



IEEE P802.3ap

Backplane Ethernet Task Force

Agenda and General Information

Vancouver, BC
January 24, 2005



Agenda

- Welcome and Introductions
- Approve Agenda
- Approve Meeting Minutes
- Goals for this Meeting
- Task Force Organization
- Reflector and Web
- Ground Rules
- IEEE
 - Structure
 - Bylaws and Rules
 - Call for Patents
 - IEEE Standards Process
- Review Task Force Status
- Presentations
- Motion Madness
- Future Meetings



Goals for this Meeting

- Work toward IEEE P802.3ap Draft 1.0.
- Adopt proposals to fill holes in baseline text.
- Discuss “Big Ticket” Items:
 - Interconnect Specifications
 - 10GBASE-KR
- Resolve comments against Draft 0.7.



Task Force Organization

- Task Force Chair
 - Adam Healey (ahealey@agere.com)
- Task Force Secretary
 - John D'Ambrosia (john.dambrosia@tycoelectronics.com)
- Chief Editor
 - Schelto van Doorn (schelto.vandoorn@intel.com)
- Channel Model Ad Hoc Chair
 - Adam Healey (acting)
- Signaling Ad Hoc Chair
 - Mike Altmann (michael.w.altmann@intel.com)



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 body of the message (do not include “<>”):
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
- Signaling Ad Hoc web page:
http://www.ieee802.org/3/ap/public/signal_adhoc



IEEE P802.3ap Draft Repository

- IEEE P802.3ap Private Area:

