



# IEEE 802.3 Energy Efficient Ethernet Study Group

## Agenda and General Information

Ottawa, ON  
April, 2007

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# Agenda

- Welcome and Introductions
- Appoint/Volunteer Recording Secretary
- Sign-in Rules
- Goals for this Meeting
- Reflector and Web
- Ground Rules
- IEEE
  - Structure
  - Bylaws and Rules
  - Call for Patents
  - IEEE Standards Process
- Presentations
- Discussion and Motions
- Future Meetings

# Sign-in rules

- Red/Blue book setup with the addition of the affiliation sheets

  - Now three sections to check

- The Attendance will be the same as Dallas format, the Affiliation will contain Name, Employer and Affiliation, w/Affiliation pre-populated with January declaration

- More about this when the books go around

- Don't forget the sign-in sheet as attendees need to go in the meeting minutes as well

# Remember to Declare Your Affiliation

## ■ From the IEEE SA Standards Board By-laws

### □ 5.2.1.5 Disclosure of affiliation (<http://standards.ieee.org/guides/bylaws/sect5.html#5.2.1.5>)

- Every member and participant in a working group, Sponsor ballot, or other standards development activity shall disclose his or her affiliation. An individual is deemed "affiliated" with any individual or entity that has been, or will be, financially or materially supporting that individual's participation in a particular IEEE standards activity. This includes, but is not limited to, his or her employer and any individual or entity that has or will have, either directly or indirectly, requested, paid for, or otherwise sponsored his or her participation. Failure to disclose every such affiliation may result in complete or partial loss of rights to participate in IEEE-SA activities. An individual is not excused from compliance with this policy by reason of any claim of a conflicting obligation (whether contractual or otherwise) that prohibits disclosure of affiliation.

## ■ From the IEEE SA Standards Board Operations Manual

### □ 5.3.3.1 Disclosure of affiliation (<http://standards.ieee.org/guides/opman/sect5.html#5.3.3.1>)

- Each participant's affiliation shall be disclosed at any working group or project meeting. The chair or the chair's delegate shall inform the meeting of the requirement for disclosure of affiliation (see [5.2.1.5](#) of the *IEEE-SA Standards Board Bylaws*). This shall be via a sign-in (e.g., sign-in sheet, electronic sign-in, verbal disclosure, or electronic communication) that provides for disclosure of employer and any other affiliation, a reminder of the definition of affiliation, and possible penalties for non-compliance.

Whenever an individual is aware that the ownership of his or her employer or other affiliation may be material to the process, or when the Sponsor or the IEEE-SA Standards Board requests, that individual shall also declare the "ultimate parent entity" of their affiliation. The ultimate parent entity is an entity that directly or indirectly, through one or more intermediaries, controls the entity identified as the individual's affiliation. For the purposes of this definition, the term "control" and its derivatives, with respect to for-profit entities, means the legal, beneficial or equitable ownership, directly or indirectly, of more than fifty percent (50%) of the capital stock (or other ownership interest, if not a corporation) of an entity ordinarily having voting rights. "Control" and its derivatives, with respect to nonprofit entities, means the power to elect or appoint more than fifty percent (50%) of the Board of Directors of an entity.

### □ 5.3.3.2 False or misleading disclosure (<http://standards.ieee.org/guides/opman/sect5.html#5.3.3.2>)

- A meeting attendee who fails to disclose affiliation shall not accrue any membership rights, including rights of or towards voting membership, until such disclosures have been made. The chair shall review the adequacy of disclosures. Failure to disclose affiliation, or materially false or misleading disclosure of affiliation, shall result in loss of membership privileges and may also result in loss of other participation privileges within the IEEE-SA for such participants and any affiliated entities

# Goals for this Meeting

- Hear presentations related to 5 Criteria, Goals, and Objectives
- Develop consensus on EEESG Objectives
- Develop consensus on EEESG 5 Criteria for EEE
- Lay the ground work for the next meeting

# Reflector and Web

- To subscribe to the EEESG reflector, send your request to:

[ListServ@ieee.org](mailto:ListServ@ieee.org)

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

*subscribe stds-802-3-eesg <yourfirstname> <yourlastname>  
end*

- Send EEESG reflector messages to:

*stds-802-3-eesg@listserv.ieee.org*

- For complete instructions on reflector usage, subscription, and unsubscription:

