

IEEE 802.3
10GBASE-T Study Group
Agenda and General Information

Vancouver, BC
January 14, 2004

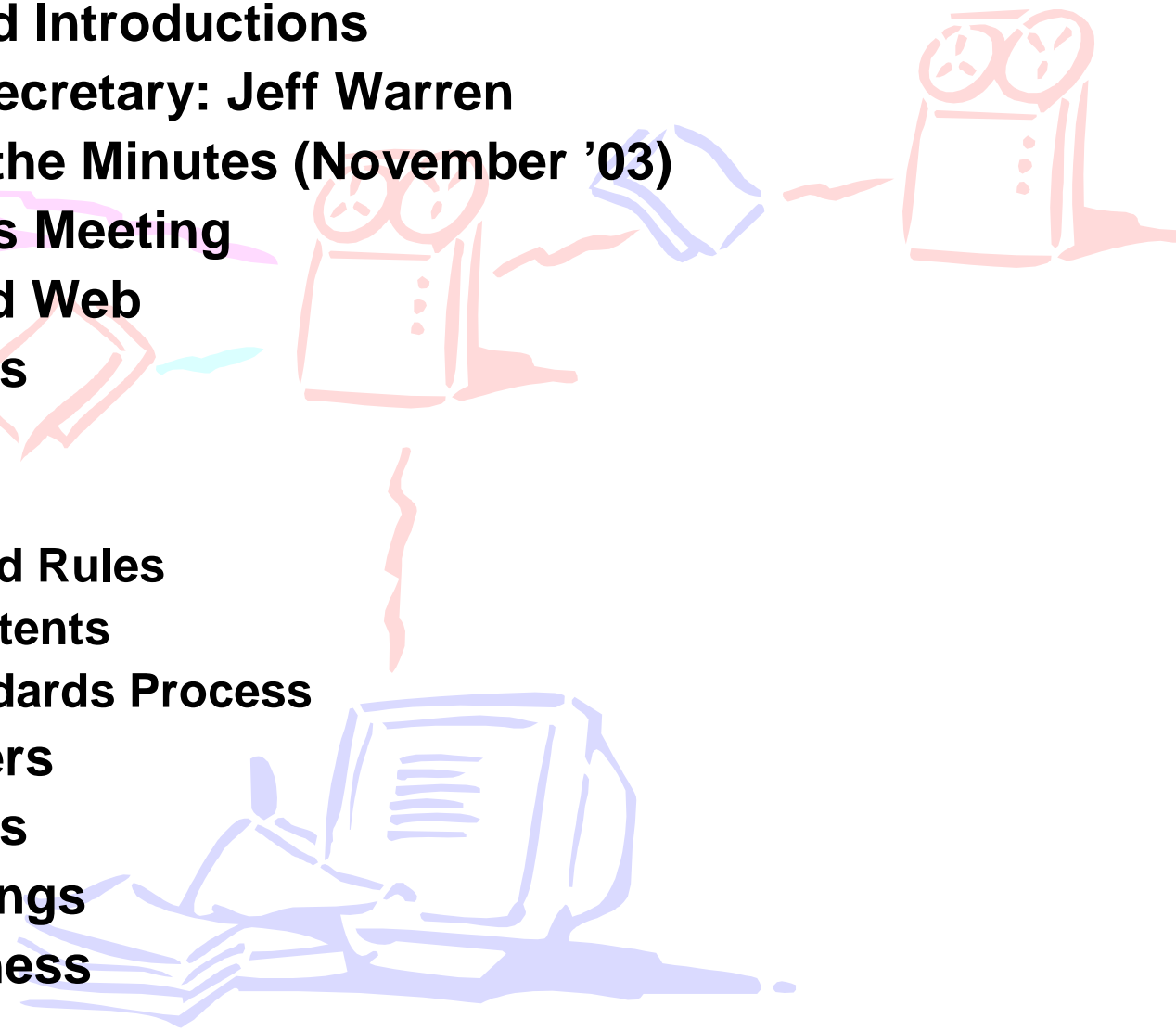
Brad Booth, Chair

Put Cell Phones on Stun!!