- username: **802.3ap**
- password: ●●●●●●●●

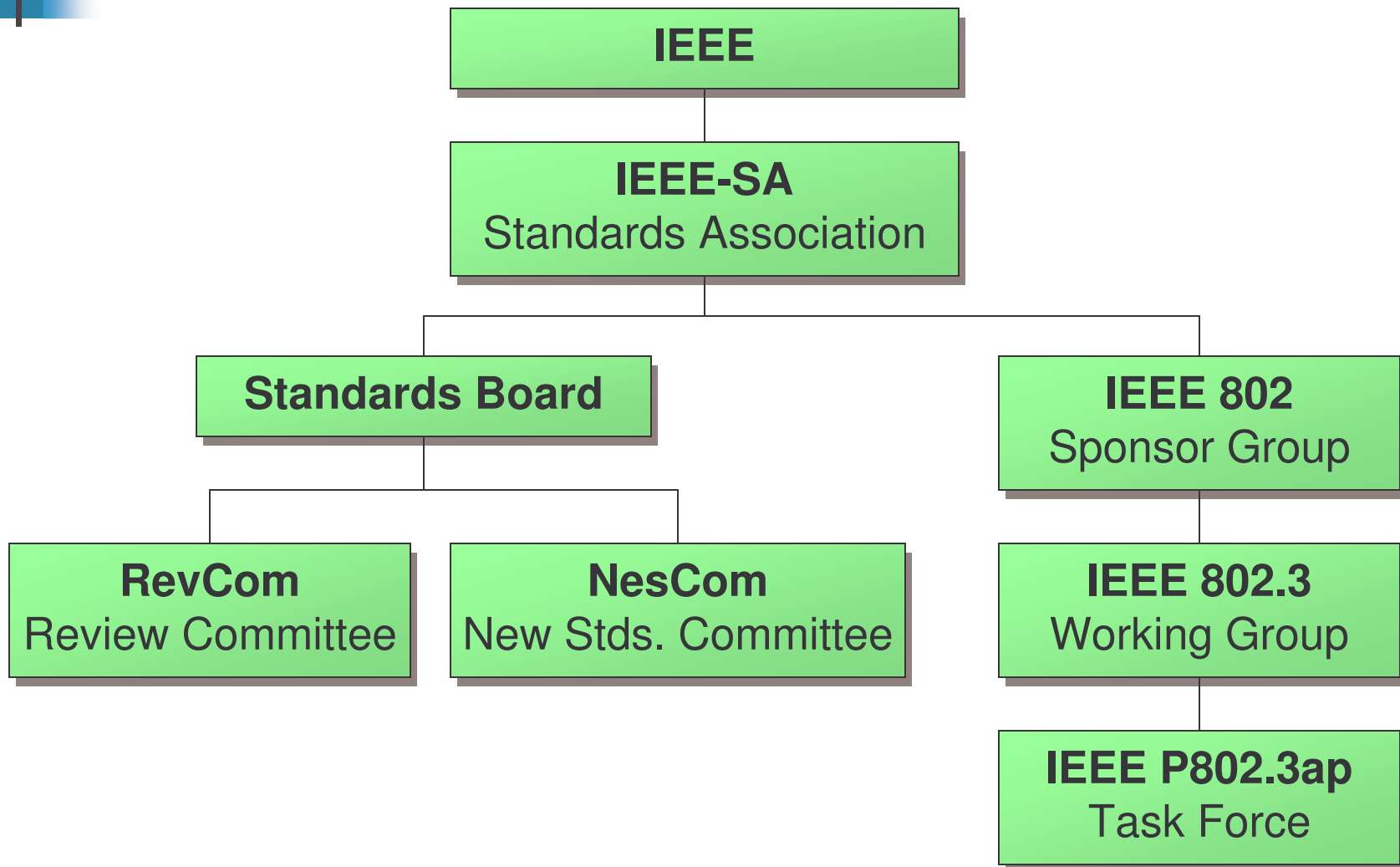


Ground Rules

- 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





Bylaws and Rules

- IEEE Standards Association (IEEE-SA):
<http://standards.ieee.org/sa>
- 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 Patent Policy

- The IEEE's patent policy is consistent with the ANSI patent policy and is described in Clause 6 of the *IEEE-SA Standards Board Bylaws*
- Early disclosure of patents which may be essential for the use of standards under development is encouraged
- Disclosures made of such patents may not be exhaustive of all patents that may be essential for the use of standards under development, and that neither the IEEE, the WG, nor the WG Chairman ensure the accuracy