

Agenda and General Information

IEEE 802.3

Reduced Twisted Pair Gigabit Ethernet
PHY

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High Speed Design, Inc.

San Diego, CA, USA – July 17-19 2012

Agenda

- *Appointment of Recording Secretary*
- Welcome and Introductions
- Approve Agenda
- Approve previous Minutes
- Goals for this meeting
- Reflector and Web
- Ground Rules
- IEEE
 - Structure
 - Bylaws and Rules
 - Call for Patents
 - IEEE Standards Process
- Liaisons and Communications
- Review of Action Items from previous Meeting
- Presentations
- Joint session with 802.1 AVB Wednesday 8:30 – 10:30AM “Low-latency scheduled traffic”
- Motions and Closing Business
- Future Meetings

Study Group Decorum



- Photography or recording by permission only (2010 SASB Op Manual 5.3.3.4)
- Cell phone ringers off
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (5.3.3.5)
- 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

Goals for the meeting

- Introduction to IEEE process
 - PAR
 - 5 Criteria
 - Objectives
- Presentations that address the PAR, 5 Criteria, and objectives
- Tutorials on automotive issues
- Set goals for next meeting
- Build consensus

Reflector and Web

- To subscribe to the RTPGE reflector, send an email to:

ListServ@ieee.org

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

subscribe **stds-802-3-RTPGE** *<yourfirstname>* *<yourlastname>*

- Send RTPGE reflector messages to:

stds-802-3-RTPGE @listserv.ieee.org

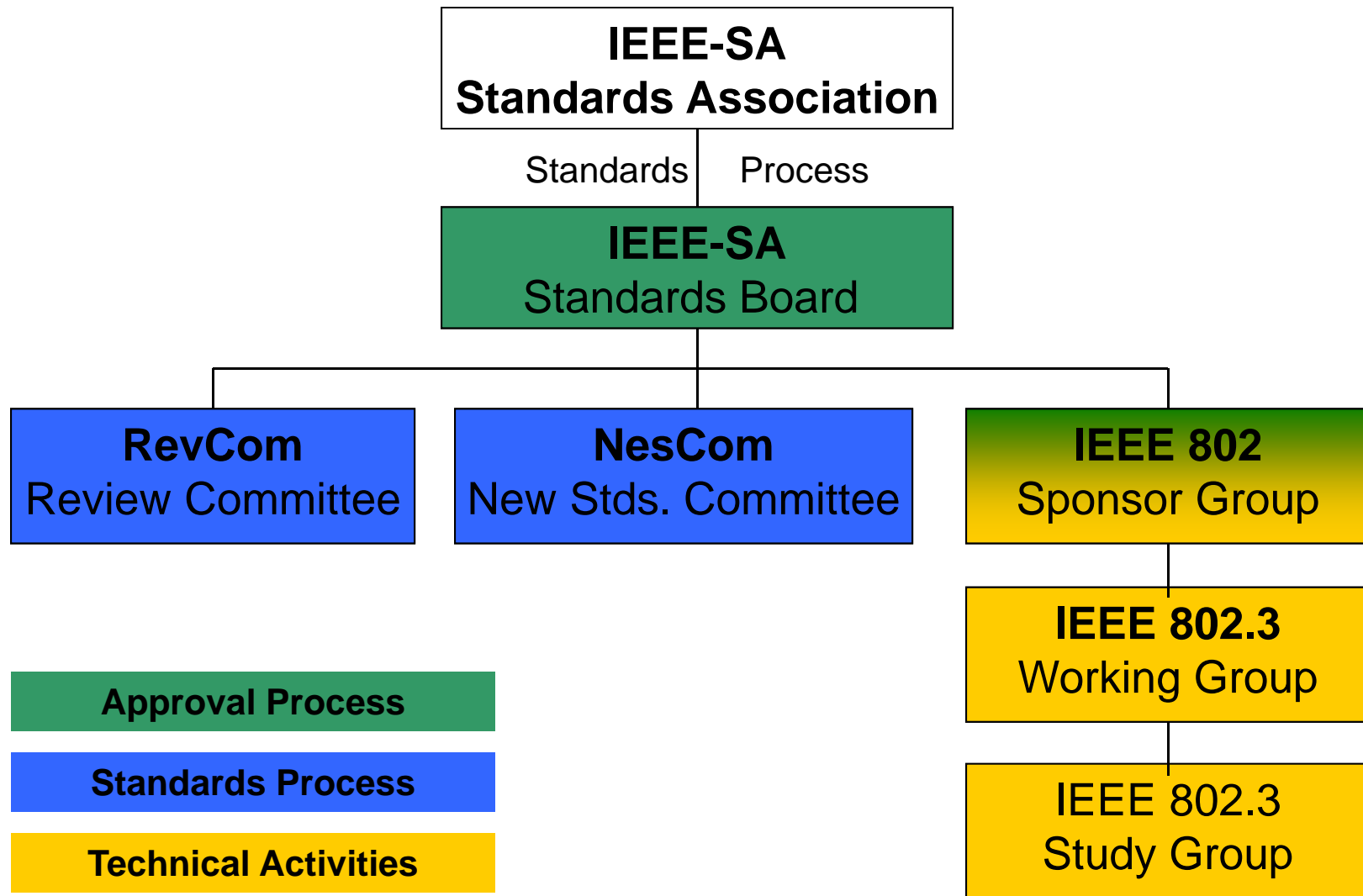
- Study Group web page URL:

www.ieee802.org/3/RTPGE/index.html

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/sa/sa-om.pdf>
- **IEEE-SA Standards Board Bylaws**
<http://standards.ieee.org/guides/bylaws/sb-bylaws.pdf>
- **IEEE-SA Standards Board Operations Manual**
<http://standards.ieee.org/guides/opman/sb-om.pdf>
- **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/PNP/2010-07/IEEE_802_LMSC_OM_approved_100716.pdf
- **IEEE 802 LAN/MAN Standards Committee (LMSC) Working Group (WG) Policies and Procedures**
http://www.ieee802.org/PNP/2010-07/IEEE_802_LMSC_WG_PandP_approved_100716.pdf
- **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.**

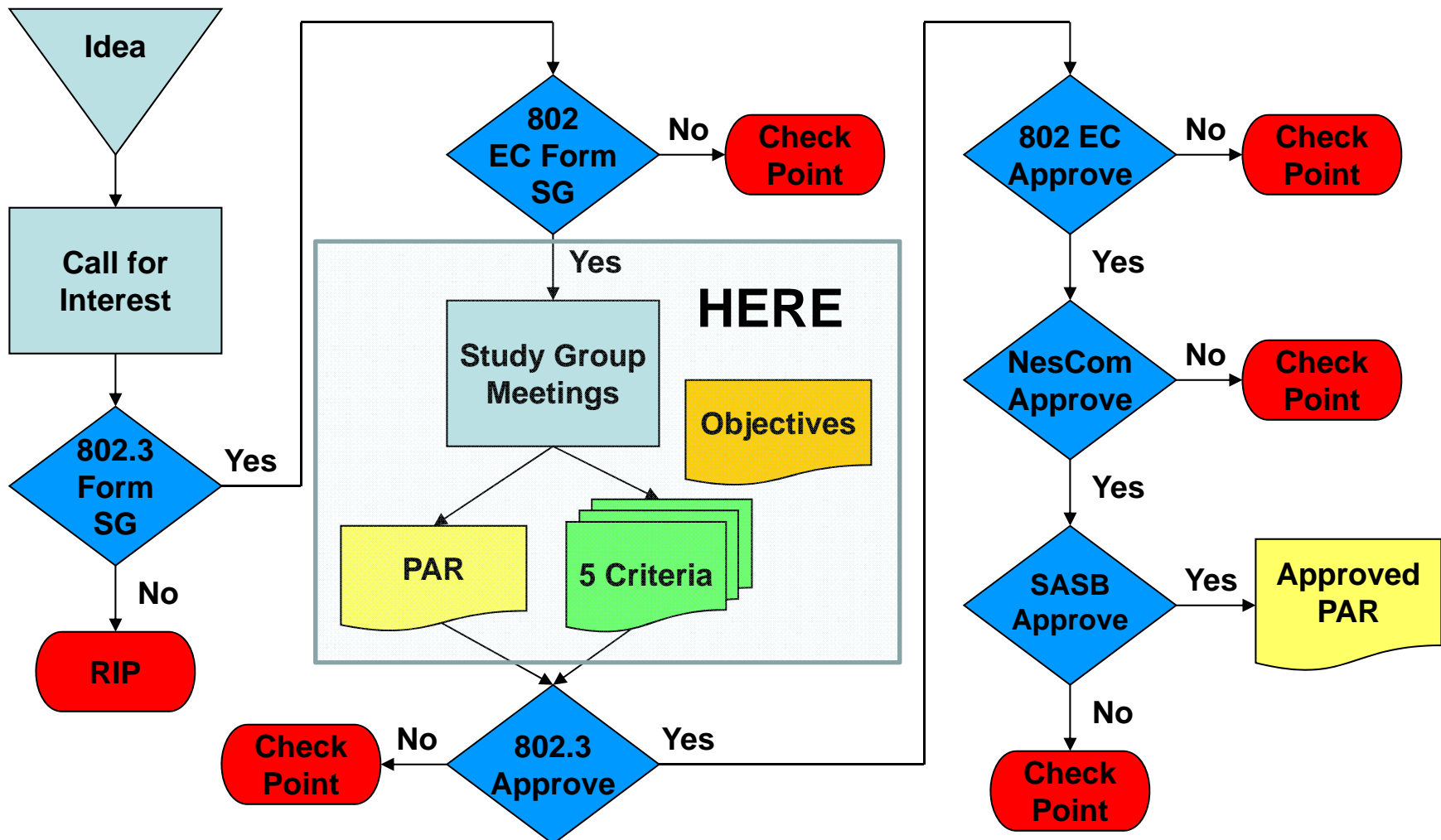
If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit <http://standards.ieee.org/about/sasb/patcom/index.html>

