Agenda and General Information

IEEE P802.3bs 400GbE Task Force

John D'Ambrosia, Dell

Berlin, Germany

IEEE 802 Mar 2015 Plenary

Agenda

- Welcome and Introductions
- Approve Agenda
- Approve Jan 2015 Interim Minutes
- Goals for this meeting
- Reflector and Web
- Patent Policy
- Ground Rules
- IEEE
  - Structure
  - Bylaws and Rules
  - Guidelines for IEEE-SA Meetings
  - IEEE Standards Process
- Project Documentation
- Review of BTI Activities
- Chief Editor's Report
- Liaisons & Communications
- Ad Hoc Reports
- Technical Presentations
- Motions and Closing Business
- 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

Attendance

- Tutorial Material on attendance tool
  - http://www.ieee802.org/3/minutes/mar15/0315_imat.pdf

- Attendance books
  - Keeps track of attendance in room
  - Used to support requests to verify attendance by chair if IMAT not used.

Goals for the meeting week

- Technical Presentations
- Assess Resolution of Big Ticket Items (BTIs)
- Re-evaluate timeline

Reflector and Web

- To subscribe to the 400G reflector, send an email to:

  ListServ@ieee.org

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

  subscribe stds-802-3-400G <yourfirstname> <yourlastname>

  end

- Send 400G reflector messages to:

  STDS-802-3-400G@listserv.ieee.org

- Task Force web page URL:

  http://www.ieee802.org/3/bs/index.html

- Ad hoc area URL:

  http://www.ieee802.org/3/bs/public/adhoc/index.shtml

Private Area

- URL: http://www.ieee802.org/3/bs/private/index.html
  - Username: xxxxxx
  - Password: xxxxxx

- Write it down…

- Note - The draft, and any other content, is posted for your review only, and neither the content nor access information should be copied or redistributed to others in violation of document copyrights.

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 12 and 12a 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.

(Optional to be shown)

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**
    - **"Personal awareness" means that the participant "is personally aware that the holder may have a potential Essential Patent Claim," even if the participant is not personally aware of the specific patents or patent claims**
  - **"Should inform the IEEE (or cause the IEEE to be informed)" of the identity of "any other holders of such 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

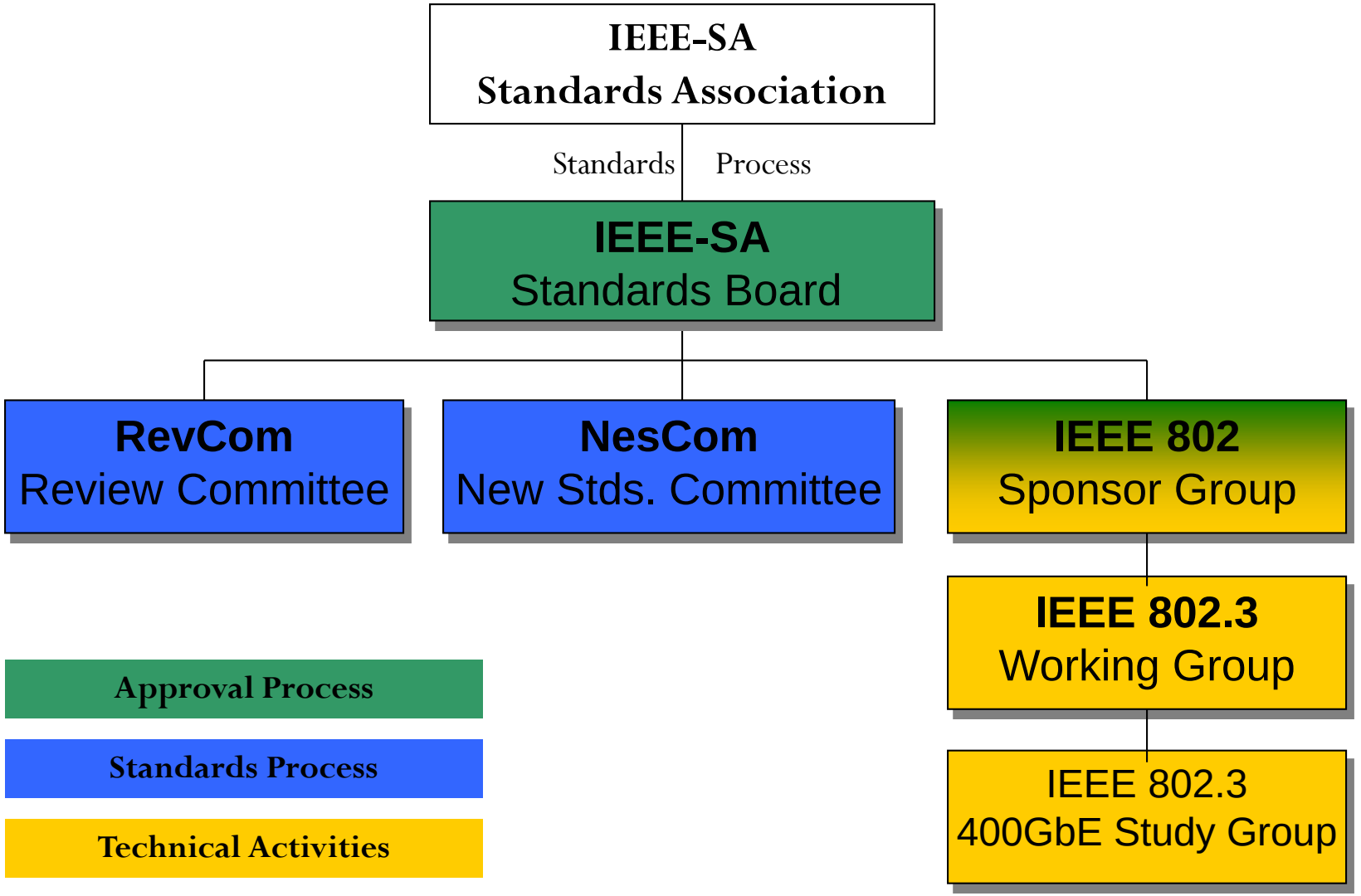
- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
  - **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
  - **Don't discuss specific license rates, terms, or conditions.**
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

