

IEEE P802.3ap Backplane Ethernet Task Force

Agenda and General Information

Vancouver, BC November 15, 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
- Closing Business
- Future Meetings



Goals for this Meeting

- Respond to comments against IEEE P802.3ap Draft 2.0.
- Approve generation and recirculation of Draft 2.1



Task Force Organization

- Task Force Chair
 - Adam Healey (<u>ahealey@agere.com</u>)
- Task Force Secretary
 - John D'Ambrosia (<u>john.dambrosia@tycoelectronics.com</u>)
- Chief Editor
 - Schelto van Doorn (<u>schelto.vandoorn@intel.com</u>)
- Channel Model Ad Hoc Chair
 - Charles Moore (<u>charles moore@agilent.com</u>)

Editorial Team

- Front matter, clauses 1–44, 70, and 71
 - Schelto van Doorn, Intel
- Clause 45
 - Arthur Marris, Cadence
- Clause 69 and Annex 69A
 - Adam Healey, Agere Systems
 - Charles Moore, Agilent
- Clause 72
 - Tom Palkert, Xilinx
- Clause 73 and Annex 73A
 - Pat Thaler, Agilent
- Thanks to all volunteers and contributors...

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> (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



IEEE P802.3ap Draft Repository

IEEE P802.3ap Private Area:

http://ieee802.org/3/ap/private/index.html

Username: •••••

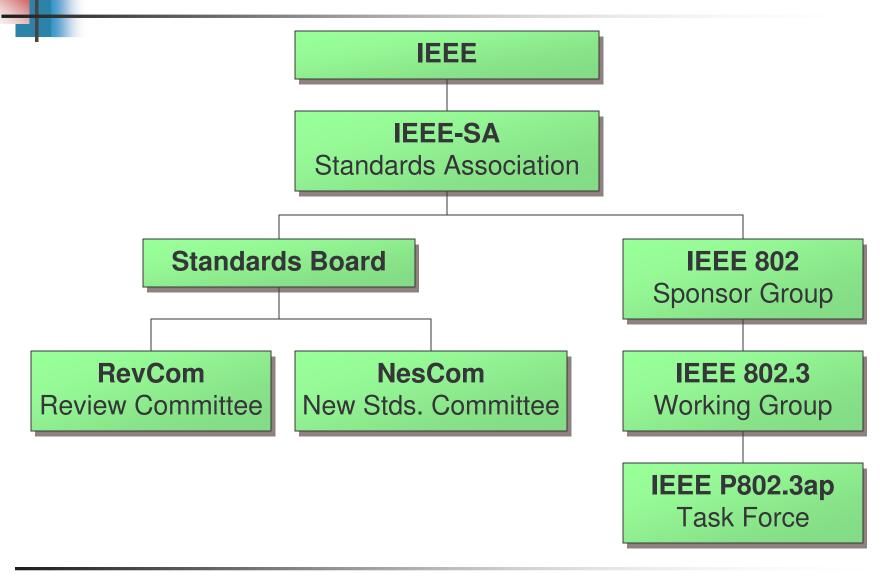
Password: •••••

The username and password are case-sensitive.
Write them down...

Ground Rules

- 802.3 Rules apply...
 - Foundation based upon Robert's Rules of Order
- ...with the following exceptions:
 - 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



References

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



Additional References

IEEE-SA Operations Manual:

http://standards.ieee.org/sa/sa-om-main.html

■ IEEE Standards Association (IEEE-SA) Standards Board Bylaws:

http://standards.ieee.org/guides/bylaws/index.html

Overview and Guide to LMSC:

http://ieee802.org/802%20overview.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 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 March 2005)



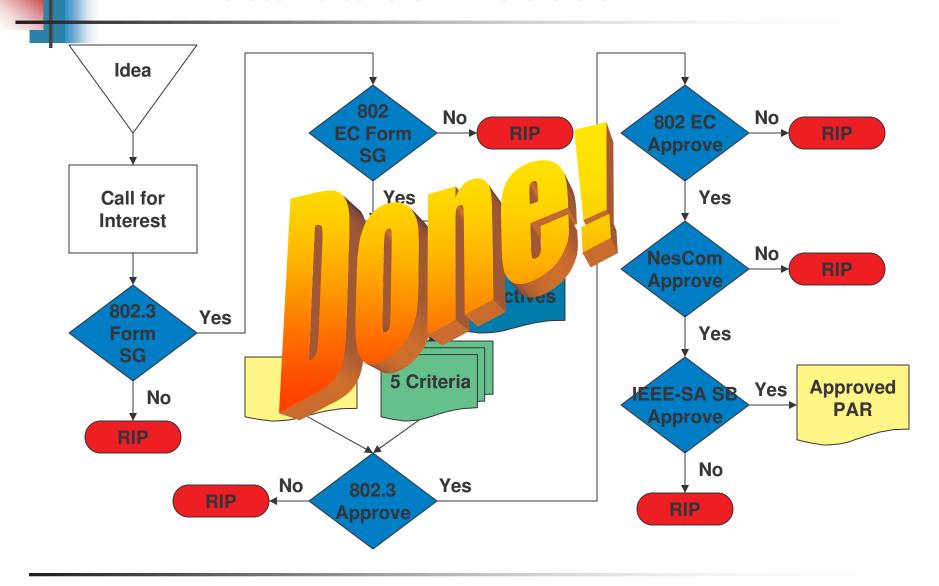
- Don't discuss the validity/essentiality of patents/patent claims
- Don't discuss the cost of specific patent use
- Don't discuss licensing terms or conditions
- Don't discuss product pricing, territorial restrictions, or market share
- Don't discuss ongoing litigation or threatened litigation
- Don't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