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/slideset.ppt>

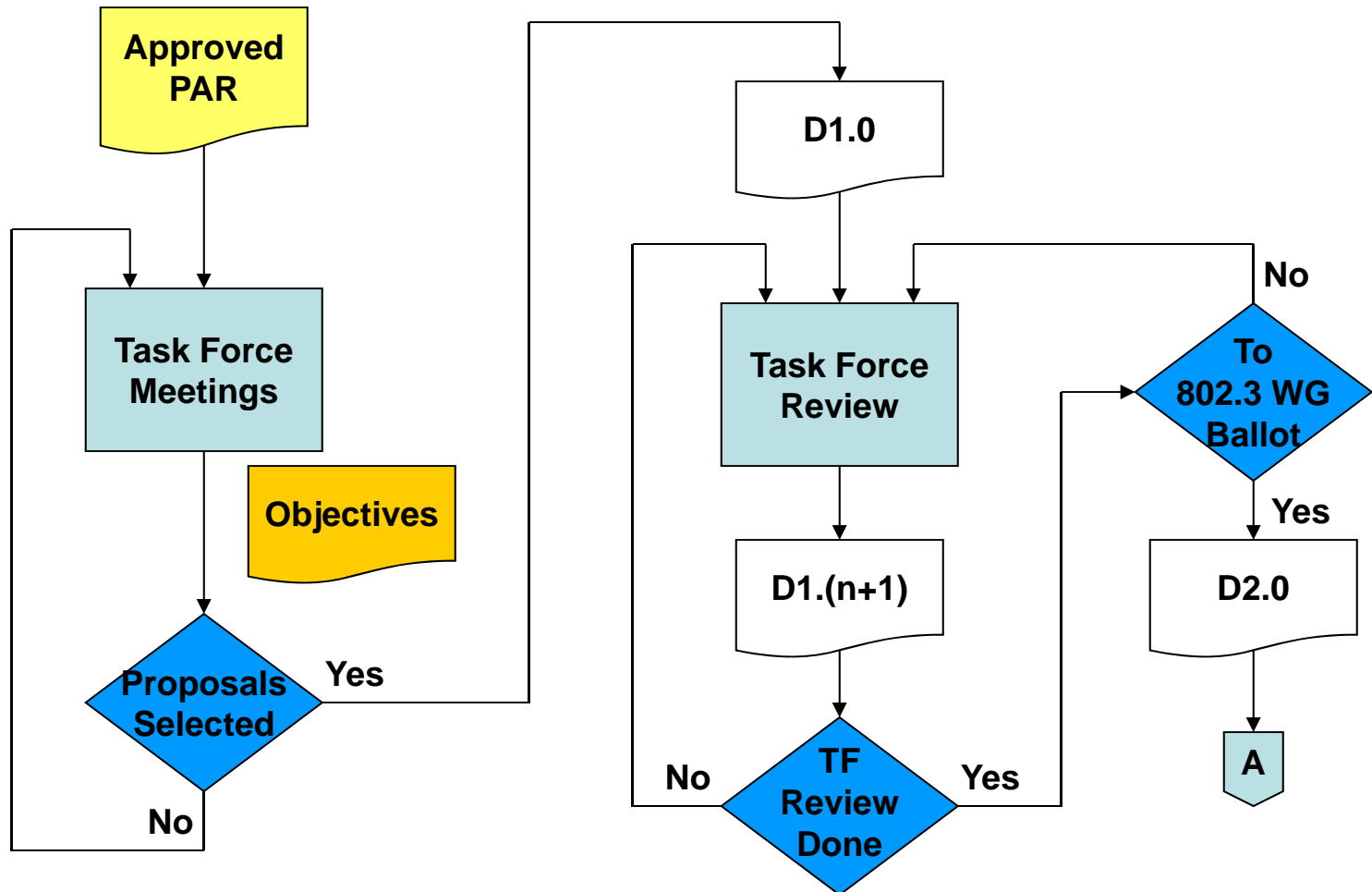


Overview of IEEE 802.3 Standards