Agenda and General Information

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

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Mar 10, 2015

Agenda

- Welcome and Introductions (Secretary – Volunteer?)
- Approve Agenda
- Approve January 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
- Presentations
- Maintenance Comments
- 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
- Review presentations submitted
- Draft responses to liaison letters
- Adopt baseline text
- Direct editor to create D0.4
- Initiate review of D0.4
- Update schedule

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
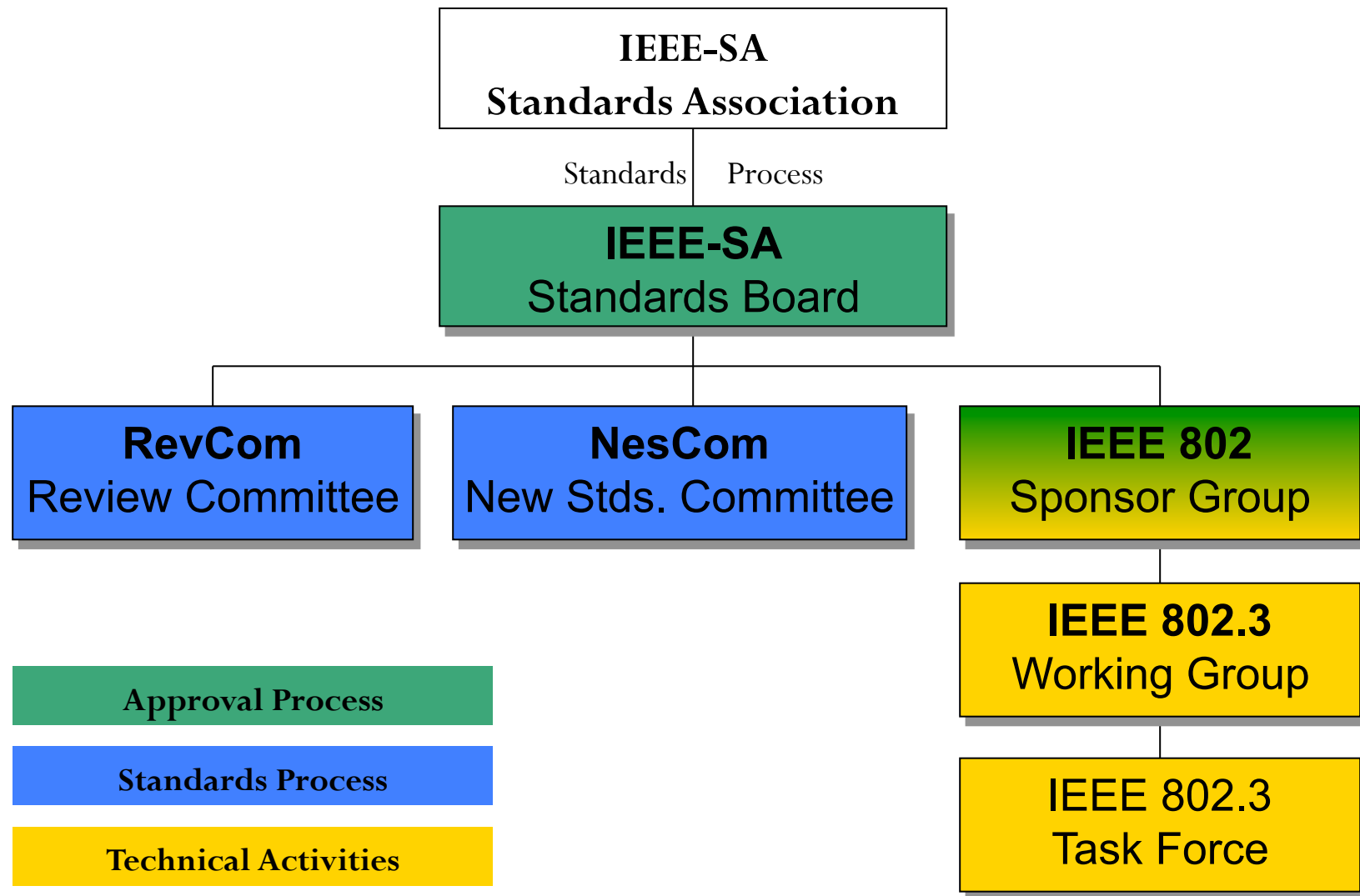
- Username:

- 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: none, be on local LAN

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
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

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.

