

Agenda and General Information

IEEE 802.3

10 Mbps Single Pair Ethernet Study Group

George Zimmerman (Chair)

CME Consulting, Inc.

San Antonio, Texas, USA, 8 Nov. 2016

Agenda

- Appointment of Recording Secretary
- ~~Confirmation of Chair~~
- Welcome and Introductions
- Approve Agenda
- ~~(no prior minutes to approve)~~ Approve Minutes of last meeting
- Goals for this meeting
- Big Ticket Items
- Reflector and Web
- Ground Rules
- IEEE
 - Structure, Bylaws and Rules
 - Call for Patents
 - IEEE Standards Process
- Liaisons and Communications
- Review of Action Items
- Presentations
- Motions and Closing Business
- Future Meetings

Study Group Decorum



- Photography or recording by permission only (December 2014 IEEE-SA Standards Board Ops Manual 5.3.3.2)
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (December 2014 IEEE-SA Standards Board Ops Manual 5.3.3.3)
- Cell phone ringers off
- Wear your badges at all times in meeting areas
 - Help the hotel security staff improve the general security of the meeting rooms
 - **PCs HAVE BEEN STOLEN** at previous meetings
 - **DO NOT** assume that meeting areas are secure
- Please observe proper decorum in meetings

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Goals for the meeting

- Hear additional presentations supporting our CSDs
- Respond to comments on PAR & CSDs
- Complete adoption of objectives
- Lay the ground work for the next meeting

Big ticket items

- Same as the goals
- Objectives, CSD and PAR
 - Issues to resolve:
 - Wording the powering objective
 - Potential multipoint objective?
 - Fast startup objective
- Lay the ground work for the next meeting

Reflector and Web

- To subscribe to the 10 Mbps Single Pair Ethernet reflector, send an email to: ListServ@ieee.org

with the following in the body of the message (do not include “<>”):

subscribe STDS-802-3-10SPE <yourfirstname> <yourlastname>

end

- Send 10 Mbps Single Pair Ethernet reflector messages to:
[STDS-802-3-10SPE @listserv.ieee.org](mailto:STDS-802-3-10SPE@listserv.ieee.org)
- Study Group web page URL:
<http://www.ieee802.org/3/10SPE/index.html>

