Maintenance Task Group Meeting

November 12, 2019
Paul Congdon
(post meeting)

Maintenance Task Group Meeting
November 12, 2019 – 8AM
Agenda

- Patents and Guidelines

- Attendees

- Document Vehicle Status

- Existing Maintenance items
    - YANGsters to discuss - 0242 - IEEE Std 802.1Qcp-2018: Collected issues on data consistency and others

- New Maintenance items
    - 0243 - Maintenance request on IEEE 802.1Q
    - 0244 - Minor maintenance item for 802.1Q
    - 0245 - Another small maintenance item for 802.1Q-2018
    - 0246 - IEEE Std 802.1Q-2018: Color-aware flow meters are color-blind

- Comment resolution
    - None

- Liaisons
    - SG15 liaison - http://www.ieee802.org/1/files/public/docs2019/liaison-SG15-LS216-OTNT_standardization_workplan-1019.zip
    - ITU-T IMT-2020 JCA liaison - http://www.ieee802.org/1/files/public/docs2019/maint-haasz-itu-roadmap-report-1109-v01.pdf

- SC6 comment resolution
    - None

- SC6 status

- 802.1ACct update (802.15) – James Glib

- EPD and LPD topics – Roger Marks/Norm Finn
    - http://www.ieee802.org/1/files/public/docs2019/maint-Marks-Finn-epd-lpd-1119-copyright.pdf

Instructions for Chairs of standards development activities

☐ **At the beginning of each standards development meeting the chair or a designee is to:**

  ☐ Show the following slides (or provide them beforehand)

  ☐ Advise the standards development group participants that:

  ☐ IEEE SA's copyright policy is described in Clause 7 of the IEEE SA Standards Board Bylaws and Clause 6.1 of the IEEE SA Standards Board Operations Manual;

  ☐ Any material submitted during standards development, whether verbal, recorded, or in written form, is a Contribution and shall comply with the IEEE SA Copyright Policy;

  ☐ Instruct the Secretary to record in the minutes of the relevant meeting:

  ☐ That the foregoing information was provided and that the copyright slides were shown (or provided beforehand).

IEEE SA Copyright Policy

- **By participating in this activity, you agree to comply with the IEEE Code of Ethics, all applicable laws, and all IEEE policies and procedures including, but not limited to, the IEEE SA Copyright Policy.**

  - Previously Published material (copyright assertion indicated) shall not be presented/submitted to the Working Group nor incorporated into a Working Group draft unless permission is granted.
  - Prior to presentation or submission, you shall notify the Working Group Chair of previously Published material and should assist the Chair in obtaining copyright permission acceptable to IEEE SA.
  - For material that is not previously Published, IEEE is automatically granted a license to use any material that is presented or submitted.

IEEE SA Copyright Policy

☐ The IEEE SA Copyright Policy is described in the IEEE SA Standards Board Bylaws and IEEE SA Standards Board Operations Manual

- IEEE SA Copyright Policy, see
  Clause 7 of the IEEE SA Standards Board Bylaws
  https://standards.ieee.org/about/policies/bylaws/sect6-7.html#7
  Clause 6.1 of the IEEE SA Standards Board Operations Manual
  https://standards.ieee.org/about/policies/opman/sect6.html

☐ IEEE SA Copyright Permission
- https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/permissionltrs.zip

☐ IEEE SA Copyright FAQs
- http://standards.ieee.org/faqs/copyrights.html/
☐ IEEE SA Best Practices for IEEE Standards Development
- http://standards.ieee.org/develop/policies/best_practices_for_ieee_standards_development_051215.pdf

☐ Distribution of Draft Standards (see 6.1.3 of the SASB Operations Manual)
- https://standards.ieee.org/about/policies/opman/sect6.html

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:**
  - 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 IEEE is not aware. Additionally, neither 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.

