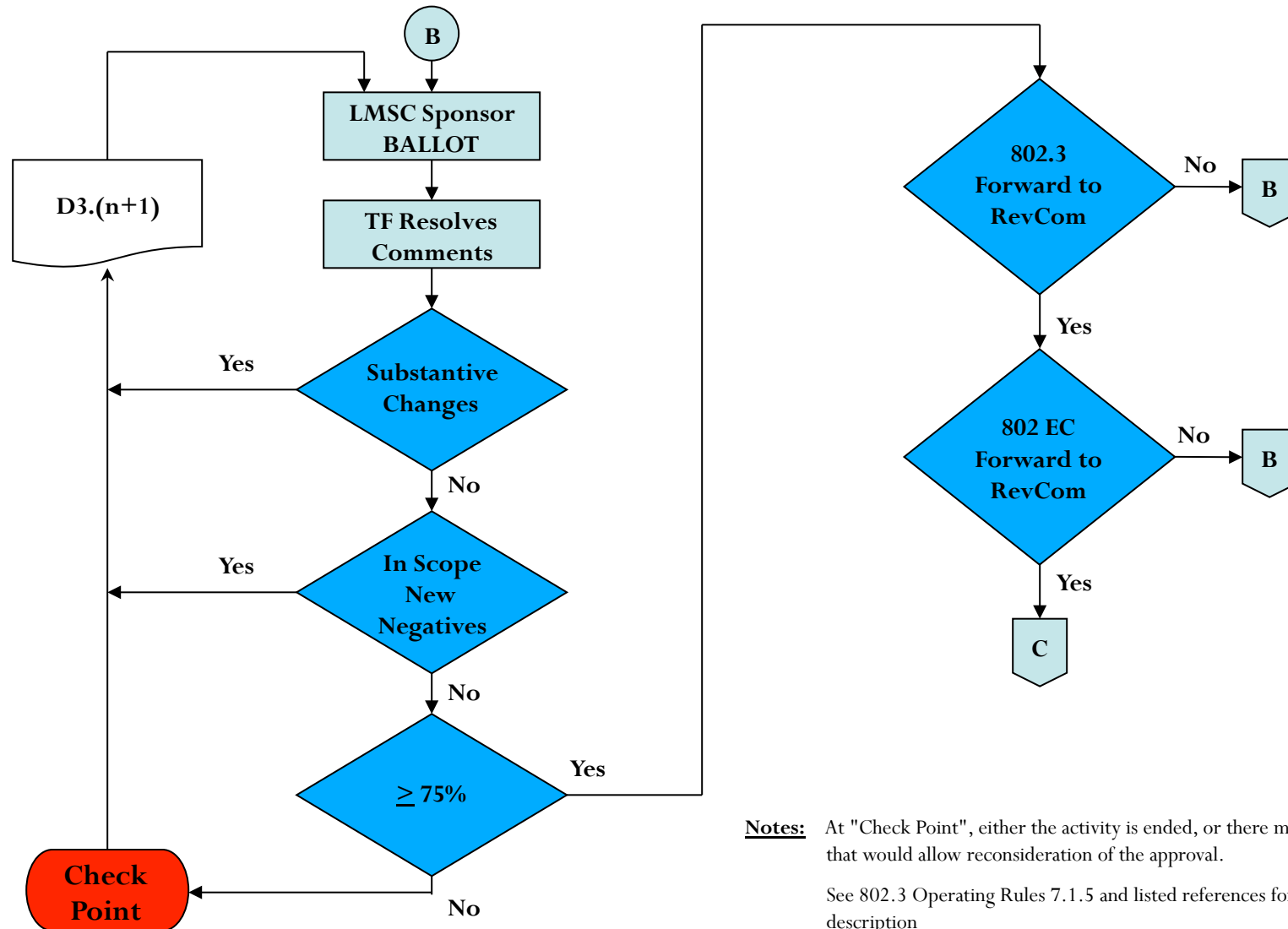


Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase



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

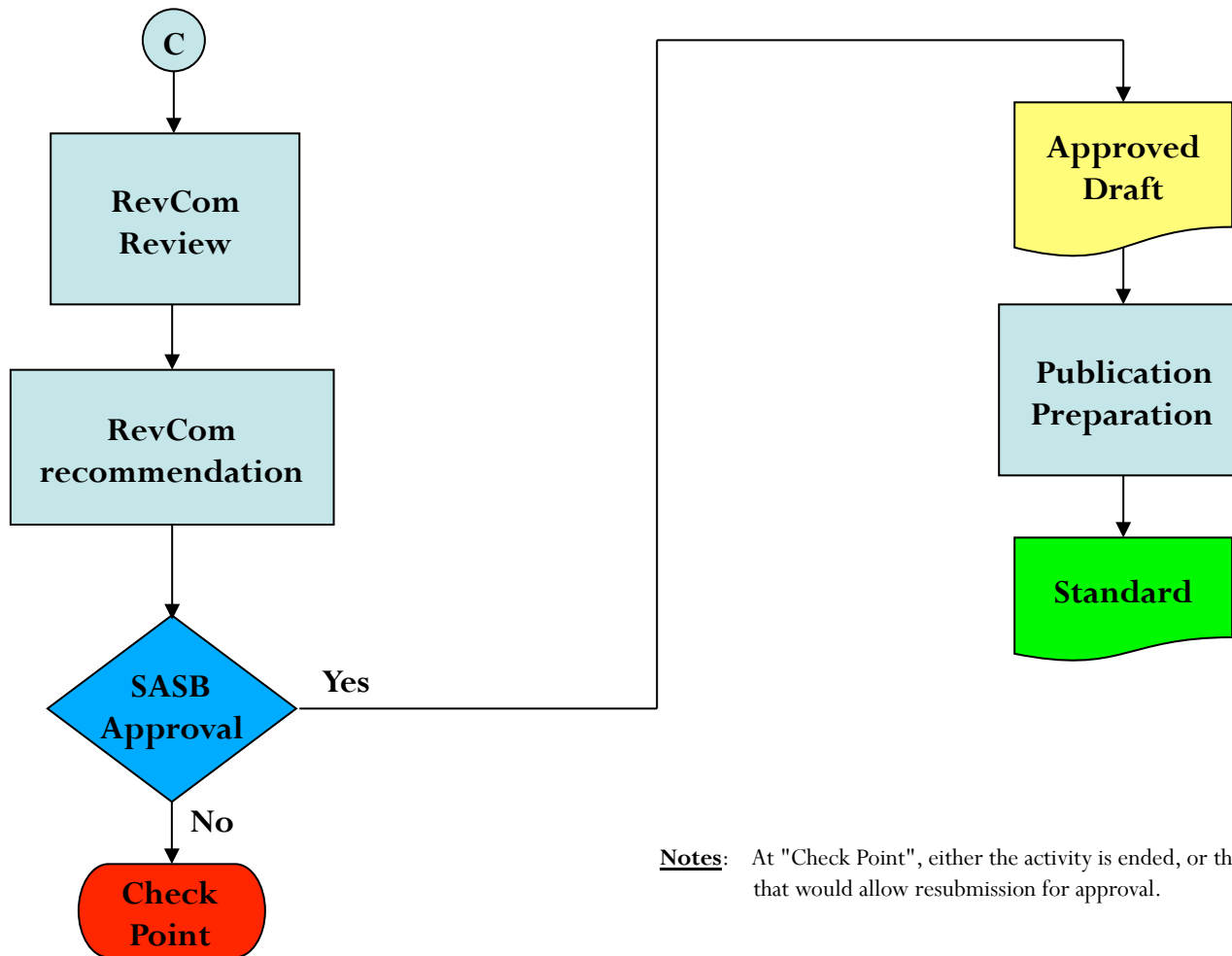
Overview of IEEE 802.3 Standards Process (4/5)- Sponsor Ballot Phase



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 resubmission for approval.

Liaisons and Communications

- none

IEEE P802.3bt 4-Pair Power over Ethernet

Approved Project Documents

- PAR
 - http://www.ieee802.org/3/bt/P802d3bt_PAR.pdf
- 5 Criteria
 - http://www.ieee802.org/3/bt/P802d3bt_5Criteria.pdf
- Objectives
 - http://www.ieee802.org/3/bt/P802d3bt_objectives.pdf

IEEE P802.3bt 4-Pair Power over Ethernet Objectives

- The project will amend IEEE Std 802.3-2012 by amending Clause 33
- IEEE Std 802.3 will comply to the limited power source and SELV requirements as defined in ISO/IEC 60950
- Specify Mutual Identification to address four pair operation
- The standard shall not preclude the ability to meet FCC/CISPR/EN Class A, Class B, Performance Criteria A and Performance Criteria B with data for all supported PHYs

IEEE P802.3bt 4-Pair Power over Ethernet

Objectives – part 2

- Support for operation over the following channels that have DC loop resistance of no greater than 25 ohms:
 - Class D or better 4-pair copper medium from ISO / IEC 11801:2002, including Amendments 1 & 2
 - Class D or better media from ISO / IEC 11801:1995
 - Category 5e or better cable and components as specified in ANSI/TIA-568-C.2
 - Category 5 cable and components as specified in ANSI/TIA/EIA-568-A
- Support operation with 10GBASE-T
- The project shall support a minimum of 49 Watts at the PD PI.

IEEE P802.3bt 4-Pair Power over Ethernet Objectives – part 3

- Define parameters to limit maximum pair-to-pair current imbalance.
- 4PPoE PDs which operate at power levels consistent with IEEE 802.3-2012 PDs will interoperate with IEEE 802.3-2012 PSEs.
- 4PPoE PSEs will be backwards compatible with IEEE 802.3-2012 PDs.
- Update management parameters

Presentations

- 22 presentations submitted (+ baseline)
- Two ad hoc reports

- Rough presentation order is as posted on the website

Future Meetings

- See: <http://www.ieee802.org/3/interims/index.html>
- June 2015 Interim
 - Manchester, NH
 - June 16 – 18, 2015

Bonita Springs, FL
Week of Sept 14, 2015
Location TBD
- July 2015 Plenary
 - Waikoloa, HI
 - July 12 – 17, 2015

Dallas, TX
Week of Oct 12, 2015
Nov 8 – 13, 2015
Atlanta, GA
Week of Jan 18, 2016
- Anyone interested in hosting a interim meeting contact me or the IEEE 802.3 Executive Secretary [Steve Carlson](#).



Thank You!