<http://www.ieee802.org/3/eesg/reflector.html>

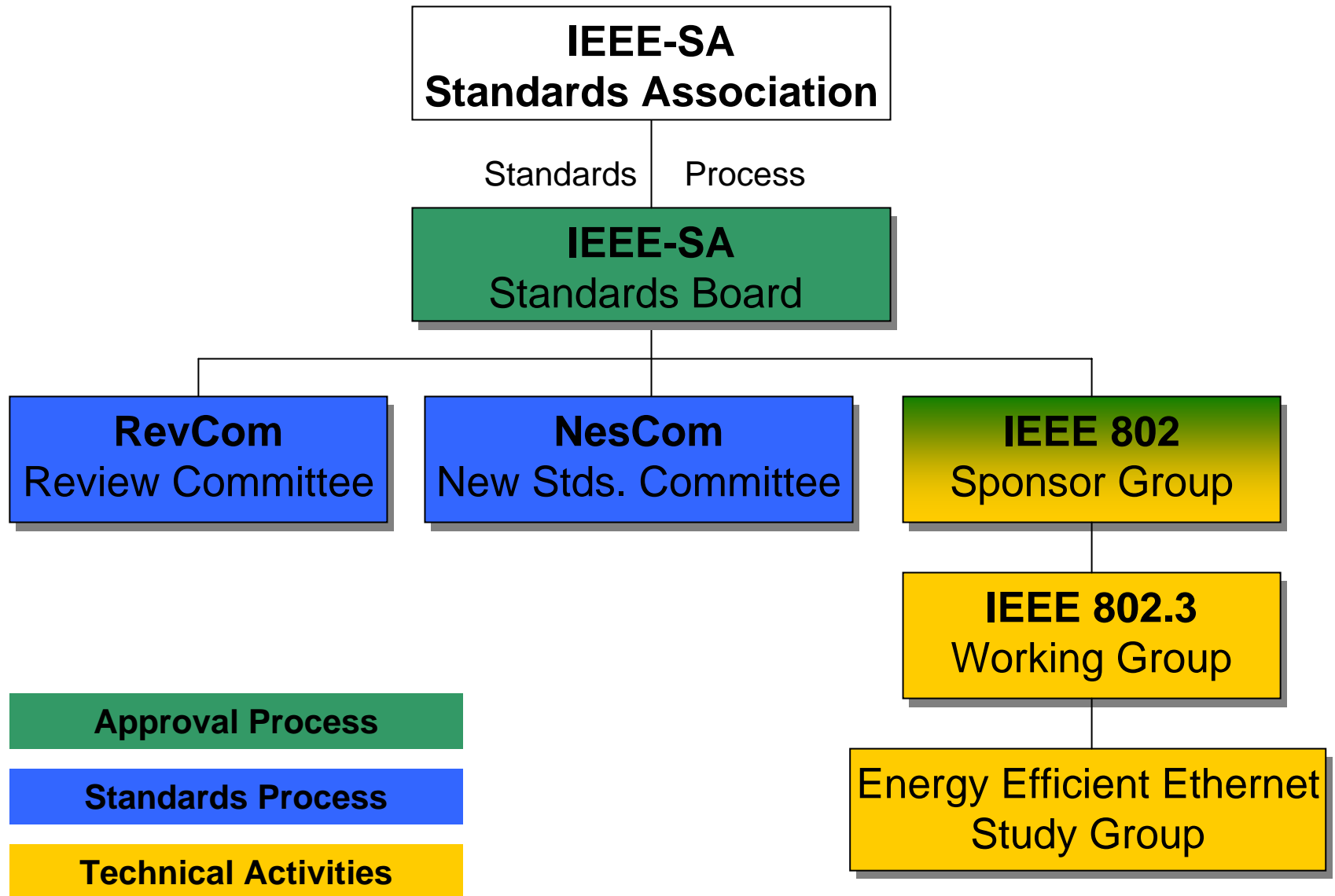
- EEESG web page URL:

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

# 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, Average Sales Prices (ASP), etc. no matter what the currency
- NO restrictive notices

# IEEE Structure





# 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>
- **LAN/MAN Standards Committee (LMSC) Policies and Procedures:**
  - <http://ieee802.org/policies-and-procedures.pdf>
- **IEEE 802.3 Working Group Operating Rules:**
  - [http://ieee802.org/3/rules/P802\\_3\\_rules.pdf](http://ieee802.org/3/rules/P802_3_rules.pdf)

# *IEEE-SA Standards Board Bylaws on Patents in Standards*

## **6. Patents**

IEEE standards may include the known use of essential patents and patent applications provided the IEEE receives assurance from the patent holder or applicant with respect to patents whose infringement is, or in the case of patent applications, potential future infringement the applicant asserts will be, unavoidable in a compliant implementation of either mandatory or optional portions of the standard [essential patents]. This assurance shall be provided without coercion. The patent holder or applicant should provide this assurance as soon as reasonably feasible in the standards development process. This assurance shall be provided no later than the approval of the standard (or reaffirmation when a patent or patent application becomes known after initial approval of the standard). This assurance shall be either:

- a) A general disclaimer to the effect that the patentee will not enforce any of its present or future patent(s) whose use would be required to implement either mandatory or optional portions of the proposed IEEE standard against any person or entity complying with the standard; or
- b) A statement that a license for such implementation will be made available without compensation or under reasonable rates, with reasonable terms and conditions that are demonstrably free of any unfair discrimination.