or completeness of any disclosure or whether any disclosure is of a patent that, in fact, may be essential for the use of standards under development.



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 and prior to approval of the standard (or reaffirmation when a patent or patent application 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 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 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 – March 2003 (Revised December 2004)



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-SA Standards Board Patent Committee Administrator at:

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>

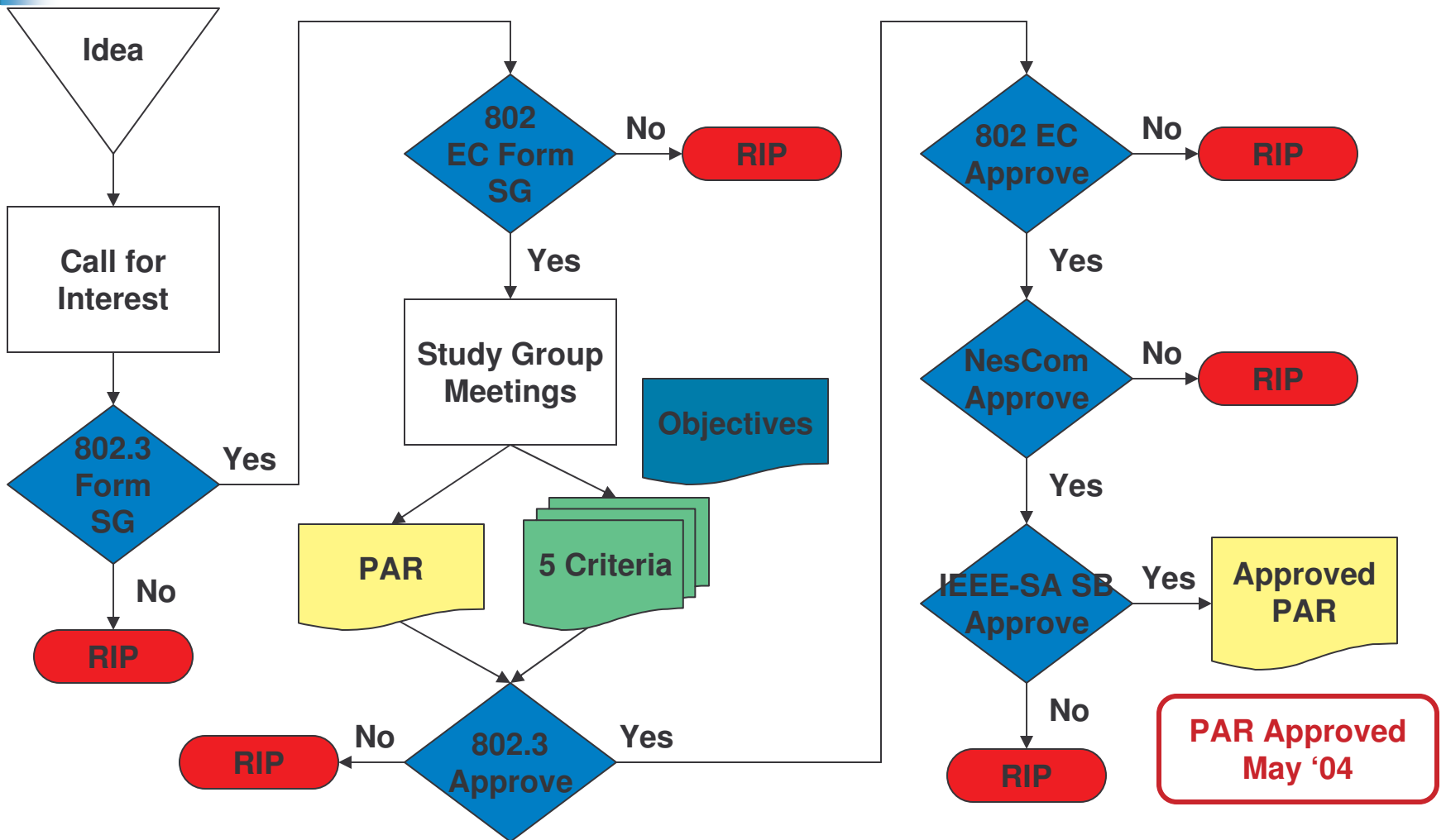
Approved by IEEE-SA Standards Board – March 2003 (Revised December 2004)