Process (1/5)- Study Group Phase

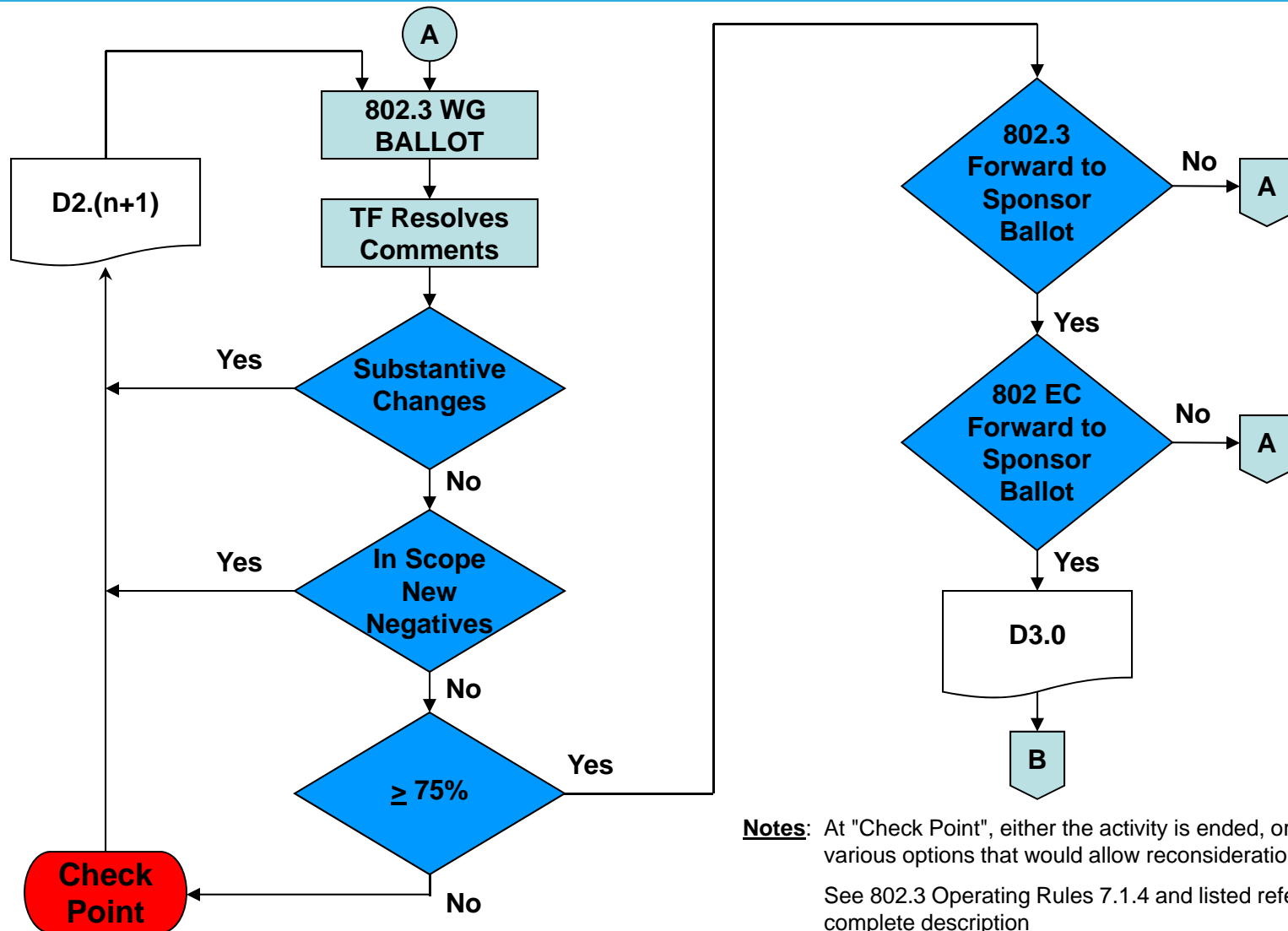


Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