(Optional to be shown)

Participants have a duty to inform the IEEE

- Participants <u>shall</u> 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

- Participants <u>should</u> inform the IEEE (or cause the IEEE to be informed) of the identity of any other holders of potential Essential Patent Claims

Early identification of holders of potential Essential Patent Claims is encouraged

<u>Slide #1</u>

Ways to inform IEEE

- **Cause an LOA to be submitted to the IEEE-SA (patcom@ieee.org); 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**

- **Speak up now and respond to this 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, please respond at this time by providing relevant information to the WG Chair

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 of different technical approaches that include relative costs of patent licensing terms may be discussed in standards development meetings.

      - **Technical considerations remain the 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.**

  For more details, see *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and *Antitrust and Competition Policy: What You Need to Know* at
  http://standards.ieee.org/develop/policies/antitrust.pdf

Patent-related information

The patent policy and the procedures used to execute that policy are documented in the:

- *IEEE-SA Standards Board 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

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)

Brief Status Update

- Maintenance database site issues resolved – current status believe to be accurate: https://www.802-1.org/

- Current Document Vehicles for open items
  - 802.1AS-Rev/D8.1 Sponsor ballot recirculation ballot posted August 19th.
  - 802.1ABcu Comment resolution completed on TSN conference calls. Editor is preparing draft D.07.
  - 802.1Qcw/D0.4 TG ballot completed July 9th. Editor is preparing a new draft
  - 802.1Qcr/D1.3 WG ballot completed Nov 4th. Comment resolution to begin at the November plenary
  - 802.1CBdb/D0.3 TG ballot completed Oct 31st. Comment resolution to begin at the November plenary
  - 802.1CMde/D1.2 motion for sponsor ballot at November plenary.
  - 802.1AE-Cor/D1.0 motion for sponsor ballot at November plenary.

- Open Items awaiting document vehicles
  - 0170 – waiting for 802.1BA
  - 0174 – waiting for 802.1AC
  - 0210, 0243 – waiting for 802.1DC to go to Sponsor ballot to update 802.1Q
  - 0237 – waiting for 802

802.1 Maintenance Status

Category	Count
Approved	0
Ready for Ballot	1
Complete then Ballot	13
Complete then Errata	0
Errata	0
Failed	0
Incomplete	0
Rejected	38
Published	132
Received	2
Errata Sheet Published	0
Technical experts review	4
Balloting	23
Withdrawn	2

Existing Maintenence Items

- All existing open maintenance items are included here, **except** items which are in "balloting" state already, as those aren't really interesting to track.

- Task force chairs and editors: have you decided in your groups not to change something which is covered by a Maintenance item? If so, you please ensure you bring this to the attention of the Maintenance Task Group.

Items for review

Number	Status	Submitted	Standard	Clause	Subject	Draft with fix
0170	Ready for Ballot	2016-05-16	802.1BA-2011	7.3.5	References to other standards in 802.1BA-2011	
0174	Complete then Ballot	2016-11-08	802.1AC-2016	2	802.1AC: IEEE 802.17 has been withdrawn	
0210	Complete then Ballot	2018-09-11	IEEE Std 802.1Q-2018	43.3.3.4	ECP protocol code point for P802.1CS needed in 802.1Q-2018	
0213	Complete then Ballot	2018-09-24	802.1AB-2016 and 802.1AB-2009	9.2.5.6	The range of msgTxHold and the range of its MIB object lldpV2MessageTxHoldMultiplier are not consistent	
0230	Technical experts review	2019-06-06	802.1Qcp-2018	48.6.3.2	802.1Qcp-2018 maintenance: Incorrect traffic-class-table-grouping	
0232	Technical experts review	2019-07-17	IEEE Std 802.1Q-2018	Appendix A	Maintenance requires: PICS inconsistent in 802.1Q-2018	
0234	Complete then Ballot	2019-08-07	802-1CB-2017	7.4.3.5	802.1CB-2017 7.4.3.5 sample code fix	802.1CBdb/D0.3
0235	Complete then Ballot	2019-08-07	802-1CB-2017	7.4.3.5	802.1CB-2017 7.4.3.5 discarded packet count off by 1	802.1CBdb/D0.3
0236	Complete then Ballot	2019-08-07	802-1CB-2017	10.4.1.6	802.1CB-2017 10.4.1.6 frerSeqRcvyHistoryLength min value s/b 1, not 2	802.1CBdb/D0.3
0237	Complete then Ballot	2019-08-16	IEEE Std 802-2014	8.2.2	802.1 Maintenance request: IEEE Std 802	

