



# Welcome to IEEE 802

## Newcomer Orientation

[www.ieee802.org](http://www.ieee802.org)

IEEE 802 Plenary Session

Last updated, October 6, 2011



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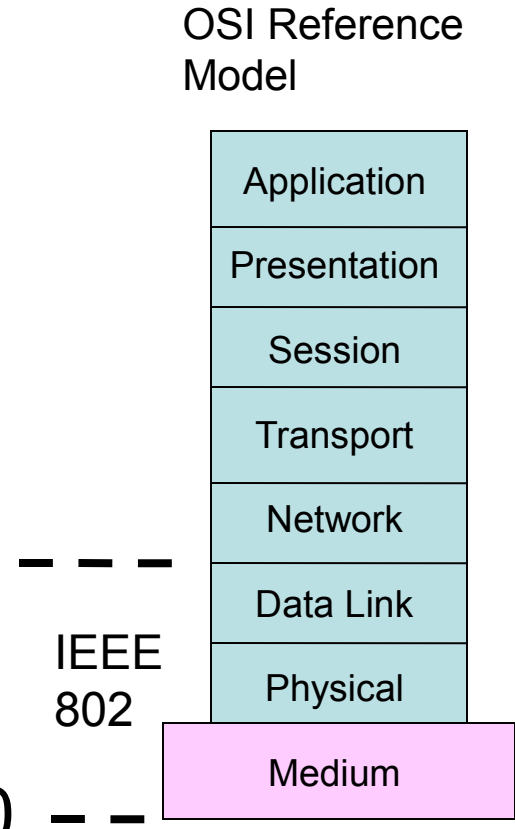