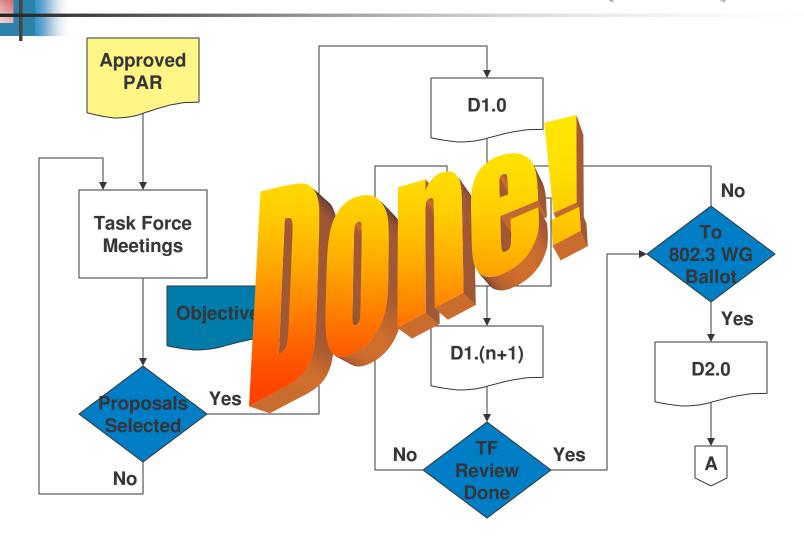
This slide set is available at http://standards.ieee.org/board/pat/pat-slideset.ppt

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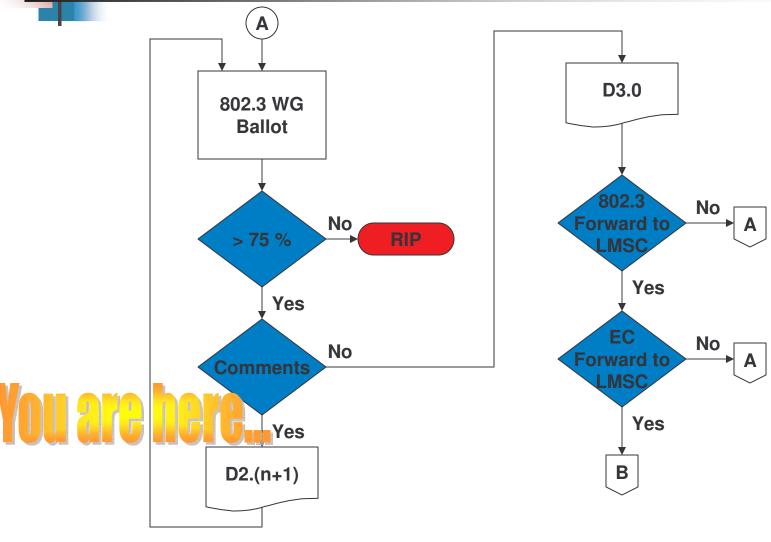
IEEE Standards Process



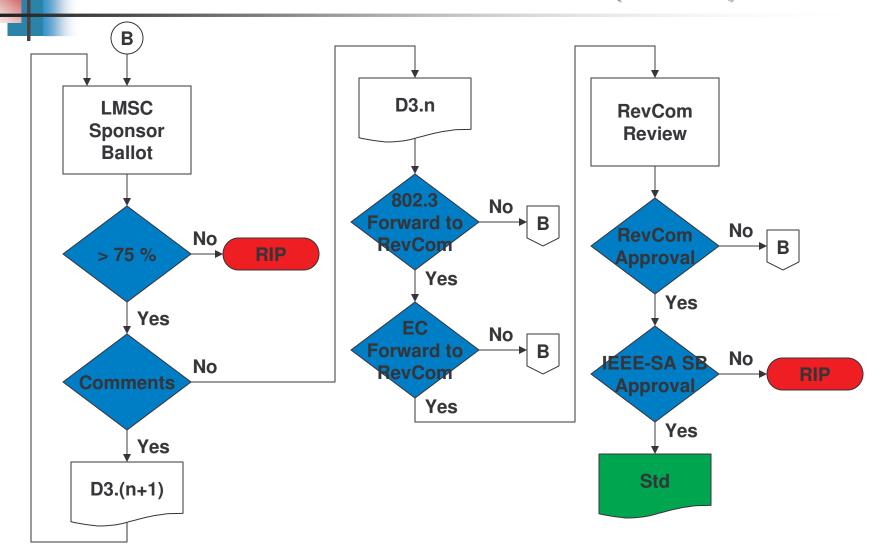
IEEE Standards Process (cont.)