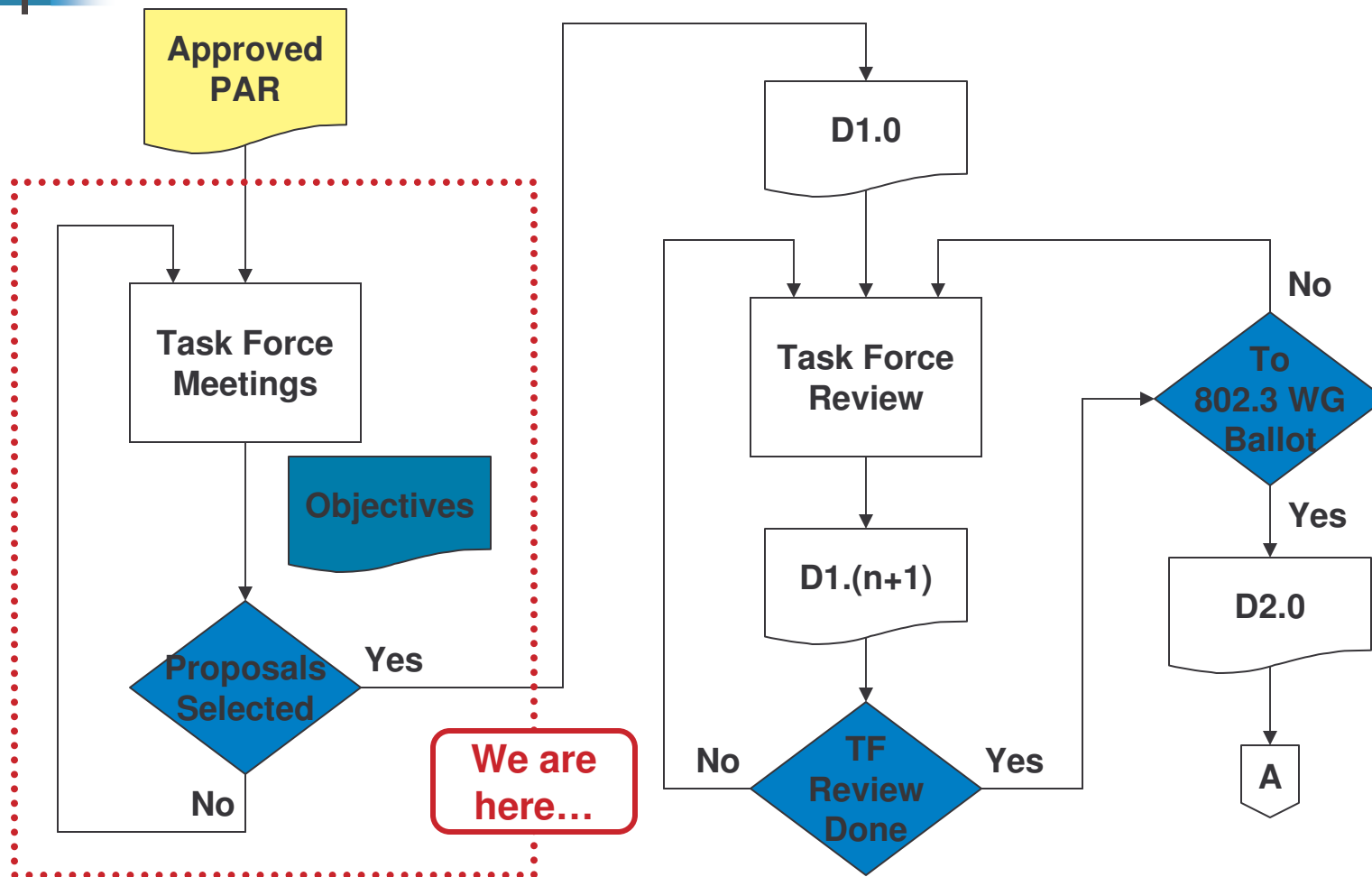
Process Overview

- Adopt proposals for the formation of a baseline
- Baseline is used to create Draft 1.0
- Draft 1.0 is reviewed by the Task Force
 - Comments on the draft are generated and resolved
 - Multiple iterations
 - When Task Force review is completed and the draft is technically complete...
- ...ask the 802.3 working group to authorize a working group ballot (Draft 2.0)...

