IEEE P802.3ap
Backplane Ethernet Task Force
Agenda and General Information

Long Beach, CA
May 26, 2004

Agenda

- Welcome and Introductions
- Appoint/confirm Task Force Chair
- Appoint Task Force Editor and Secretary
- Approve meeting minutes
- Goals for this Meeting
- Reflector and Web
- Ground Rules
- IEEE
    - Structure
    - Bylaws and Rules
    - Call for Patents
    - IEEE Standards Process
- Presentations
- Future Meetings
- Motion Madness

Goals for this Meeting

- Begin development of Draft 1.0.
  - Develop plan and identify any gaps.

- Hear presentations.

- Agree on a backplane channel model.

- Advance discussion on auto-negotiation.

Reflector and Web

- To subscribe to the IEEE P802.3ap Backplane Ethernet Task Force reflector send an email to:

  listserv@ieee.org

  with the following in the <u>body of the message</u>:

  subscribe stds-802-3-blade <yourfirstname> <yourlastname>

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

  http://ieee802.org/3/ap/reflector.html

- IEEE P802.3ap Task Force web page:

  http://www.ieee802.org/3/ap/
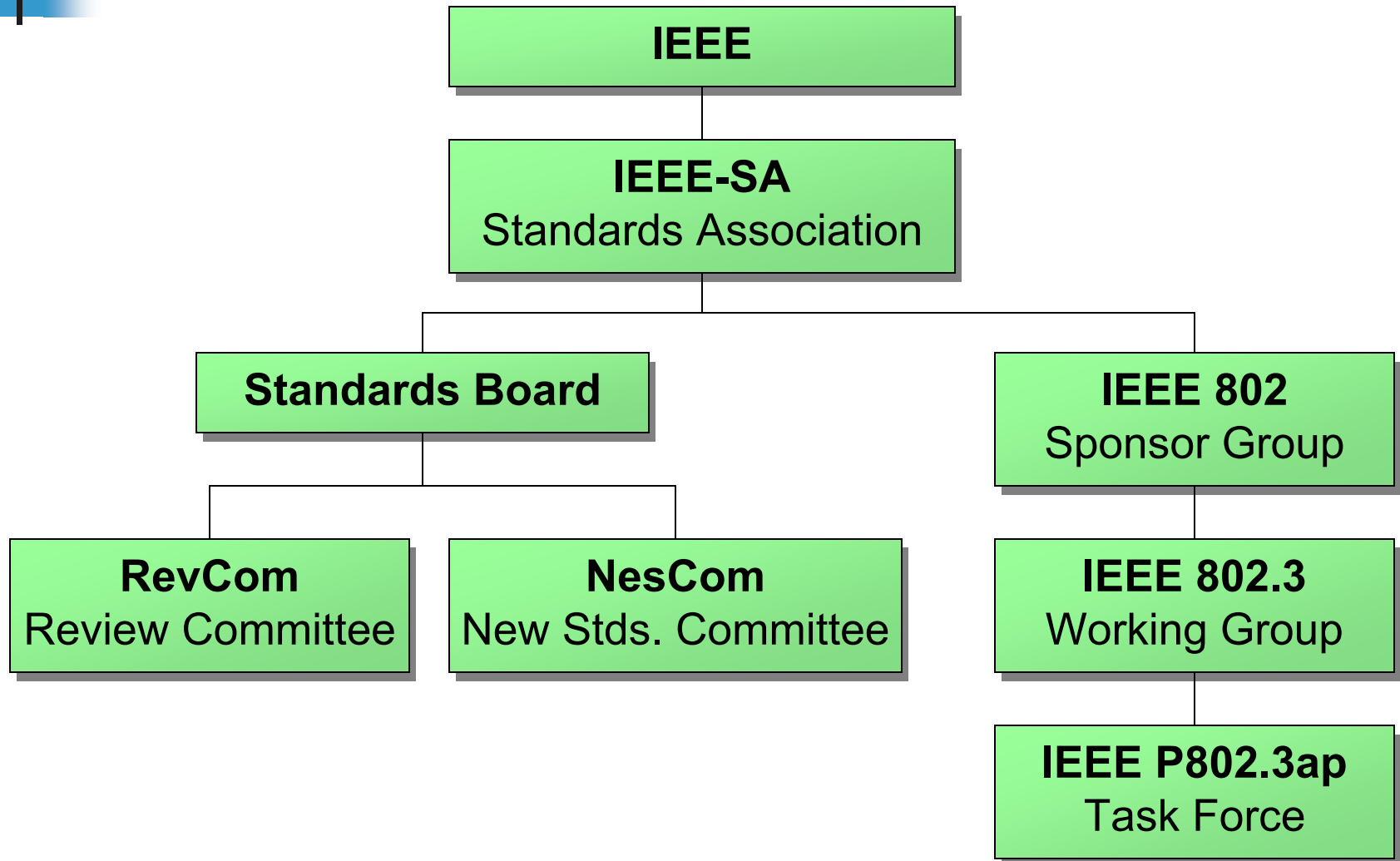
- Channel Model Ad Hoc web page:

  http://www.ieee802.org/3/ap/public/channel_adhoc

Ground Rules

- 802.3 Rules apply
  - 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       │
                        └────────┬────────┘
                                 │
                        ┌─────────────────┐
                        │     IEEE-SA     │
                        │Standards Association│
                        └────────┬────────┘
              ┌──────────────────┴──────────────────┐
    ┌──────────────────┐                  ┌──────────────────┐
    │ Standards Board  │                  │    IEEE 802      │
    └────────┬─────────┘                  │  Sponsor Group   │
      ┌──────┴──────┐                     └────────┬─────────┘
┌──────────────┐ ┌──────────────────┐    ┌──────────────────┐
│   RevCom     │ │     NesCom       │    │   IEEE 802.3     │
│Review Committee│ │New Stds. Committee│   │  Working Group   │
└──────────────┘ └──────────────────┘    └────────┬─────────┘
                                          ┌──────────────────┐
                                          │  IEEE P802.3ap   │
                                          │   Task Force     │
                                          └──────────────────┘
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Bylaws and Rules

- Bylaws of the IEEE Standards Association (IEEE-SA):

  http://standards.ieee.org/sa/sa-bylaws.pdf

- Bylaws of the IEEE-SA Standards Board:

  http://standards.ieee.org/guides/bylaws/sb-bylaws.pdf

- IEEE LAN/MAN Standards Committee (LMSC) Operating Rules:

  http://www.ieee802.org/rules.pdf

- IEEE 802.3 Working Group Operating Rules:

  http://www.ieee802.org/3/rules/

IEEE-SA Standards Board Bylaws on Patents in Standards

6. Patents

IEEE standards may include the known use of patent(s), including patent applications, provided the IEEE receives assurance from the patent holder or applicant with respect to patents essential for compliance with both mandatory and optional portions of the standard. This assurance shall be provided without coercion and prior to approval of the standard (or reaffirmation when a patent becomes known after initial approval of the standard). This assurance shall be a letter that is in the form of 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 the proposed IEEE standard against any person or entity using the patent(s) to comply with the standard or

b) A statement that a license 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 shall apply, at a minimum, from the date of the standard's approval to the date of the standard's withdrawal and is irrevocable during that period.