Agenda

- Welcome and Introductions
- Recording Secretary: Jeff Warren
- Approval of the Minutes (November '03)
- Goals for this Meeting
- Reflector and Web
- Ground Rules
- IEEE
 - Structure
 - Bylaws and Rules
 - Call for Patents
 - IEEE Standards Process
- Liaison Letters
- Presentations
- Future Meetings
- Motion Madness



Goals

- **Hear presentations concerning:**
 - Technical proposals for developing a baseline
 - Request for a Cat 5e objective
- **Task Force**
 - Develop a draft D1.0
 - Ballot and edit the draft until submission to RevCom to become a standard
 - Editor-in-Chief: **Sanjay Kasturia**

Reflector and Web

- To subscribe to any of the 10GBASE-T reflectors send an email to:

majordomo@ieee.org

with the following in the body of the message:

[subscribe stds-802-3-10GBT <your email address>](#)

[subscribe stds-802-3-10GBT-Modeling <your email address>](#)

[subscribe stds-802-3-10GBT-Cabling <your email address>](#)

- 10GBASE-T Study Group web page URL:

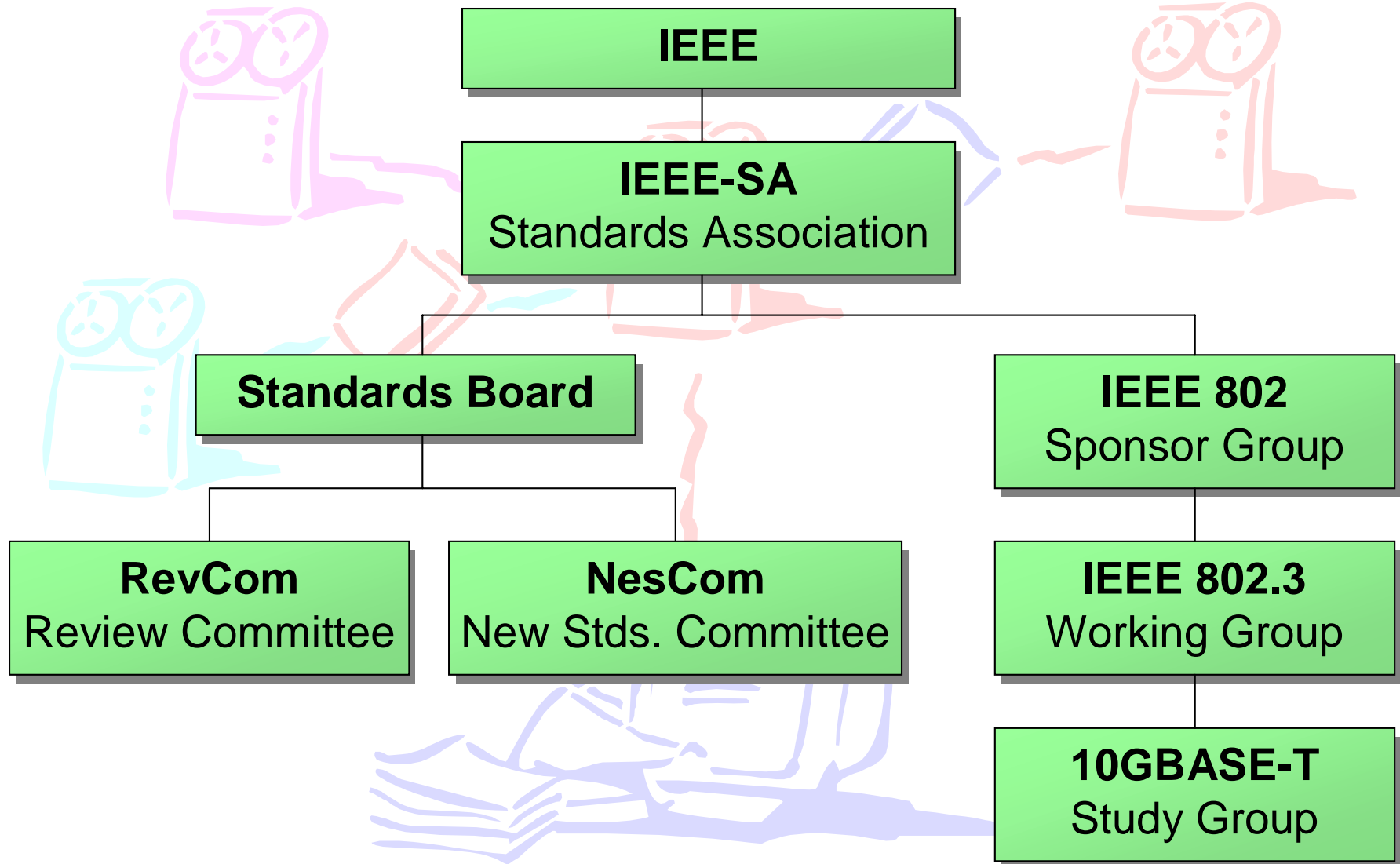
<http://www.ieee802.org/3/10GBT/>



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

- **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 – March 2003

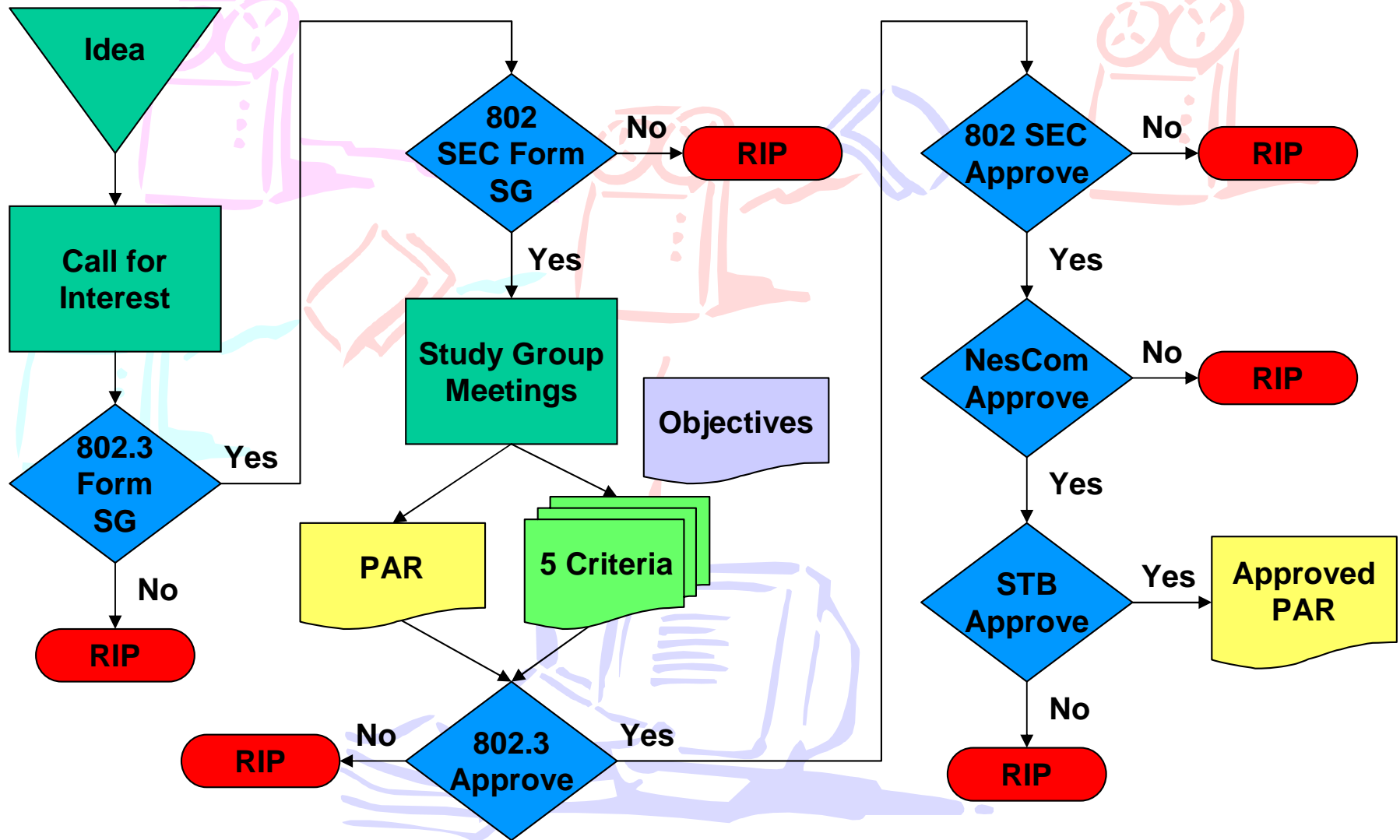
Inappropriate Topics for IEEE WG Meetings

