IEEE 802.3 Maintenance Task Force
15th September 2015
Bonita Springs, FL

Adam Healey
Chair, IEEE 802.3 Maintenance TF
Vice-Chair, IEEE 802.3 Working Group

Agenda

- Introductions

- Review and approve agenda

- Approve minutes

- Call for patents

- Attendance procedures

- IEEE P802.3 status

- Review status of open revision requests

- Review revision requests

- Future meetings

IEEE P802.3 (Revision) editorial team

Pete Anslow	Section 4 and Section 6 editor
Marek Hajduczenia	Section 5 editor
Adam Healey	Section 2 and Section 3 editor, Editor-in-chief
Valerie Maguire	Section 1 editor

Agenda and Minutes Motions

- Motion #1: Approve the agenda
  - M: S. Carlson   S: A. Marris
  - Passes by voice vote without opposition

- Motion #2: Approve the July 2015 minutes
  - M: P. Thaler   S: G. Thompson
  - Passes by voice vote without opposition

- Motion #3: Approve the August 2015 minutes
  - M: C. Donahue   S: M. Hajduczenia
  - Passes by voice vote without opposition

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.

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(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**
    - **"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**

15 March 2015

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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

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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

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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.

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Attendance

- 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

IEEE P802.3 ballot results

- IEEE P802.3/D3.2 2st Sponsor ballot recirculation
  - Opened 21 July 2015
  - Closed 5 August 2015

	D3.0				D3.1				D3.2			
	Count	%		Status	Count	%		Status	Count	%		Status
		Actual	Req'd			Actual	Req'd			Actual	Req'd	
Abstain	11	8	< 30	PASS	9	6	< 30	PASS	9	6	< 30	PASS
Disapprove	6	-	-	-	0[b]	-	-	-	0	-	-	
Disapprove w/o comment	0	-	-	-	0	-	-	-	1	-	-	
Approve	117	95	≥ 75	PASS	128	100	≥ 75	PASS	133	100	≥ 75	PASS
Ballots returned	134	83	≥ 75	PASS	137	85	≥ 75	PASS	143	89	≥ 75	PASS
Voters	160	-	-	-	160	-	-	-	160	-	-	
Comments	109[a]	-	-	-	12[c]	-	-	-	4	-	-	

[a] Includes 5 comments received after ballot closed.

[b] Two ballots "flipped" after ballot closed.

[c] Includes 3 comments received after ballot closed.

Final revision schedule

11/8/2014	WB opens		6/16/2015	SB-r1 opens
12/11/2014	WB closes		7/1/2015	SB-r1 closes
12/23/2014	Ad hoc teleconference #1		7/13/2015	Maintenance TF meeting
1/8/2015	Ad hoc teleconference #2		7/17/2015	Conditional approval for RevCom submittal
1/14/2015	Maintenance TF meeting		7/20/2015	SB-r2 opens
2/7/2015	WB-r1 opens		7/24/2015	RevCom submittal deadline
2/21/2015	WB-r1 closes		8/4/2015	SB-r2 closes
3/9/2015	Maintenance TF meeting		8/12/2015	Maintenance TF meeting
3/13/2015	SB approval		9/2/2016	RevCom meeting
3/25/2015	SB opens			
4/24/2015	SB closes			
5/21/2015	Maintenance TF meeting			

**IEEE P802.3 approved by
IEEE-SA Standards Board!!!
3rd September 2015**

Revision request ballot status

#	July-15	Sep-15	Target project	Update
1238	V	A	Revision	
1239	V	A	Revision	
1243	V	A	Revision	
1247	V	A	Revision	
1249	V	A	Revision	
1250	V	A	Revision	IEEE P802.3 approved!
1251	V	A	Revision	
1253	V	A	Revision	
1254	V	A	Revision	
1255	V	A	Revision	
1256	V	A	Revision	
1257	V	A	Revision	

Revision request ballot status cont'd

#	May-15	Sep-15	Target project	Update
1258	V	A	Revision	
1259	V	A	Revision	
1260	V	A	Revision	IEEE P802.3 approved!
1262	V	A	Revision	
1265	V	A	Revision	
1266	V	V	P802.3bq	Initial Working Group ballot comment #103
1267	V	A	Revision	
1268	V	A	Revision	
1269	V	A	Revision	IEEE P802.3 approved!
1270	V	A	Revision	
1271	B	B	P802.3bt	
1273	B	B	P802.3bt	

Revision request ballot status cont'd

#	July-15	Sep-15	Target project	Update
1274	B	B	P802.3bt	
1276	R	R		
1277	R	R		
1278	B	B	P802.3bt	

New revision requests

#	Date	Standard	Clause	Subject
1279	16-Jun-15	802.3-2012	35.2.1.1.2	TRANSMIT_COMPLETE vs. DATA_COMPLETE
1280	15-Jul-15	802.3-2012	57	Hard-coded pdu_limit
1281	16-Jul-15	802.3bj-2014	82	Incomplete logic in LPI Transmit state diagram
1282	22-Jul-15	802.3-2012	76.3.2.5.6	IdleBlockCount type
1283	26-Aug-15	802.3-2012	73.6.4	Backplane/twinax PHY advertisement
1284	03-Sep-15	802.3-2015	83	Incorrect register names
1285	09-Sep-15	802.3-2015	1.4	Incorrect/missing cable definitions
1286	11-Sep-15	802.3-2015	90.7	Data delay reference points