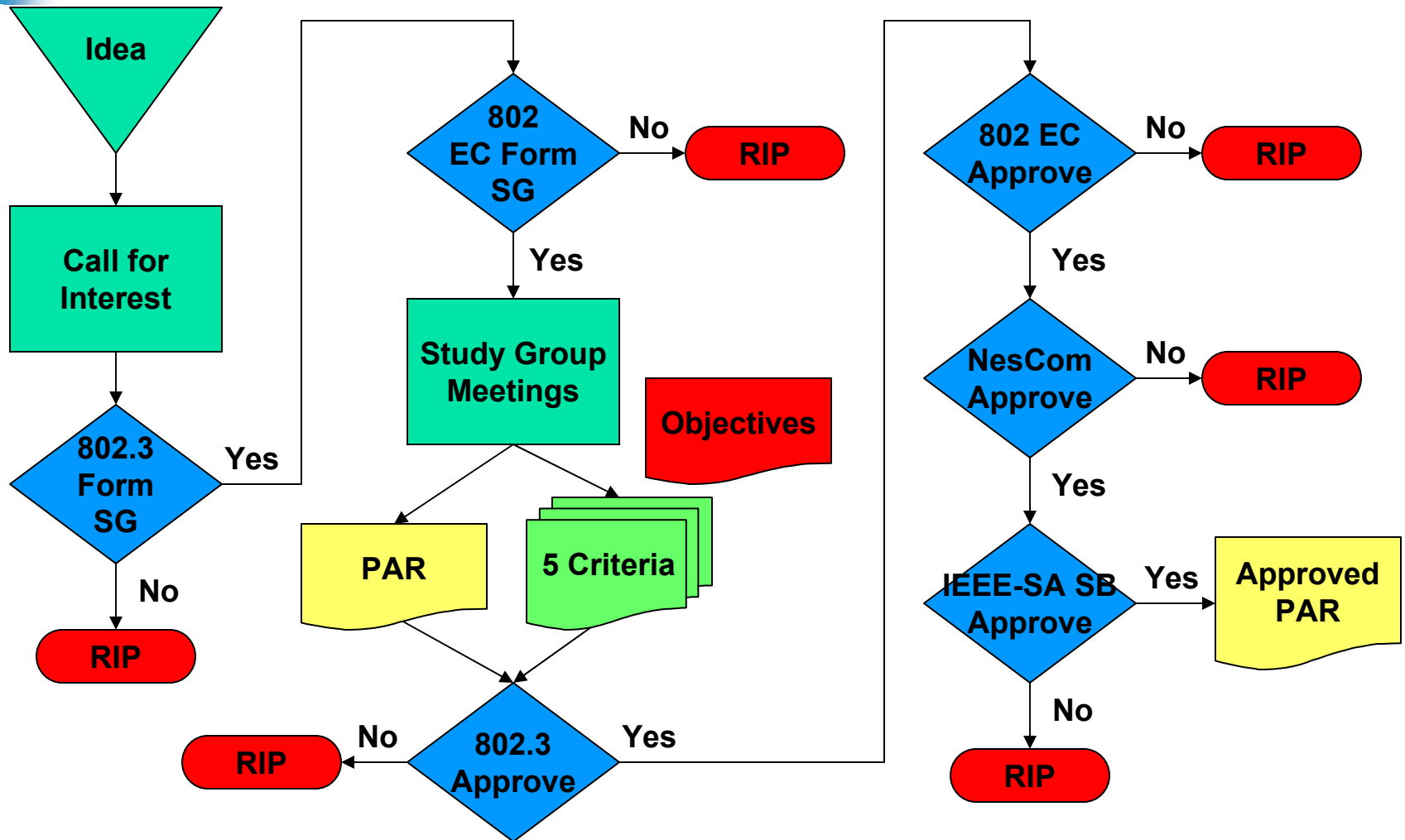Approved by IEEE-SA Standards Board – December 2002