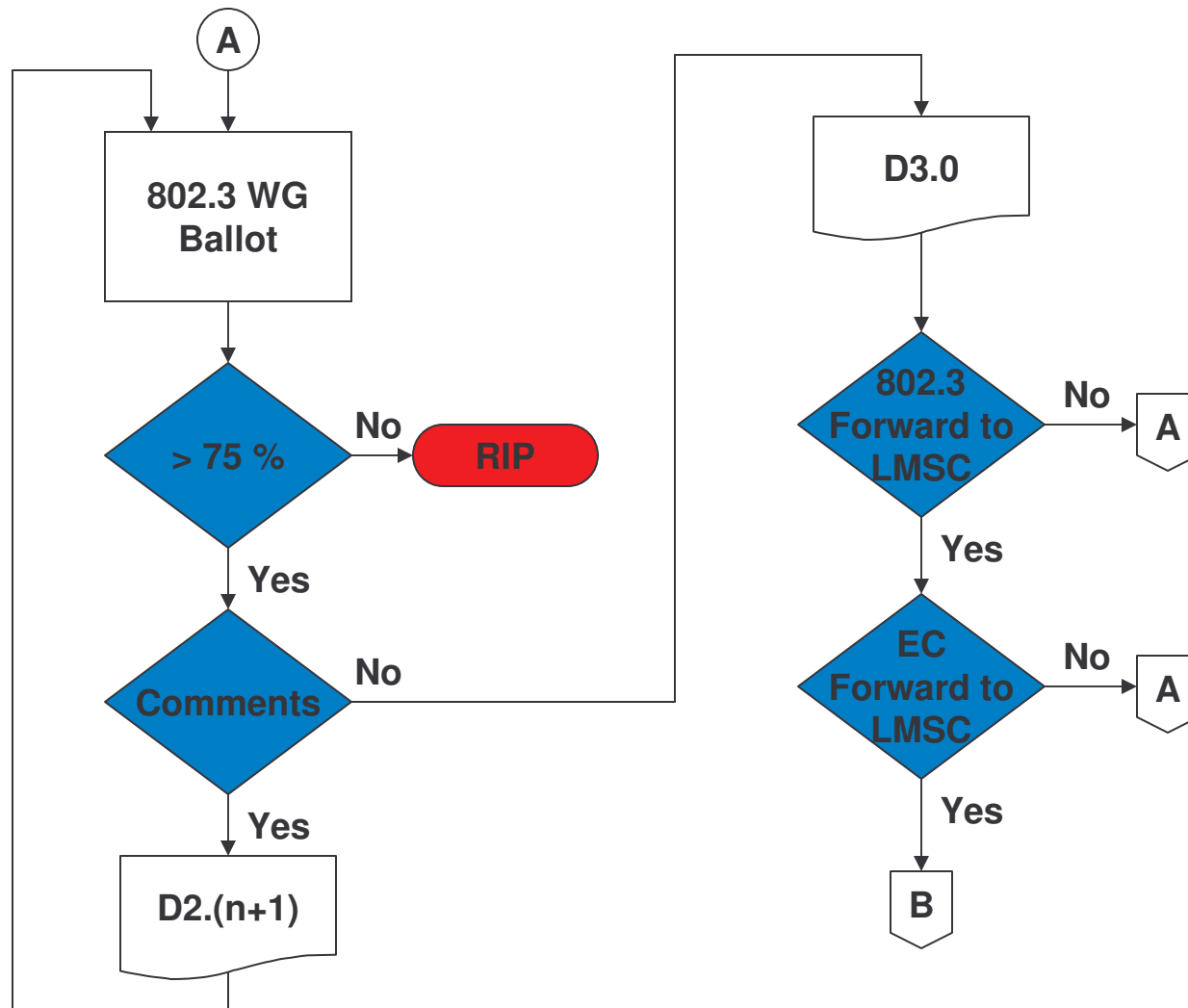
IEEE Standards Process



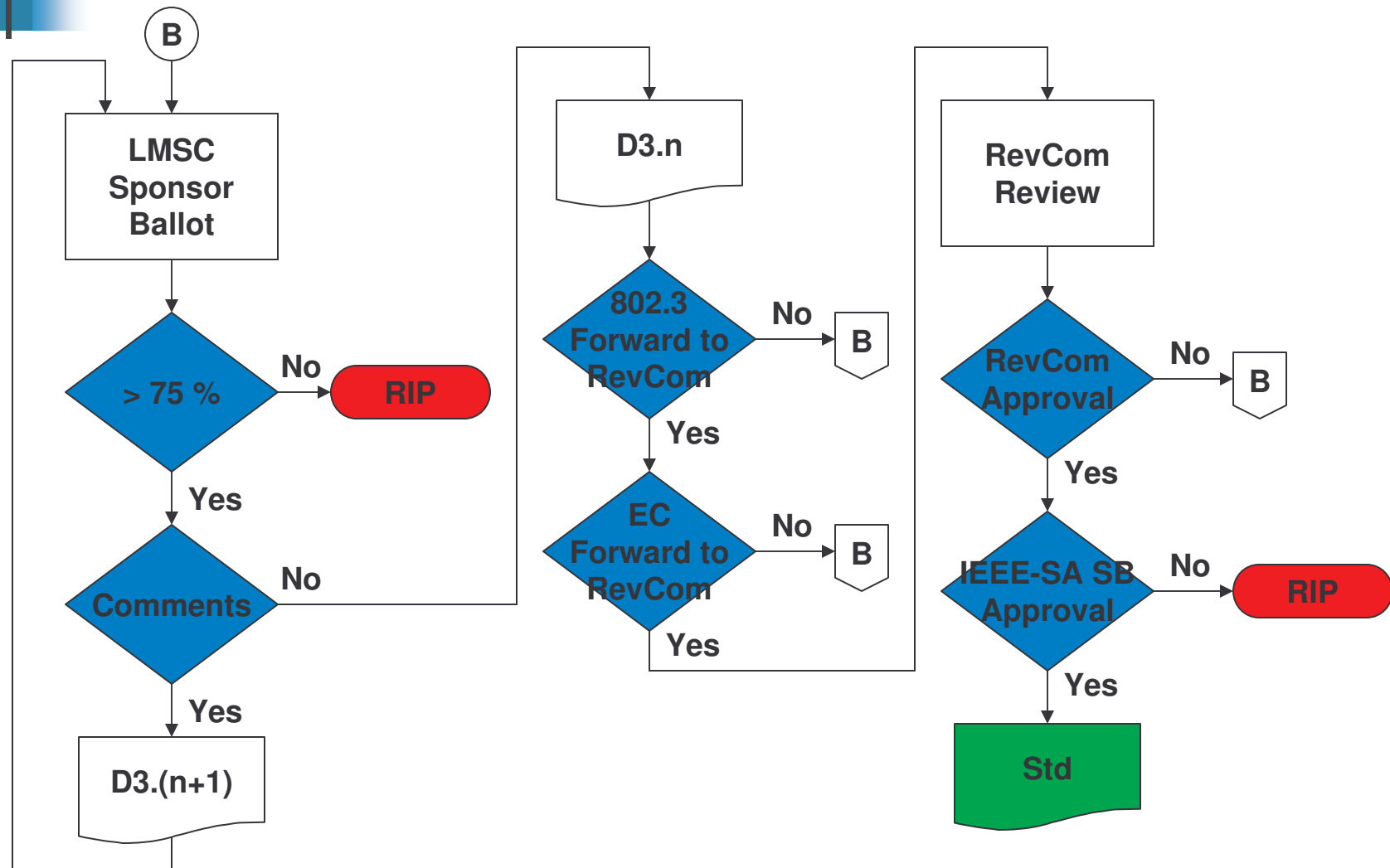
IEEE Standards Process (cont.)



IEEE Standards Process (cont.)



IEEE Standards Process (cont.)