This assurance is irrevocable once submitted and accepted and shall apply, at a minimum, from the date of the standard's approval to the date of the standard's withdrawal.

Approved by IEEE-SA Standards Board – March 2003 (Revised February 2006)

## *IEEE-SA Standards Board Bylaws on Patents in Standards*

- Be aware that there is a change coming
  - See <http://standards.ieee.org/board/pat/pat-slideset.ppt> for approved slides
  - New slide scheduled April 30, 2007

# Inappropriate Topics for IEEE WG Meetings

- Don't discuss the validity/essentiality of patents/patent claims
- Don't discuss the cost of specific patent use
- Don't discuss licensing terms or conditions
- Don't discuss product pricing, territorial restrictions, or market share
- Don't discuss ongoing litigation 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](mailto:patcom@ieee.org) or visit <http://standards.ieee.org/board/pat/index.html>**

**This slide set is available at <http://standards.ieee.org/board/pat/pat-slideset.ppt>**

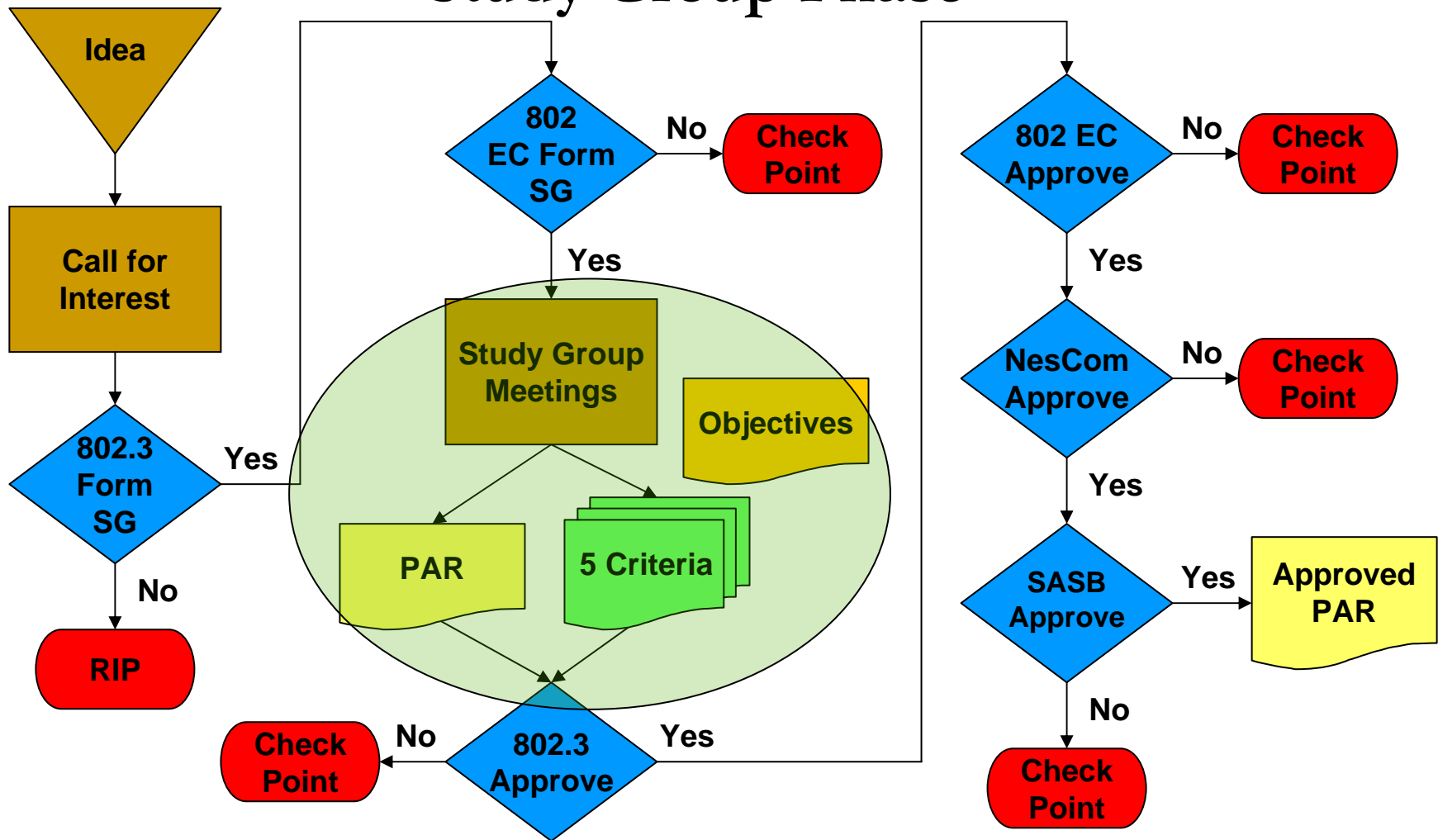
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# Overview of IEEE 802.3 Standards Process (1/5)

