

IEEE 802.3 Working Group Interim meeting 21st January 2016

David Law
Chair, IEEE 802.3 Working Group
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Agenda, voter list:
<http://www.ieee802.org/3/minutes/jan16/index.html>

IEEE 802.3 Officers

IEEE 802.3 Chair: David Law <dlaw@hpe.com>

IEEE 802.3 Vice Chair: Adam Healey <adam.healey@avagotech.com>

IEEE 802.3 Secretary: Pete Anslow <panslow@ciena.com>

IEEE 802.3 Executive Secretary: Steve Carlson <scarlson@ieee.org>

IEEE 802.3 Treasurer: Valerie Maguire <valerie_maguire@siemon.com>

IEEE 802.3 Task Force chairs

IEEE P802.3bn EPON Protocol over Coax (EPoC): Mark Laubach <laubach@broadcom.com>

IEEE P802.3bp 1000BASE-T1: Steve Carlson <scarlson@hspdesign.com>

IEEE P802.3bq 25G/40GBASE-T: Dave Chalupsky <david.chalupsky@intel.com>

IEEE P802.3br Interspersing Express Traffic: Ludwig Winkel <ludwig.winkel@siemens.com>

IEEE P802.3bs 400 Gb/s Ethernet: John D'Ambrosia <john_dambrosia@dell.com>

IEEE P802.3bt DTE Power via MDI over 4-Pair: Chad Jones <cmjones@cisco.com>

IEEE P802.3bu 1-Pair Power over Data Lines (PoDL): Dan Dove <dan_dove@ieee.org>

IEEE P802.3bv Gigabit Ethernet Over Plastic Optical Fiber: Bob Grow <bob.grow@ieee.org>

IEEE P802.3by 25 Gb/s Ethernet: Mark Nowell <mnowell@cisco.com>

IEEE P802.3bz 2.5G/5GBASE-T: Dave Chalupsky <david.chalupsky@intel.com>

IEEE P802.3ca 25 Gb/s, 50 Gb/s, and 100 Gb/s EPON: Curtis Knittle <c.knittle@cablelabs.com>

IEEE P802.3cb 2.5 Gb/s and 5 Gb/s Backplane and Copper Cables: Yong Kim <ybkim@broadcom.com>

IEEE 802.3 Study Group chairs

IEEE 802.3 50 Gb/s Ethernet Over a Single Lane: Mark Nowell <mnowell@cisco.com>

IEEE 802.3 Next Generation 100 Gb/s Ethernet & 200 Gb/s Ethernet: Mark Nowell <mnowell@cisco.com>

IEEE 802.3 25 Gb/s Ethernet PMD(s) for Single Mode Fiber: David Lewis <David.Lewis@lumentum.com>

WG 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

Agenda

- Approve agenda
 - <http://www.ieee802.org/3/minutes/jan16/>
 - Any modifications, additions or deletions?

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.

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

Membership and attendance recording

Membership requirements

- Membership requirements (gaining and retaining)
 - 75% attendance at 2 of last 4 plenary sessions
 - A qualifying interim may be substituted for one plenary
 - Request to become member during potential voter agenda item at IEEE 802.3 opening or closing plenary
 - Participate in **two** out of the last **three** IEEE 802.3 Working Group ballots to retaining membership
 - Maintain valid contact information
 - Consistent declaration of affiliation

Membership and attendance recording

- IEEE 802.3 voters

http://www.ieee802.org/3/minutes/mar16/0316_voters.pdf

- Attendance recording

[Manage Attendee](#)

	MON 14-Sep-2015	TUE 15-Sep-2015	WED 16-Sep-2015	THU 17-Sep-2015	FRI 18-Sep-2015	
Schedule						
P802.3bn, bp, br, bt, by, 2.5/5G			7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00			
WG meeting			7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00			

Please record your attendance for an active Meeting (denoted by yellow bar) by clicking on the yellow bar. Once your attendance has been recorded, the yellow bar changes to a green bar.

Submittal: As the person submitting this form, I certify that:

1. I am submitting this attendance record for myself and not someone else. DO NOT SUBMIT FOR OTHERS!
2. At the time of the submittal, I am currently in the Session above.