25 March 2008 (updated January 2012)

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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**

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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

25 March 2008 (updated January 2012)

IEEE

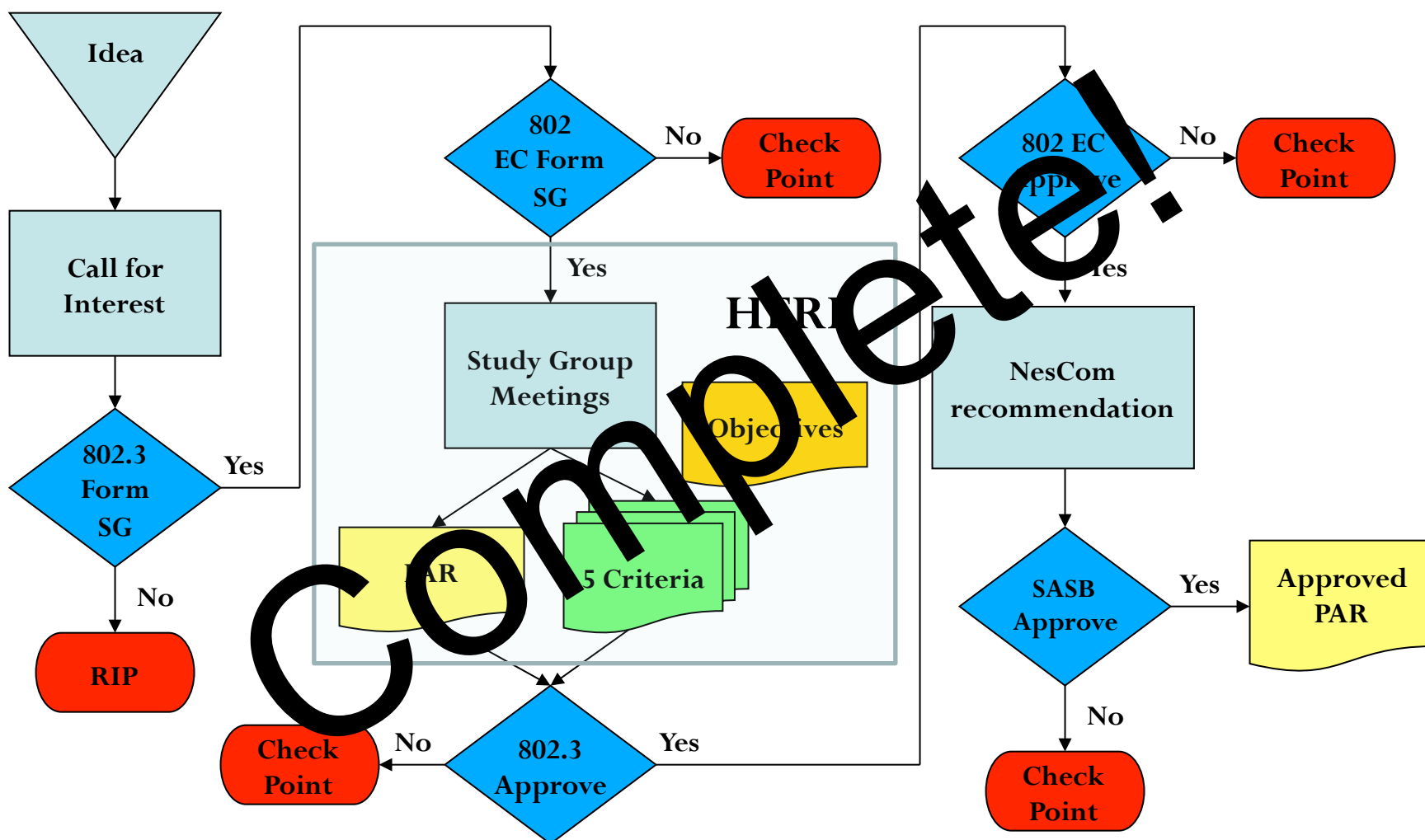# Call for Potentially Essential Patents

- 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

25 March 2008 (updated January 2012)

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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.**