- **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.**

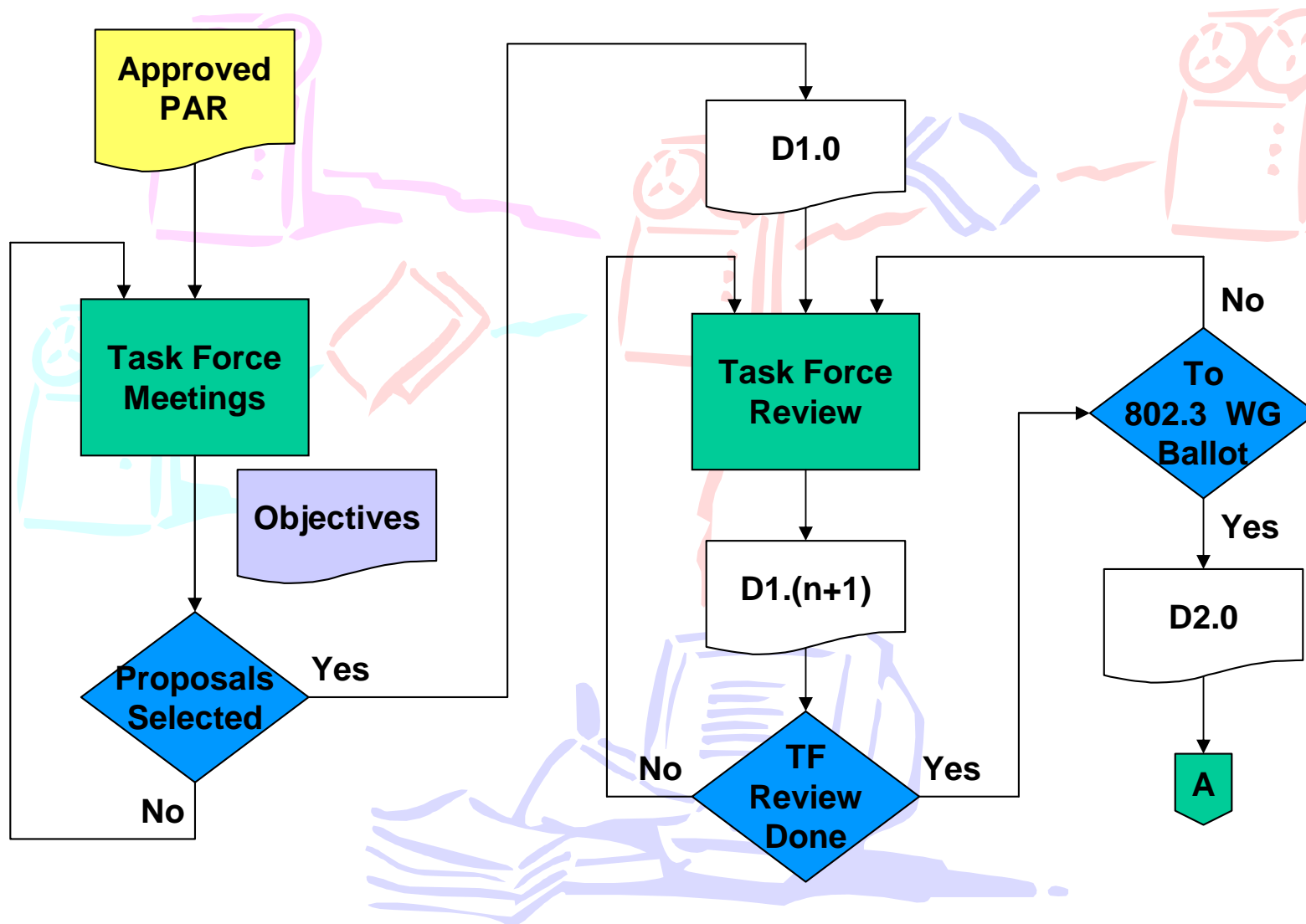
If you have questions, contact the IEEE Patent Committee Administrator at patcom@ieee.org or visit <http://standards.ieee.org/board/pat/index.html>