IEEE P802.3ap Task Force Documents

- Approved PAR

<http://standards.ieee.org/board/nas/projects/802-3ap.pdf>

- 5 Criteria

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

- Objectives

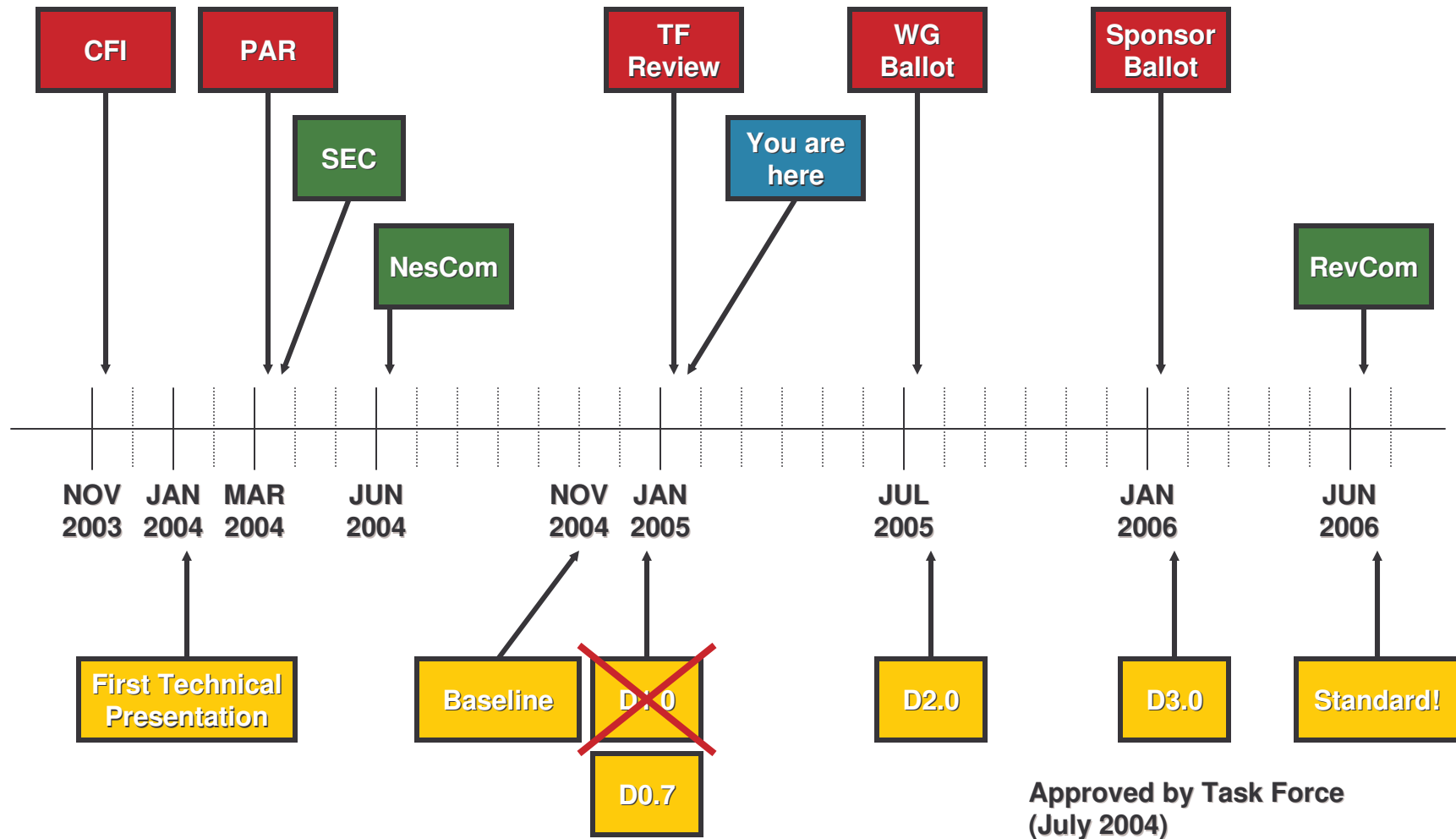
http://ieee802.org/3/ap/802_3_ap_objectives.pdf