Revision request status summary

- 36 open maintenance requests
- Current status of open requests
    - Approved   21
    - Balloting   1
    - Ready for ballot   4
    - Awaiting clarification   0
    - Errata   0
    - To be categorised   10

Review revision requests

- Deadline for consideration at this meeting was 11th August 2015

#	Date	Standard	Clause	Subject
1276	20-Feb-15	802.3-2012	Frontmatter	Define "PoE"
1277	25-Mar-15	802.3-2012	33	Load during inrush
1279	16-Jun-15	802.3-2012	35.2.1.1.2	TRANSMIT_COMPLETE vs. DATA_COMPLETE
1280	15-Jul-15	802.3-2012	57	Hard-coded pdu_limit
1281	16-Jul-15	802.3bj-2014	82	Incomplete logic in LPI Transmit state diagram
1282	22-Jul-15	802.3-2012	76.3.2.5.6	IdleBlockCount type

Revision request 1276

- Add definition of "PoE" to IEEE Std 802.3

- The term "PoE" could be expanded in the frontmatter (introduction), added as a definition (1.4), or included in Clause 33

- May 2015
  - Further consideration is needed to determine the best location.

- July 2015
  - Thompson accepted an action item to draft a change to 33.1 that expands "PoE". There will be related additions to definitions and abbreviations.
  - Completed 13th July 2015

- September 2015
  - Chair to request submitter to revise the request based upon the following proposed changes

Revised changes

Part 2, Clause 33.1, Paragraph 1:

This clause defines the functional and electrical characteristics <u>for providing a Power over Ethernet (PoE) system for deployment over balanced twisted-pair cabling. The system consists</u> of two optional power (non-data) entities, a Powered Device (PD) and Power Sourcing Equipment (PSE), for use with the MAU defined in Clause 14 and the PHYs defined in Clause 25 and Clause 40. These entities allow devices to draw/supply power using the same generic cabling as is used for data transmission.

Revised changes, cont'd

Part 1, Clause 1.4:

Insert new definition between 1.4.337 and 1.4.338 as follows:

(renumber remaining definitions as necessary)

1.4.339 IEEE 802.3 Power over Ethernet (IEEE 802.3 PoE): A system consisting of one PSE and one PD that provides power across balanced twisted-pair cabling. (See IEEE Std 802.3, Clause 33.)

Part 1, Clause 1.5:

Insert new abbreviation between "PMS-TC" and "ppd"

PoE   Power over Ethernet

Revision request 1277

- Add text to clarify that PDs should not turn on their DC-DC load during inrush

- May 2015
  - Further consideration is necessary to determine whether or not this request adds a new requirement

- July 2015
  - Deferred to September 2015 meeting in order to gather more information

- September 2015
  - It is believed there will be an impact on the compliance of existing PDs (hence an impact to existing networks)

Revision request 1279

- OUTPUT_UNIT parameter of PLS_DATA.request may assume the following values in Clause 35: ONE, ZERO, <u>TRANSMIT_COMPLETE</u>, etc.

- For speeds other than 1000 Mb/s, DATA_COMPLETE is used instead of TRANSMIT_COMPLETE

- In scope: <u>Yes</u> / ~~No~~

- Errata: ~~Yes~~ / <u>No</u>

- Complete: <u>Yes</u> / ~~No~~

- Change status to "Ready for Ballot" and target next revision

Revision request 1280

- Revision request 1229 intended to make the maximum slow protocol rate programmable

- However, the rate is hard-coded into the Transmit state diagram (see Figure 57-6)

- Replace fixed value with new state diagram variable whose value is derived from aSlowProtocolFrameLimit

- In scope: ~~Yes~~ / ~~No~~

- Errata: ~~Yes~~ / No

- Complete: Yes / ~~No~~

- Change status to "Ready for Ballot" and target next revision

Revision request 1281

- In the LPI Transmit State Diagram (Figure 82-18), the logic of transition from TX_ACTIVE to TX_ACTIVE is incomplete

- Multiple options are proposed

- This revision request has been withdrawn

Revision request 1282

- In 76.3.2.5.6, the variable IdleBlockCount is defined to be an unsigned integer
- In Figure 76-16, IdleBlockCount is set to −1 (in state RECEIVE_DATA_BLOCK) and it is never initialized
- Change the type to <u>signed</u> integer and assign a value of 0 in Figure 76-16, state "INIT"
  - Is the change to the maximum positive value significant?
- In scope: <u>Yes</u> / ~~No~~
- Errata: ~~Yes~~ / <u>No</u>
- Complete: <u>Yes</u> / ~~No~~
- Change status to "Ready for Ballot" and target next revision

Future meetings

- Week of 8th November 2015
  - Dallas, TX USA

Adjourn

Maintenance web and reflector

- IEEE 802.3 Maintenance web site
  - http://www.ieee802.org/3/maint/

- IEEE 802.3 Maintenance Request form
  - http://www.ieee802.org/3/private/maint/revision_request.html
  - Username: XXXXX
  - Password: XXXXXXX

- IEEE 802.3 Maintenance reflector
  - stds-802-3-maint@ieee.org