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



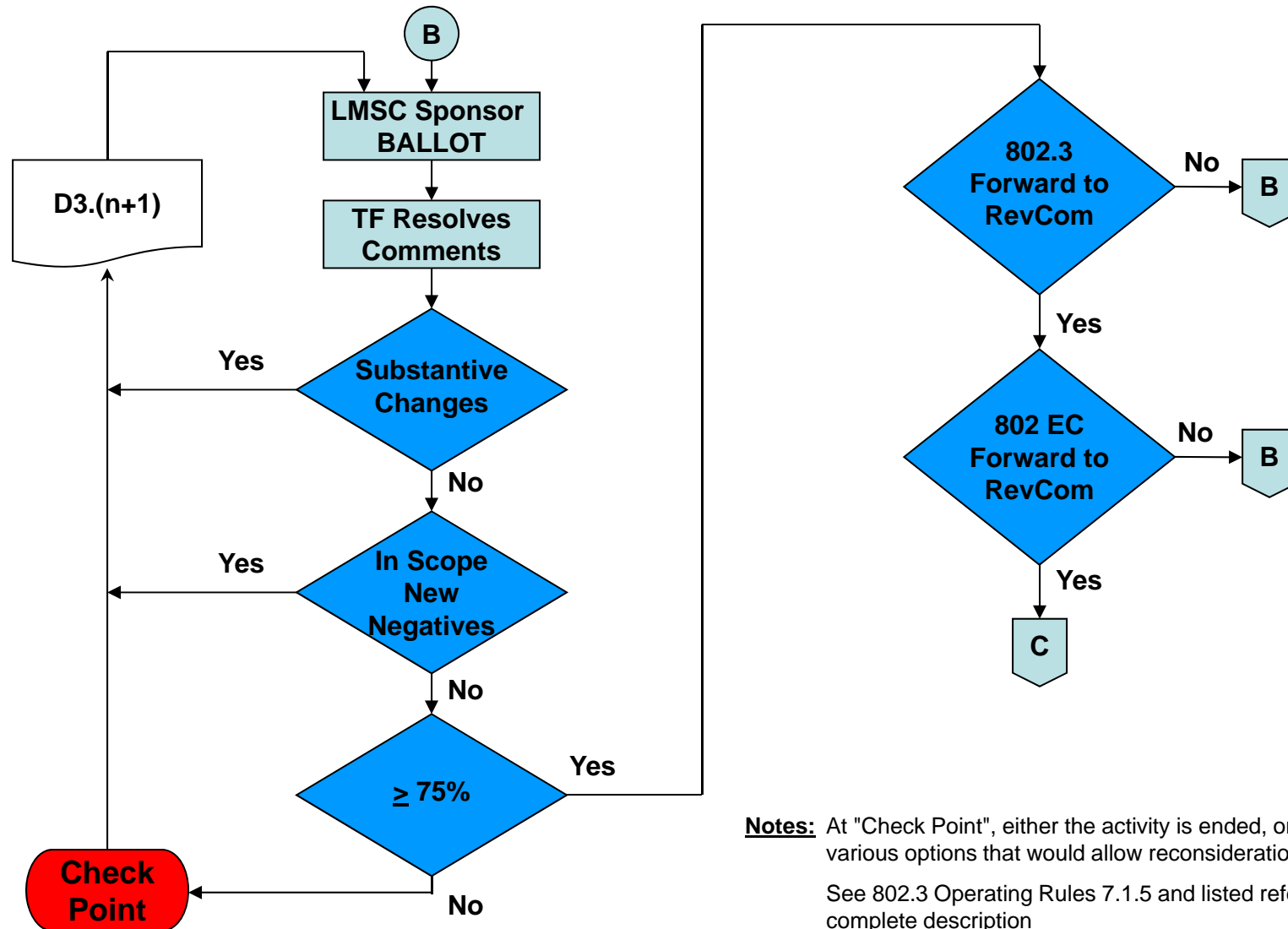
Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase