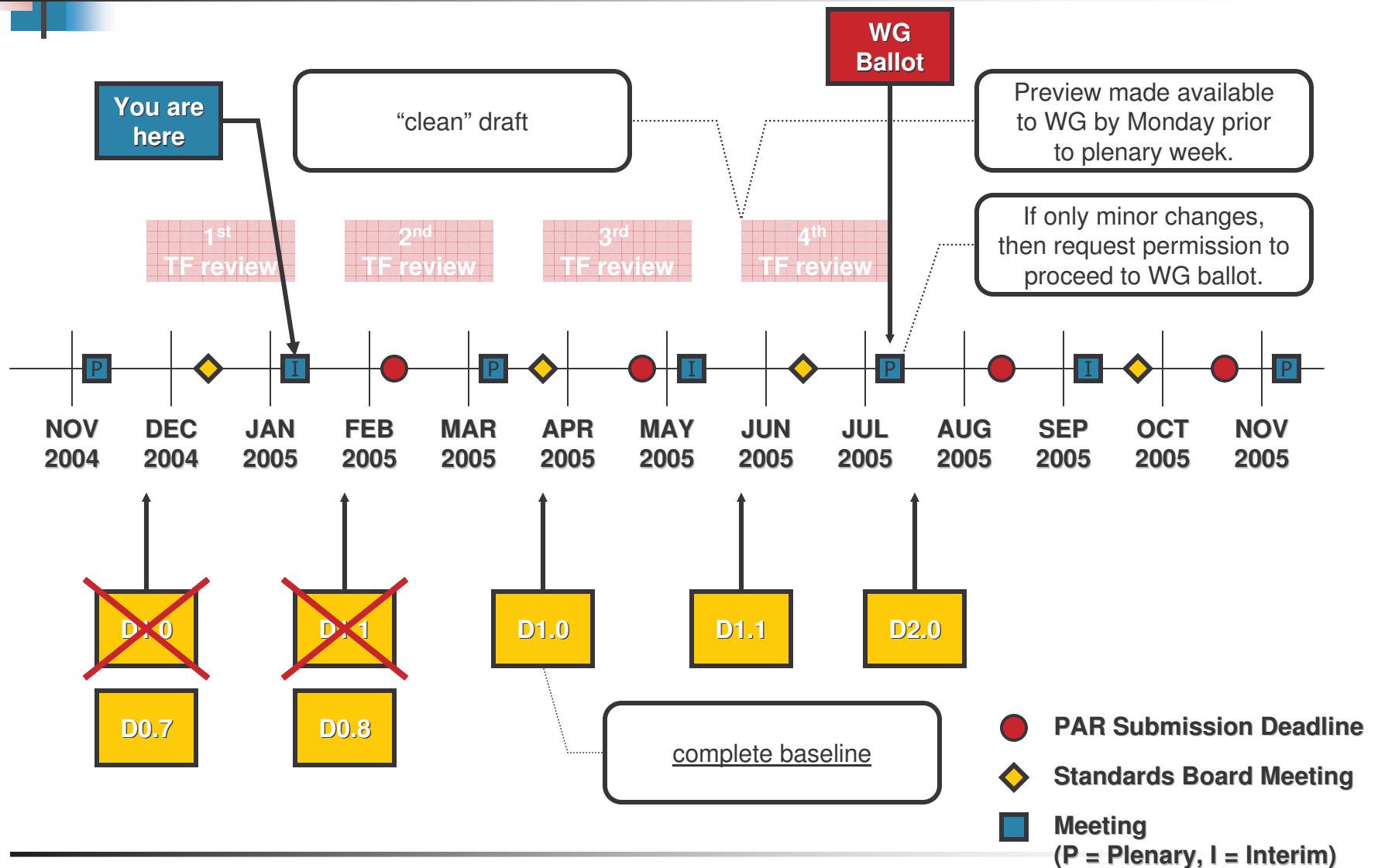
IEEE P802.3ap Objectives

- **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**
- **Define a 4-lane 10Gb/s PHY for operation over the 802.3ap channel model.**
- **Consider auto-negotiation.**
- **Support BER of 10^{-12} or better.**
- **Meet CISPR/FCC Class A.**