Inappropriate Topics for IEEE WG Meetings

- 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

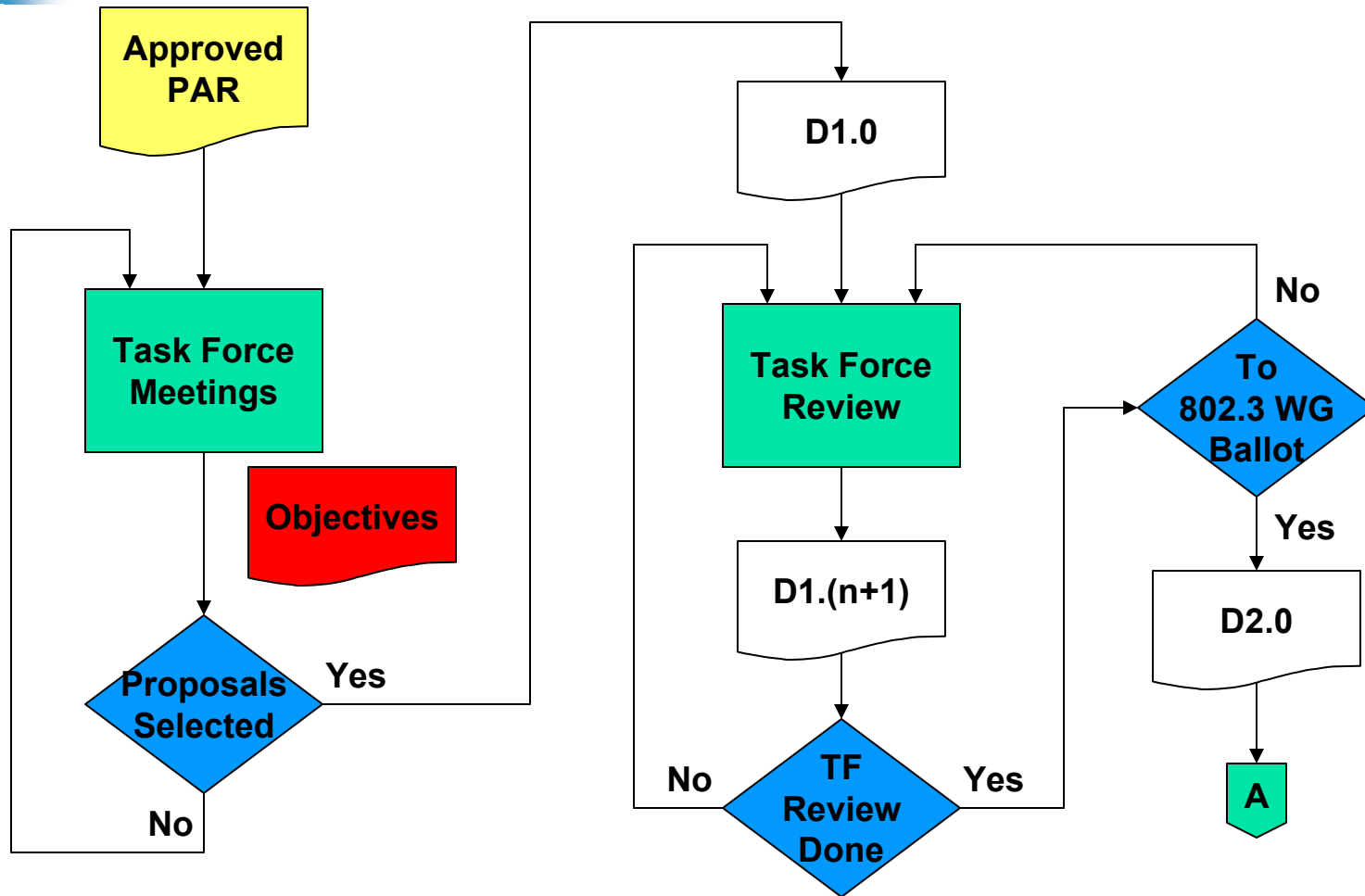- Don't be silent if inappropriate topics are discussed… do formally object.

If you have questions, contact the IEEE Patent Committee Administrator at patcom@ieee.org