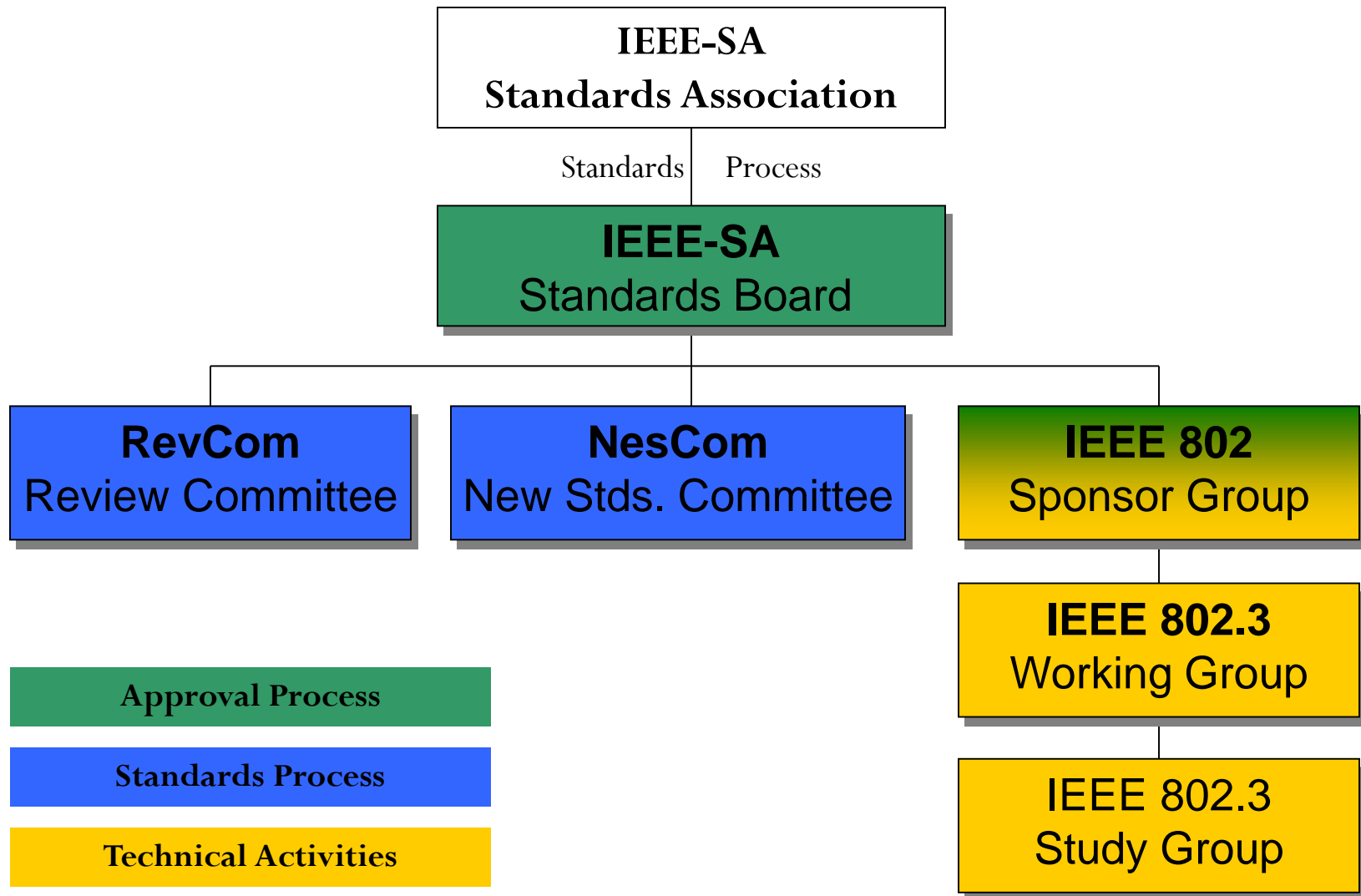
Study Group Private Area

- We currently have NO Study Group private area.
- Should we have one, the username and password will be shown at the face-to-face meetings only, and not be in the posted slides.
- If we receive copyrighted material, for example, specs from another SDO, we would establish a study group private area.

Ground Rules

- Based upon IEEE 802.3 Rules
 - 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



Important Bylaws and Rules

- **IEEE-SA Operations Manual**
http://standards.ieee.org/develop/policies/sa_opman/
- **IEEE-SA Standards Board Bylaws**
<http://standards.ieee.org/develop/policies/bylaws/>
- **IEEE-SA Standards Board Operations Manual**
<http://standards.ieee.org/develop/policies/opman/>
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Policies and Procedures**
<http://standards.ieee.org/about/sasb/audcom/pnp/LMSC.pdf>
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Operations Manual**
<http://www.ieee802.org/devdocs.shtml>
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Working Group (WG) Policies and Procedures**
<http://www.ieee802.org/devdocs.shtml>
- **IEEE 802.3 Working Group Operating Rules**
http://ieee802.org/3/rules/P802_3_rules.pdf