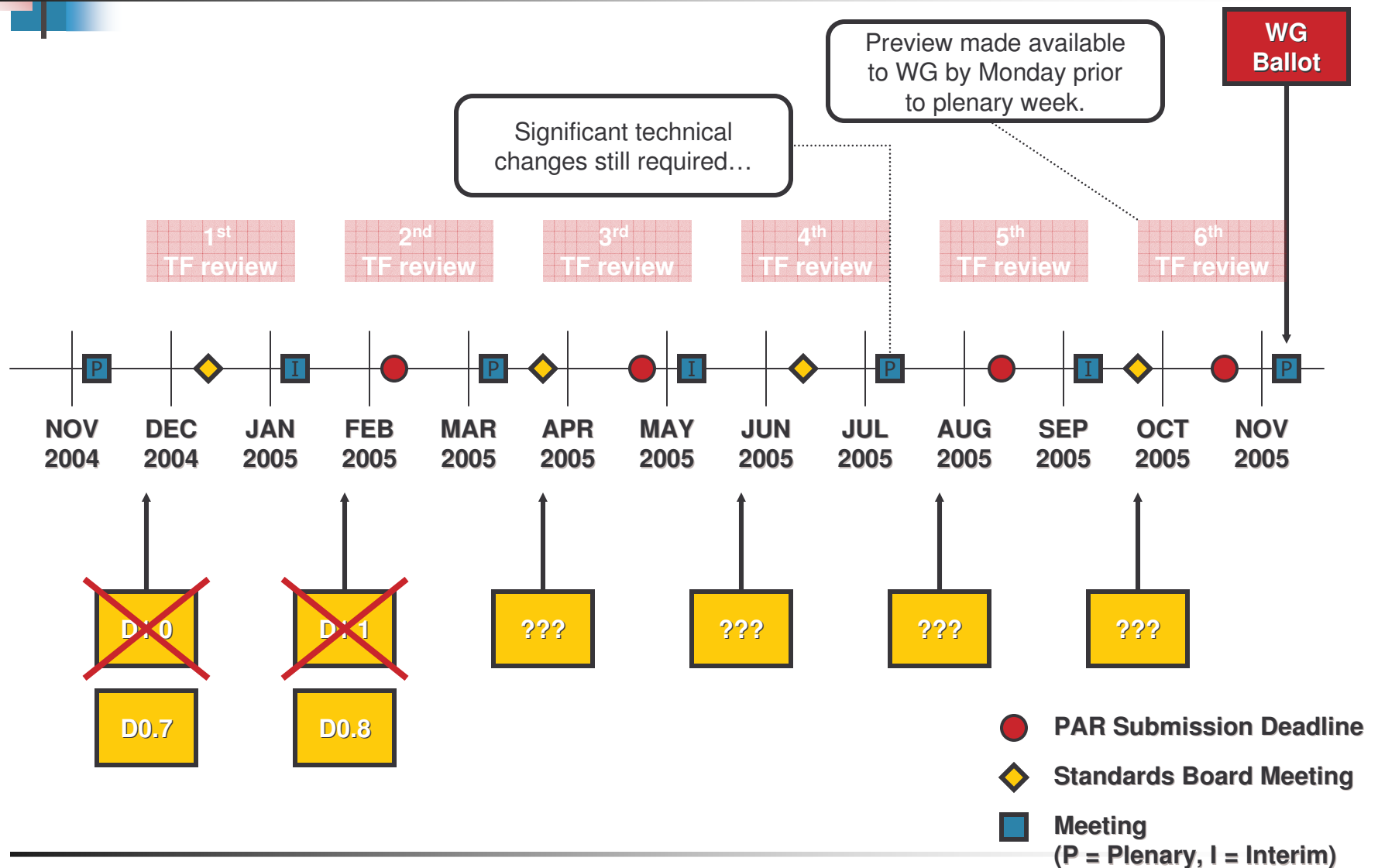
IEEE P802.3ap Timeline



Timeline Detail (Target)



“Plan B” Timeline (4 month slip)





Presentations...



Presentation Agenda (Monday 1/24)

8:30 AM		Agenda and General Information	0:30
9:00 AM	van Doorn	Editor's Report	0:20
9:20 AM	Altmann	Signaling ad hoc report-out	0:40
10:00 AM		Break	0:15
10:15 AM	Sawyer	10.3125Gbps NRZ Simulation Results Using "StatEye" and "Signal to Interference Model" on Cascaded Channel Components	0:40
10:55 AM	Abler	NRZ simulation results over ad-hoc channels	0:30
11:25 AM	Anderson	Simulations of Duobinary and NRZ Over Selected IEEE Channels, Including Jitter and Crosstalk	0:40
12:05 PM		Lunch	1:30
1:35 PM	Brink	10GBASE-KR Start-Up Protocol	0:30
2:05 PM	Gaither	10Gbps signaling proposal using Unified signalling	0:30
2:35 PM	Altmann	Proposal to Use PR-4 Signaling for 10GBASE-KR Links	0:40
3:15 PM		Break	0:15
3:30 PM	Moore	Proposed Receiver Interference Tolerance Specification	0:40
4:10 PM	Healey	Channel Model Ad Hoc Report	0:20
4:30 PM	Peters	HVM ATCA channel performance	0:30
5:00 PM	D'Ambrosia	Status Update: SDD21 and SDD11/SDD22 Model Developement	0:30
5:30 PM		Break	



Presentation Agenda (Tuesday 1/25)

8:30 AM	D'Ambrosia	Need for a Normative Channel Model Approach	0:20
8:50 AM	Lerer	Update on OIF Statistical Eye Activities	0:20
9:10 AM	Barazande-Pour	A close look at Statistical Eye Algorithm and Issues	0:20
9:30 AM	von Herzen	Crosstalk summation on 10G channels	0:15
9:45 AM		Break	0:15
10:00 AM	Gaither	Choose Signaling First	0:30
10:30 AM	Thaler	Transceiver friendly auto-negotiation signaling for 802.3ap	0:30
11:00 AM		Comment Resolution	1:00
12:00 PM		Lunch	1:30
1:30 PM		Comment Resolution	1:30
3:00 PM		Break	0:15
3:15 PM		Comment Resolution	2:15
5:30 PM		Break	



Motion Madness...



Ad Hoc Meeting Schedule

■ TBD



Future Meetings

- March 2005 Plenary
 - Date: March 13-18, 2005
 - Location: Atlanta, GA

- May 2005 Interim
 - Date: TBD
 - Location: TBD



Adjourn

Thank You!