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

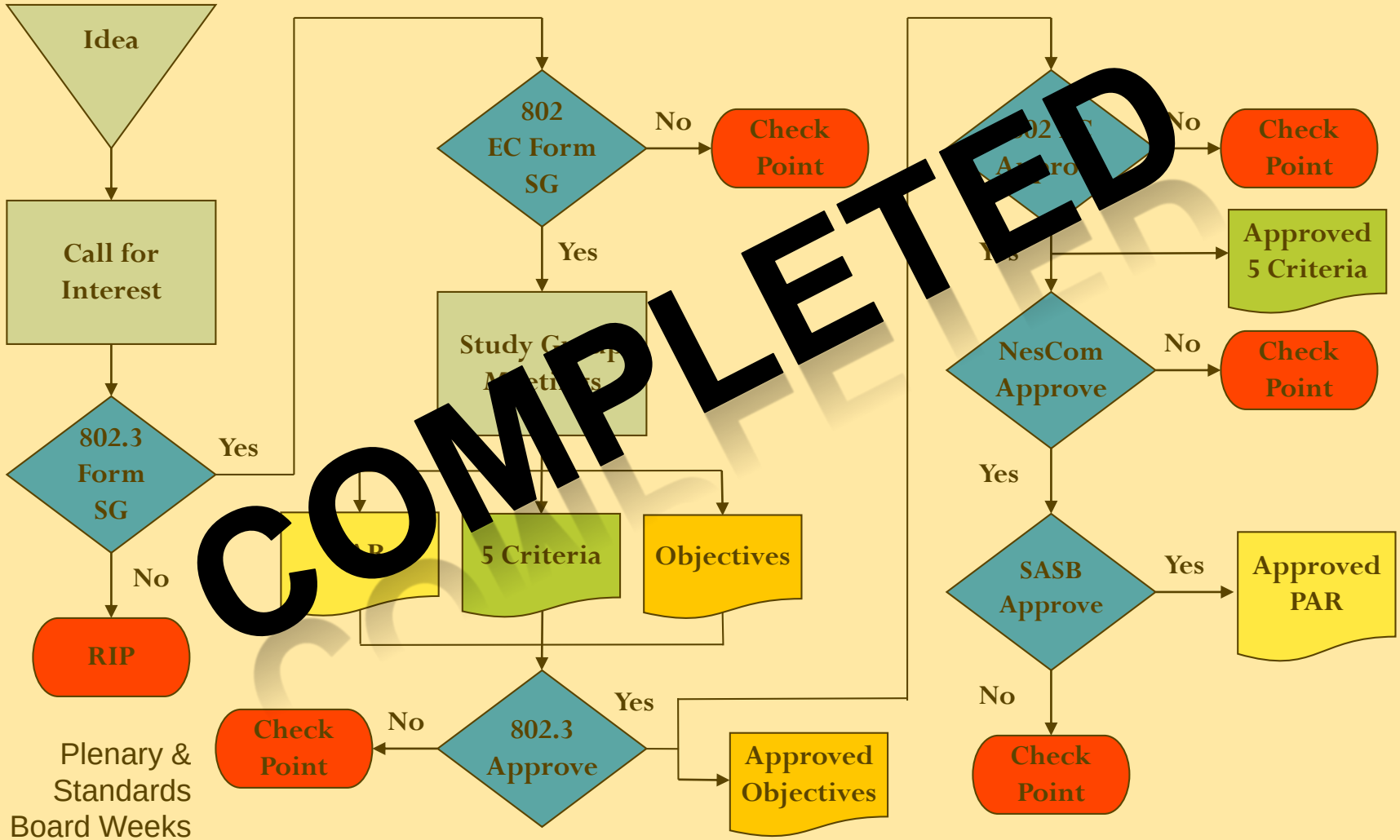
IEEE Structure



Important Bylaws, Rules, & References

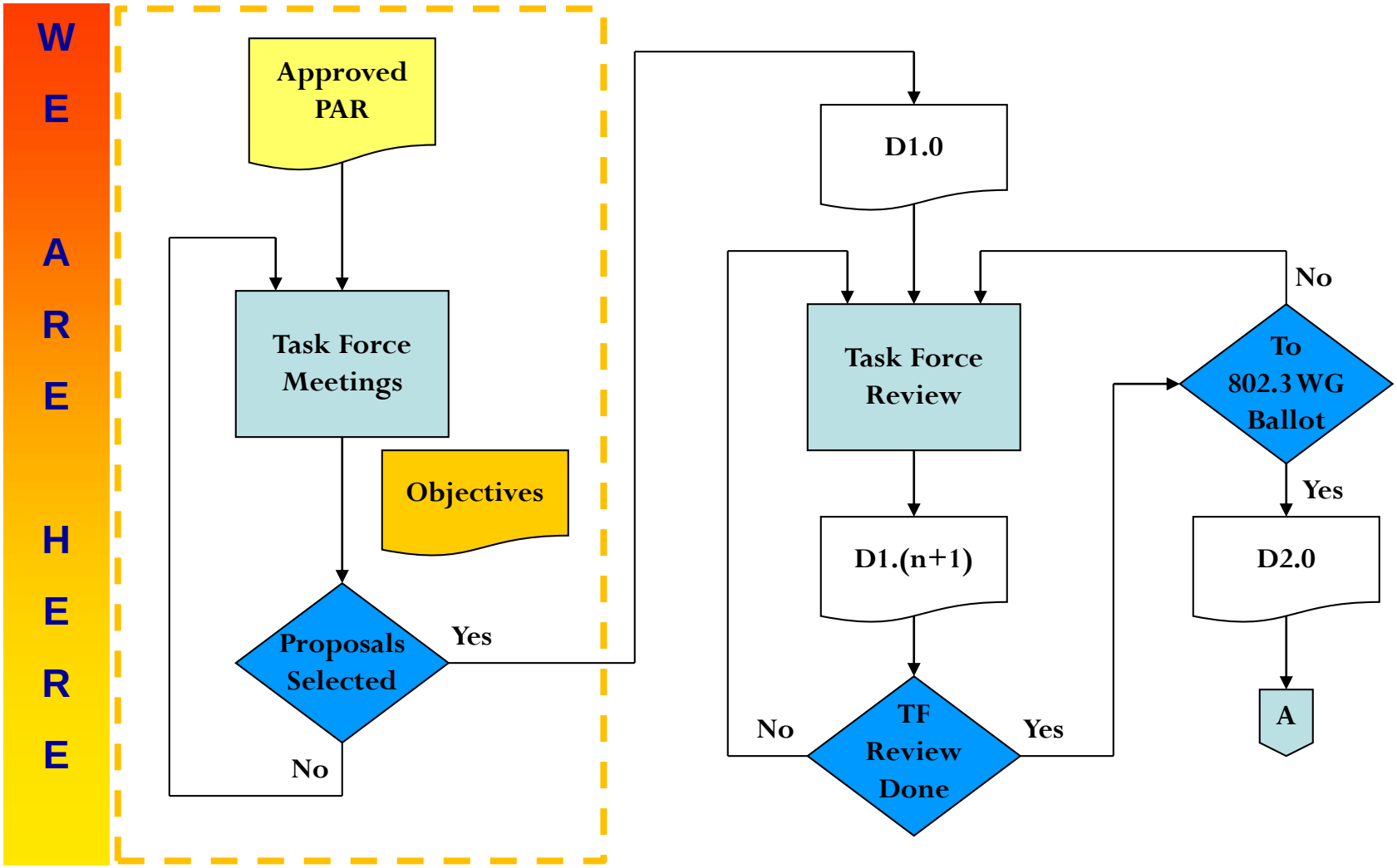
- **IEEE-SA Operations Manual**
  http://standards.ieee.org/sa/sa-om.pdf
- **IEEE-SA Standards Board Bylaws**
  http://standards.ieee.org/guides/bylaws/sb-bylaws.pdf
- **IEEE-SA Standards Board Operations Manual**
  http://standards.ieee.org/guides/opman/sb-om.pdf
- **IEEE 802 LAN/MAN Standards Committee (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
- **“Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy”**
  http://standards.ieee.org/develop/policies/antitrust.pdf

