

IEEE 802.3 Maintenance Task Force

12th July 2017

Berlin, Germany

Adam Healey
Chair, IEEE 802.3 Maintenance TF
Vice Chair, IEEE 802.3 Ethernet WG

Agenda

- Introductions
- Review and approve agenda
- Approve minutes
- Patent policy
- Participation in IEEE 802 Meetings
- Attendance procedures
- Review status of open revision requests
- Review revision requests
- Corrigendum 1 to ISO/IEC JTC 1/SC 6 for approval
- Review revision plan and progress
- Future meetings

Agenda and minutes motions

- Motion #1: Approve the agenda
 - M: C. Jones S: D. Law
 - Passes by voice vote without opposition

- Motion #2: Approve the [May 2017 minutes](#)
 - M: D. Law S: H. Stewart
 - Passes by voice vote without opposition

- May 2017 minutes were posted 25th May 2017

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.

Participation in IEEE 802 Meetings

Participation in any IEEE 802 meeting (Sponsor, Sponsor subgroup, Working Group, Working Group subgroup, etc.) is on an individual basis

- **Participants in the IEEE standards development individual process shall act based on their qualifications and experience. (https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1)**
- **IEEE 802 Working Group membership is by individual; “Working Group members shall participate in the consensus process in a manner consistent with their professional expert opinion as individuals, and not as organizational representatives”. (subclause 4.2.1 “Establishment”, of the IEEE 802 LMSC Working Group Policies and Procedures)**
- **Participants have an obligation to act and vote as an individual and not under the direction of any other individual or group. A Participant’s obligation to act and vote as an individual applies in all cases, regardless of any external commitments, agreements, contracts, or orders.**
- **Participants shall not direct the actions or votes of any other member of an IEEE 802 Working Group or retaliate against any other member for their actions or votes within IEEE 802 Working Group meetings, see https://standards.ieee.org/develop/policies/bylaws/sb_bylaws.pdf section 5.2.1.3 and the IEEE 802 LMSC Working Group Policies and Procedures, subclause 3.4.1 “Chair”, list item x.**

By participating in IEEE 802 meetings, you accept these requirements. If you do not agree to these policies then you shall not participate.

(Latest revision of IEEE 802 LMSC Working Group Policies and Procedures: <http://www.ieee802.org/devdocs.shtml>)

Attendance procedures

- IEEE Meeting Attendance Tool
 - <http://imat.ieee.org/>
- For more information, please see...
 - http://ieee802.org/3/minutes/attendance_procedures.pdf
- Please sign the attendance sheet for the Task Force meeting minutes

Maintenance request ballot status

- http://www.ieee802.org/3/maint/requests/open_num.html

Project	Maintenance request(s)
P802.3cd	1283 – IEEE P802.3cd/D1.0 comment #31

New maintenance requests

- 2 new maintenance requests were received since the May 2017 meeting

#	Date	Standard	Clause	Subject
1310	30-May-17	802.3-2015	33.4.9.1.4	Midspan PSE description
1311	30-May-17	802.3-2015	33.4.9.1	Connector Midspan PSE description

Maintenance request status

- 35 open maintenance requests
- Current status of open requests
 - Approved 0
 - Balloting 0
 - Ready for ballot 27
 - Awaiting clarification 0
 - Errata 0
 - To be categorized 8

Maintenance requests for consideration

- Deadline for consideration at this meeting was 5th June.

#	Date	Standard	Clause	Subject
1298	09-Sep-16	802.3-2015	78	Sort order
1301	28-Oct-16	802.3-2015	90	Timestamp reference point for 100BASE-T
1306	21-May-17	802.3-2015	33	Clarify source of pd_dll_power_type
1307	21-May-17	802.3-2015	33	Clarify source of pse_dll_power_type
1308	21-May-17	802.3bu-2016	104.4.4.1	PSE output capacitance limit
1309	23-May-17	802.3-2015	1.4.254	Link section definition
1310	30-May-17	802.3-2015	33.4.9.1.4	Midspan PSE description
1311	30-May-17	802.3-2015	33.4.9.1	Connector Midspan PSE description

Maintenance request 1298

- Intended sort order for the PHYs/interfaces in Table 78-1, 78-2, and 78-4 is not clear
- No specific sort order is proposed
- In scope: Yes / ~~No~~
- Errata: ~~Yes~~ / No
- Complete: ~~Yes~~ / No
- Request revision request be re-submitted with specific revision text (suggest that Table 78-4 be sorted with the same order used in Tables 78-1 and 78-2).
- Revision request was withdrawn.

Maintenance request 1301

- Referral of IEEE 1588-2008 interpretation request #26 to IEEE 802.3
- Request to clarify (in Clause 90) the timestamp reference point for 100BASE-T but no specific text is provided.
- In scope: Yes / ~~No~~
- Errata: ~~Yes~~ / No
- Complete: ~~Yes~~ / No
- [Presentation for review.]
- Revision request was withdrawn.