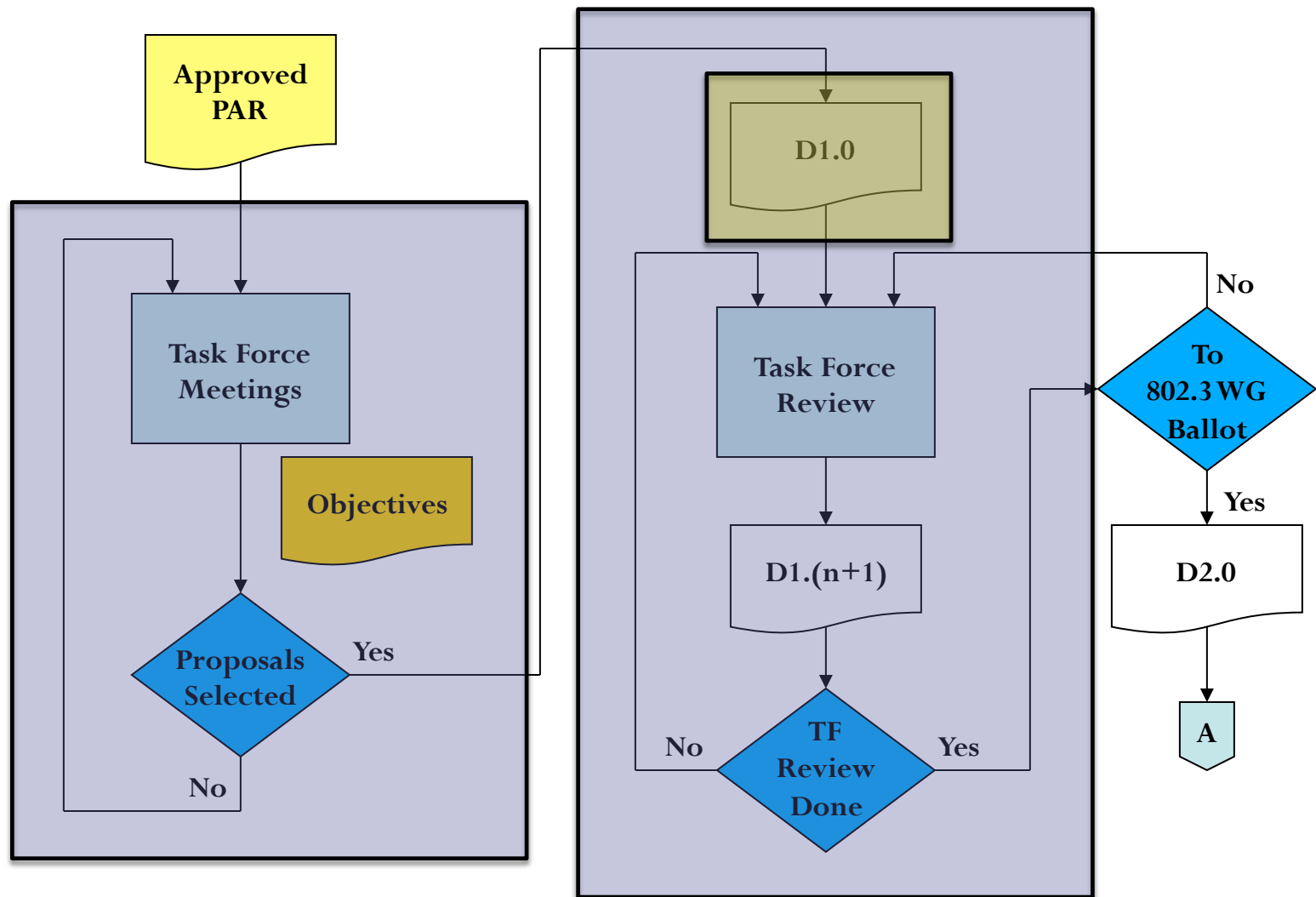 ---

  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.