Items for review

Number	Status	Submitted	Standard	Clause	Subject	Draft with fix
0238	Complete then Ballot	2019-08-23	IEEE Std 802.1Qcp-2018	48	802.1Qcp-2018: ieee802-dot1q-vlan-bridge is empty and should be removed	
0239	Complete then Ballot	2019-08-23	IEEE Std 802.1Qcp-2018	48	802.1Qcp-2018: Missing counters in ieee802-dot1q-tpmr	
0240	Complete then Ballot	2019-08-23	IEEE Std 802.1Qcp-2018	48	802.1Qcp-2018: Managed Object <-> YANG mapping tables	
0241	Complete then Ballot	2019-09-05	802.1CB-2017	10.4.1.10	802.1CB-2017 SequenceGenerationAlgorithm does not discard packets as stated in 10.4.1.10	802.1CBdb/D0.3
0242	Technical experts review	2019-09-16	IEEE Std 802.1Qcp-2018	48	IEEE Std 802.1Qcp-2018: Collected issues on data consistency and others	
0243	Received	2019-09-19	IEEE Std 802.1Q-2018	42.3.3.4	Maintenance request on IEEE 802.1Q	
0244	Received	2019-10-14	IEEE Std 802.1Q-2018	5.4.1.6	Minor maintenance item for 802.1Q	
0245	Received	2019-10-14	IEEE Std 802.1Q-2018	5.4.1	RESEND Another small maintenance item for 802.1Q-2018	
0246	Received	2019-10-31	IEEE 802.1Q-2018	8.6.5.1.3	IEEE Std 802.1Q-2018: Color-aware flow meters are color-blind	

NEW MAINTENANCE ITEMS

- 0243 - Maintenance request on IEEE 802.1Q

- 0244 - Minor maintenance item for 802.1Q

- 0245 - Another small maintenance item for 802.1Q-2018

- 0246 - IEEE Std 802.1Q-2018: Color-aware flow meters are color-blind

Items progressed

Nov 2019 Plenary Meeting

Location: Waikola, Hawaii

[Minutes]

Number	Status	Submitted	Standard	Clause	Subject	Draft
0247	Received	2019-11-13	IEEE Std 802.1Qcp	48.6.3	802.1Qcp-2018: Missing copyright release for YANG modules	
0248	Received	2019-11-12	IEEE Std 802.1Q-2019	12.26	Managed objects for ECP in 802.1Q-2018	
0246	Technical experts review	2019-10-31	IEEE 802.1Q-2018	8.6.5.1.3	IEEE Std 802.1Q-2018: Color-aware flow meters are color-blind	
0245	Complete then Ballot	2019-10-14	IEEE Std 802.1Q-2018	5.4.1	RESEND Another small maintenance item for 802.1Q-2018	
0244	Complete then Ballot	2019-10-14	IEEE Std 802.1Q-2018	5.4.1.6	Minor maintenance item for 802.1Q	
0241	Complete then Ballot	2019-09-05	802.1CB-2017	10.4.1.10	802.1CB-2017 SequenceGenerationAlgorithm does not discard packets as stated in 10.4.1.10	802.1CBdb/D0.3

BALLOT COMMENT RESOLUTION

- none

LIAISONS

- none

JTC1 SC6 COMMENT RESPONSES

- None

JTC1 SC6 STATUS – November 2019

ISO/IEC JTC1 SC6 Status

- Karen Randall has been performing this tracking
- Volunteers sought to assist with this task