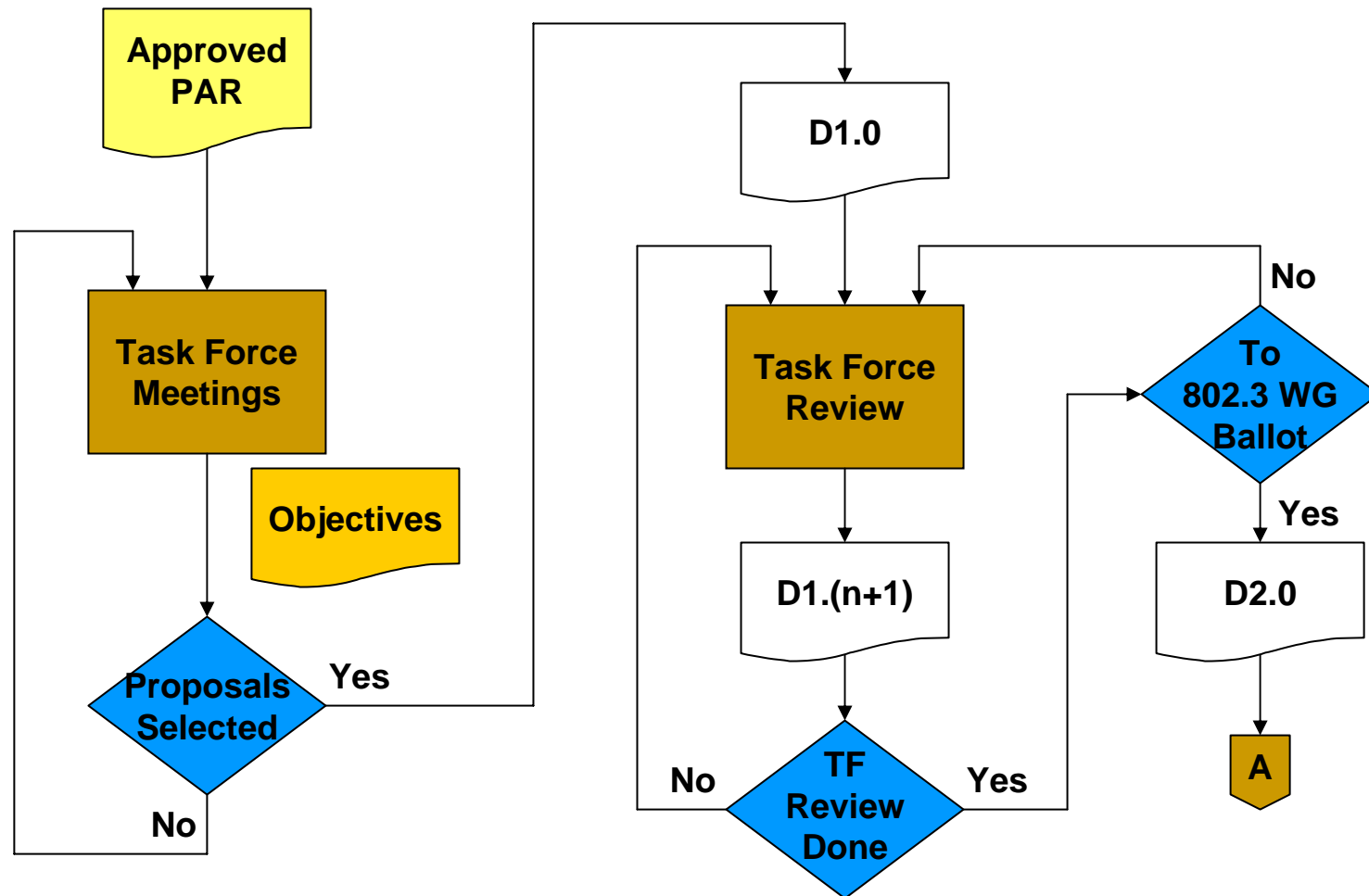
## Study Group Phase



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