IEEE Standards Process (cont.)



IEEE Standards Process (cont.)





IEEE P802.3ap Task Force Documents

Approved PAR

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

5 Criteria

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

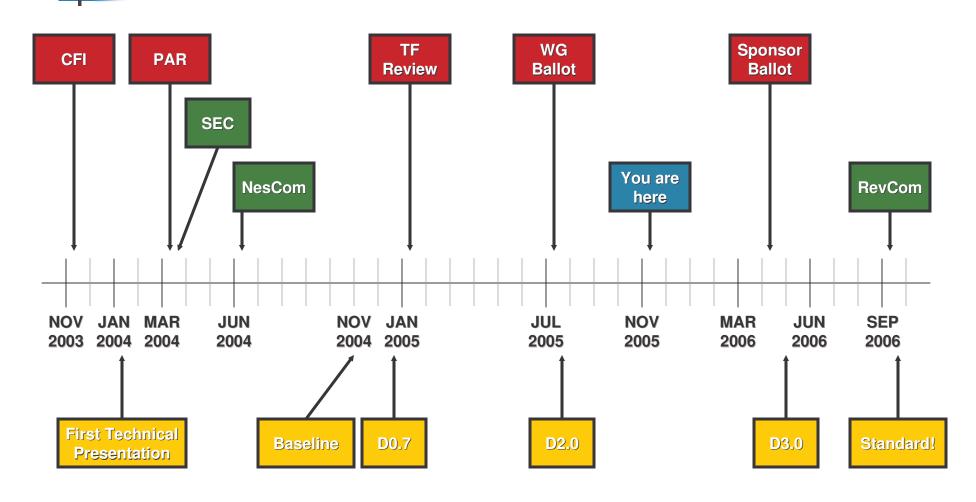
Objectives

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

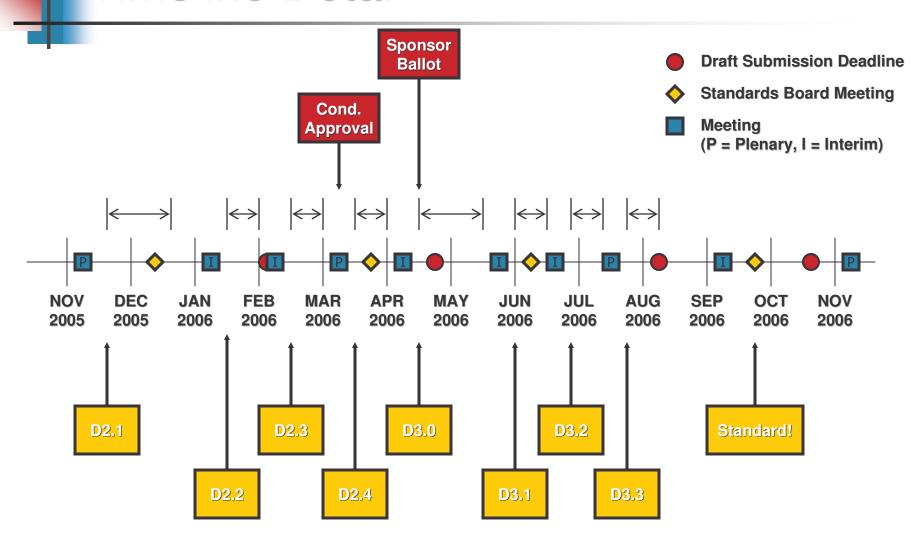
IEEE P802.3ap Objectives

- 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
- 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.

Proposed Timeline



Timeline Detail





Presentations (in no particular order)

- Belogolovy et al., "Update on FEC Proposal for 10GbE Backplane Ethernet"
- Gao et al., "Simulation Methodology and Data to Verify RX Interference Tolerance"
- Liu and Caroselli, "The Effect of DFE Error Propagation"



Closing Business...



Future Meetings

January 2006 Interim

Date: TBD

Location: TBD

February 2006 Interim

Date: February 2 and 3

Location: TBD

March 2006 Plenary

■ Date: March 5-10

Location: Hyatt Regency Denver, Denver, CO



Thank You!