ISO/IEC JTC1 SC6 Status

- PSDO agreement in place to allow progress of IEEE standards in ISO/IEC
- EC JTC1 standing committee is administering the process for IEEE 802 Standards
  - 802.1, 802.3, 802.11, 802.15, 802.16, 802.21, 802.22
- 802.1 has previously agreed to submit its standards to SC6
  - Most standards and their amendments (note – not sending Recommended Practices)
  - Motion required per standard
    - To forward Sponsor Ballot draft for information and comment
    - To submit approved standard for PSDO approval
  - Procedure for Corrigenda: one 90 day ballot and three questions.

802.1 Stds for SC6 approval (1/3)

– PSDO approved

- 802.1AE-2006 (MAC Security)

  - FDIS passed Oct 2013, cmnts liaised Jan 2014 Systematic Rvw – (re)confirmed March 2019. No further action required.

- 802.1X-2010 (Port-Based NW Acc Cntrl)

  - FDIS passed Oct 2013, cmnts liaised Jan 2014 Systematic Rvw – (re)confirmed March 2019 No further action required.

- 802.1AS-2011 (Time synch)

  - FDIS passed Dec 2013, cmnts liaised May 2014 Systematic Rvw – (re)confirmed June 2019. No further action required.

- 802.1AB-2009 (LLDP)   - FDIS passed Dec 2013, cmnts liaised May 2014
- 802.1AR-2009 (Secure device ID)   - FDIS passed Dec 2013, cmnts liaised May 2014
- 802.1AEbn-2011   - ISO/IEC 8802-1AE:2015/Amd 1 (Apr 2015)
- 802.1AEbw-2013   - ISO/IEC 8802-1AE:2015/Amd 2 (Apr 2015)
- 802.1AX-2014   - FDIS passed Nov 2015; no comments
- 802-2014   - FDIS passed Nov 2015, cmnts liaised Jan 2016
- 802.1Xbx-2014   - FDIS passed Dec 2015; cmnts liaised 20 April
- 802.1Q-2014   - FDIS passed Jan 2016; cmnts liaised 20 April
- 802.1BA-2011 (AVB systems)   - FDIS passed August 2016; no comments
- 802.1BR-2012 (Port extender)   - FDIS passed August 2016; no comments
- 802.1AB-2016 (Stn & MAC Conn Disc)   - FDIS passed 4/17; Cmt resp liaised Jul 2017
- 802.1Qbv-2015 (Enhs for Sch Traffic)   - FDIS passed 4/17; Cmt resp liaised Jul 2017
- 802.1Qca-2015 (Path Control & Reserv)   - FDIS passed 4/17; Cmt resp liaised Jul 2017

802.1 Stds for SC6 approval (2/3)

- PSDO approved (cont'd)
  - 802.1Q-2014/Cor 1-2015 — FDIS passed 4/17; Cmt resp liaised Jul 2017 published Oct 2017

  - 802.1Qbu-2016 (Frame Preemption) — FDIS passed Oct 2017; no cmts; pub Nov 2017
  - 802.1Qbz-2016 (Enh to Bridging 802.11) — FDIS passed Oct 2017; no cmts; pub Nov 2017
  - 802.1Qcd (Application VLAN TLV) — FDIS passed Dec 2017 – no cmts; pub Jan 2018
  - 802.1AX-2014/Cor1-2017 — 90 day Cor FDIS passed Jul 2017; no cmts published Sep 2018

  - 802.1AC-2016 (MAC Svc Def) — FDIS passed 3/2018 – cmt resps sent Apr 2018 published Apr 2018

  - 802d-2017 (URN Namespace) — FDIS passed 3/2018; no cmts; pub Apr 2018
  - 802.1CB (Frame Repl & Elim for Reliability) — FDIS passed Dec 2018; no cmts
  - 802.1Qch (Cyclic Queuing & Fwding) — FDIS passed Jan 2019; no cmts
  - 802.1Qci (Per stream filtering & policing) — FDIS passed Jan 2019; no cmts
  - 802.1AEcg-2017 (EDE devices) — FDIS passed Aug 2018 w/cmt from China; cmt resps sent Jan 2019; published Oct 2018