# Introduction to IEEE 802



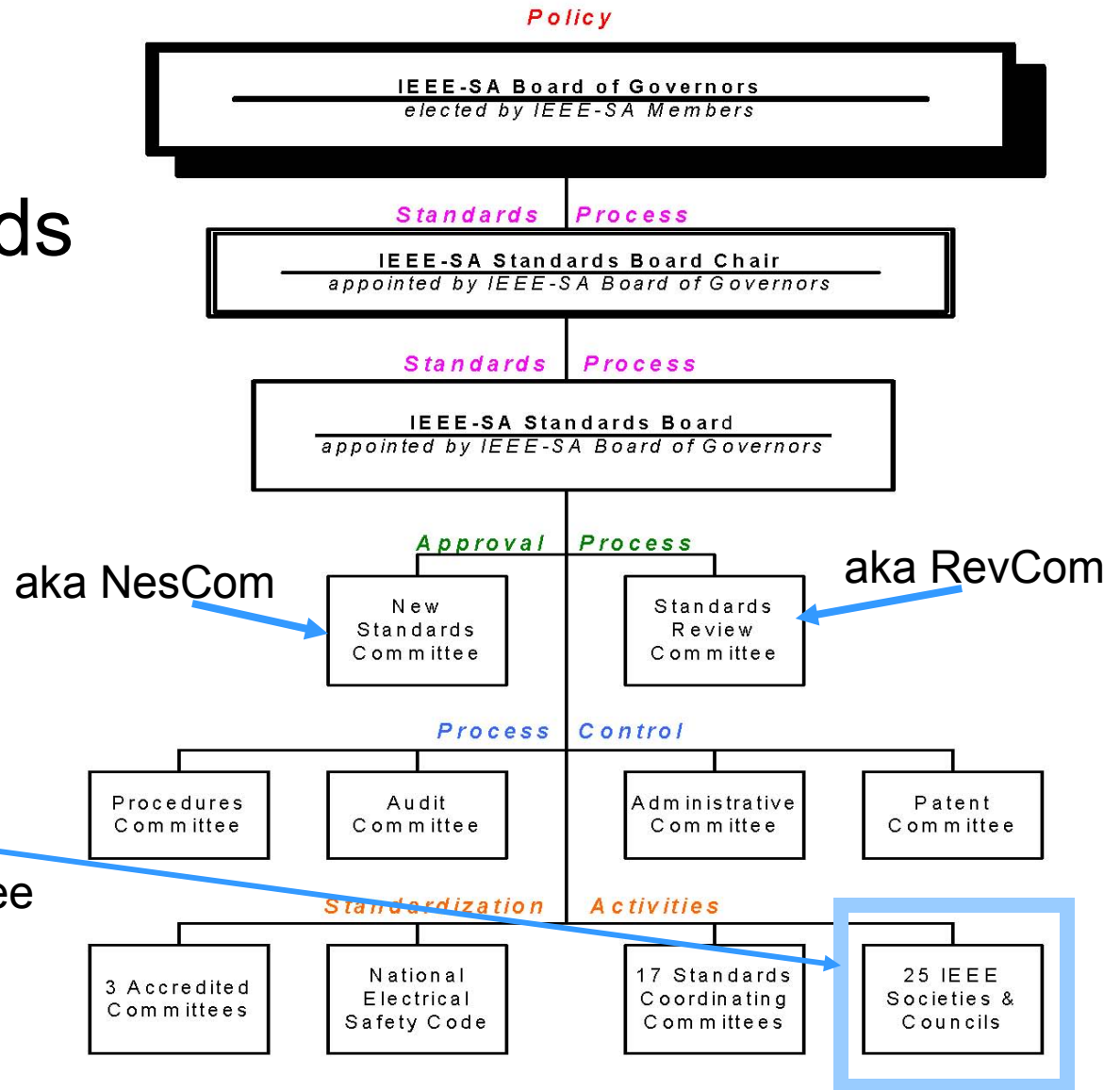
# Who we are

- IEEE Project 802 LAN/MAN Standards Committee (aka IEEE 802 or LMSC)
  - Develop LAN and MAN standards
  - Mainly for link and physical layers of the network stack
  - In operation since March 1980





# IEEE Standards Organization



IEEE 802 is here:  
a standards committee  
formed by the  
Computer Society

# Some terms

- PAR – project authorization request – the document that authorizes work on a project.
- WG - Working group – responsible for developing standards in an area
- TAG – Technical Advisory Group – experts on a topic area that crosses working groups – may develop a recommended practice.
- Task group or task force – a part of a working group which focuses on a particular project.



# All those dots....decoder ring

802.1 Bridging and Architecture –  
generally the top of the link layer

802.3 Ethernet

802.11 Wireless LAN (WLAN)

802.15 – Wireless Personal Area  
Network (WPAN)