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

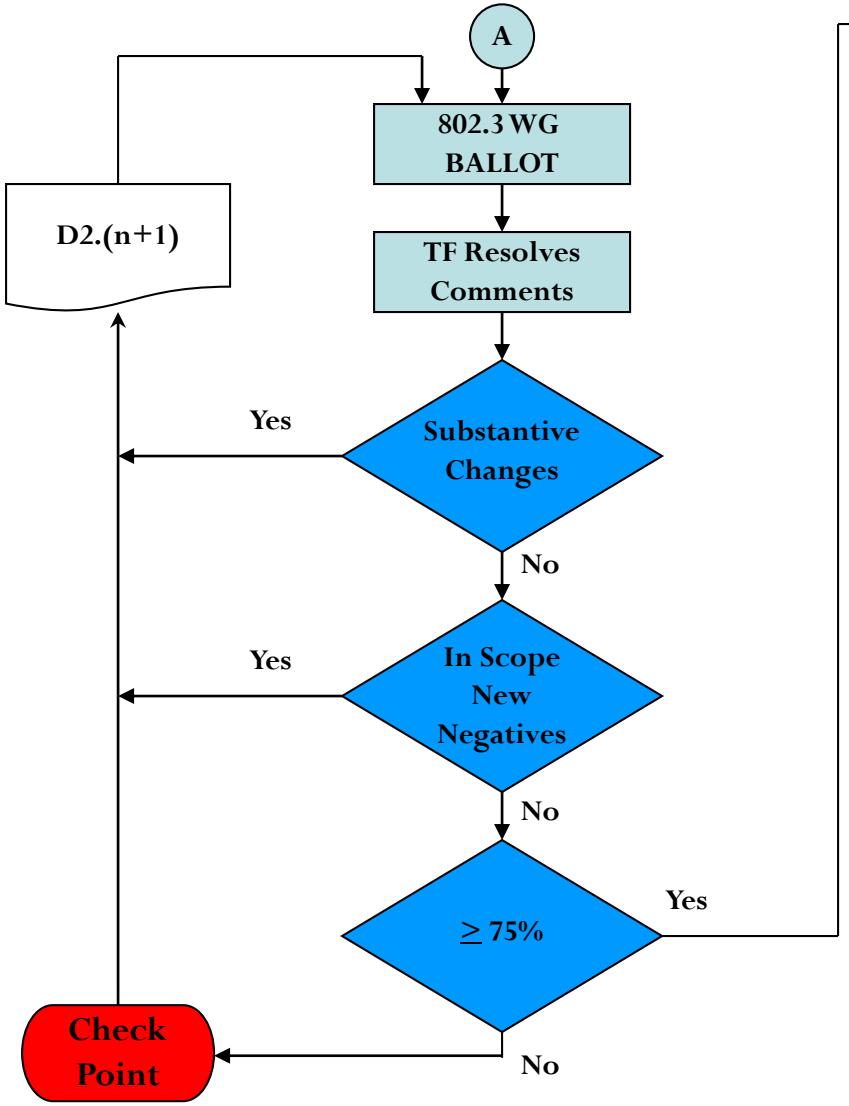


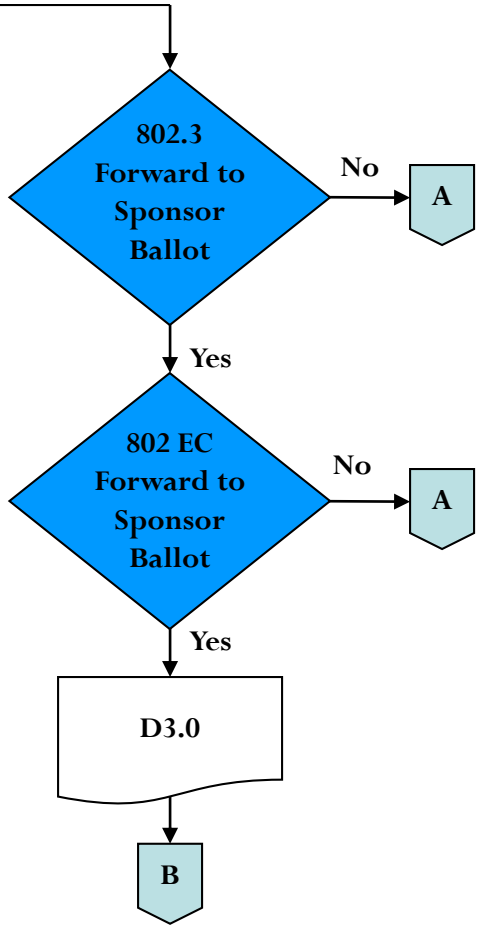
Note: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