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

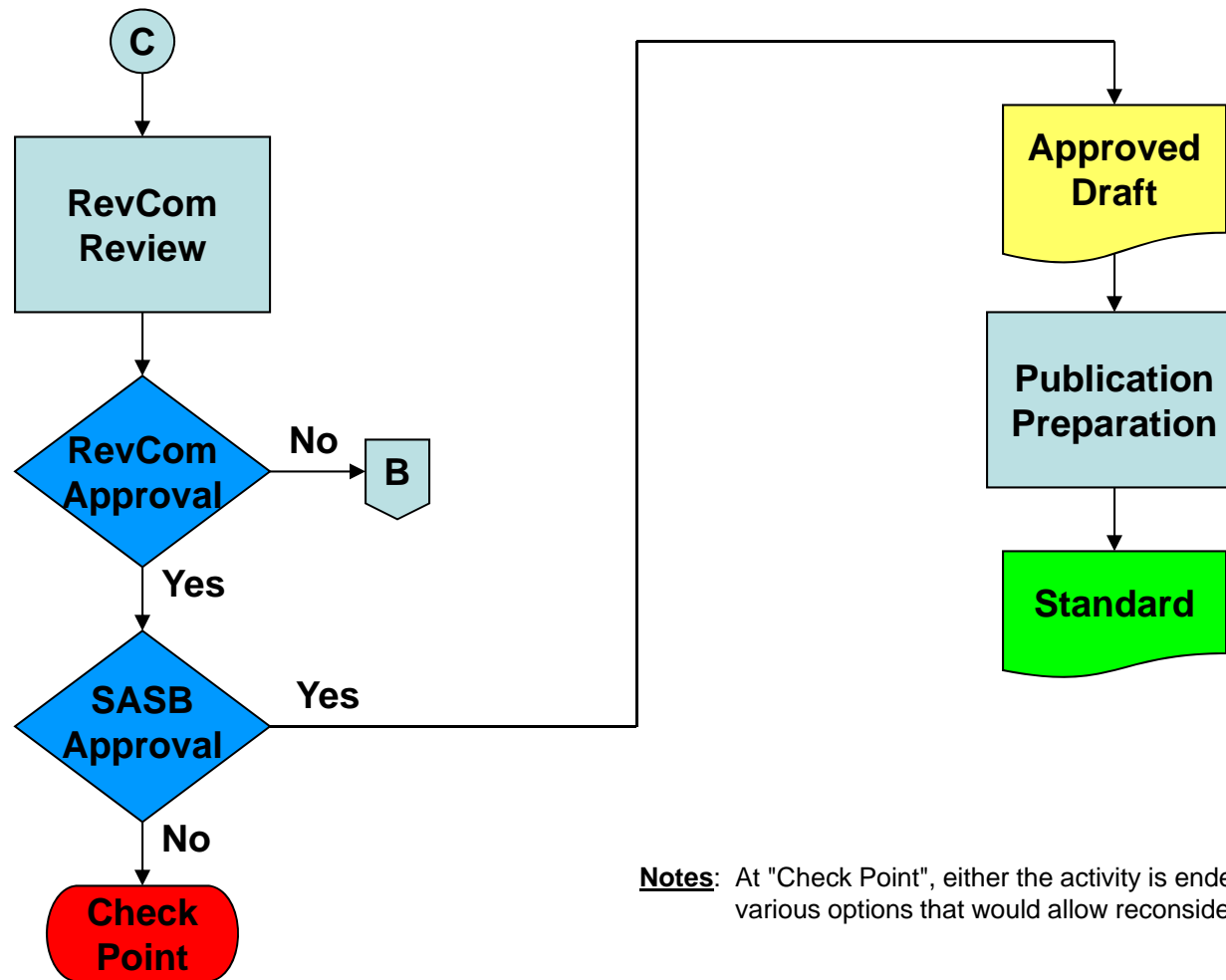
Overview of IEEE 802.3 Standards Process (4/5)- Sponsor Ballot Phase



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 reconsideration of the 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 WG 802.3, 802 SEC, IEEE NesCom and IEEE-SA Standards Board.
- SG only exists for 6 months
 - Extensions can be requested
 - Voted on by 802.3
 - Ratified by SEC
- Development of Objectives helps set the goals for the Task Force
- Consensus (>75%) required to move forward
- Not a goal – choosing a solution.