Guidelines for IEEE-SA Meetings

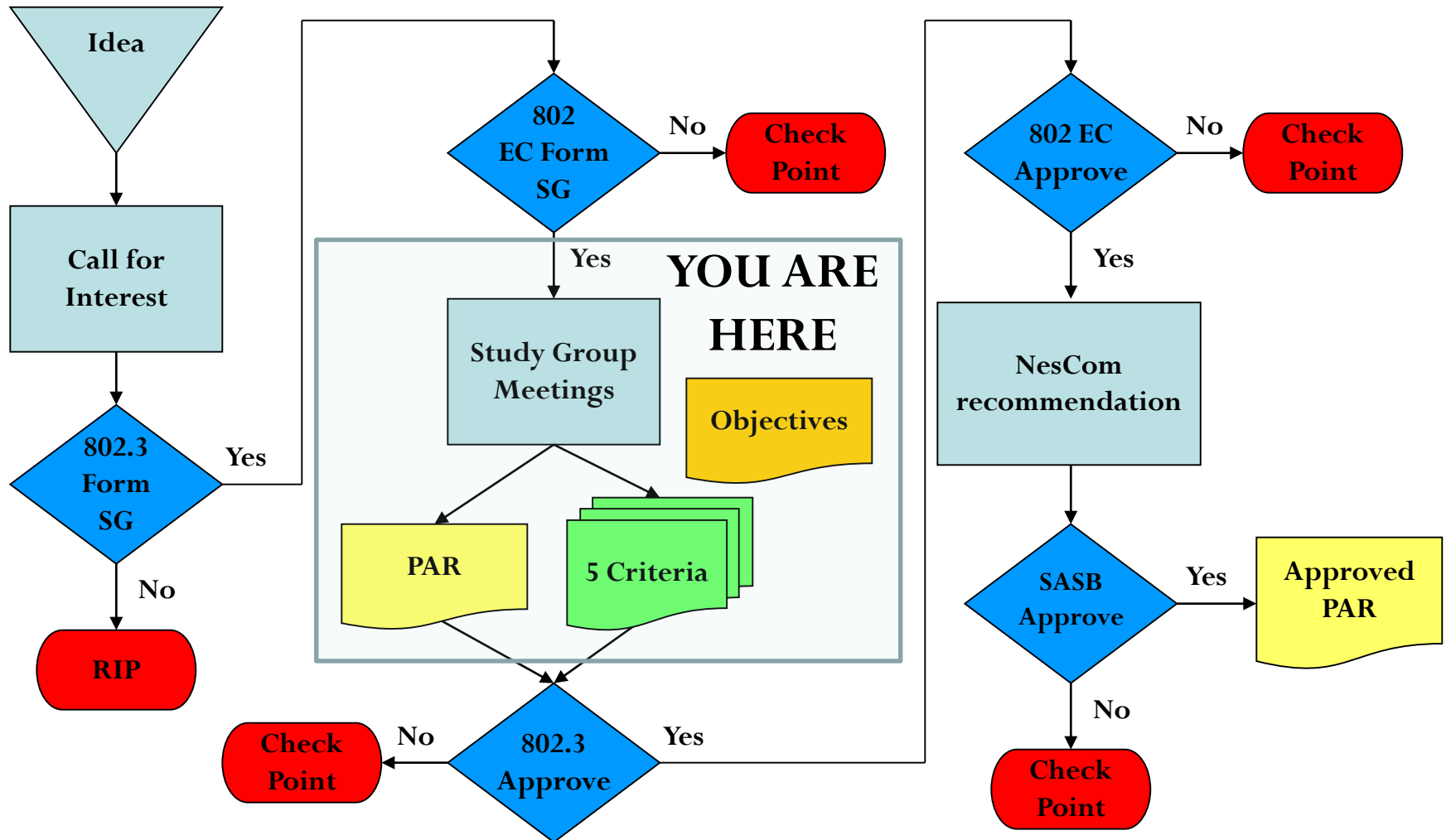
- All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.
- Don't discuss the interpretation, validity, or essentiality of patents/patent claims.
- Don't discuss specific license rates, terms, or conditions.
 - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
 - Technical considerations remain primary focus
- Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.
- Don't discuss the status or substance of ongoing 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/about/sasb/patcom/index.html>

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and “Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association’s Antitrust and Competition Policy” for more details.