802.16 Broadband Wireless  
Access (BWA)

802.18 Radio Regulatory TAG

802.19 Coexistence

802.21 Media Independent  
Handover

802.22 Wireless Regional Area  
Networks (WRAN)



# IEEE 802 Organization

## EXECUTIVE COMMITTEE (EC)

**CHAIR**  
Paul Nikolich

### Working Group/TAG Chairs

**802.1**  
**BRIDGING/ARCH**  
Tony Jeffree

**802.3**  
**Ethernet**  
David Law

**802.11**  
**WLAN**  
Bruce Kraemer

**802.15**  
**WPAN**  
Bob Heile

**802.16**  
**BWA**  
Roger Marks

**802.18 TAG**  
**Radio Regulatory**  
Mike Lynch

**802.19**  
**Coexistence**  
Steve Shellhammer

**802.21**  
**Media indep.**  
**handover**  
Subir Das

**802.22**  
**WRAN**  
Apurva Mody

### Hibernating WG Chairs (non voting)

**802.17**  
**Resilent Packet**  
**Ring**  
John Lemon

**802.20**  
**MBWA**  
Mark Klerer

### Appointed Officers

**1st VICE CHAIR**  
Pat Thaler

**2nd VICE CHAIR**  
Mat Sherman

**EXECUTIVE SECY**  
Jon Rosdahl

**RECORDING SECY**  
James Gilb

**TREASURER**  
Bob Grow

### Appointed Officers (non voting)

**MEETING MGR**  
**MEMBER**  
**EMERITUS**  
Buzz Rigsbee

**MEMBER**  
**EMERITUS**  
Geoff  
Thompson

### DISBANDED

802.2 LLC

802.5 Token Ring

802.7 Broadband TAG

802.9 ISLAN

802.12 Demand Priority

802.4 Token Bus

802.6 DQDB

802.8 Fiber Optic TAG