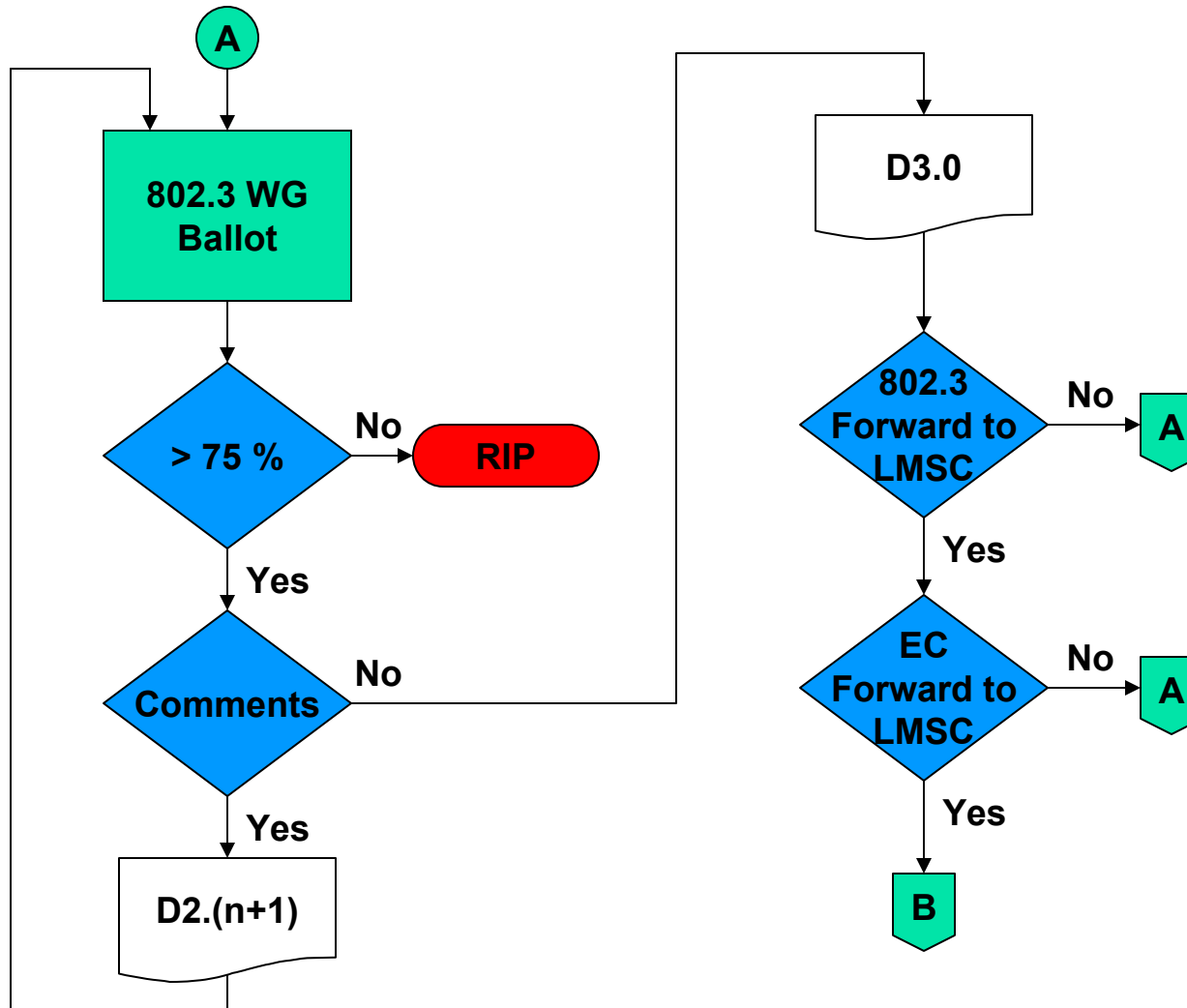Approved by IEEE-SA Standards Board – December 2002
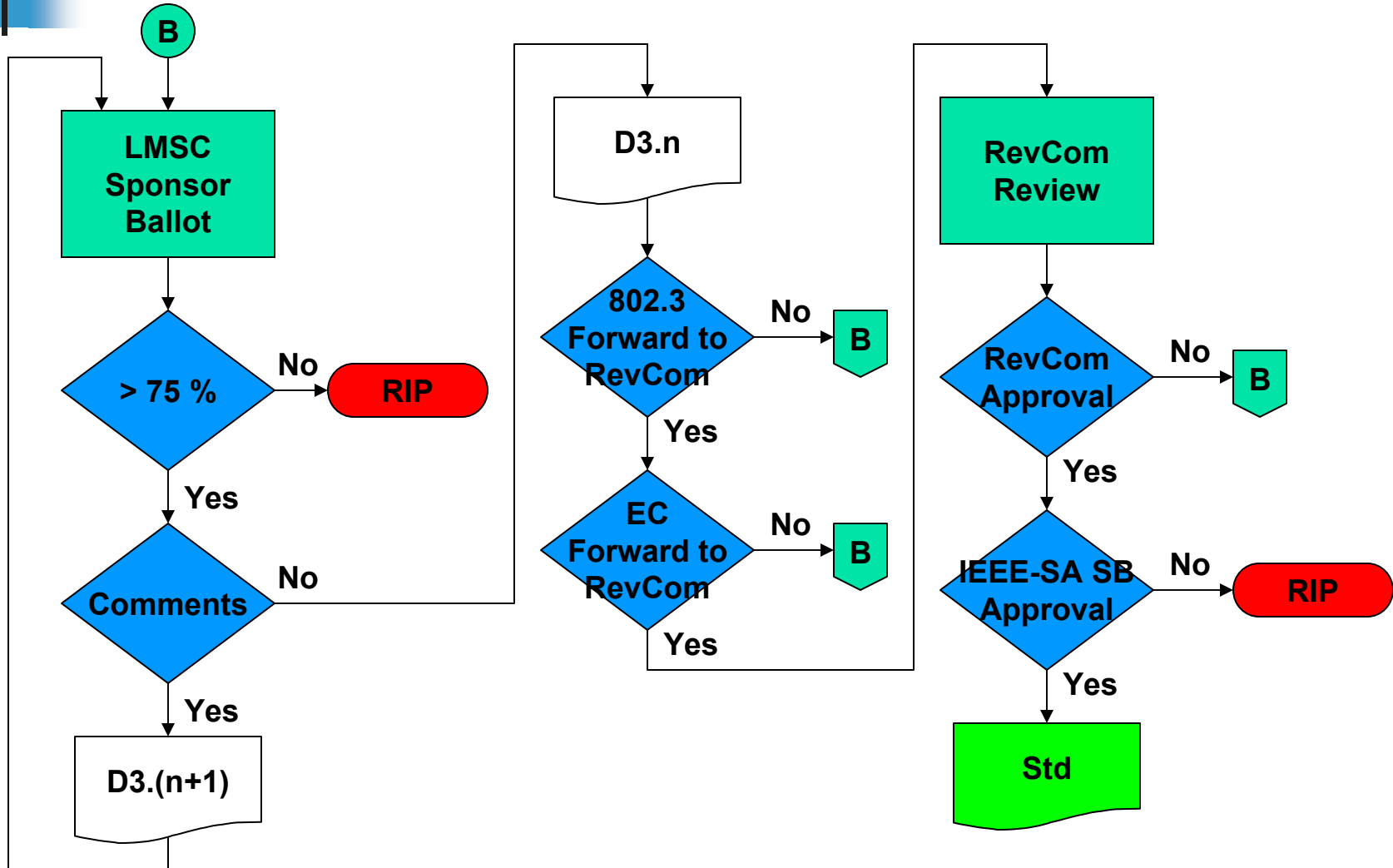
IEEE Standards Process

