

Agenda and General Information

IEEE P802.3bp
1000BASE-T1 PHY

Steven B. Carlson
High Speed Design, Inc.
May 2015 – Pittsburgh, PA, USA

Agenda

- Appoint 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
 - Task Force Operation
- Liaisons and Communications
- Review of Action Items from previous Meeting
- Daily Schedule
 - Monday: Opening and comment resolution
 - Tuesday: Comment resolution,
 - Wednesday AM: Closing motions
- Future Meetings

Task Force 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

- Presentations
 - Editor's report and comment resolution D1.4
- Goals
 - Work plan for determining what is missing from the draft—this is it!
 - Eliminate TBDs
 - Create WG preview D1.5 and review and comment
 - Insure technical completeness
 - Discuss timeline
 - **Build consensus**

Task Force Officers

- **Steve Carlson**
Task Force Chair
- **Marek Hajduczenia**
Task Force Editor-in-Chief
- **Curtis Donahue**
Task Force PICS Editor
- See <http://www.ieee802.org/3/contacts.html#RTPGE> for contact info

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](mailto:stds-802-3-RTPGE@listserv.ieee.org)

- Task Force web page URL:

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

IEEE P802.3bp 1000BASE-T1 PHY Task Force Project Documents

– Home page:

<http://ieee802.org/3/bp/index.html>

- PAR:

http://www.ieee802.org/3/bp/P802.3bp_12_Jun_14.pdf

- 5C: <http://www.ieee802.org/3/bp/5Criteria.pdf>

- Objectives:

http://www.ieee802.org/3/bp/Updated_Objectives_0714.pdf

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

Attendance

- Tutorial Material on attendance tool
 - http://www.ieee802.org/3/minutes/attendance_procedures.pdf
- URL
 - URL: <http://imat.ieee.org>
 - Session Access Code: Chatham
- Please sign the sheet that will be circulated each day including both employer and affiliation

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

Instructions for the WG Chair

The IEEE-SA strongly recommends that at each WG meeting the chair or a designee:

- **Show slides #1 through #4 of this presentation**
- **Advise the WG attendees that:**
 - The IEEE's patent policy is described in Clause 6 of the *IEEE-SA Standards Board Bylaws*;
 - Early identification of patent claims which may be essential for the use of standards under development is strongly encouraged;
 - There may be Essential Patent Claims of which the IEEE is not aware. Additionally, neither the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development.
- **Instruct the WG Secretary to record in the minutes of the relevant WG meeting:**
 - That the foregoing information was provided and that slides 1 through 4 (and this slide 0, if applicable) were shown;
 - That the chair or designee provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which the participant is personally aware and that may be essential for the use of that standard
 - Any responses that were given, specifically the patent claim(s)/patent application claim(s) and/or the holder of the patent claim(s)/patent application claim(s) that were identified (if any) and by whom.
- The WG Chair shall ensure that a request is made to any identified holders of potential essential patent claim(s) to complete and submit a Letter of Assurance.
- It is recommended that the WG chair review the guidance in *IEEE-SA Standards Board Operations Manual* 6.3.5 and in FAQs 14 and 15 on inclusion of potential Essential Patent Claims by incorporation or by reference.

Note: **WG** includes Working Groups, Task Groups, and other standards-developing committees with a PAR approved by the IEEE-SA Standards Board.



Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

- **Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]:**
 - **“Shall inform the IEEE (or cause the IEEE to be informed)” of the identity of each “holder of any potential Essential Patent Claims of which they are personally aware” if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents**
 - **“Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of potential Essential Patent Claims” (that is, third parties that are not affiliated with the participant, with the participant’s employer, or with anyone else that the participant is from or otherwise represents)**
- **The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group**
- **Early identification of holders of potential Essential Patent Claims is strongly encouraged**
- **No duty to perform a patent search**

Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards Bylaws

<http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6>

IEEE-SA Standards Board Operations Manual

<http://standards.ieee.org/develop/policies/opman/sect6.html#6.3>

Material about the patent policy is available at

<http://standards.ieee.org/about/sasb/patcom/materials.html>

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>

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



Call for Potentially Essential Patents

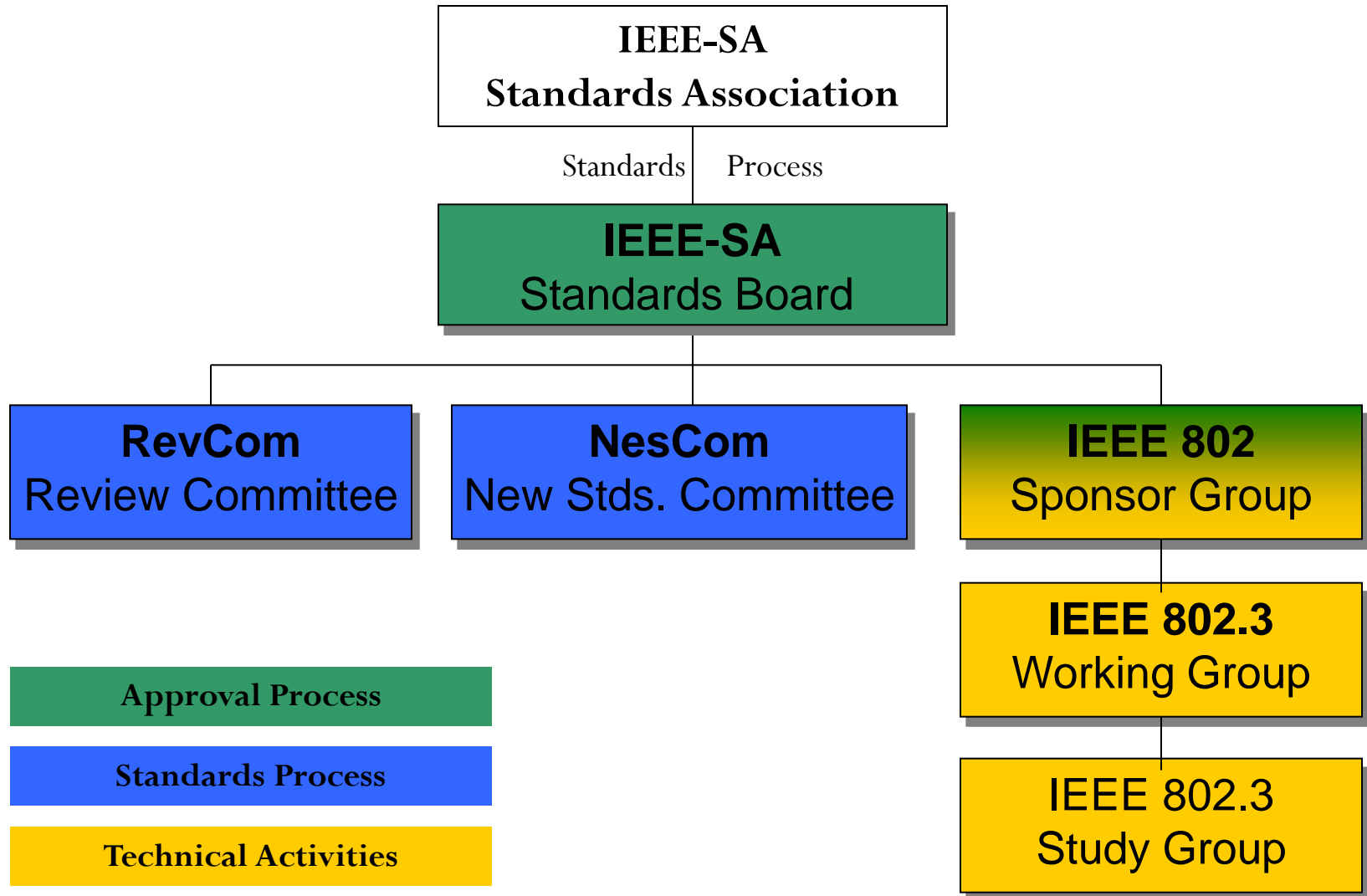
- If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:
 - Either speak up now or
 - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or
 - Cause an LOA to be submitted