802.10 Security

802.14 CATV

ECSG TV Whitespace

ECSG Emergency Services

802.23 Emergency Services





# General structure of the week

	Sun	Mon	Tue	Wed	Thu	Fri
A M	Some task forces / task group meetings	<ul style="list-style-type: none"> <li>- Opening EC</li> <li>- 802-newcomer orientation</li> <li>- 802.11-newcomer</li> <li>- Some WG Opening plenaries</li> </ul>	Task force and task group meetings		Task force and task group	WG plenary
P M		<ul style="list-style-type: none"> <li>- Remaining WG opening plenaries</li> <li>- Task force and task group meetings</li> </ul>			WG plenary or task force or group	Closing EC
E v e		Tutorials	TF/TG mtgs	social	WG plenary	

Check WG agendas for details – there is some variation between groups



# Introduction to IEEE standards process



# Principles of the process

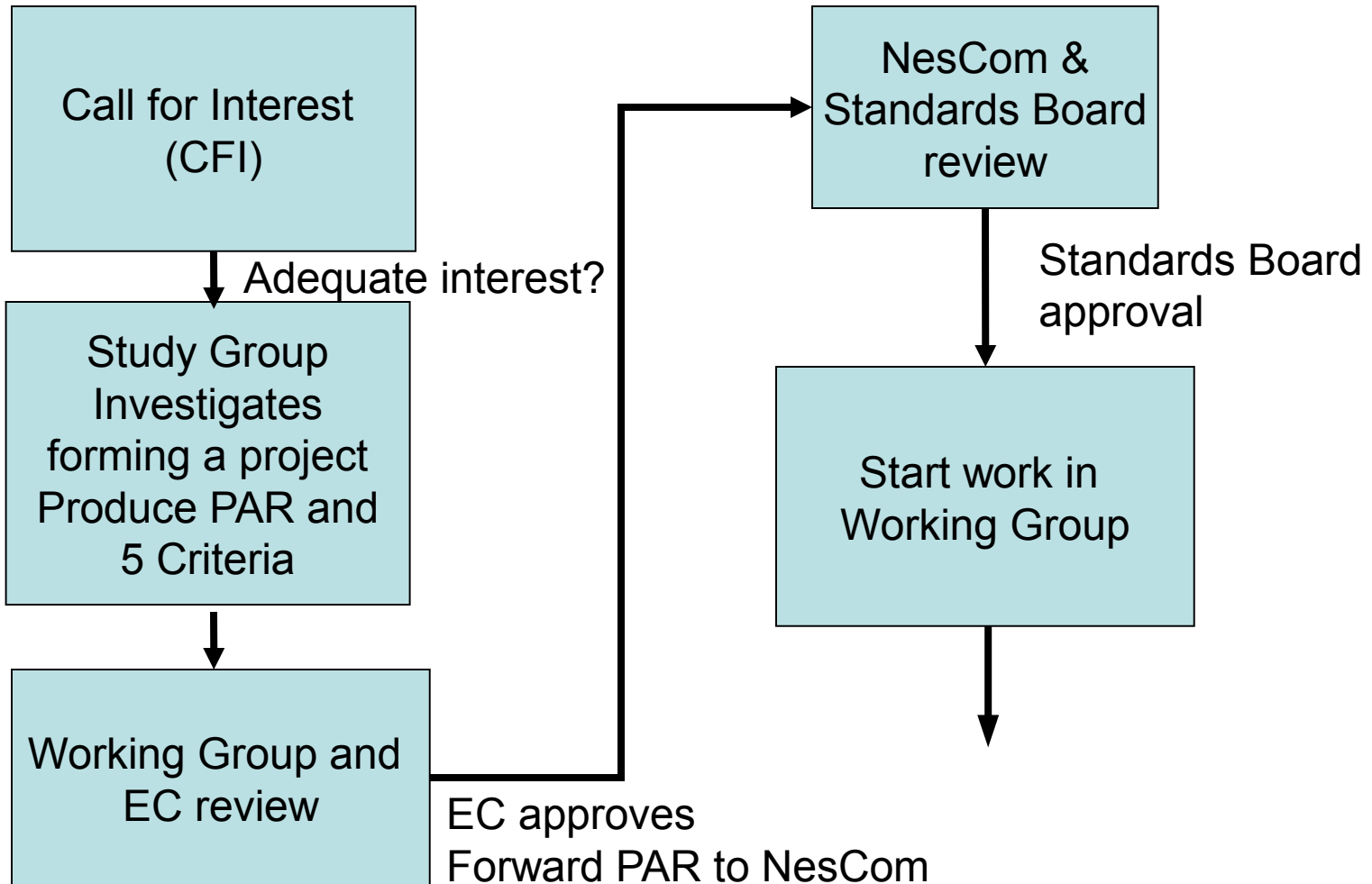
- **Due process** – procedures are publicly available and followed consistently
- **Consensus** – requiring agreement of a majority or supermajority – for technical decisions here = 75%
- **Openness** – ensuring materially interested and affected parties can participate
- **Balance** – representation from all interested parties without overwhelming influence from any one party
- **Right of appeal** – process to ensure due process