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

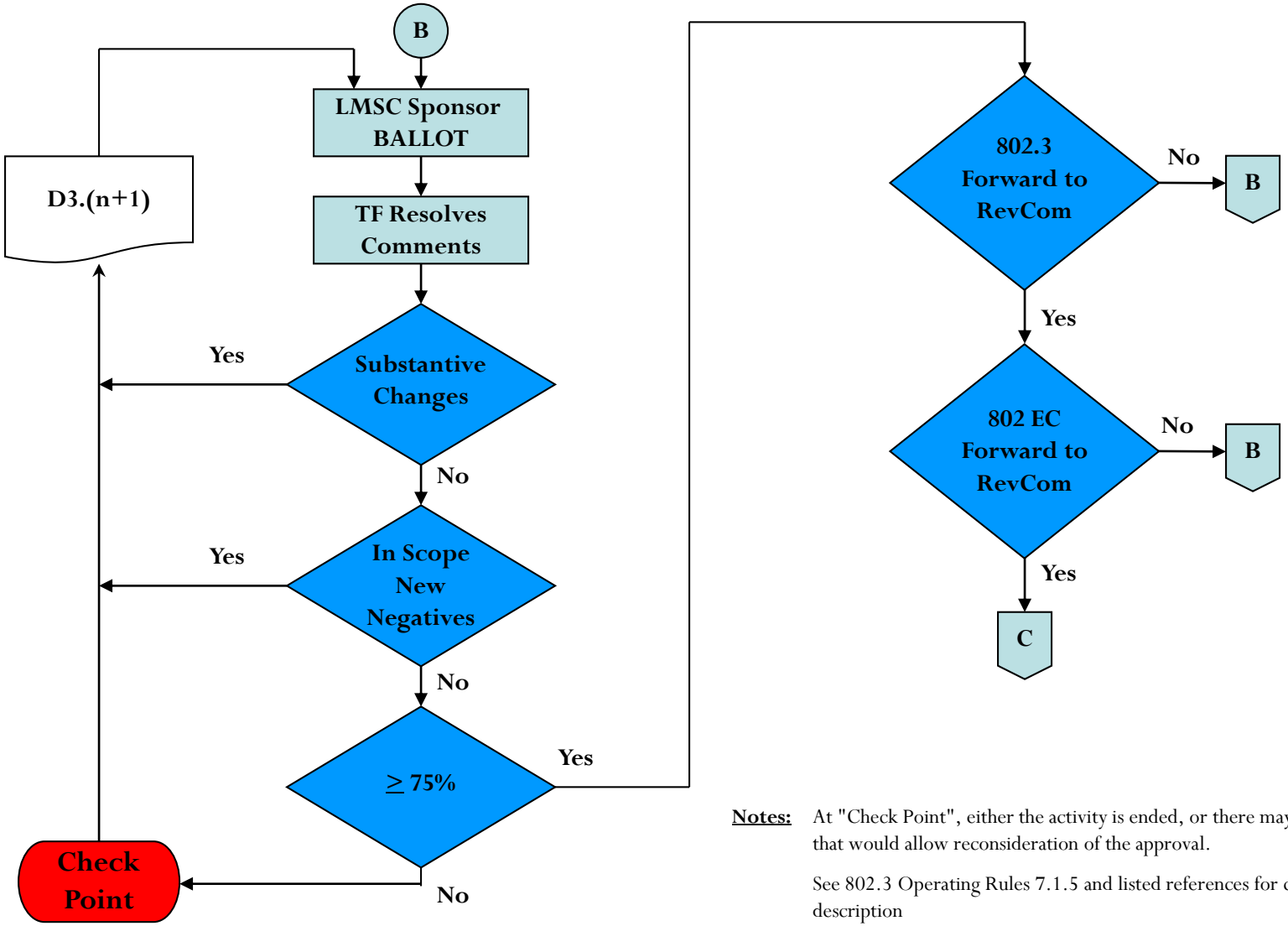




Notes: At "Check Point", either the activity is ended, or there may be various options that would allow reconsideration of the approval.

See 802.3 Operating Rules 7.1.4 and listed references for complete description

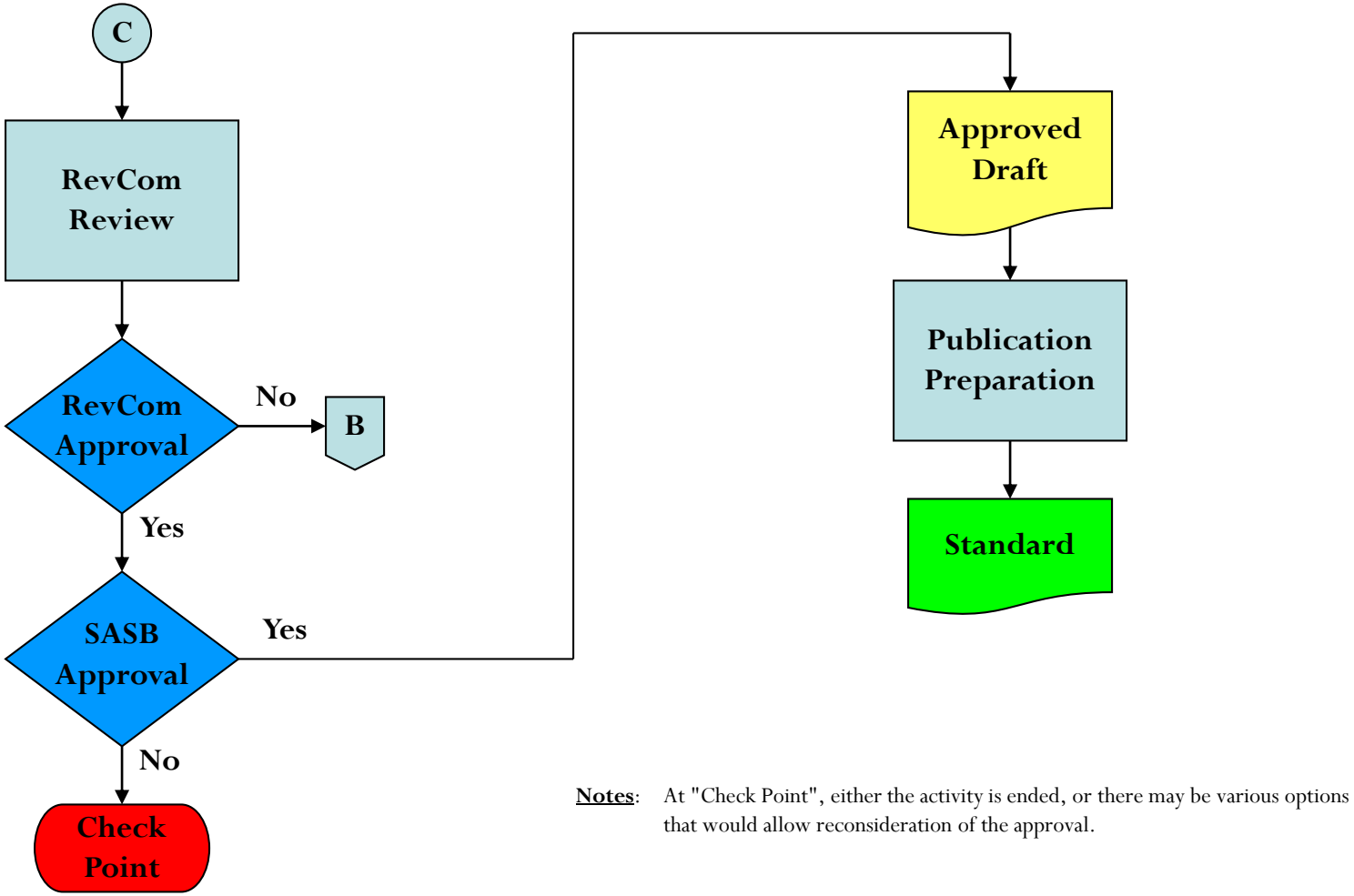
Overview of IEEE 802.3 Standards Process (4/5)- Sponsor Ballot Phase



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.