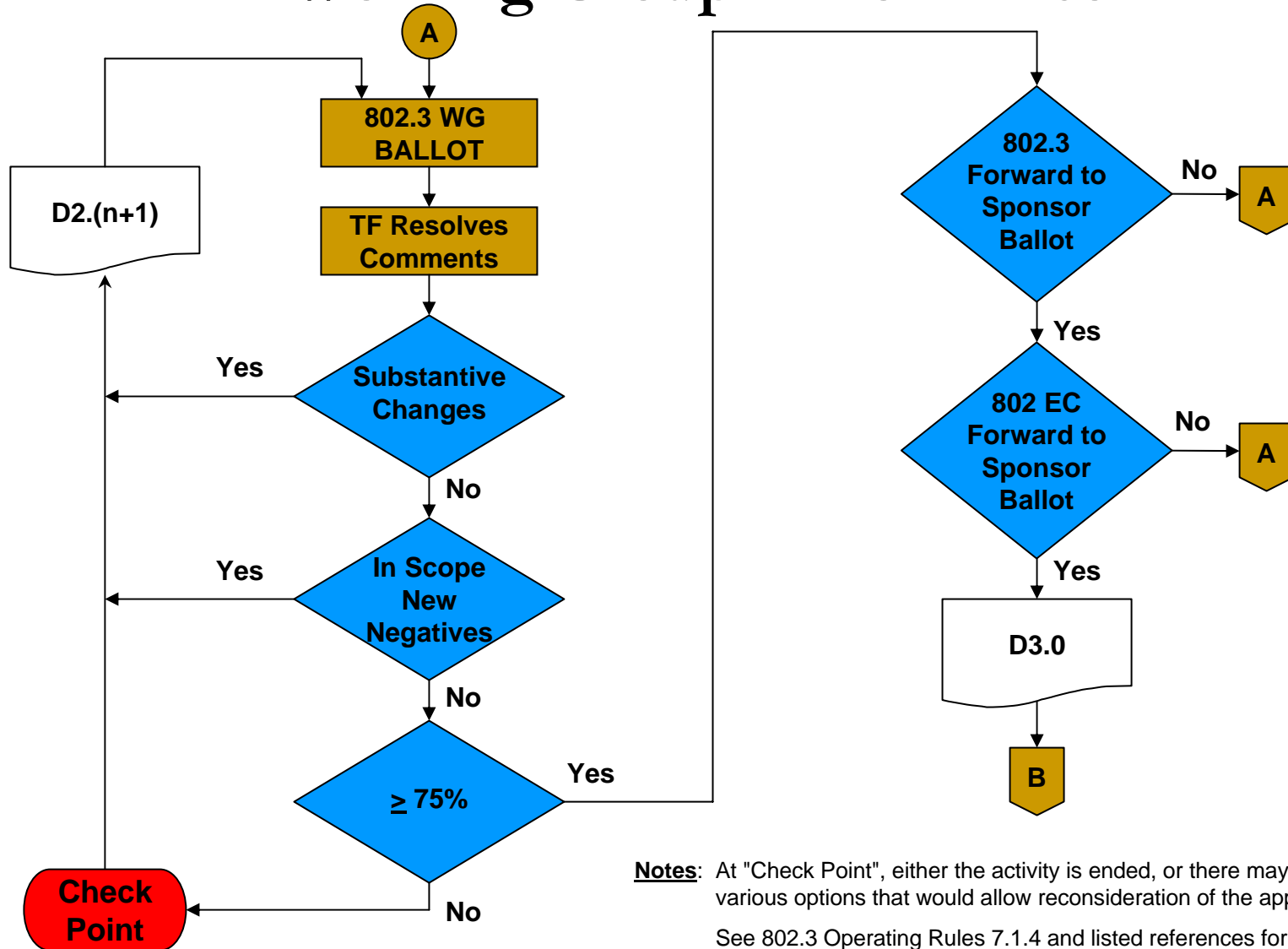
# Overview of IEEE 802.3 Standards Process (2/5)