# More terms

- PAR – Project Authorization Request – the charter for a standards project
- CFI – Call for interest – a brief meeting to outline a topic and determine if there is interest in investigating possible project
- Study Group – a group formed to investigate a project and produce a PAR
- Five Criteria – In IEEE 802 the basis for determining whether to forward a PAR.



# IEEE 802 standards development life cycle – part 1



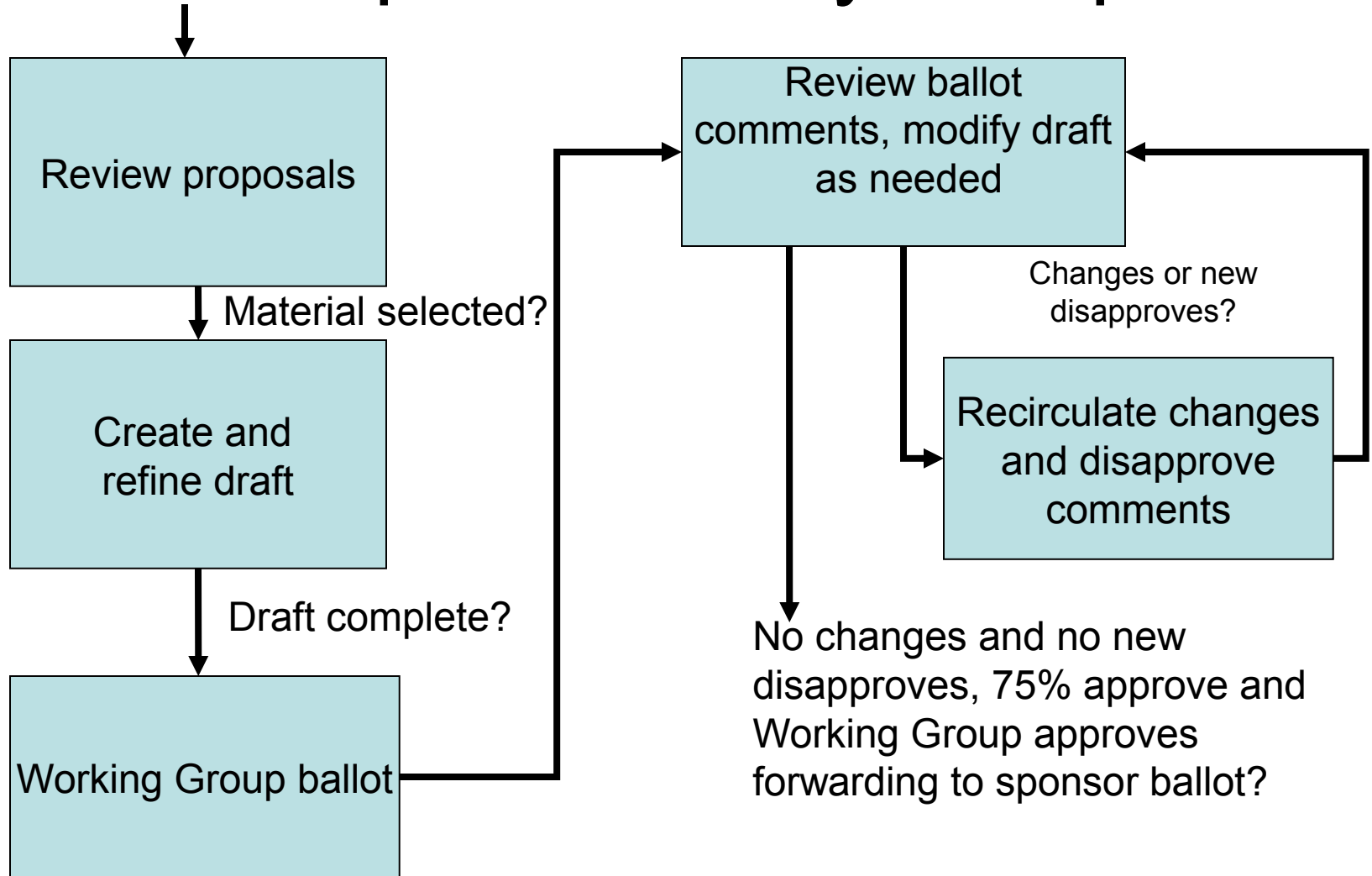


# IEEE 802 Five Criteria

- Broad Market Potential
- Compatibility
- Distinct Identity
- Technical Feasibility
- Economic Feasibility