Project Documentation

- **PAR -**

  http://www.ieee802.org/3/bs/PAR_P802.3bs_14_0612.pdf

- **CSD -**

  http://www.ieee802.org/3/bs/CSD_400_14_0121.pdf

- **Objectives -**

  http://www.ieee802.org/3/bs/Objectives_14_0320.pdf

- **Timeline -**

  http://www.ieee802.org/3/bs/timeline_3bs_0514.pdf

Project Objectives

- Support a MAC data rate of 400 Gb/s
- Support a BER of better than or equal to 10^{-13} at the MAC/PLS service interface (or the frame loss ratio equivalent)
- Support full-duplex operation only
- Preserve the Ethernet frame format utilizing the Ethernet MAC
- Preserve minimum and maximum FrameSize of current Ethernet standard
- Provide appropriate support for OTN
- Specify optional Energy Efficient Ethernet (EEE) capability for 400 Gb/s PHYs
- Support optional 400 Gb/s Attachment Unit Interfaces for chip-to-chip and chip-to-module applications
- Provide physical layer specifications which support link distances of:
  - At least 100 m over MMF
  - At least 500 m over SMF
  - At least 2 km over SMF
  - At least 10 km over SMF

* Approved by IEEE 802.3 WG, 20-Mar-2014

BTI Progress

- Action items identified by proposal authors and TF Participants in Jan 2015
- Summarized in http://www.ieee802.org/3/bs/public/15_01/big_ticket_items_3bs_01_0115.pdf
- Following slides are chair's assessment of BTI status. (Items in red have supporting material this meeting cycle).
- Feedback welcome.

BTI Progress

Item	Proposal	BTI Actions	March Presentations	March General Presentations	Comments
PCS	gustlin_3bs_02_0115	Slide 11 per gustlin_3bs_02 are work items PMD selection influence PCS and FEC Need burst error nature to select PCS and FEC Error model by PMD type?	gustlin_3bs_02_0315.pdf		
FEC	Reference: wang_x_3bs_01_0115	PMD selection BERin required by PMD Try to eliminate unacceptable FEC options e.g. in wang_x_3bs_01 4x100G or 1x400G FEC striping Impact of overspeed on PMD error rates	gustlin_3bs_02_0315.pdf wang_x_3bs_01_0315.pdf		
PMA	Reference: Slavick_3bs_01_0115 Wang_t_3bs_01_0115 Gustlin_3bs_02_0115	PMD selection and electrical interfaces will impact Muxing scheme	gustlin_3bs_02_0315.pdf wang_t_3bs_01_0315.pdf	cole_3bs_01_0315	
Arch	dambrosia_3bs_02b_0115	None	None		
EEE	marris_3bs_01_0115	None	None		
OTN	trowbridge_3bs_01a_0115	none	trowbridge_3bs_01_0315.pdf		
Electrical Interfaces					

BTI Progress

Item	Proposal	BTI Actions	March Specific Presentations	March General Presentations	Comments
C2C CDAUI-8	PAM4: li_3bs_01a_0115	Refine proposal and COM model Test data from industry products, when available Power Simulations on adopted channel Industry channel data for simulation purposes Package effects	healey_3bs_01_0315.pdf li_3bs_01_0315.pdf li_3bs_02_0315.pdf li_3bs_03_0315.pdf parthasarathy_3bs_01_0315.pdf	lecheminant_3bs_01_0315 mellitz_3bs_01_0315 cole_3bs_02_0315	
	NRZ: palkert_3bs_02_0115	Refine proposal and COM model Test data from industry products, when available Power Simulations on adopted channel Industry channel data for simulation purposes Package effects	twombly_3bs_01_0315.pdf	mellitz_3bs_01_0315 cole_3bs_02_0315	
Item	Proposal	BTI Actions	March Specific Presentations	March General Presentations	Comments
C2M CDAUI-8	PAM4: brown_3bs_01a_0115	Evaluate Coupling between electrical and optical interfaces Refine proposal ILD/xtalk Test data from industry products, when available Power Simulations on adopted channel Industry channel data for simulation purposes Package effects Test procedures and reference receivers with channel simulations	brown_3bs_01_0315.pdf brown_3bs_02_0315.pdf	lecheminant_3bs_01_0315 szczepanek_3bs_01_0315.pdf	
	NRZ: palkert_3bs_01_0115	Evaluate Coupling between electrical and optical interfaces Refine proposal ILD/xtalk Test data from industry products, when available Power Simulations on adopted channel Industry channel data for simulation purposes Package effects Test procedures and reference receivers with channel simulations	twombly_3bs_01_0315.pdf	szczepanek_3bs_01_0315.pdf	
LPPI	Ref: Goergen_3bs_03a_0115	C2C and C2M interaction across the 3 reaches Refine proposal and build consensus	ghiasi_3bs_01_0315.pdf dawe_3bs_01_0315.pdf		

BTI Progress (500m SMF)

Proposal	BTI Actions	March Presentations	March General Presentations	Comments
Cole_3bs_03a_1114 (NRZ)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity		lecheminant_3bs_01_0315 szczepanek_3bs_01_0315.pdf	
Cole_3bs_04a_1114 (PAM4)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity		lecheminant_3bs_01_0315 szczepanek_3bs_01_0315.pdf	
Welch_3bs_01a_0115 (PAM4)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity More Test results (prefer real data on all proposals)	welch_3bs_01_0315.pdf welch_3bs_02_0315.pdf	lecheminant_3bs_01_0315 szczepanek_3bs_01_0315.pdf	
Lewis_3bs_01a_1114 (DMT) Corbeil_3bs_01_0115 (DMT)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity Optical loss budget model interoperability		szczepanek_3bs_01_0315.pdf	