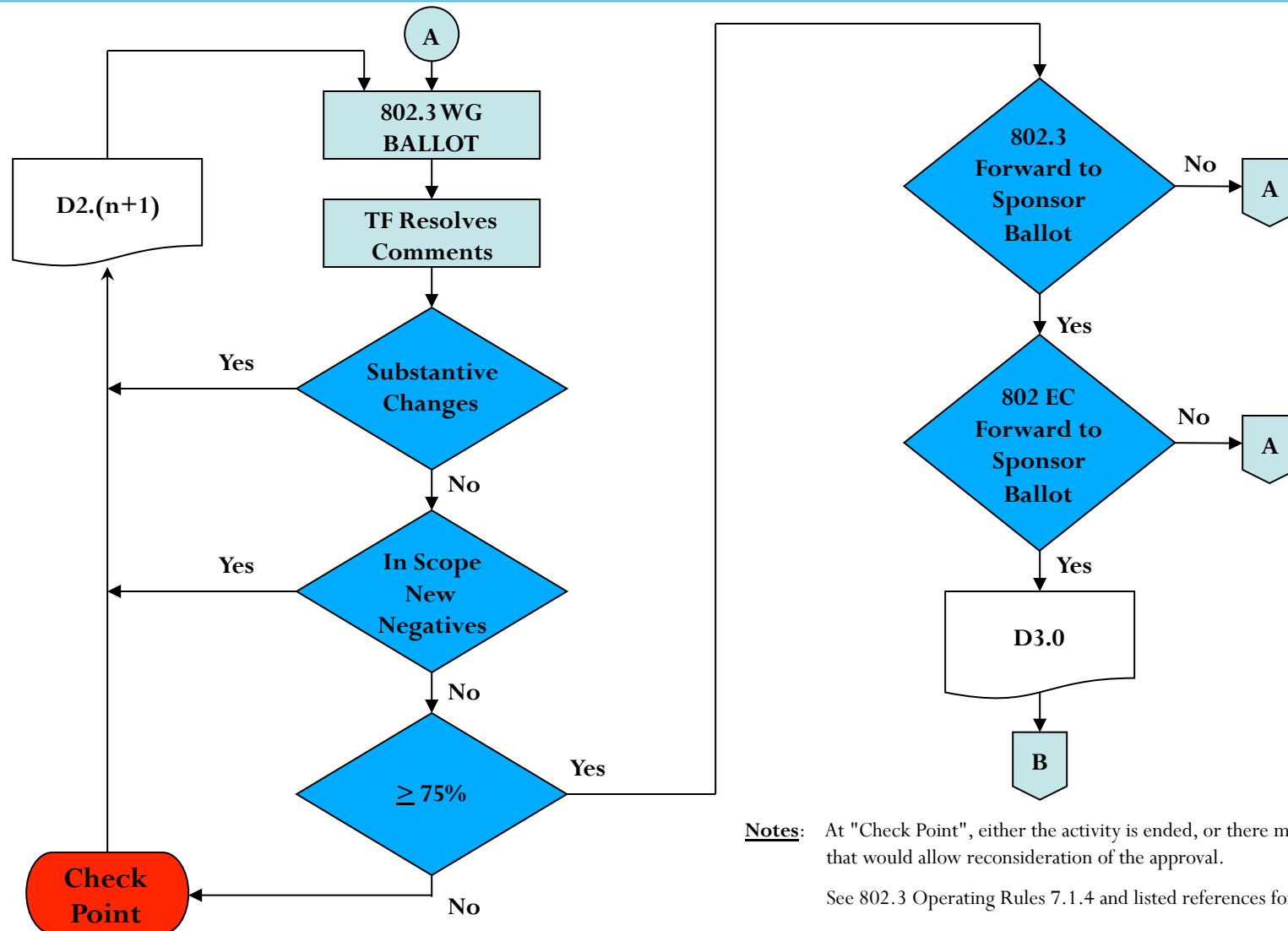25 March 2008 (updated January 2012)