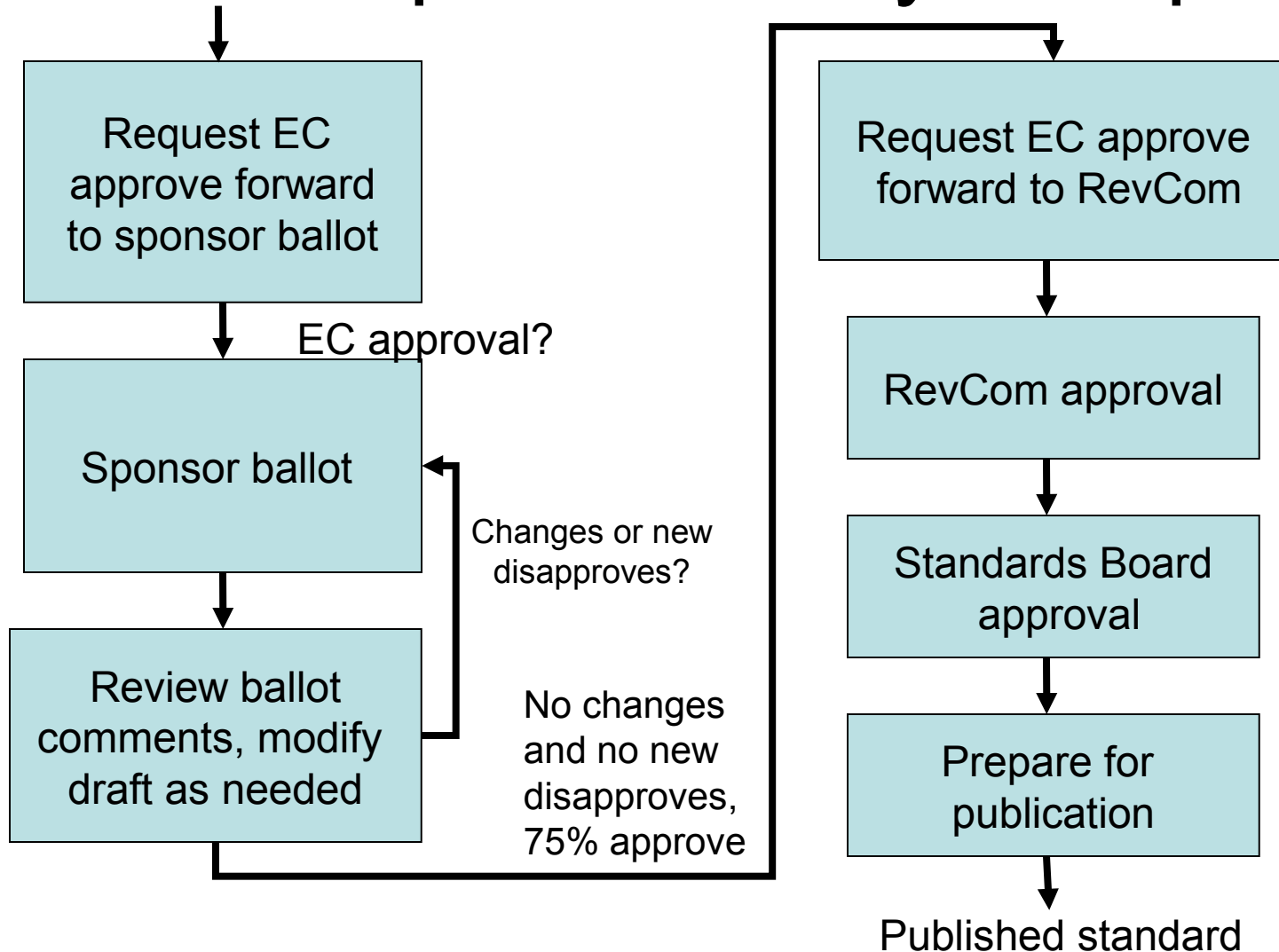


# IEEE 802 standards development life cycle – part 2





# IEEE 802 standards development life cycle – part 3







# Standards life cycle – part 4

- And then there is maintaining the standard
  - Respond to request for interpretation
  - Keep the standard current by producing amendments and corrigenda (corrections)
  - Renew the life of the standard with reaffirmation or revision
  - When the standard is out of date, withdraw it.



# Voting and membership

- Voters have responsibility to vote on letter ballots
- Three levels of voting occur in IEEE 802 standards development:
  - Sponsor ballot
    - Open to all interested parties
      - Via IEEE SA-membership or paying a per ballot fee
    - Participation requires an IEEE Web Account
  - Working group
    - Requirements on next page
  - Task force or task group
    - Requirements vary – consult Working group.

# Acquiring Working Group voting membership

- Participating at a meeting = at least 75% presence.
- For a new Working Group, persons participating in the initial meeting become members.
- For an existing Working Group, after attending 2 of last 4 plenary sessions or 1 plenary and 1 interim, membership starts at the next plenary attended.
  - May require submitting a letter of intent.



# Retaining Working Group voting membership

- Participate in 2 of the last 4 plenary sessions.
  - An interim may substitute for one of the 2 plenary sessions.
- Return working Group letter ballots
  - Membership may be lost for failing to respond or responding abstain for reason other than “lack of technical expertise” to 2 of the last 3 ballots.



# Affiliation

- IEEE-SA Standards Board By-Laws, Section 5.2.1.5
  - (<http://standards.ieee.org/guides/bylaws/sect5.html>)
- Disclosure of Affiliation
  - “Every member and participant in a working group, Sponsor ballot, or other standards development activity shall disclose his or her affiliation.”
- What is “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.”
- Affiliation and 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.”



# Ground rules

- Respect ... give it, get it
- NO product pitches
- NO corporate pitches
- NO prices
- NO restrictive notices – presentations must be openly available
- Silence your cell phone ringers



**IEEE Patent policy  
see the slide set at:**

<http://standards.ieee.org/board/pat/pat-slideset.ppt>



# Getting more information





# Resources

- IEEE 802 home page:
  - <http://www.ieee802.org>
- Links to IEEE and IEEE 802 procedural documents:
  - <http://www.ieee802.org/devdocs.shtml>
- Links to IEEE 802 WG and TAG pages:
  - <http://www.ieee802.org/dots.shtml>
- On-line training:
  - IEEE process course first course rolled out so far
  - <http://www.ieee802.org/training.shtml>