BTI Progress (2km SMF)

Proposal	BTI Actions	March Presentations	March General Presentations	
Cole_3bs_01_0115.pdf (NRZ)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity	cole_3bs_03_0315	lecheminant_3bs_01_0315 szczepanek_3bs_01_0315.pdf wen_3bs_01_0315.pdf	
Kojima_3bs_01a_0115 (NRZ)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity		lecheminant_3bs_01_0315 szczepanek_3bs_01_0315.pdf wen_3bs_01_0315.pdf	
Cole_3bs_02_0115.pdf (PAM4)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity		lecheminant_3bs_01_0315 szczepanek_3bs_01_0315.pdf	
Lewis_3bs_01a_0115 (PAM4)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity	tipper_3bs_01_0315.pdf lewis_3bs_01_0315.pdf	lecheminant_3bs_01_0315 szczepanek_3bs_01_0315.pdf	
Lewis_3bs_01a_1114.pdf (DMT) Corbeil_3bs_01_0115.pdf (DMT)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity Optical loss budget model interoperability		szczepanek_3bs_01_0315.pdf	Future experiments TBD

BTI Progress (10km SMF PMD)

Proposal	BTI Actions	March Presentations	March General Presentations	Comments
Cole_3bs_01_0115.pdf (NRZ)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity	cole_3bs_04_0315	lecheminant_3bs_01_0315 szczepanek_3bs_01_0315.pdf wen_3bs_01_0315.pdf	
Kojima_3bs_01a_0115.pdf (NRZ)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity	shirao_3bs_01_0315	lecheminant_3bs_01_0315 szczepanek_3bs_01_0315.pdf wen_3bs_01_0315.pdf	
Cole_3bs_02_0115.pdf (PAM4)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity	stassar_3bs_01_0315 ghiasi_3bs_02_0315.pdf	lecheminant_3bs_01_0315 szczepanek_3bs_01_0315.pdf	
Takahara_3bs_01_1114 (DMT) corbeil_3bs_01_0115 (DMT)	Evaluate Coupling between electrical and optical interfaces RX Technical feasibility Dispersion penalty worst case (in SMF ad hoc) TDP. MPI RX sensitivity Optical loss budget model interoperability	corbeil_3bs_01_0315.pdf tanaka_3bs_01_0315	szczepanek_3bs_01_0315.pdf	additional measurements scheduled for May

Liaisons and Communications

- None at this time

Ad Hocs

- Webpage: Ad Hoc
  - http://www.ieee802.org/3/bs/public/adhoc/index.shtml

- Ad Hocs
  - Logic, Chair – Mark Gustlin
  - Use Case, Chair – Gary Nicholl
  - SMF, Chair – Pete Anslow
  - MMF, Chair – Jonathan King
  - Electrical Interface, Co-chair – Joel Goergen, Co-chair – Vasu Parthasarathy

Tuesday

All times listed are subject to change.

Time	Presenter	Affiliation	Title	File Name
1:00 PM	John D'Ambrosia	Dell	Agenda and General Information	agenda_3bs_01_0315.pdf
1:30 PM	Pete Ansow	Ciena	Chief Editor's Report: Document structure, naming and open questions	anslow_3bs_01_0315.pdf
1:50 PM	Mark Gustlin	Xilinx	Logic Ad hoc Updates	gustlin_3bs_01_0315.pdf
2:20 PM	Pete Anslow	Ciena	SMF Ad Hoc Updates	anslow_3bs_02_0315.pdf
2:40 PM	Joel Goergen	Cisco	Electric Interface Ad Hoc Update	goergen_3bs_01_0315.pdf
3:00 PM	Break			
3:20 PM	Kent Lusted	Intel	Nomenclature	lusted_3bs_01_0315.pdf
3:30 PM	John D'Ambrosia	Dell	Timeline Revisited	dambrosia_3bs_01_0315.pdf
3:50 PM	Brad Booth	Microsoft	Thoughts on Big Ticket Items	booth_3bs_01_0315.pdf
4:15 PM	Mark Gustlin	Xilinx	400GbE PCS and PMA Baseline Proposals	gustlin_3bs_02_0315.pdf
4:45 PM	Oded Wetheim	Mellanox	Muxing and Interleaving	wertherim_3bs_01_0315.pdf
5:10 PM	Tongtong Wang	Huawei	Further investigation on bit multiplexing for 400GbE PMA	wang_t_3bs_01_0315.pdf
5:35 PM	Break			
5:55 PM	Xinyuan Wang	Huawei	Proposal for 400GbE FEC Architecture	wang_x_3bs_01_0315.pdf
6:20 PM	Steve Trowbridge	Alcatel-Lucent	OTN Support Proposal	trowbridge_3bs_01_0315.pdf
6:40 PM	Greg Lecheminant	Keysight	Parametric Test and Measurement for 400 Gb/s	lecheminant_3bs_01_0315.pdf
7:00 PM	Break for the day			

Wednesday

All times listed are subject to change.