Other Guidelines for IEEE WG Meetings

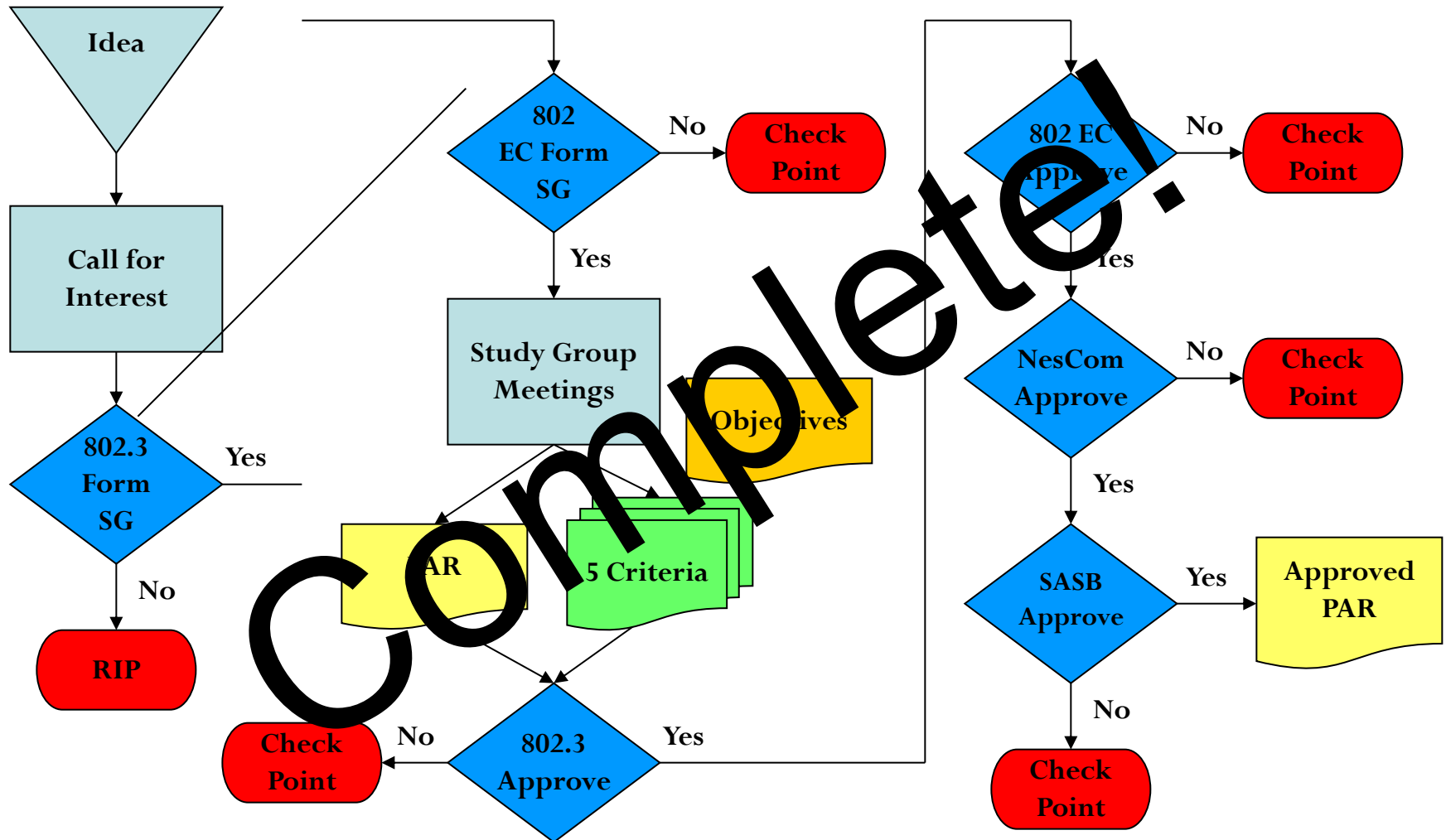
- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
 - **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
 - **Don't discuss specific license rates, terms, or conditions.**
 - 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.**

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.