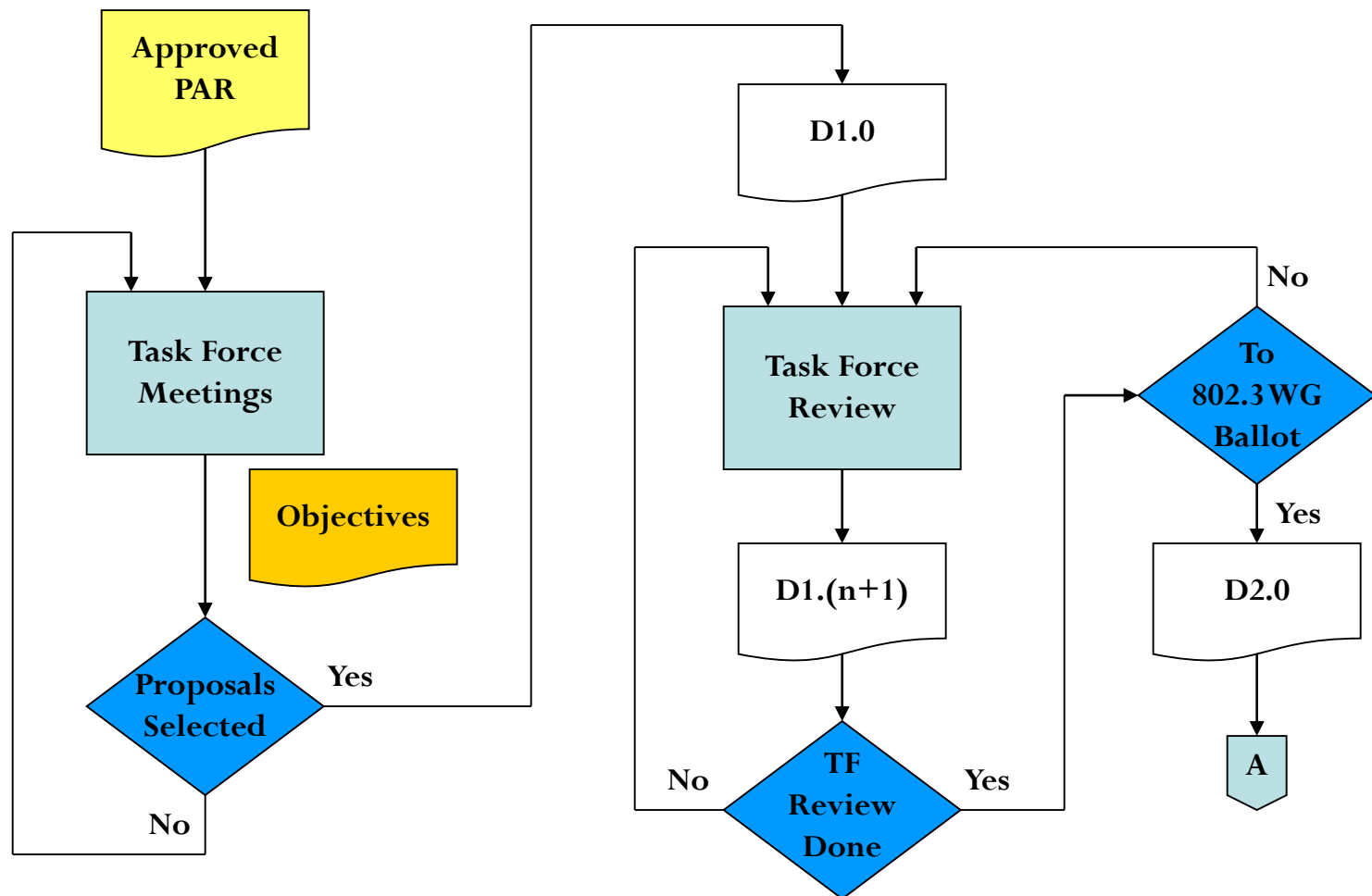
This slide set is available
at <https://development.standards.ieee.org/myproject/Public/mytools/mob/preparslides.ppt>