Request for Formation of Study Group (as per March 2011 Plenary Motion)

Request that IEEE 802.3 WG form a study group to develop a PAR and 5 Criteria for a:

Reduced Twisted Pair Gigabit Ethernet PHY

M: Steve Carlson

S: Marek Hajduczenia

Procedural (>50%)

Y: 77 N: 0 A: 3

Liaisons and Communications

- When we have them, they will go here

Action Items

- Reports from ad hocs chartered at May meeting
- Vote on new draft PAR, 5C, and objectives

Attendance

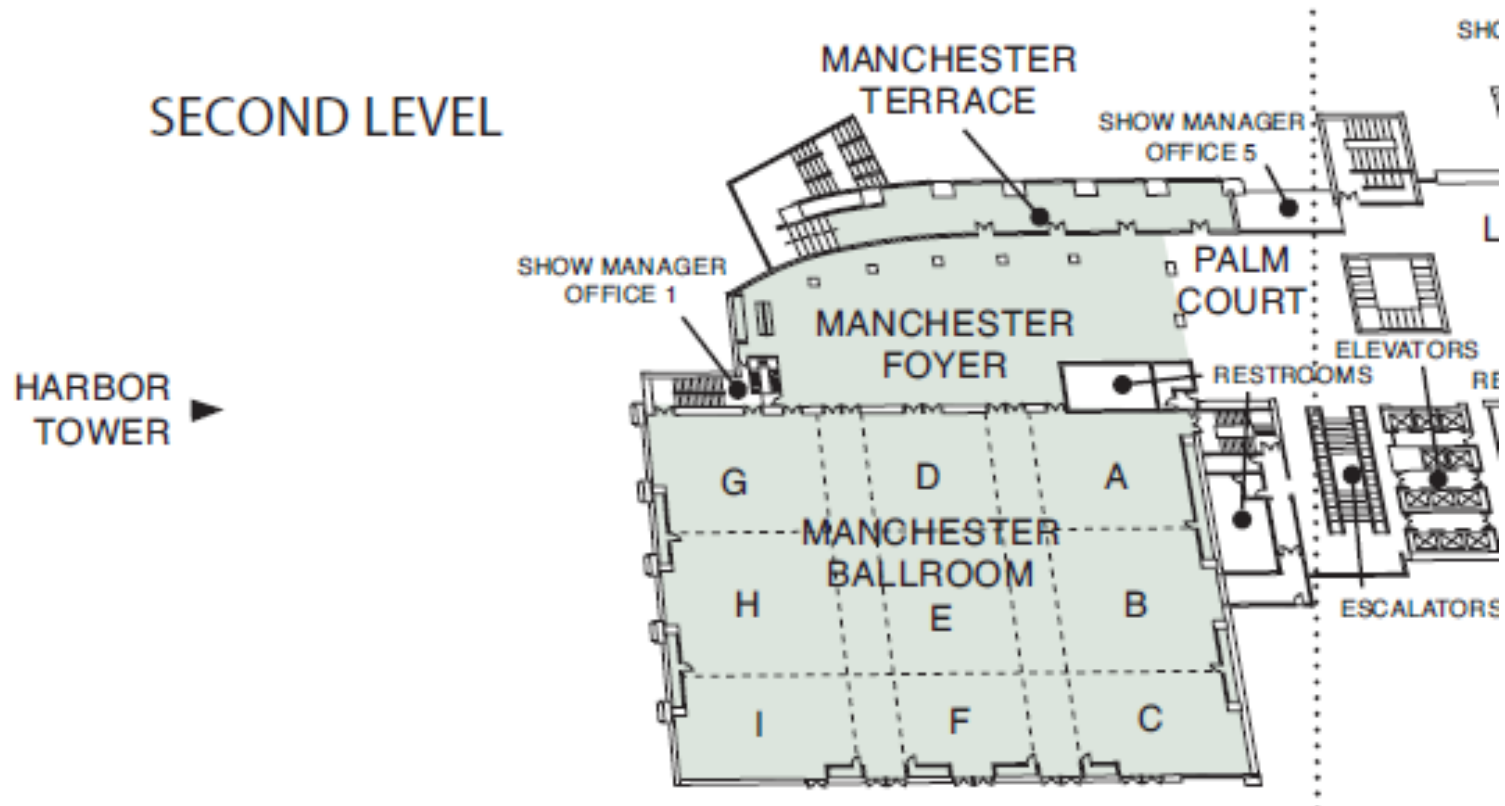
- Tutorial Material on attendance tool
 - http://iee802.org/3/minutes/mar11/0311_imat.pdf
- URL
 - URL: imat.ieee.org
- Please sign the sheet that will be circulated each day