IEEE Structure

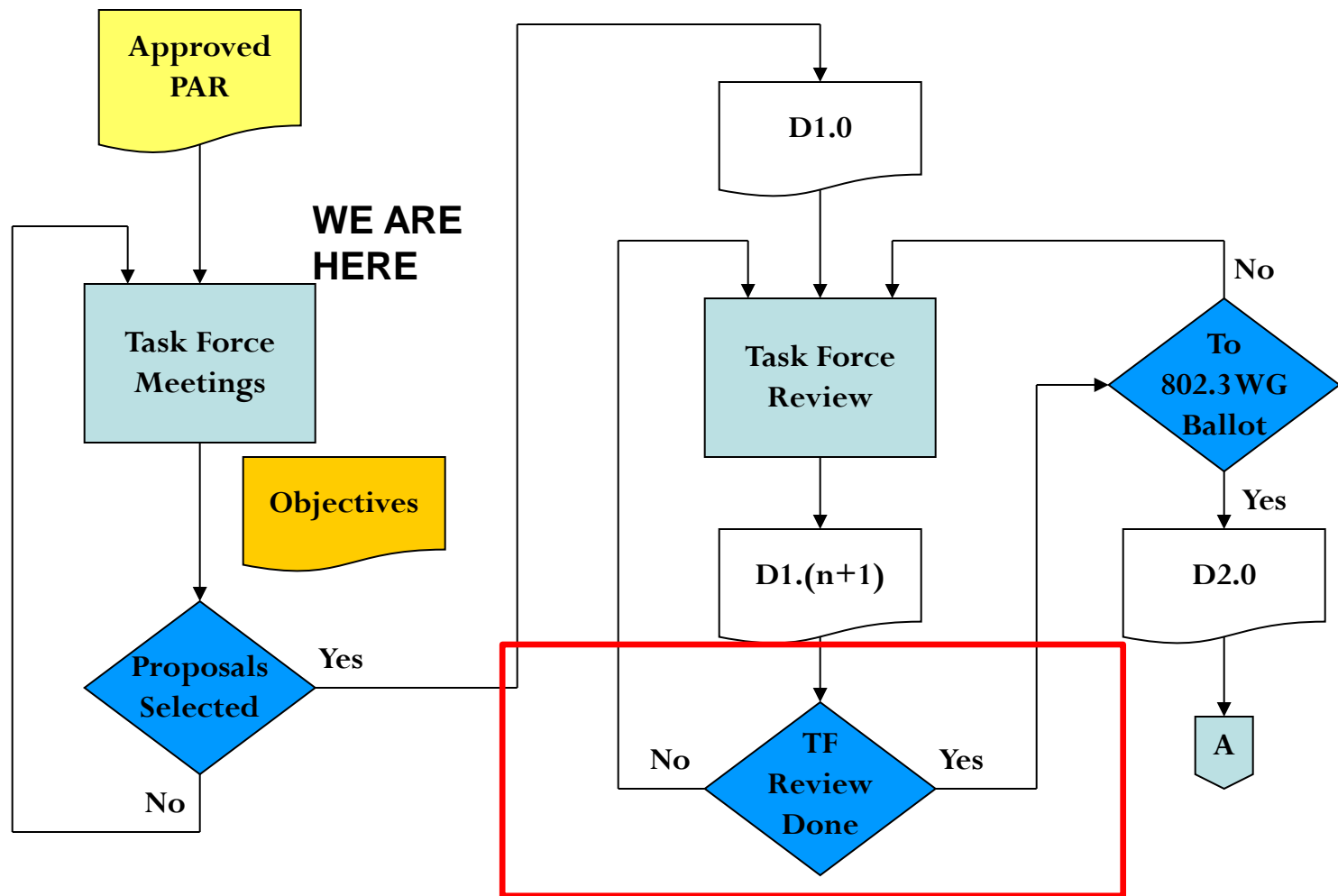


Overview of IEEE 802.3 Standards Process (1/5)- Study Group Phase

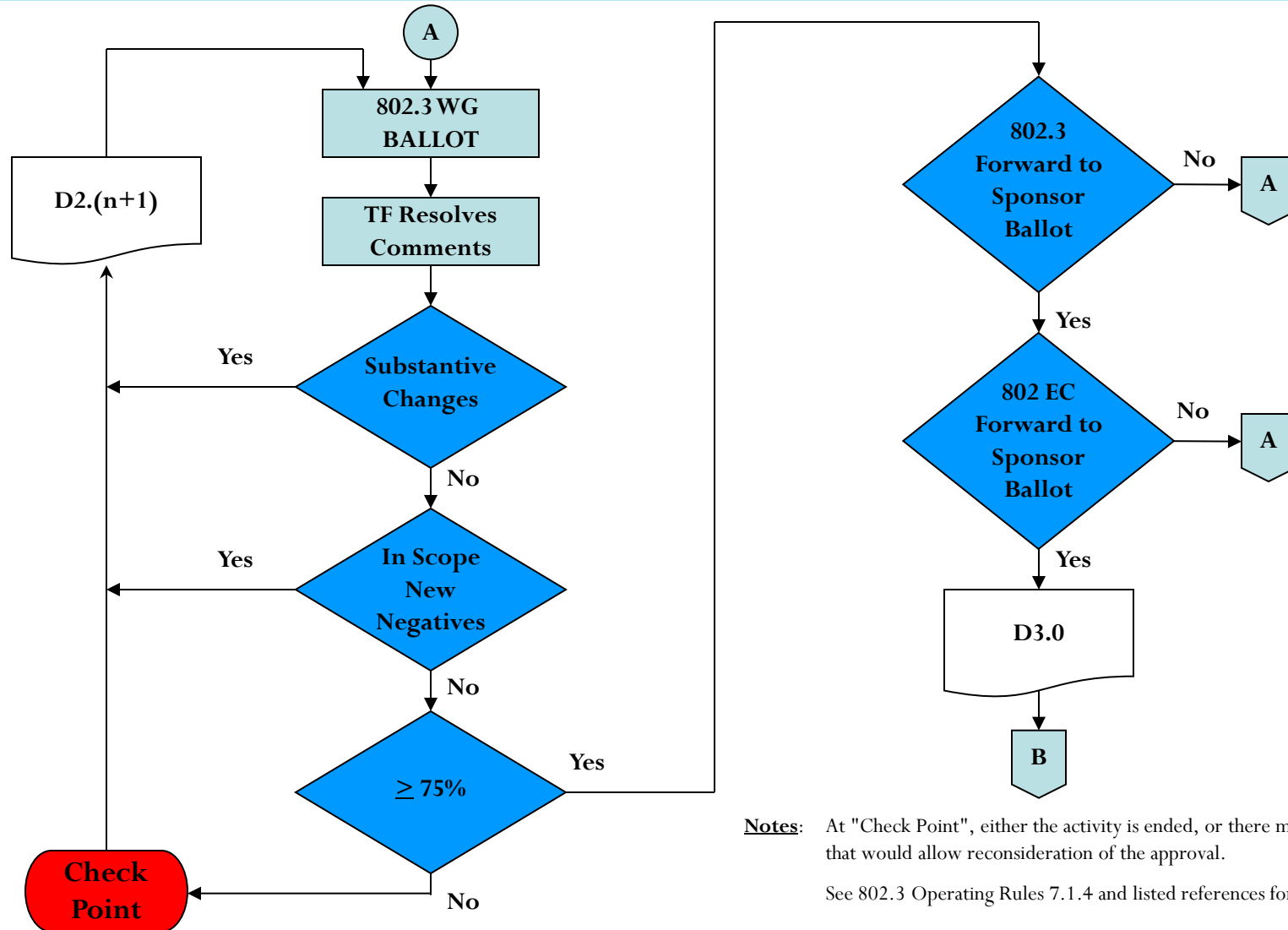


Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

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

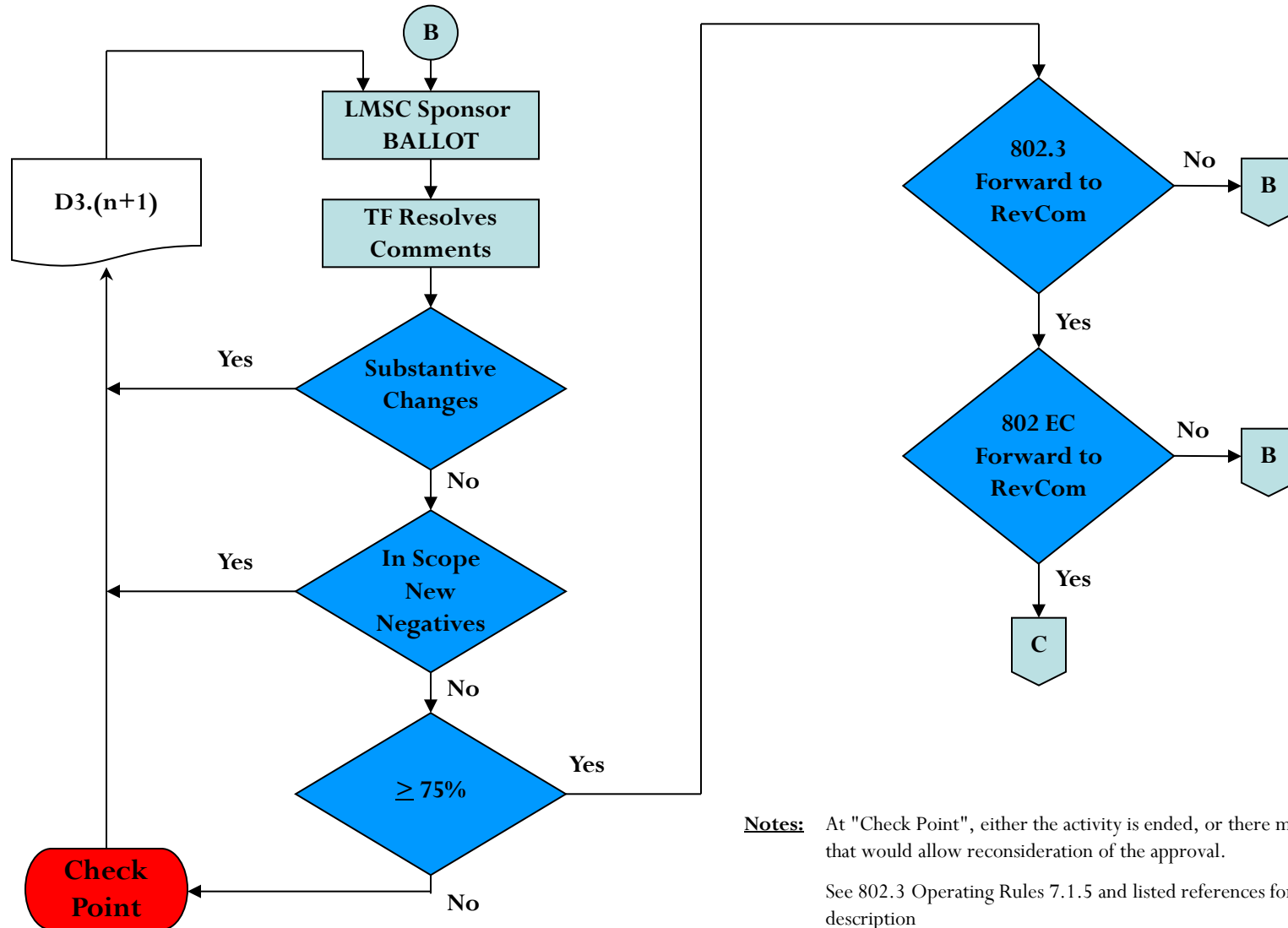


Overview of IEEE 802.3 Standards Process (3/5) – Working Group Ballot Phase