Overview of IEEE 802.3 Standards Process (1/5)- Study Group Phase

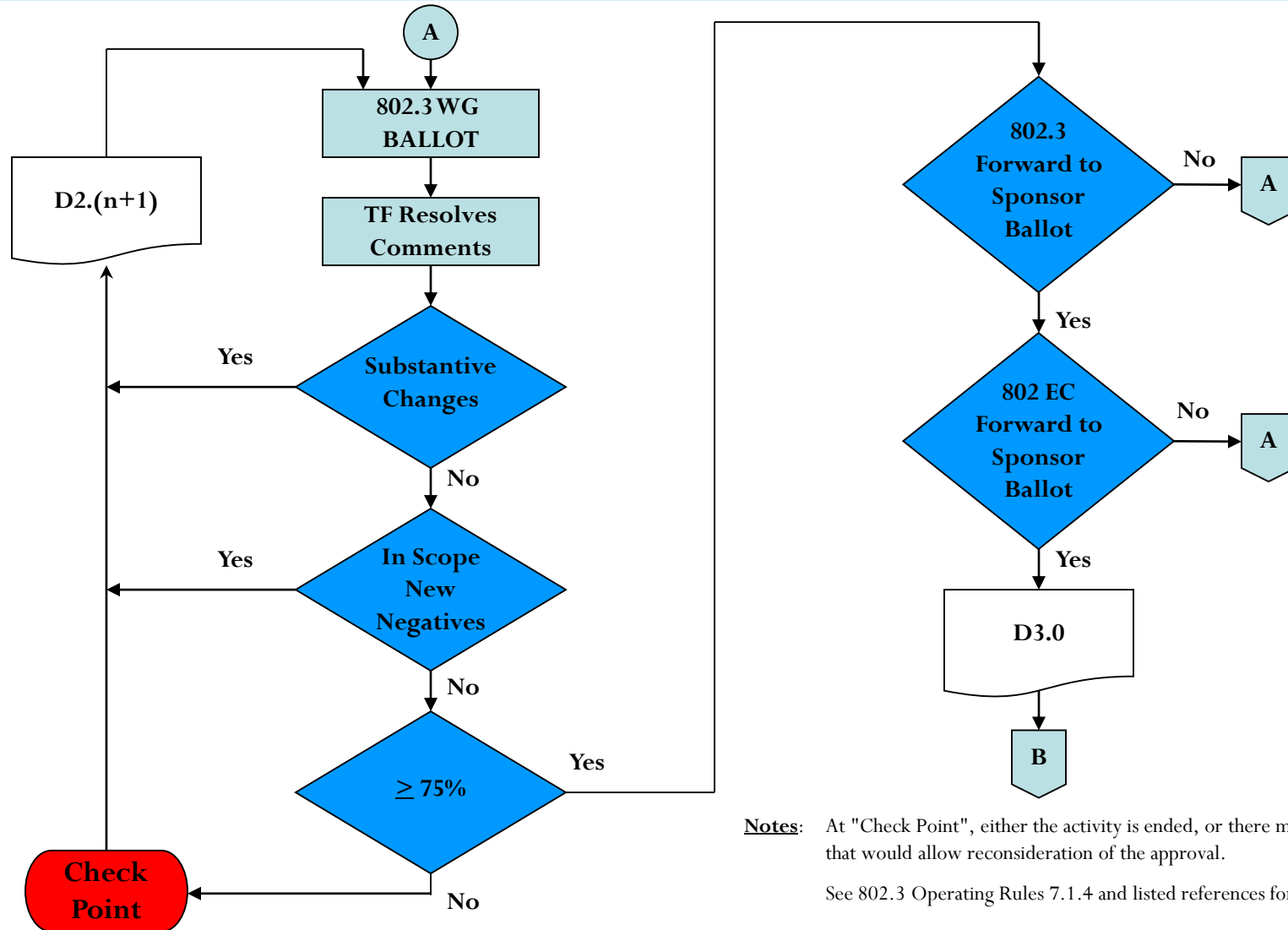


Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

Overview of IEEE 802.3 Standards Process (2/5) – Task Force Comment Phase



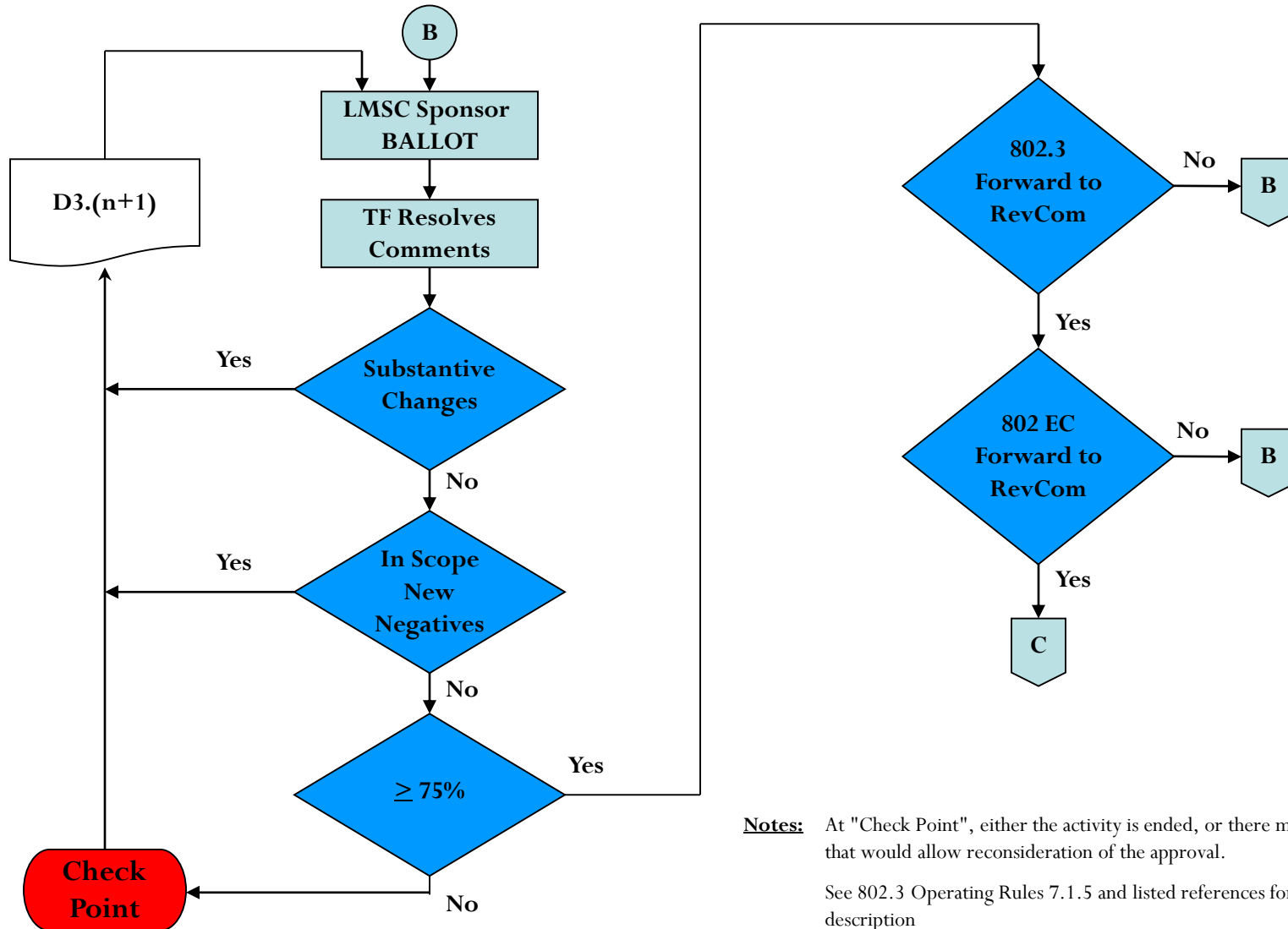
Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase



Notes: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

See 802.3 Operating Rules 7.1.4 and listed references for complete description

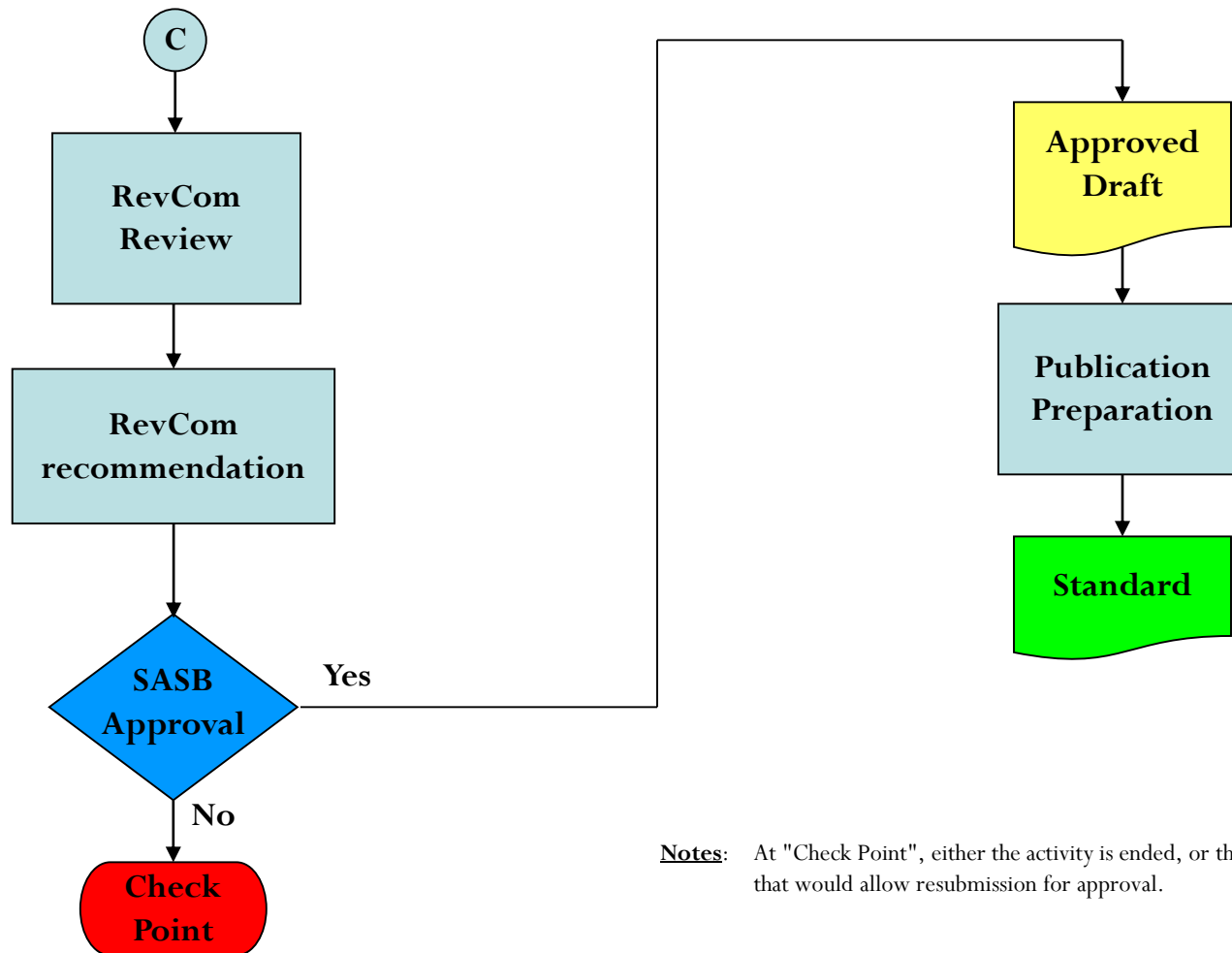
Overview of IEEE 802.3 Standards Process (4/5)- Sponsor Ballot Phase