Maintenance request 1306

- There are two sources for variable `pd_dll_power_type`
 - INITIALIZE state of Figure 33–46 “PSE power control state diagram”
 - Table 33–41 “Attribute to state diagram variable cross-reference”
- Potential to get different values for `pd_dll_power_type` from these two sources
- Make Table 33–41 sole source for the variable
- In scope: Yes / ~~No~~
- Errata: ~~Yes~~ / No
- Complete: Yes / ~~No~~
- Mark request as “Ready for ballot”.

Maintenance request 1307

- There are two sources for variable `pse_dll_power_type`
 - INITIALIZE state of Figure 33–49 “PD power control state diagram”
 - Table 33–41 “Attribute to state diagram variable cross-reference”
- Potential to get different values for `pse_dll_power_type` from these two sources
- Make Table 33–41 sole source for the variable
- In scope: Yes / ~~No~~
- Errata: ~~Yes~~ / No
- Complete: Yes / ~~No~~
- Mark request as “Ready for ballot”.

Maintenance request 1308

- Change Cout maximum value in Table 104-3 from 200 nF to 2.64 μ F
- Analysis provided to demonstrate the increase would not result in a PSE to detecting another PSE as a valid PD
- In scope: Yes / ~~No~~
- Errata: ~~Yes~~ / No
- Complete: Yes / ~~No~~
- Mark request as “Ready for ballot”.

Maintenance request 1309

- Change definition of “link section” from:
 - *The portion of the link from the PSE to the PD.*
- To:
 - *The point-to-point medium connection between the active PSE Power Interface (PI) and the PD PI.*
- In scope: Yes / ~~No~~
- Errata: ~~Yes~~ / No
- Complete: Yes / ~~No~~
- Mark request as “Ready for ballot”.

Maintenance request 1310

- Proposed change to 33.4.9.1.4:
 - ~~Replacing the work area or equipment cable with a cable that includes a Midspan PSE should not alter the requirements of the cable. This cable~~ A Midspan PSE replaces an element in a link segment and shall meet the requirements of this clause and the specifications for a Category 5 (jumper) cord as specified in ISO/IEC11801:2002 or ANSI/TIA-568-C.2 for insertion loss, NEXT, and return loss for the transmit and receive pairs.
- Note that the change is consistent with similar text in IEEE P802.3bt/D2.5 (145.4.9.2)
- In scope: Yes / ~~No~~
- Errata: ~~Yes~~ / No
- Complete: Yes / ~~No~~
- Mark request as “Ready for ballot”.

Maintenance request 1311

- Proposed change to 33.4.9.1:
 - ~~The Midspan PSE equipment to be inserted as “connector” or “telecom outlet” shall meet the following transmission parameters~~ A connector Midspan PSE replaces one of the connectors in the link segment and shall meet the following transmission parameters. These parameters should be measured using the test procedures of ISO11801:2002 or ANSI/TIA-568-C.2 for connecting hardware.
- Note that the change is consistent with similar text in IEEE P802.3bt/D2.5 (145.4.9.1)
- In scope: Yes / ~~No~~
- Errata: ~~Yes~~ / No
- Complete: Yes / ~~No~~
- Mark request as “Ready for ballot”.

Corrigendum to ISO/IEC JTC 1/SC 6 for approval

[Motion]

Corrigendum motion

- Submit IEEE Std 802.3-2015/Cor 1-2017 to ISO/IEC JTC 1/SC 6 for ratification under the PSDO agreement.
- M: R. Grow S: C. Jones
- Passes by voice vote without opposition

Revision

[Review progress and plan. Motion.]