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

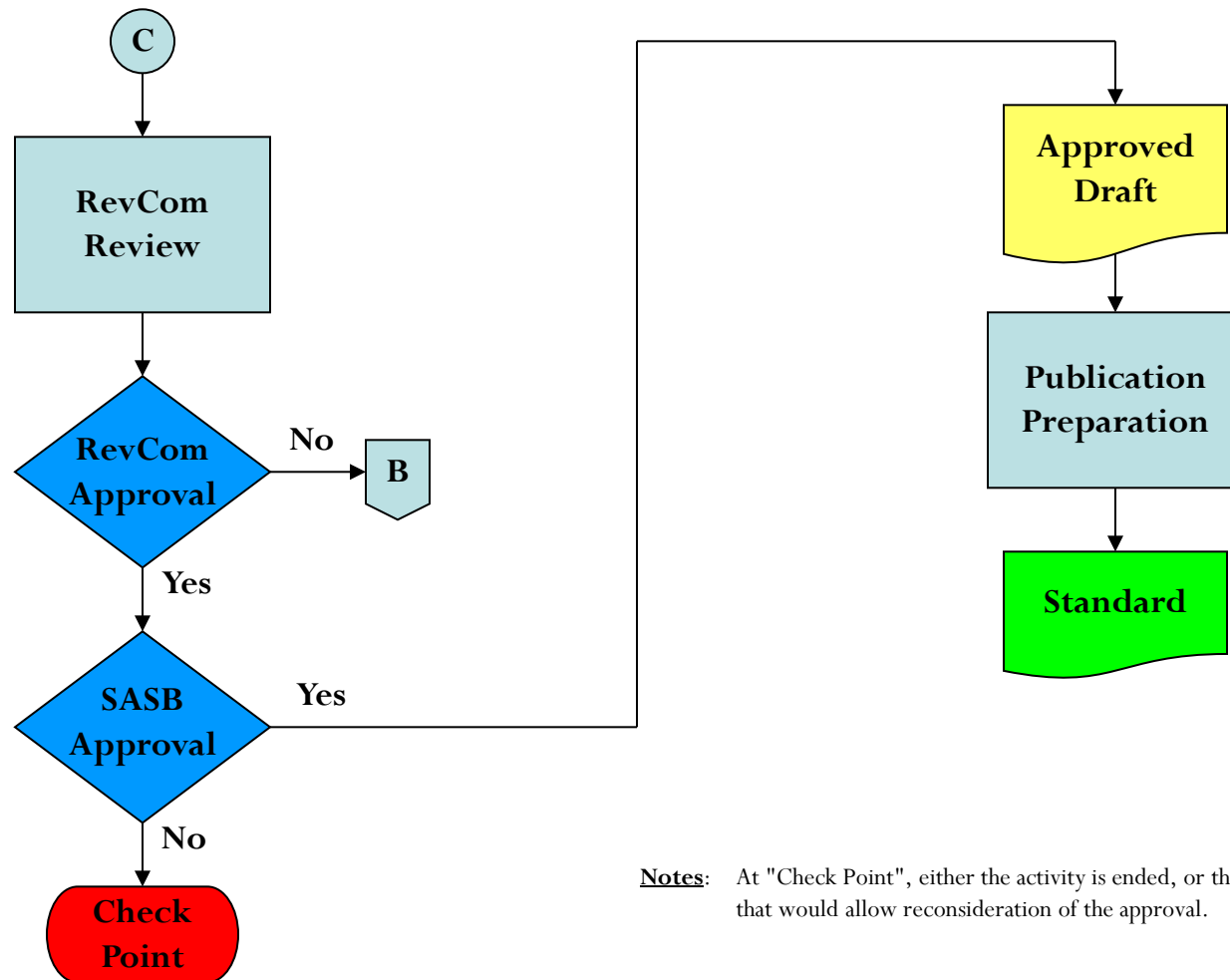
Overview of IEEE 802.3 Standards Process (4/5)- Sponsor Ballot Phase



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.

Liaisons and Communications

- Create liaison letter to **Japan Automotive Software Platform and Architecture (JASPAR)**

Private Area

- What is posted to the private area?
 - Drafts of the standard
 - Any drafts from other SDOs that have been supplied to us
 - Login and password info is never posted on slides or in emails
 - Login and password should not be given out to anyone

Task Force Operation

- The Task Force writes the standard
- P802.3bp will be a two clauses to the 802.3 Standard, 97 and 98
- P802.3bp will modify existing clauses 1, 22, 30, 32, 33, 45 and 78
- Other clauses may also be modified

Action Items

- Comment resolution to D1.4
- Resolve TBDs in draft—can't go to WG ballot with TBDs
- Insure technical completeness
- Figures will need to be in Frame drawing tool if not already---will need volunteers to redraw
- Discuss timeline