IEEE Standards Process (cont.)

Approved PAR

Task Force Meetings

Objectives

Proposals Selected
- **Yes**
- **No**

D1.0

Task Force Review

D1.(n+1)

TF Review Done
- **No**
- **Yes**

To 802.3 WG Ballot
- **No**
- **Yes**

D2.0

A

IEEE Standards Process (cont.)

A

802.3 WG Ballot

> 75 % — No → RIP

Yes

Comments — No

Yes

D2.(n+1)

D3.0

802.3 Forward to LMSC — No → A

Yes

EC Forward to LMSC — No → A

Yes

B

IEEE Standards Process (cont.)

IEEE P802.3ap Task Force Documents

- Approved PAR

   http://standards.ieee.org/board/nes/projects/802-3ap.pdf

- 5 Criteria

   http://ieee802.org/3/ap/802_3_ap_5criteria.pdf
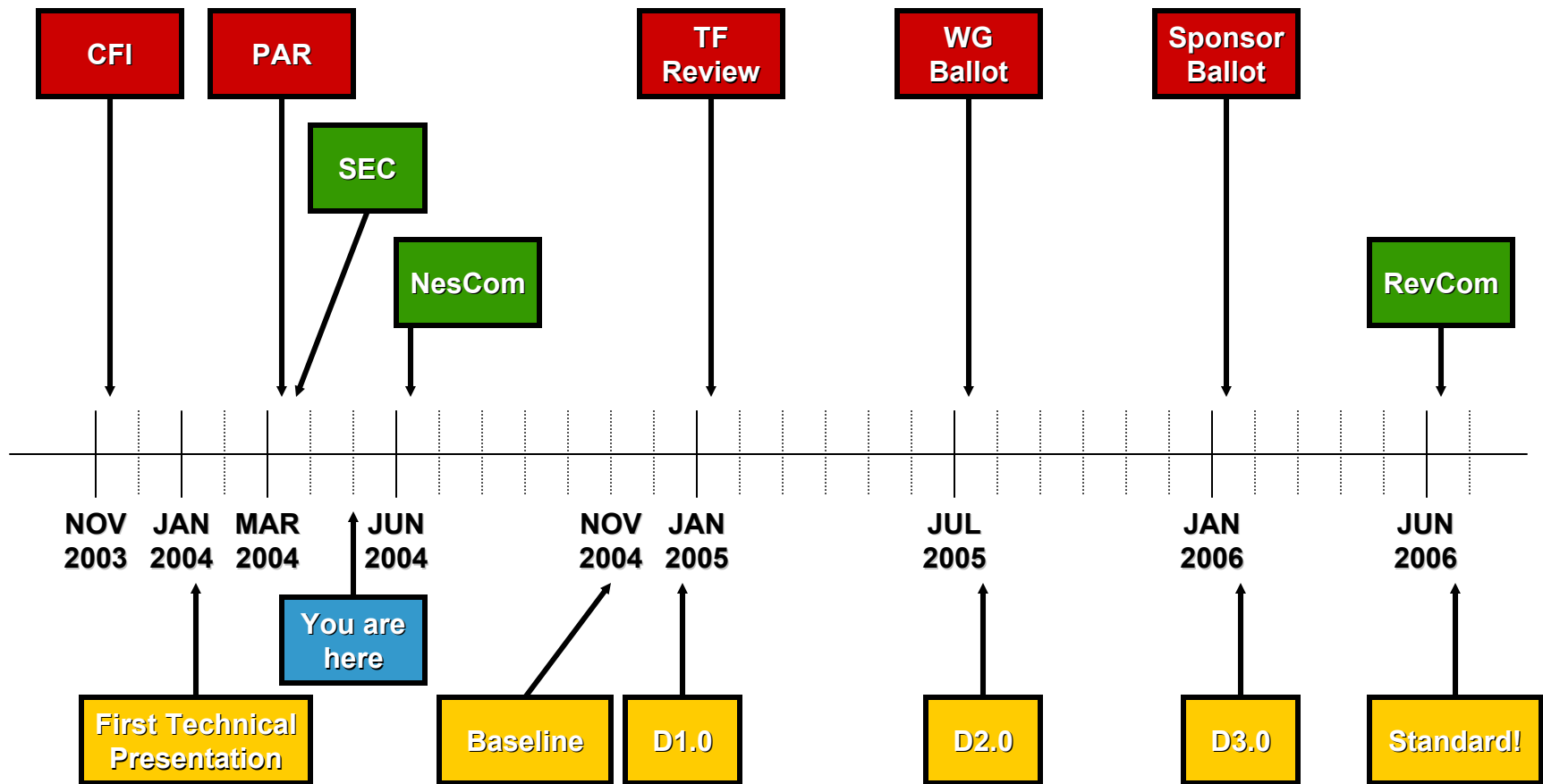
- Objectives