IEEE

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
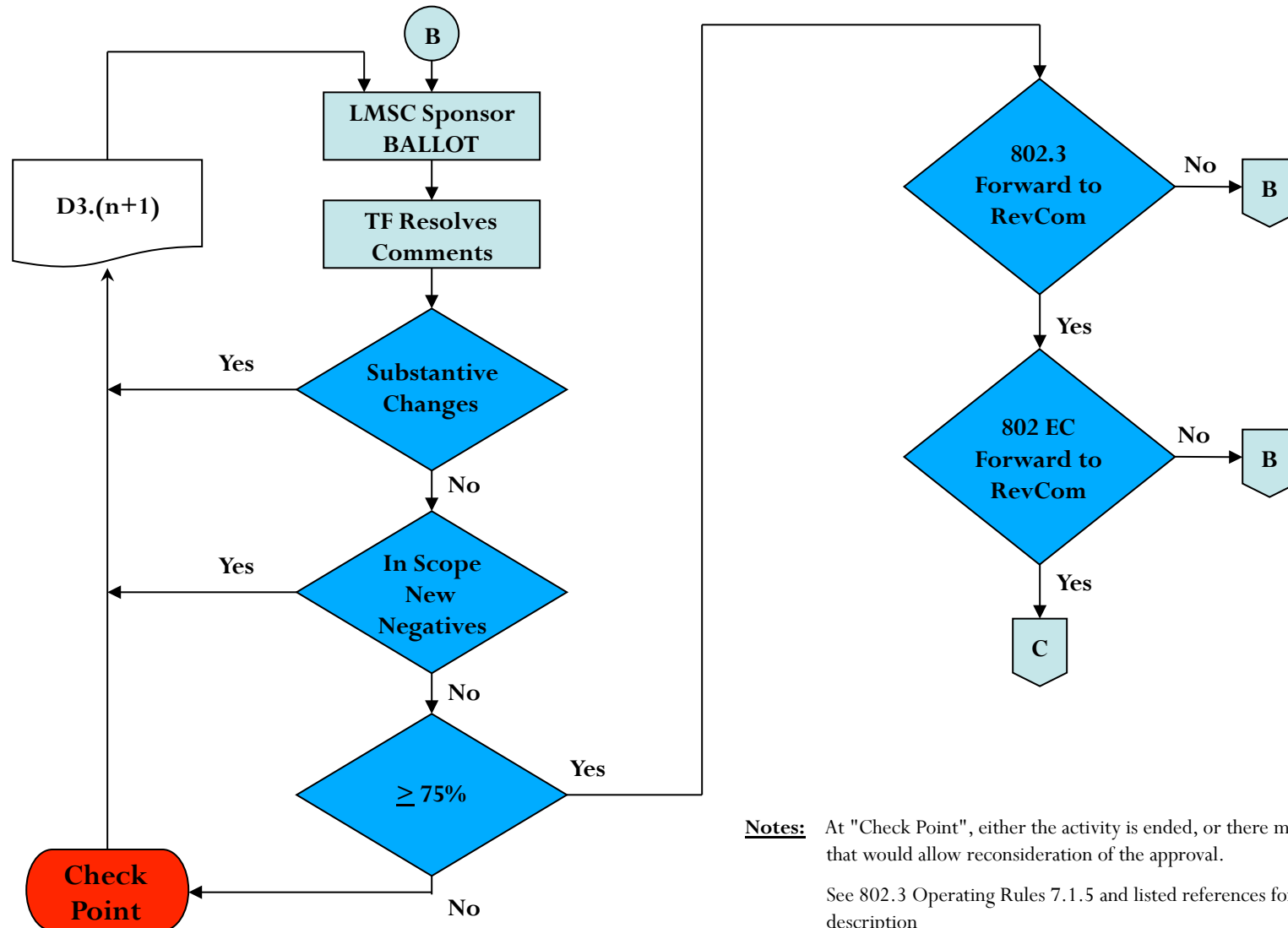
A

802.3 WG BALLOT

D2.(n+1)

TF Resolves Comments

Substantive Changes — Yes

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

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

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.