## Task Force Comment Phase



# Overview of IEEE 802.3 Standards Process (3/5)

## Working Group Ballot Phase



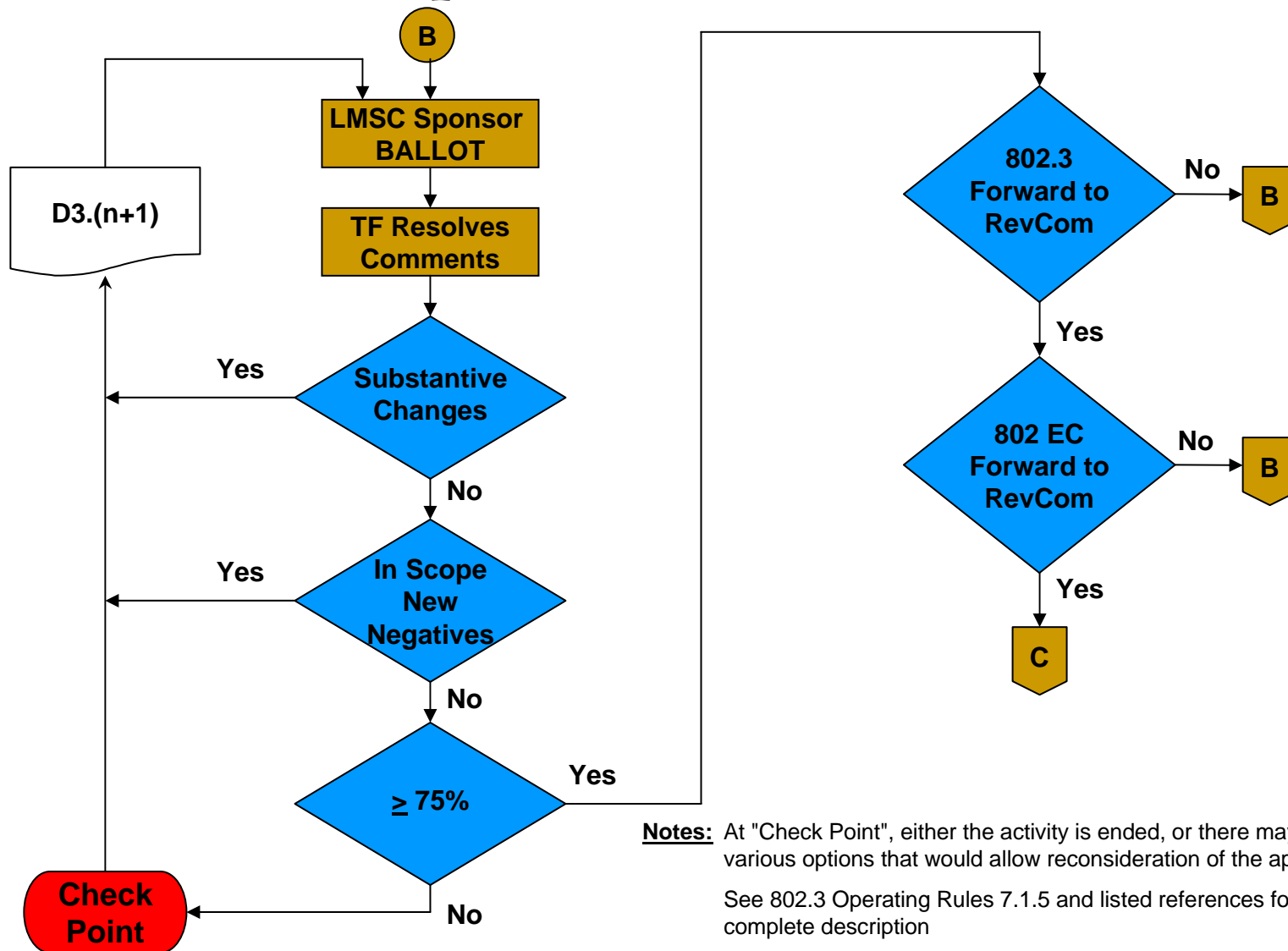
**Notes:** At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