8:00 AM	John D'Ambrosia	Dell	Opening Comments	
8:10 AM	Rich Mellitz	Intel	Improved mellitz_3bs_01_0714 C2C Channels Which Exceed the goergen_3bs_01a_1114 Loss Line	mellitz_3bs_01_0315.pdf
8:35 AM	Ali Ghiasi	Ghiasi Quantum LLC	LPPI "The Ultra Low Power C2C Interface"	ghiasi_3bs_01_0315.pdf
9:00 AM	Graeme Boyd	PMC-Sierra	CEI-56G-XSR-NRZ a candidate C2EO CDAUI-8	dawe_3bs_01_0315.pdf
9:25 AM	Jeff Twombly	Credo	50Gbps NRZ Measurement Results in support of "palkert_01_115_CDAUI8_C2M" and "palkert_01_115_CDAUI8_C2C	twombly_3bs_01_0315.pdf
9:50 AM	Adam Healey	Avago	Channel operating margin for PAM4 CDAUI-8 chip-to-chip interfaces	healey_3bs_01_0315.pdf
10:00 AM	Break			
10:20 AM	David Brown	Semtech	Update Baseline Proposal for CDAUI-8 Chip-to-Module (c2m)	brown_3bs_01_0315.pdf
10:45 AM	David Brown	Semtech	56Gb/s PAM4 on a 28G VSR channel	brown_3bs_02_0315.pdf
11:10 AM	Mike Li	Altera	Draft Baseline Proposal for CDAUI-8 Chip-to-Chip (c2c)	li_3bs_01_0315.pdf
11:35 AM	Mike Li	Altera	Review of BTIs Status for the PAM4 CDAUI-8 Chip-to-Chip (c2c) Baseline Proposal	li_3bs_02_0315.pdf
12:00 PM	Lunch			
1:00 PM	Mike Li	Altera	PAM4 CDAUI-8 Chip-to-Chip (c2c) Link Simulation with a Reference Channel	li_3bs_03_0315.pdf
1:25 PM	Vasu Parthasarathy	Broadcom	PAM4 performance over various electrical reaches	parthasarathy_3bs_01_0315.pdf
1:50 PM	Andre Szczepanek	Inphi	Decoupling electrical and Optical Modulation	szczepanek_3bs_01_0315.pdf
2:15 PM	Brian Welch	Luxtera	400G-PSM4: A Proposal for the 500m Objective using 100 Gb/s per Lane Signaling	welch_3bs_01_0315.pdf
2:40 PM	Brian Welch	Luxtera	A Review of 400G-PSM4	welch_3bs_02_0315.pdf
3:05 PM	Break			
3:25 PM	Alan Tipper	Semtech	100Gb/s/Lambda 2km PAM4	tipper_3bs_01_0315.pdf
3:50 PM	David Lewis	JDSU	Proposal for 400GE Optical PMD for 2km SMF Objective based on 4 x 100G PAM4	lewis_3bs_01_0315.pdf
4:15 PM	Yangjing Wen	Huawei	Experimental Investigation on Dispersion Tolerance of 8x53.2Gbps NRZ for 400GbE 2km and 10km PMD	wen_3bs_01_0315.pdf
4:40 PM	Mizuki Shirao	Mitsubishi	Big Ticket Items and supplemental information for 8x50G NRZ	shirao_3bs_01_0315.pdf
5:05 PM	Sacha Corbeil	JDSU	Big Ticket Items for 10km DMT	corbeil_3bs_01_0315.pdf
5:30 PM	Toshiki Tanaka	Fujitsu	Chromatic dispersion penalty of 4x100G DMT for 10km SMF PMD	tanaka_3bs_01_0315.pdf
6:00 PM	Break for day			

Thursday

Note –Times listed are subject to change.

8:30 AM	John D'Ambrosia	Dell	Opening Comments	
8:40 AM	Peter Stassar	Huawei	Update on BTI's for 8x50G PAM4 over 10km SMF	stassar_3bs_01_0315.pdf
9:05 AM	Ali Ghiasi	Ghiasi Quantum LLC	400G-LR8: A Proposal for 10 km Objective Using 50 Gb/s PAM4 Signaling	ghiasi_3bs_02_0315.pdf
Pending TF Approval and Time	Chris Cole	Finisar	400Gb/s 2km duplex SMF NRZ PMD Baseline Specifications	cole_3bs_03_0315.pdf
	Chris Cole	Finisar	400Gb/s 10km duplex SMF NRZ PMD Baseline Specifications	cole_3bs_04_0315.pdf
	Chris Cole	Finisar	SMF PMD Modulation Observations	cole_3bs_02_0315.pdf
	Chris Cole	Finisar	400G System Use Cases	cole_3bs_01_0315.pdf
10:00 AM	Break			
10:20 AM	Discussion, Strawpolls, Motions			
11:30 AM	Closing Business			
12:00 PM	Adjourn			

Future Meetings

- See: http://www.ieee802.org/3/interims/index.html
- May 2015 Interim
  - Week of May 18, 2015
  - Omni William Penn Hotel, Pittsburgh, PA, USA
  - Hosted by Ethernet Alliance
- July 2015 Plenary
  - Week of July 12
  - Hilton Waikoloa Village, Waikoloa, Hawaii USA
- Sept 2015 Interim
  - Week of Sept 14
  - Hyatt Regency Coconut Point, Bonita Springs, FL, USA
  - Hosted by NEC
- Nov 2015 Plenary
  - Week of Nov 8
  - Hyatt Regency Dallas, Dallas, TX, USA

- Anyone interested in hosting a meeting or webex contact me.

Thank You!