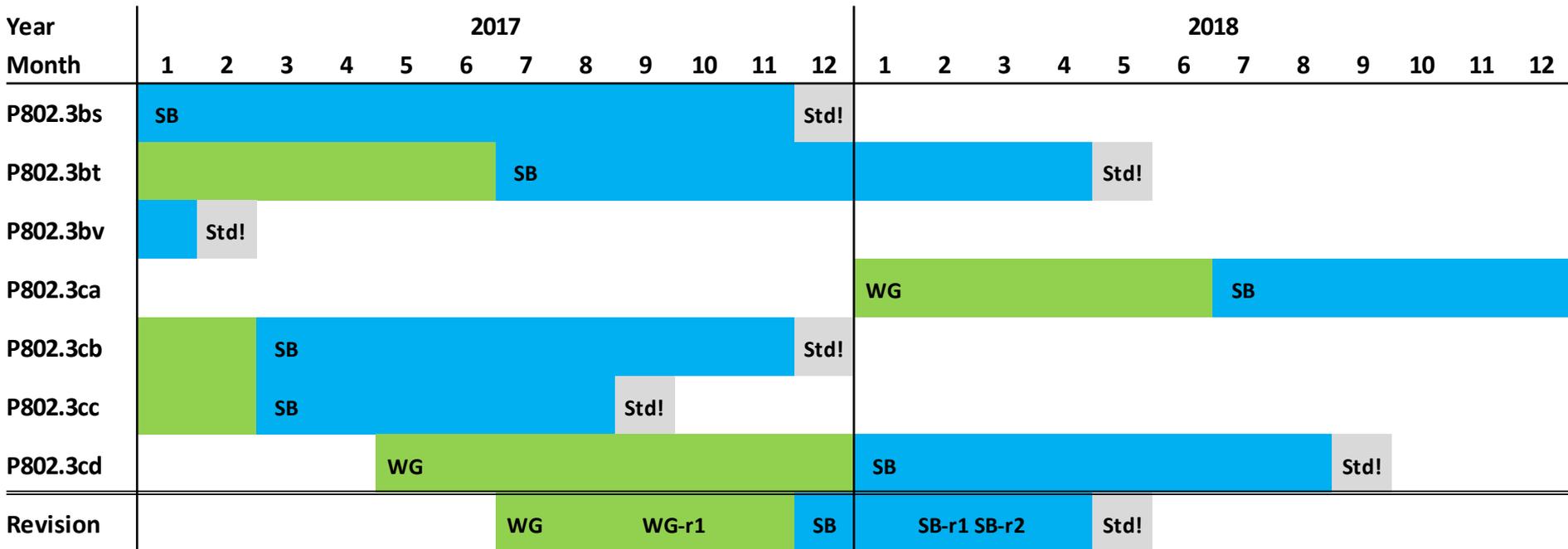
Revision progress

- D1.1 created based on D1.0 and selected maintenance requests marked “Ready for ballot”
 - Also includes some editorial corrections
- D1.1 submitted for Working Group preview on 30th June

Included maintenance requests

#	Standard	Clause	Date	Subject
1279	802.3-2012	35.2.1.1.2	16-Jun-15	TRANSMIT_COMPLETE vs. DATA_COMPLETE
1280	802.3-2012	57	15-Jul-15	Hard-coded pdu_limit
1282	802.3-2012	76.3.2.5.6	22-Jul-15	IdleBlockCount type
1284	802.3-2015	83	03-Sep-15	Incorrect register names
1285	802.3-2015	1.4	09-Sep-15	Incorrect/missing cable definitions
1287	802.3-2015	75.1.4	09-Oct-15	EPON extended power budget identification
1288	802.3-2015	86.10 and 95.10	05-Nov-15	Equate fibre optic channel with link segment
1289	802.3-2015	30.3.2.1.2	05-Nov-15	Management enumeration of PHY types
1290	802.3-2015	25.4.10	19-Nov-15	Clarify definition of STP
1291	802.3-2015	82	20-Nov-15	Indicate FlexE uses O code 0x5
1293	802.3-2015	55.1.3.1	26-Jan-16	Incorrect DSQ128 mapping description
1295	802.3-2015	93A.2	21-Mar-16	Incorrect notation in Equation 93A-50
1296	802.3-2015	1.3	09-Sep-16	Sort order
1297	802.3-2015	1.4	09-Sep-16	Sort order
1299	802.3-2015	91	27-Sep-16	FEC synchronization state diagram
1302	802.3-2015	36	05-Nov-16	Cross-references to Table 36-1(a-e)
1303	802.3-2015	Equation 126-38	06-Nov-16	Incorrect frequency range
1304	802.3-2015	Figure 36-5	14-Nov-16	Transition to/from XMIT_DATA not fully qualified
1305	802.3bp-2016	97.9.1	05-Apr-17	General safety requirements

Possible project schedules



Proposed revision plan

7/13/2017	WB approval	2/13/2018	SB-r1 opens
7/17/2017	WB day 1	2/27/2018	SB-r1 closes
8/15/2017	WB closes	3/7/2018	Maintenance TF meeting
9/13/2017	Maintenance TF meeting	3/9/2018	Cond. approval Revcom submittal
9/29/2017	WB-r1 day 1	3/14/2018	SB-r2 opens
10/13/2017	WB-r1 closes	3/16/2018	Revcom submittal deadline
11/8/2017	Maintenance TF meeting	3/28/2018	SB-r2 closes
11/10/2017	SB approval	4/26/2018	Revcom telecom
12/6/2017	Amendments approved?		
12/11/2017	SB day 1		
1/9/2018	SB closes		
1/24/2018	Maintenance TF meeting		

← Comment to include recently approved amendments

Proposed change to draft

- It was noted that Maintenance request 1305 was not implemented correctly.
- The following change is needed to resolve the discrepancy.
 - **97.9.1 General safety**
 - All equipment subject to this clause shall conform to IEC 60950-1 (for IT and motor vehicle applications) and to ISO 26262 (for motor vehicle applications only, if required by the given application). ~~All equipment subject to this clause and intended for motor vehicle applications shall conform to ISO 26262.~~ All equipment subject to this clause may be additionally required to conform to any applicable local, state, or national standards or as agreed to between the customer and supplier.

Draft motion

- Produce IEEE P802.3/D2.0 from D1.1 and the change described on slide 30 of healey_1_0717.pdf.
- M: R. Grow S: G. Thompson
- Passes by voice without opposition

WG ballot motion

- Progress the IEEE P802.3 draft to Working Group ballot.
- M: G. Thompson S: R. Grow
- Passes by voice vote without opposition

Future meetings

- Week of 11th September 2017
 - Charlotte, NC USA

Adjourn