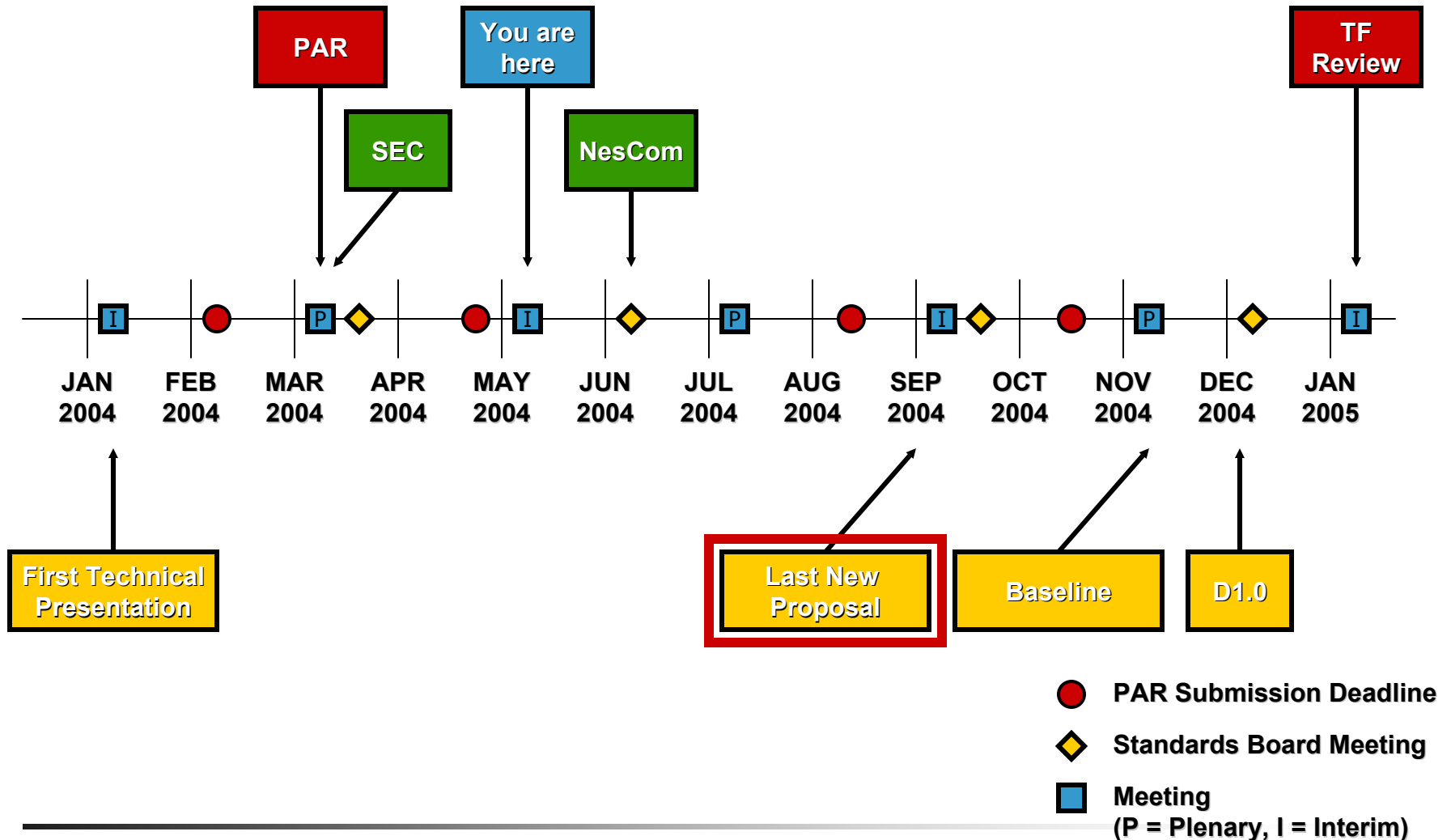   *http://ieee802.org/3/ap/802_3_ap_objectives.pdf*