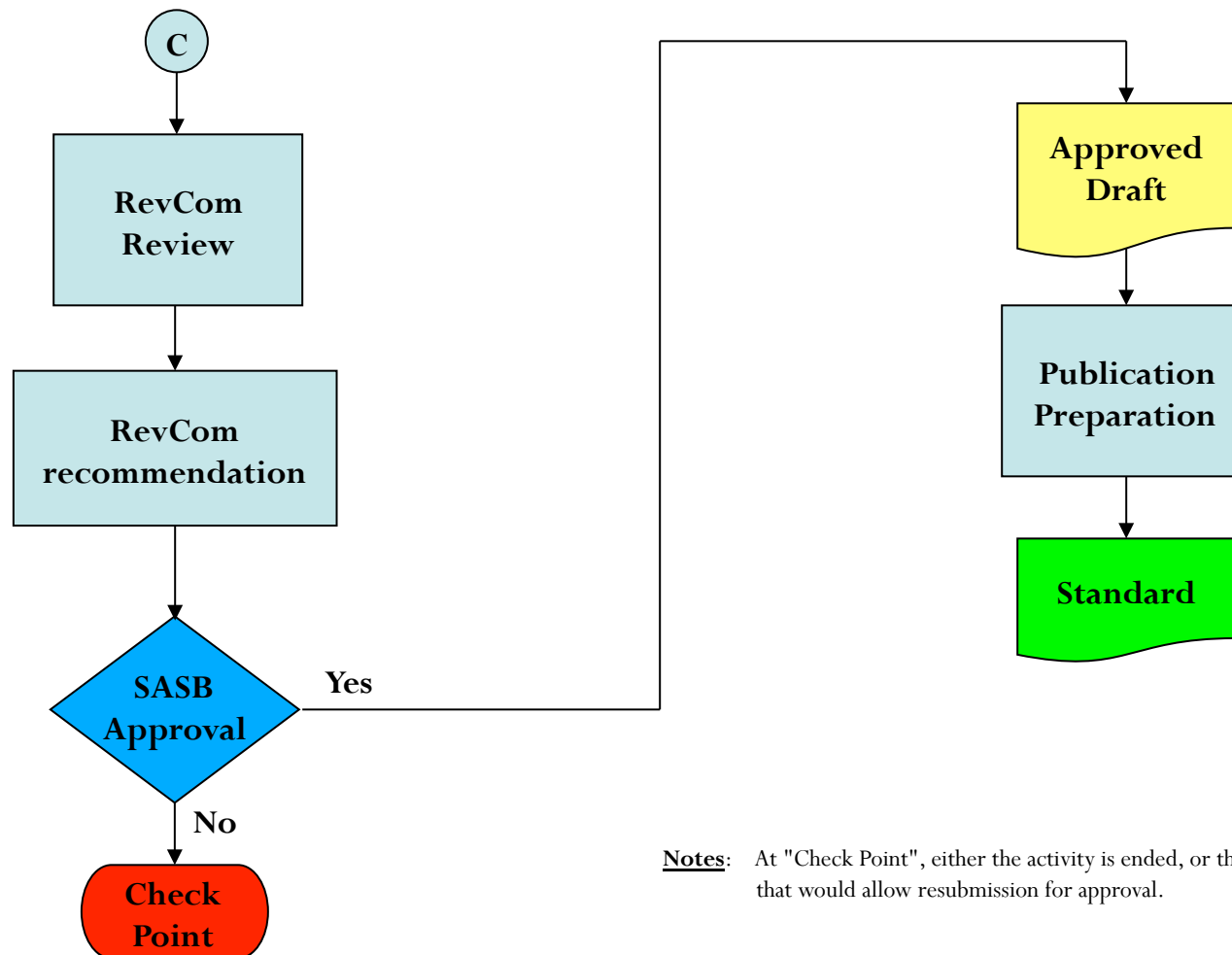See 802.3 Operating Rules 7.1.5 and listed references for complete description

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

C

RevCom Review

RevCom recommendation

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 resubmission for approval.

Liaisons and Communications

- TIA TR-42 to IEEE 802.3 on DC resistance unbalance

- ISO/IEC JTC1 SC25 to IEEE 802.3 on remote powering

- ITU-T SG5 to IEEE 802.3 on new Recommendations related to Ethernet port protection, presented by Steve Carlson

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

- 19 presentations submitted
- One ad hoc report

- Rough presentation order is as posted on the website

Future Meetings

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

- May 2015 Interim
  - Pittsburgh, PA
  - Week of May 18, 2015

- July 2015 Plenary
  - Waikoloa, HI
  - July 12 – 17, 2015

Bonita Springs, FL
Week of Sept 14, 2015
Dallas, TX
Nov 8 – 13, 2015
Location TBD
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!