- IEEE 802.3 balloting records

http://ieee802.org/3/ballots/ballot_returns.pdf

IEEE 802.3 Maintenance Task Force

Outgoing liaison letter

IEEE 802.3 Maintenance Task Force

Outgoing liaison letter

Approve IEEE_802d3_to_ISOIEC_JTC1_SC6_0116_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to ISO/IEC JTC1 SC6.

Move: Adam Healey

Second: ????

Technical ($\geq 75\%$ required)

Y: N: A:

IEEE P802.3bq 25G/40GBASE-T Task Force

Outgoing liaison letters

IEEE P802.3bq 25G/40GBASE-T Task Force

Outgoing liaison letters

- Move that the IEEE 802.3 Working Group approve:
IEEE_802d3_to_ISOIEC_SC25_WG3_40GRL_0116_draft.pdf
IEEE_802d3_to_ISOIEC_SC25_WG3_9905_0116_draft.pdf
with editorial license granted to the Chair (or his appointed agent) as liaison communications from the IEEE 802.3 Working Group to ISO/IEC JTC1/SC25 WG3.
- Moved: David Chalupsky
- Seconded: George Zimmerman
- Technical ($\geq 75\%$ required)
- Y: N: A:
- Motion passes/fails
- (Task Force motion passed 20/0/0, January 21, 2016)

IEEE P802.3br Interspersing Express Traffic Task Force

Request for unconditional approval
to proceed to sponsor ballot

IEEE P802.3br IET to Sponsor ballot

The 2nd Working Group recirculation ballot on IEEE P802.3br draft D2.4 closed on 03rd Dec 2015

Vote Tally Draft D2.4

	D2.0	D2.1	D2.2	D2.3	D2.4		D2.0	D2.1	D2.2	D2.3	D2.4
Voters	275	275	279	279	279						
Approve	72	81	110	115	135	Response rate:	50,91%	52,73%	53,05%	55,20%	64.87%
Disapprove with comment	16	15	7	6	6	Approval rate:	81,82%	84,38%	94,02%	95,04%	95.74%
Disapprove without comment	1	0	0	0	0	Abstain rate:	36,43%	33,79%	20,95%	21,43%	22.10%
Abstain	51	49	31	33	40						
Returns	140	145	148	154	181						
Comments	385	114	51	25	16						
Comments incl. from floor	387	115	51	32	16						

Motion 1

Move that the IEEE 802.3 Working Group re-affirm the CSD responses in

<http://www.ieee802.org/3/br/8023-DMLT-SG-1311-Winkel-5C-v2.3.pdf>

and request approval to progress the IEEE P802.3br draft to IEEE 802 LMSC sponsor ballot.

Moved: Ludwig Winkel on behalf of the TF IET
Technical ($\geq 75\%$ required)

Y: N: A: Results:

IEEE P802.3bs 400Gb/s Ethernet Task Force

Outgoing liaison letter

IEEE P802.3bs 400Gb/s Ethernet Task Force

Outgoing liaison letter

Move that the IEEE 802.3 Working Group approve the text in IEEE_802d3_to_SG15_0116_draft.pdf with editorial license granted to the IEEE 802.3 WG Chair (or his appointed agent) as a liaison to ITU-T

Move: John D'Ambrosia

Second: Pete Anslow

Technical ($\geq 75\%$ required)

Y: N: A:

IEEE P802.3bt DTE Power via MDI over 4-pair Task Force

Outgoing liaison letter

IEEE P802.3bt DTE Power via MDI over 4-pair Task Force - Outgoing liaison letter

Move that IEEE 802.3 approve the text in IEEE_802d3_to_SC25_PoE_0116_draft.pdf with editorial license granted to the Chair (or his appointed agent) as a liaison communication from the IEEE 802.3 Working Group to ISO/IEC JTC1 SC25/ WG3

Move: Chad Jones

Second:

Technical ($\geq 75\%$ required)

Y: N: A:

P802.3bv Task Force WG business

IEEE P802.3bv Task Force Gigabit Ethernet over Plastic
Optical Fiber

Robert M. Grow

RMG Consulting

Atlanta, Georgia, USA

21 January 2016

Motion – P802.3bv WG ballot

Move that the 802.3 Working Group advance the IEEE P802.3bv draft to Working Group ballot.