See 802.3 Operating Rules 7.1.4 and listed references for complete description



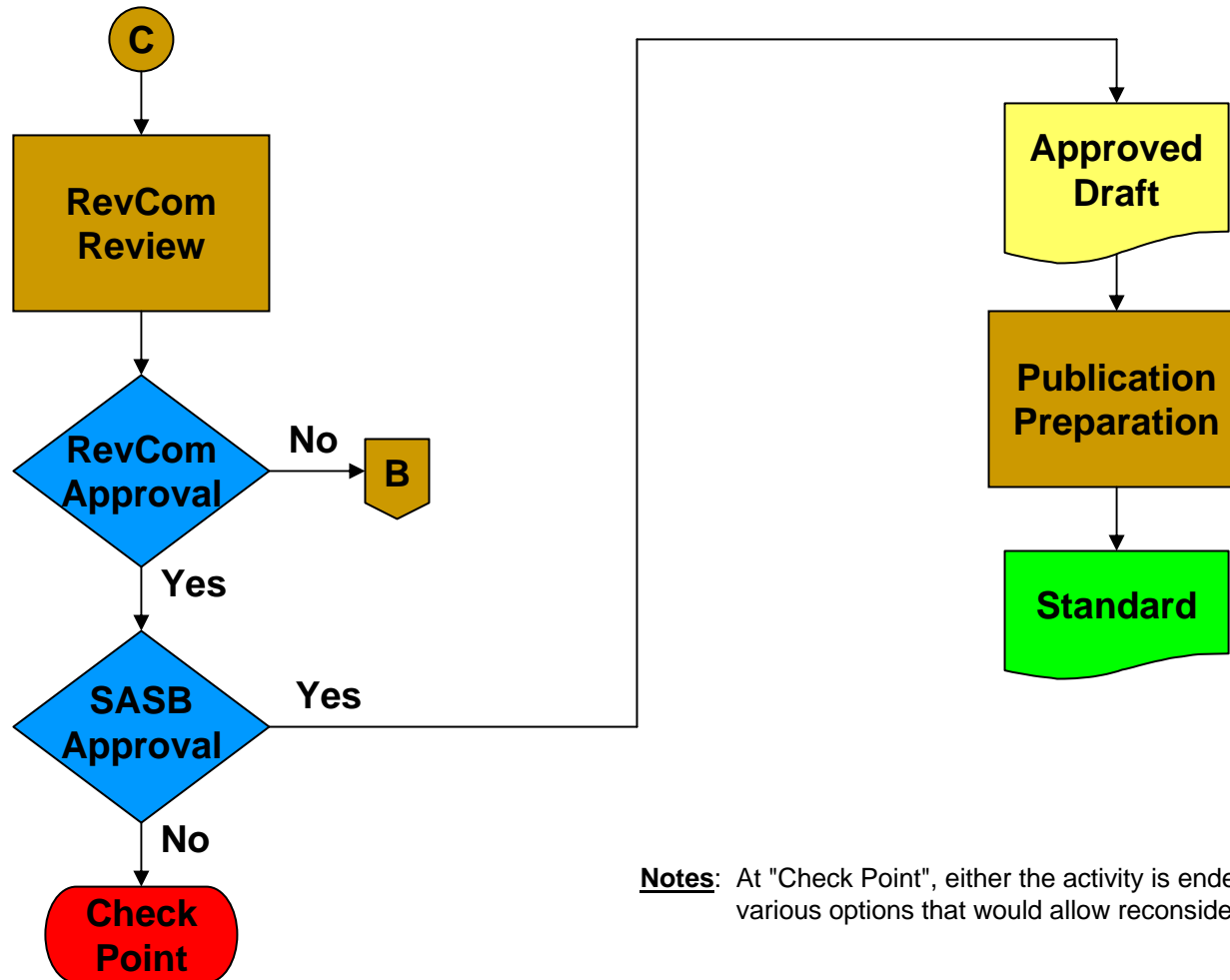
# Overview of IEEE 802.3 Standards Process (4/5)

## Sponsor Ballot Phase



# Overview of IEEE 802.3 Standards Process (5/5)

## Final Approvals and Standard Release



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

# The Study Group

- Normal function is to draft a complete PAR and Five Criteria
- Provide a plenary week tutorial to the LMSC.
- Gain approval at the WG 802.3, 802 SEC, IEEE NesCom and IEEE-SA Standards Board.
- SG only exists for 6 months
  - Extensions can be requested, voted on by 802.3, ratified by SEC
    - Our first extension was granted in March
- Development of Objectives helps set the goals for the Task Force
- Consensus (>75%) required to move forward
  
- Not a goal – choosing a solution.

# Request for Formation of EEESG (as per November '06 Plenary Motion)

Move that the IEEE 802.3 working group request formation of an *Energy Efficient Ethernet* IEEE 802.3 study group to evaluate methods to reduce energy use by reduction of link speed during periods of low link utilization

## Our job is to:

- Determine the objectives
  - Based on the 5 criteria
- Produce a Project Authorization Request (PAR)

# PAR

- Title

- What are we calling this

- Scope

- The Focus – Energy Efficient Ethernet

- Purpose

- Why do we want to do this

# 5 Criteria (IEEE 802)

## ■ Broad Market Potential

- ❑ Broad sets of applicability.
- ❑ Multiple vendors, numerous users
- ❑ Balanced cost (LAN vs. attached stations)