Approved by IEEE-SA Standards Board – March 2003

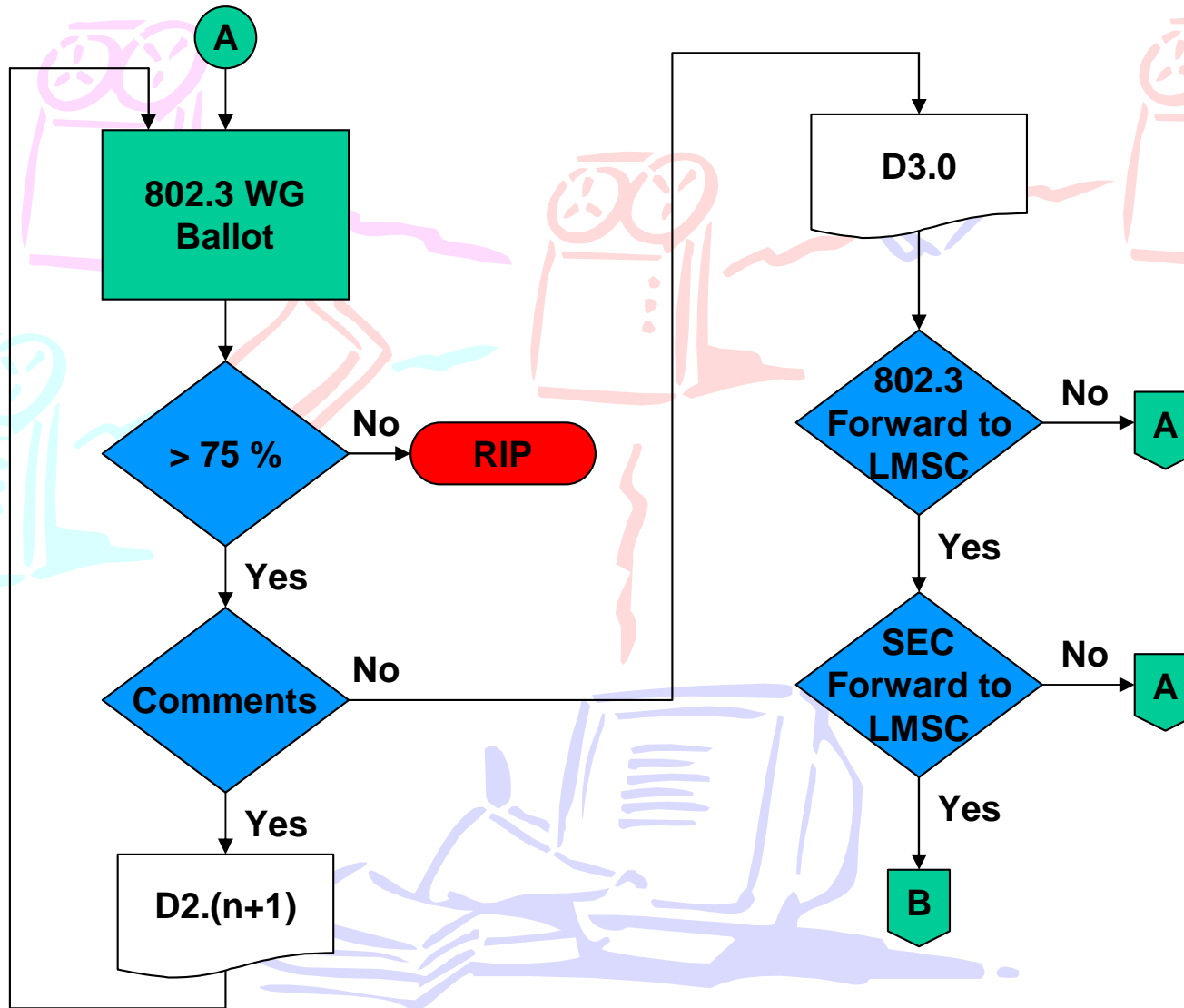
IEEE Standards Process



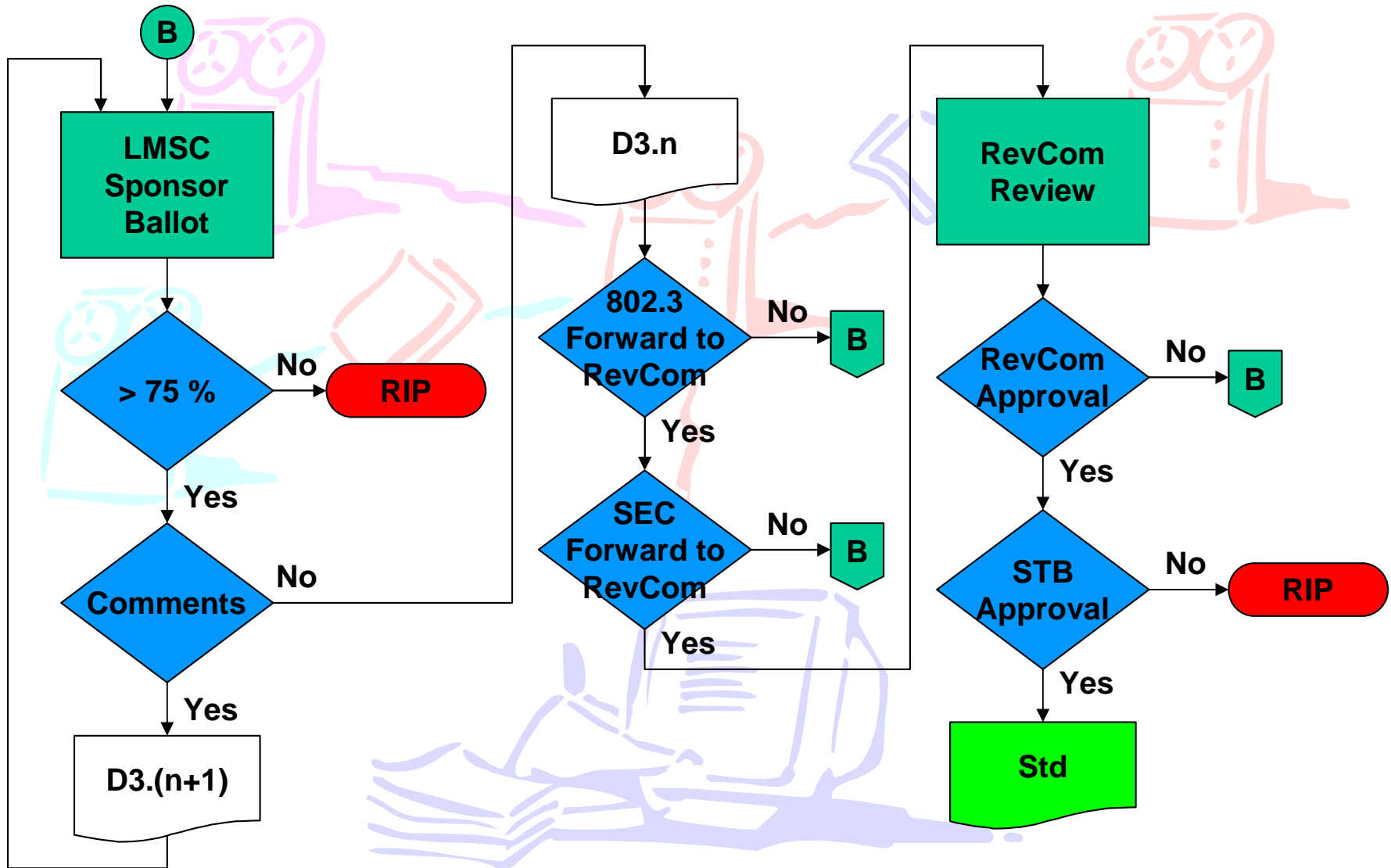
IEEE Standards Process (cont.)



IEEE Standards Process (cont.)



IEEE Standards Process (cont.)



Status

- **Gained approval of WG 802.3 and 802 SEC**
- **Awaiting approval of IEEE NesCom and IEEE Stds. Board**
 - Approval is anticipated to be the end of February
 - At that time SG will become a Task Force
- **Can modify Objectives with the approval of 802.3**
 - 5 Criteria and PAR are considered done; modifications require a lot of effort
- **Building a draft**
 - Consensus (> 75%) required to add proposal to draft
 - Consensus required to make changes

10GBASE-T Documents

- **PAR**
 - As per [par_2_1103.pdf](#)
- **5 Criteria**
 - As per [5Criteria_2_1103.pdf](#)
- **Objectives**
 - As per [objectives_1_0903.pdf](#)