Presentations

EEE Considerations for RTPGE	222kB	Michael Bennett	Lawrence Berkeley National Laboratory
Answers to PoE and Channel Model ad hoc	941kB	Stefan Buntz, Thilo Streichert,	Daimler
Update on Required Cable Length	382kB	Stefan Buntz	Daimler
Update on EMC requirements	105kB	Stefan Buntz	Daimler
RTPGE Feasibility Consideration on EMC	274kB	Shaoan Dai, Dance Wu, Kok-Wui Cheong, David Tsui	Marvell
Link segments	403kB	Chris DiMinico	MC Communications
RTPGE PoE Ad Hoc Report	191kB	Dave Dwelley	LTC
Tutorial for Lifetime Requirements and Physical Testing of Automotive Electronic Control Units (ECUs)	1.7MB	Thomas Hogenmüller	Robert Bosch
Tutorial for Wake Up Schemes and Requirements for Automotive Communication Networks	469kB	Thomas Hogenmüller	Robert Bosch
PHY Feasibility Study for One or Two Pairs RTPGE	82kB	Benson Huang, Joseph Chou	Realtek
Technical Feasibility of Gigabit transmission on one or two pair cabling based on Category 6a technology	2.3MB	Richard Mei, Mabud Choudhury, George Zimmerman,	Commscope, Commscope, CME Consulting
Slightly Beyond RTPGE	92kB	Geoff Thompson	GraCaSI S.A.
Automotive PoE Requirements for RTPGE	70kB	Helge Zinner, Thomas Hogenmüller, Kirsten Matheus	Continental, Robert Bosch, BMW
REQUIREMENTS UPDATE FOR IEEE 802.3 RTPGE	65kB	Helge Zinner, Kirsten Matheus, Stefan Buntz, Thomas Hogenmüller	Continental, BMW, Daimler, Robert Bosch

Note – Times and order listed are subject to change.

Meeting Map



Tutorial for adoption of PAR, 5C, objectives

The adoption of a DRAFT PAR, 5C and objectives is done by technical motions (>75%) approval. The motions should look like this example:

MOTION #X (the Recording Secretary will keep track of the motion numbers)

Adopt objectives 1, 2, 4, 7, and 9 from “presenter_name_xx_0712.pdf”.

Moved:

Second:

Technical (75%)

Y: N: A:

Our goal for this meeting is to adopt a DRAFT PAR, 5C and objectives. These are DRAFTS, and do not have to be complete. Between this meeting and the Geneva interim, changes may be proposed to the DRAFT PAR, 5C and objectives by email reflector conversations or teleconferences.

Tutorial for adoption of PAR, 5C, objectives

Geneva Interim

Any proposed changes will be presented and voted on in Geneva. At the Geneva interim the goal is to adopt a final PAR, 5C and objectives. These will be sent to the 802.3 WG Chair for submission to the EC and previewed to the 802.3 WG prior to the November Plenary.

San Antonio Plenary

At the closing 802.3 WG plenary, the PAR, 5C and objectives will be presented and voted on by the WG. Each of the 5C are voted separately. The WG may request changes to the wording of any of the material submitted to them for a vote.

Post-plenary

The PAR and 5C are forwarded to the EC for approval, then sent on to NesCom and finally the SASB. If we maintain our timeline we should be on the December SASB agenda. When our project is approved, we become the IEEE 802.3bp Task Force.

Motion #1

Move that IEEE 802.3 extend the Reduced Twisted Pair Gigabit Ethernet PHY Study Group.

M:

S:

Taken by voice:

Procedural, 50%

This motion will be made at the closing IEEE 802.3 WG meeting:

Move that IEEE 802.3 extend the Reduced Twisted Pair Gigabit Ethernet PHY Study Group.

Moved by Steve Carlson on behalf of the Study Group

Future Meetings

- See: <http://www.ieee802.org/3/interims/index.html>
- September 2012 Interim
 - ITU, Geneva, CH
 - September 23 - 28
- November 2012 Plenary
 - San Antonio, TX
 - November 12 - 15
- Anyone interested in hosting a meeting contact me.



Thank You!