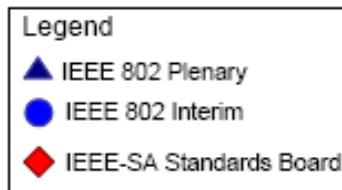
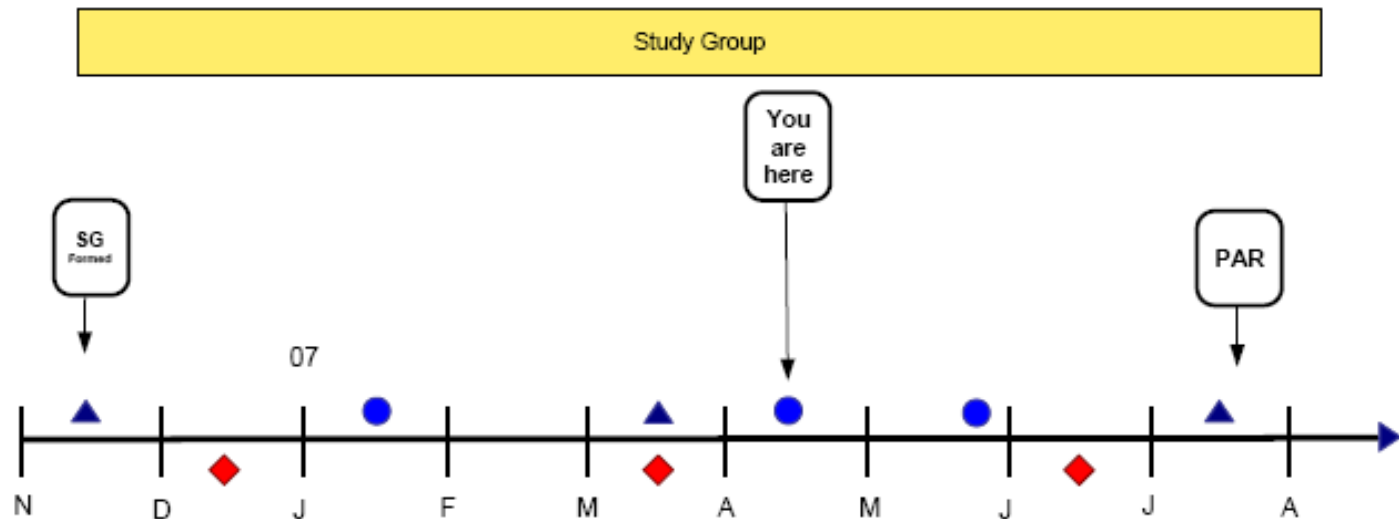
## ■ Compatibility

- ❑ IEEE 802 defines a family of standards. All standards shall be in conformance with the IEEE 802.1 Architecture, Management, and Inter-working documents as follows: 802. Overview and Architecture, 802.1D, 802.1Q, and parts of 802.1f. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with 802.
- ❑ Each standard in the IEEE 802 family of standards shall include a definition of managed objects that are compatible with systems management standards.

# 5 Criteria (IEEE 802)

- Distinct Identity
  - ❑ Substantially different from other 802 standards
  - ❑ One unique solution per problem (not two solutions to a problem)
  - ❑ Easy for document reader to select relevant spec
  
- Technical Feasibility
  - ❑ Demonstrated system feasibility
  - ❑ Proven technology, reasonable testing
  - ❑ Confidence in reliability
  
- Economic Feasibility
  - ❑ Known cost factors, reliable data
  - ❑ Reasonable cost for performance
  - ❑ Consideration of installation costs

# A possible timeline to PAR





# Presentations and Discussion

## Tuesday

Time	Title	File name	Presenter	Affiliation	Duration
9:00 AM	Agenda and General Information	agenda_01_0407.pdf	Mike Bennett	LBNL	0:30
9:30 AM	Feasibility of 1000BASE-T RPS Restart	chadha_01_0407.pdf	Mandeep Chadha	Vitesse	0:30
10:00 AM	Break				0:25
10:25 AM	10BASE-T Amplitude Optimization	chadha_02_0407.pdf	Mandeep Chadha	Vitesse	0:20
10:45 AM	5 Criteria Discussion				1:00
11:45 AM	Lunch				1:30
1:15 PM	5 Criteria Discussion				0:30
1:45 PM	Break				0:30
2:15 PM	5 Criteria Discussion				2:30
4:45 PM	recess				

## Wednesday

Time	Title	File name	Presenter	Affiliation	Duration
9:00 AM	Opening remarks		Mike Bennett	LBNL	0:15
9:15 AM	5 Criteria Discussion		All		0:45
10:00 AM	Break				0:30
10:30 AM	Discussion and Motions		All		1:30
12:00 PM	Lunch				1:30
1:30 PM	Discussion and Motions		All		1:00
2:30 PM	Break				0:30
3:00 PM	Discussion and Motions		All		2:00
5:00 PM	adjourn				

# Future Meetings

- May 2007 Interim
  - Week of May 28
  - ITU
  - Geneva, Switzerland
    - For more info: <http://www.ieee802.org/1/files/public/docs2006/meetings-may07-interim+workshop-1106.pdf>
  
- July 2007 Plenary
  - Week of July 16
  - Hyatt Regency
  - San Francisco, CA
  
- Future meeting information at:
  - <http://www.ieee802.org/meeting/index.html>

Thank You!