IEEE P802.3ap Objectives

- **Preserve the 802.3/Ethernet frame format at the MAC Client service interface.**

- **Preserve min. and max. frame size of current 802.3 Std.**

- **Support existing media independent interfaces.**

- **Support operation over a single lane across 2 connectors over copper traces on improved FR-4 for links consistent with lengths up to at least 1m.**
  - **Define a 1 Gb/s PHY**
  - **Define a 10 Gb/s PHY**

- **Consider auto-negotiation.**

- **Support BER of 10^-12 or better.**

- **Meet CISPR/FCC Class A.**

IEEE P802.3ap Timeline

Timeline Detail

PAR

You are here

TF Review

SEC

NesCom

| JAN 2004 | FEB 2004 | MAR 2004 | APR 2004 | MAY 2004 | JUN 2004 | JUL 2004 | AUG 2004 | SEP 2004 | OCT 2004 | NOV 2004 | DEC 2004 | JAN 2005 |

First Technical Presentation

Last New Proposal

Baseline

D1.0

⬤ PAR Submission Deadline

◆ Standards Board Meeting

▪ Meeting
(P = Plenary, I = Interim)

Presentations

8:30 AM		**Agenda and General Information**	**0:30**
9:00 AM	Healey	Questions to Be Answered by the IEEE P802.3ap Task Force	0:20
9:20 AM	van Doorn	Structure and Clauses to Edit for Backplane Ethernet 802.3ap	0:20
9:40 AM	Alping	A Telecom View	0:15
9:55 AM	Lynch	4-Lane 10G Ethernet Backplane Requirement	0:20
10:15 AM		**Break**	**0:15**
10:30 AM	Kundu	ATCA^{TM} Platform Considerations for Backplane Ethernet	0:45
11:15 AM	Goergen	FR4 Definition Update	0:15
11:30 AM	Goergen	Channel Model Ad Hoc Report	0:30
12:00 PM		**Lunch**	**1:10**
1:10 PM	D'Ambrosia	Channel Comparisons to Proposed Channel Model	0:15
1:25 PM	Koenen	Channel Model Requirements for Ethernet Backplane in Blade Servers	0:20
1:45 PM	Seemann	Channel Proposal	0:30
2:15 PM	Ganga (?)	Proposal for Auto-Negotiation	0:45
3:00 PM		**Break**	**0:15**
3:15 PM	van Doorn	Pass-Downs from PICMG 3.1	0:30
3:45 PM	D'Ambrosia	PAM-4 Link Analysis	0:30
4:15 PM	Barazande-Pour	10G Serial Signaling Techniques	0:45
5:00 PM		**Discsussion**	**0:30**
5:30 PM		**Break**	

Future Meetings

- July 2004 Plenary:
    - Week of the 12th
    - Portland, OR
    - Embassy Suites

- September 2004 Interim
    - ???

Adjourn

Thank You!