Objectives

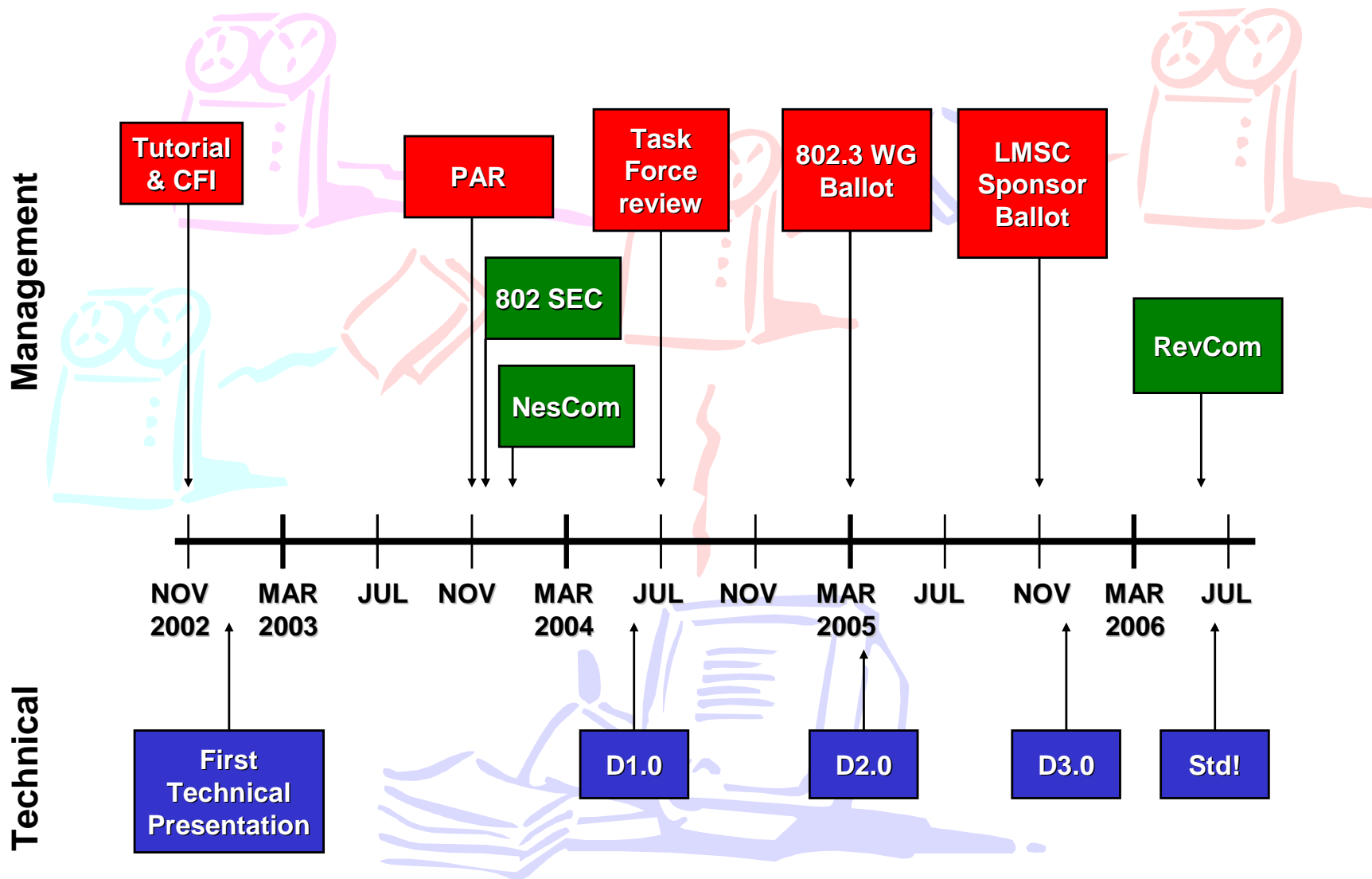
- **Preserve the 802.3/Ethernet frame format at the MAC Client service interface**
- **Preserve min. and max. frame size of current 802.3 Std.**
- **Support full duplex operation only**
- **Support star-wired local area networks using point-to-point links and structured cabling topologies**
- **Support a speed of 10.000 Gb/s at the MAC/PLS service interface**
- **Select copper media from ISO/IEC 11801:2002, with any appropriate augmentation to be developed through work of 802.3 in conjunction with SC25/WG3**
- **Support Clause 28 auto-negotiation**
- **Support coexistence with 802.3af**
- **To not support 802.3ah (EFM) OAM unidirectional operation**
- **Meet CISPR/FCC Class A**

Objectives (cont.)