Presentations

Editor's Report D1.4	Marek Hajduczenia	Bright House Networks
Clause 30 Changes	Marek Hajduczenia	Bright House Networks
Clause 30 Changes to Support Autonegotiation	David Law	HP Ltd.
Proposed Clause 45 Editorial Changes	Marek Hajduczenia	Bright House Networks
Merged Synchronization State Machine	William Lo	Marvell
Proposed Revision to Figure 97-15 – PCS Receive state diagram	Alon Regev	Ixia
Proposed Changes to Clause 45 MDIO Registers for 1000BASE-T1	Mike Tu	Broadcom
Proposed Modifications to 1000BASE-T1 State Diagrams and Variables	Mike Tu Peiqing Wang	Broadcom
Clause 98 Comment #539 and #574 Reconciliation	Jay Cordero	Broadcom
Proposed Revision to Figure 97-14 – PCS Transmit state diagram	Alon Regev	Ixia
Consolidated register comment resolution to 802.3bp D1.4	William Lo	Marvell
Proposed Revision to Figure 97-14 – PCS Transmit state diagram for comment 344	Alon Regev	Ixia
State Machine Changes	Mike Tu	Broadcom
Updated Figure 97-22	Mike Tu	Broadcom
Updated Figure 97-23	Mike Tu	Broadcom
Suggested Remedies for Comments 555 and 563	Brett McClellan	Marvell
Variable Name Change Spreadsheet	Mike Tu	Broadcom

The Road to WG Ballot

- **May 2015**
 - Resolve comments to D1.4
 - Create D1.5 (D2.0) for Working Group preview (10 days prior to July plenary)
 - The TF does a TF review to D2.0 in any case
 - D2.0 needs to be technically complete (no TBDs, all Clause 30 management, PICs, drawings in FrameMaker format, etc.)
 - In a perfect world, D2.0 would have no errors of any kind
- **July 2015**
 - It is best not to make changes to the preview draft during the plenary week
 - Request to go to WG ballot is made at the Thursday closing plenary
 - Any changes made during the week must be shown as a red-line to D2.0
 - Small changes are OK---half the pages in red strike-through are not
 - If a small number of comments are received in TF review, it is possible to ask commenters to withdraw them and resubmit at WG ballot

WG Ballot

- **July 2015**
 - If WG approves WG ballot, David Law will open the ballot after the July meeting for a 30-day review
- **September 2015**
 - WG casts approve or disapprove votes
 - Ballot must meet >50% return rate, >75% approval rate, <30% abstain rate
 - ER or TR comments are an automatic disapprove
 - ER and TR must be signed-off by the commenter in order to get their vote changed to approve
 - TF resolves are WG comments to D2.0 and creates D2.1 for WG 1st recirculation out of September
 - Any portion of D2.0 that received no comments is out-of-scope for D2.1
 - This is how we move to completion
- **November 2015**
 - Resolve comments to D2.1

Motion

The IEEE P802.3bp 1000BASE-T1 Task Force approve
(and grant the Chair editorial license)
P802_3bp_to_JASPAR_0515.pdf.

M: Brett McClellan

S: William Lo

No discussion

Taken by voice-passed by acclamation

Technical (75% required)

Passed by acclamation at 11:34am

Motion

The IEEE P802.3bp 1000BASE-T1 Task Force accept the comment resolutions to D1.4 as detailed in http://www.ieee802.org/3/bp/comments/8023bp_D14_approved.pdf along with the results of motions accepted at the May 2015 Task Force meeting and charter the editor to produce D1.5 for WG preview and comment.

M: William Lo

S: Jim Graba

No Discussion

Taken by voice-passed by acclamation

Technical (75% required)

Passed by acclamation at 11:35am

Motion

The IEEE P802.3bp 1000BASE-T1 Task Force grant the Task Force leadership editorial license for D1.5 in preparation for WG preview.

M: Ludwig Winkel

S: Curtis Donahue

Taken by voice-passed by acclamation

Technical (75% required)

Passed by acclamation at 11:41am

Future Meeting

**IEEE 802 plenary
Monday, July 13th through Thursday, July 16th, 2015**

**All IEEE 802.3 Task Force, Study Groups and Ad Hocs will meet during the IEEE
802 plenary week**

Hilton Waikoloa Village

Waikoloa, HI

USA

Thank You!