Notes: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

See 802.3 Operating Rules 7.1.5 and listed references for complete description

Overview of IEEE 802.3 Standards Process (5/5) – Final Approvals / Standard Release



Notes: At "Check Point", either the activity is ended, or there may be various options that would allow resubmission for approval.

The Study Group

- Normal function is to draft a complete PAR and Five Criteria
- Provide a plenary week tutorial to the LMSC.
- Gain approval at the IEEE 802.3 WG, IEEE 802 EC, IEEE-SA NesCom and IEEE-SA Standards Board.
- SG only exists for 6 months
 - Extensions can be requested
 - Voted on by IEEE 802.3
 - Ratified by IEEE 802 EC
- Development of Objectives helps set the goals for the Task Force
- Consensus required to move forward

- Not a goal – choosing a solution.

Request for Formation of Study Group (as per July 2016 Plenary Motion)

- Move that the IEEE 802.3 Working Group request the formation of a Study Group to develop a Project Authorization Request (PAR) and Criteria for Standards Development (CSD) responses for 10Mb/s Single Twisted Pair Ethernet including optional power.

Crash course on Study Group goals

For an overview of Study Group activities, please refer to:

Overview of the Process – Wael Diab

http://www.ieee802.org/3/400GSG/public/13_05/diab_400_01_0513.pdf

Review of the 5 Criteria – Howard Frazier

http://www.ieee802.org/3/400GSG/public/13_05/frazier_400_01_0513.pdf

Guidelines for Project Objectives – Howard Frazier

http://www.ieee802.org/3/400GSG/public/13_05/frazier_400_02_0513.pdf

The following slides are adapted from these excellent presentations.
The originals, while a little dated, remain, in spirit, correct.

(THANKS TO MARK NOWELL and the 25Gbps Study Group)

What does the Study Group Produce?

- PAR
 - Our “contract” with the IEEE-SA and “authorization” to develop a standard
 - Goes all the way up the hierarchy
 - Broadly focuses on what the standard is that group will work on including scope, purpose, broad timeline (not a project plan)
 - High level - to notify anyone interested as to what we’re attempting to do
- 5 Criteria (now called CSDs)
 - Broad Market Potential, Compatibility, Distinct Identity, Technical Feasibility, Economic Feasibility
 - Controlled at the 802 EC level
- Objectives
 - Our “contract” with 802.3 – controlled at the 802.3 level

History and Traditions

(adapted from Howard Frazier “Guidelines for Project Objectives”)