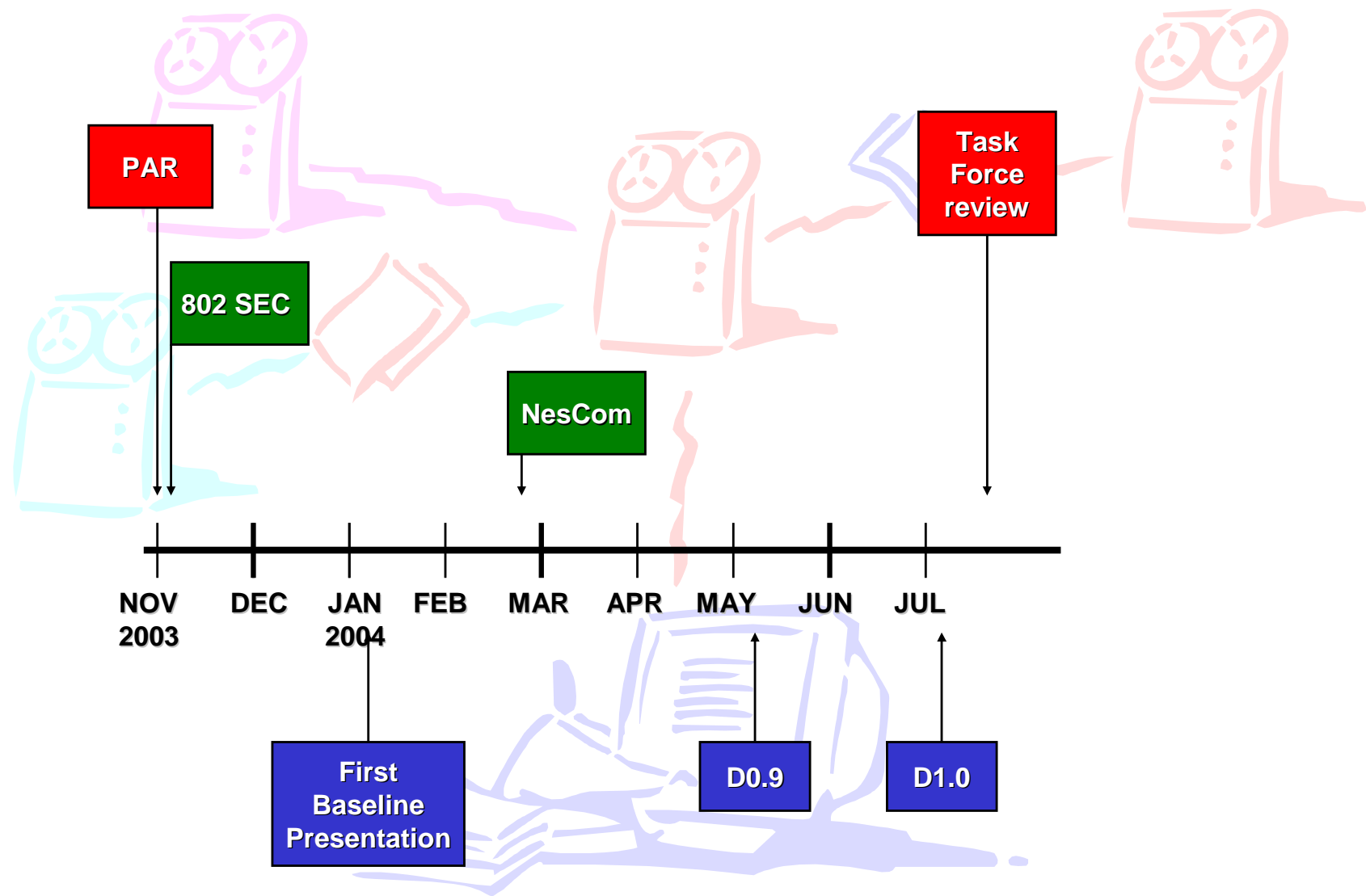
- Support operation over 4-connector structured 4-pair, twisted-pair copper cabling for all supported distances and Classes
- Define a single 10 Gb/s PHY that would support links of:
 - At least 100 m on four-pair Class F balanced copper cabling
 - At least 55 m to 100 m on four-pair Class E balanced copper cabling
- Support a BER of 10^{-12} on all supported distances and Classes



10GBASE-T Timeline



Next 6 Months



Liaison Letter & Ad Hoc Reports

- **No Liaison Letters**
 - Informal communication?
- **No Ad Hoc Reports**



Presentations

Kasturia, Sanjay

802.3an 10GBASE-T Document Structure

Lynskey, Eric

Auto-negotiation for 10GBASE-T

Dinh, Thuyen

Updates on Magnetics for 10GBase-T

Bennett, Mike

10GBASE-T: The Need to Support Cat 5E

Powell, Scott

Shedding Some Light on Coding Gain

Shalvi, Ofir

Channel Code Considerations for 10GBASE-T Signaling

Di Minico, Chris

10GBASE-T Link Segment Specifications and ANEXT Considerations

Future Meetings

- **March 2004 Plenary:**
 - Week of the 15th
 - WDW, FL
 - Hilton Hotel @ Walt Disney World
- **May 2004 Interim:**
 - Need a host!
 - Need one for Sept. 2004 too



Motion Madness



Adjourn