Moved: R. Grow

Second: moved on behalf of the TF
Technical

Y: , N: , A:

(TF vote Y: 15, N: 0, A: 0)

Motion – Liaison to WG3

Move that the 802.3 Working Group approve IEEE_802d3_to_ISOIEC_SC25_0116_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to ISO/IEC/JTC1/SC25/WG3.

Moved: R. Grow

Second:

Technical/Procedural

Y: , N: , A:

(TF vote Y: 15, N: 0, A: 0)

IEEE P802.3bz 2.5G/5GBASE-T Task Force

Working Group ballot
Outgoing liaison letter

IEEE P802.3bz draft status

- Draft 1.2 Review opened December 4, 2015, Closed January 3, 2016
 - 25 comments from 6 reviewers
- **TF Motion #4:** Move to: Generate (802.3bz) Draft 1.3 from Draft 1.2 and closed comments
- Direct the Task Force Chair to make the following motion to the 802.3 Working Group:
 - Move that the IEEE 802.3 Working Group progress the IEEE P802.3bz draft to Working Group ballot.
 - Y: 22 N: 0 A: 0
- **TF Motion #5:** Authorize the editor to remove Editor's notes labeled as to be removed (before/prior to) working group ballot and generate draft 1.3.1.
 - MOTION PASSES BY VOICE VOTE WITHOUT OBJECTION

(from P802.3bz) WG Motion

Move that the IEEE 802.3 Working Group progress the IEEE P802.3bz draft to Working Group ballot.

- Moved: David Chalupsky on behalf of the IEEE P802.3bz Task Force
- Technical ($\geq 75\%$ required)
- Y: N: A:
- Motion passes/fails.
- (Task force motion passed 20/0/0 January 21, 2016)

(from P802.3bz) WG Motion

- Move that the IEEE 802.3 Working Group approve IEEE_802d3_to_ISOIEC_SC25_WG3_9904_0116_draft.pdf with editorial license granted to the Chair (or his appointed agent) as liaison communication from the IEEE 802.3 Working Group to ISO/IEC JTC1/SC25 WG3.
- Moved: David Chalupsky
- Seconded: George Zimmerman
- Technical ($\geq 75\%$ required)
- Y: N: A:
- Motion passes/fails
- (Task force motion passed 20/0/0 January 21, 2016)

IEEE 802.3 50 Gb/s Ethernet Over a
Single Lane Study Group

IEEE 802.3 Next Generation 100
Gb/s Ethernet & 200 Gb/s Ethernet
Study Group

Charter reassignment between Study
Groups

Charter Re-Assignment between Study groups

Mark Nowell – Cisco

50 Gb/s Ethernet & NGOATH Ethernet Study Group Chair

Jan 21st, 2016

CFI Motion @ Nov Closing Plenary

Move that the IEEE 802.3 Working Group request the formation of two Study Groups to develop Project Authorization Requests (PAR) and Criteria for Standards Development (CSD) responses for:

- **50 Gigabit/s Ethernet over a single lane**
- **Next Generation 100 Gb/s Ethernet & 200 Gigabit/s Ethernet**

M: Mark Nowell

S: John D'Ambrosia

Procedural (>50%)

Y: 74 N: 0 A: 2

50G & NGOATH Study Group decisions made

- Adopted objectives for:
 - 50Gb/s Ethernet including a set of PHYs
 - 200 Gb/s Ethernet including a set of PHYs
 - 100 Gb/s Ethernet including a set of PHYs
- Motion passed to modify P802.3bs objectives, CSDs and PAR to include 200 Gb/s Ethernet objectives (SMF) pending approval from 802.3bs Task Force (Friday morning)
- Straw Poll taken to gauge support that the objectives that will not be considered by P802.3bs Task Force to be included as part of a single Task force. “Single TF”:82 “More than one”:0 “Abstain”:2

Motion

Move that the IEEE 802.3 Working Group request that the EC:

- expand the charter of the current 50 Gb/s Ethernet over a single-lane Study group to include next generation 100 Gb/s and 200 Gb/s Ethernet rates
- reduce the charter of the Next generation 100 Gb/s and 200 Gb/s Ethernet Study Group to 200 Gb/s single mode fiber.

M: M Nowell

S: K Lusted