- Project objectives are brief statements, usually bullet form that summarize technical objectives for an 802.3 standards project
- They represent high-level technical requirements
- They are created by the study group, but approved and owned by the 802.3 working group, and are fulfilled by the Task Force
 - Working group ballot drafts may be measured on fulfilling these
 - The objectives may be modified in Task Force, but the working group must approve
- They are not a product spec
- They typically address major characteristics: bit rate, media, reach, BER, compatibility, impairments, coexistence
- They do not typically address implementation characteristics (power, cost, integration)

Guidelines for writing and adopting

- Consensus building is key
 - Get support before you offer a motion
 - Understand the sources of opposition
 - Remember, 25% can block
- We may consider objectives one at a time, or as a group, if there is no objection
- Pay attention to specifics – that is where consensus can fall apart

Liaisons and Communications

- [TR42-2016-10-160b_to_IEEE_802d3](#)

Action Items

- (to be filled in at end of meeting)

Attendance

- Tutorial Material on attendance tool
 - http://ieee802.org/3/minutes/attendance_procedures.pdf
- Access details
 - URL: <http://imat.ieee.org/>
 - (For interim) Password will be provided

Presentations (times subject to change)

Title	Presenters(s)	Affiliation(s)	Approx Time
Welcome, Introductions, Agenda	George Zimmerman, Chair, 10SPE Study Group	CME Consulting/Commscope, LTC, Aquantia	8:30-9AM
Ad hoc report	Peter Jones	Cisco Systems	9-9:15
Support for CSDs			
Technical Feasibility for Intrinsically Safe PHYs	Steffen Graber	Pepperl+Fuchs	9:15-9:45
Powering in an Intrinsically Safe Environment	Steffen Graber	Pepperl+Fuchs	10:30-11:00
Long-Reach PHY Design Perspectives	Claude Gauthier	OmniPHY	11:00-11:30
Link Segment Considerations for Industrial Applications	Chris Diminico	MC Communications/Panduit	11:30-12:00
SHDSL overview	Mario Traeber	Intel	1:30-2:00
Objectives General			
Proposed Objectives	George Zimmerman	CME Consulting	2:00-2:30
Requirements on Link Quality Diagnostics	Ludwig Winkel	Siemens	2:30-3:00
Objectives – Multidrop/Daisy Chain			
Factory Automation Use Case for Daisy-chain Power Delivery	Dayin Xu. David Brandt	Rockwell Automation	3:00-3:30
10BASE-T1: Power & Data II	Lennart Yseboodt, Matthias Wendt	Philips Lighting	3:30-4:00
BREAK FOR DAY 1			
Welcome, Introductions Day 2 (Wednesday)	George Zimmerman	Chair	1:30-2PM
Comments received on PAR/CSDs	George Zimmerman	Chair	2-2:30PM
(Space here for updated objectives, changes to PAR, CSDs)			
Motion Madness – Proposed objectives, PAR, CSD modifications, Request approval to go to TF, Extend SG, Adjourn			

Future Meetings

- See: <http://www.ieee802.org/3/interims/index.html>
- January 2017 802.3 Interim
 - Huntington Beach, California (Waterfront Beach Hilton)
 - January 9-13, 2017
- March 2017 802 Plenary
 - Vancouver, BC Canada (Hyatt Regency/Fairmont Vancouver)
 - March 12-17, 2017
- May 2017 802.3 Interim
 - New Orleans, LA
 - May 22-27, 2017
- Anyone interested in hosting a interim meeting contact me or the IEEE 802.3 Executive Secretary [Steve Carlson](#).

Motion #1

- **Move to approve the agenda**
- **M: Matthias Wendt S: Mick McCarthy**
- **Procedural ($\geq 50\%$)**
- **Motion Passes by voice without opposition**

Motion #2

- **Move to approve the minutes of the September 2016 Interim meeting with date in title corrected to 2016**
- **M: Henry Muyshondt S: Steve Carlson**
- **Procedural ($\geq 50\%$)**
- **Motion Passes by voice without opposition**

Motion #3

- **Move to request that the IEEE 802.3 Working Group request the extension of the 10 Mb/s Single Pair Ethernet Study Group**
- **M: Steve Carlson S: Ludwig Winkel**
- **Passes by voice without opposition
Procedural ($\geq 50\%$)**

Straw Poll on Attendance

- Attend January 802.3 Interim:
 - Y: 26 N: 12 M:12
- Attend March 802 Plenary:
 - Y: 31 N: 3 M: 15

Thank You!