  - IEEE 802.1AC-2016/Cor 1 (LLC encaps) — 90 day COR FDIS passed Mar 2019; no cmts
  - IEEE 802c (Local MAC Address Usage) — FDIS passed Dec 2018 w/cmt from China; cmt resps approved March 2019; sent 1 May 2019

  - IEEE 802.1CM (Time Sens N/W fronthaul) — pre-ballot passed Oct 2018 w no cmts; FDIS ballot passed June 2019; no cmts

802.1 Stds for SC6 approval (3/3)

– For adoption - PSDO in process (FDIS ballots)
- IEEE 802.1AR-Rev (Secure DevID)
- pre-ballot comment response rvw/apprv 11/2018 sent 14 Jan 2019; FDIS ballot closes 14 Nov 2019
- IEEE 802.1Q-Rev (Bridges)
- pre-ballot comment response rvw/apprv 3/2019; sent 1 May 2019; <u>waiting for FDIS ballot to open</u>
- IEEE 802.1AE-Rev (MAC security)
- pre-ballot comment response rvw/apprv 7/2019; sent 17 Sep 2019 (posted 31 Oct); <u>FDIS ballot TBA</u>
- IEEE 802.1Xck (802.1X YANG model)
- pre-ballot comment response rvw/appr 7/2019; sent 17 Sep 2019 (posted 31 Oct); <u>FDIS ballot TBA</u>

– For adoption - PSDO in process (60 day pre-ballots)

– Next to send - send for adoption/start ballots when published (Motions for all of these were approved at July 2018 Plenary)
- IEEE 802.1Qcp (Bridges YANG)
- D2 sent 12/2017 (*pub 9/2018; send after Q)
- IEEE 802.1Qcc (Stream Res Protocol)
- D2 sent 12/2017 (SB apprv 6/18, pub Oct 2018; send after Q is done in SC6)
- IEEE 802.1Qcy (VDP extension)
- D2.1 sent 4/2018 – *pub 6/2019; send after Q is done in SC6)

– For Information – send document drafts
- P802.1AS-Rev/D8 (Timing & Synchn)
- Sponsor Ballot (D8) sent for info 13 March 2019
- P802.1AX-Rev/D2 (Link Agg)
- Sponsor Ballot (D2) sent for info 16 July 2019
- P802.1X-Rev (Port-Based NW Acc Cntrl)
- motion to send SB version (D1.4) July 2019; <u>Doc ready to go. Waiting for Xck FDIS</u>
- P802.1Qcx (YANG for Conn Fault Mgmt)
- motion to send SB version when ready July 2019

Expected Activity at March 2020 Plenary (and looking ahead)

- Motion to send IEEE 802.1AS-Rev for adoption – after publication (*when will it be ready?*).

- Motion to send IEEE 802.1AX-Rev for adoption – after publication (*when will it be ready?*).

- Any other documents to be sent for information or adoption (do motion?)
  - IEEE 802.1CMde: send for information when it goes to Sponsor Ballot.

- Waiting to send IEEE 802.1Q amendments (1Qcp, 1Qcc, 1Qcy) until after IEEE 802.1Q-Rev is done. Motions were approved at July 2018 meeting.

- Waiting to send IEEE 802.1X-Rev until after the IEEE 802.1Xck FDIS is completed. Motion was approved at the July 2019 meeting.

- Comments expected on the IEEE 802.1AR-Rev FDIS ballot (closing 14 November) – will need to prepare responses to the comments during the January 2020 interim meeting, to be reviewed/approved at the March 2020 Plenary.

- AE-Cor will be held until AE completes – 90 day ballot

- SC-6 International meeting in London, Feb 2020. Interested attendees coordinated by Andrew Myles.