

IEEE 802.3 Maintenance Task Force

15 November 2022

Adam Healey, Broadcom Inc.
Chair, IEEE 802.3 Maintenance TF
Vice Chair, IEEE 802.3 Ethernet WG

Voting at electronic meetings

- IEEE 802.3 Task Force meetings will be classified as “electronic” for the purpose of voting
 - See https://www.ieee802.org/3/minutes/may22/0522_802_3_interim.pdf, slide 23
- IEEE 802.3 Operations Manual 3.4.2

There are two type of votes in the TF; votes on motions and votes in straw polls.

In face-to-face meetings where a TF is operating with membership rules for voting (see 3.3) only the TF members may make and vote on motions. In face-to-face meetings where membership rules are not in force all TF participants may make and vote on motions, subject only to the provision that they believe that they are qualified to vote on the matter before the TF. Electronic meetings that will consider motions shall be approved by the WG Chair prior to the meeting announcement. In such meetings only IEEE 802.3 Working Group members may make and vote on motions. If a motion is not approved by unanimous consent it shall be taken as a roll call vote.

In all cases, regardless of any membership rules that may or may not be in force, all participants who feel qualified may participate in a straw poll.

Meeting registration fee

- This meeting is being held during the November 2022 plenary session
- Anyone that attends a meeting held during this plenary session must register and pay the fee
 - Single fee allows you to attend all 802 meetings during the plenary session
 - Registration web site may be accessed from <<http://802world.org/plenary/>>
- Failure to register and pay the fee will result in loss of membership, loss of any accumulated attendance credit, and inability to attend future meetings
- See the [opening plenary report](#) for further information

General decorum

- An officer is permitted to make an audio or slideshow recording of this meeting exclusively for the purpose of generating minutes which shall not be copied or distributed. IEEE 802.3 meetings do not use this option. Recording of the proceedings by any other participant or observer, in part or in whole, via any means, is prohibited. (*January 2020 IEEE-SA Standards Board Ops Manual 5.3.3.2*)
- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (*January 2020 IEEE-SA Standards Board Ops Manual 5.3.3.3*)
- Please observe proper decorum in meetings

In-person decorum

- **Please SILENCE your mobile phones**
- Wear your badges at all times in meeting areas
 - Help the hotel security staff improve the general security of the meeting rooms
 - Do not assume that meeting areas are secure
- Please sign into the teleconference **without audio and video**
- Please line up at the floor microphones(s) to join the queue
- Please don't speak from your seat, you will not be heard on the teleconference

Teleconference decorum

- **Please MUTE if you are not speaking**
- The conference tool in use for this meeting has a chat function. Public, and in some cases private chats, are available to the teleconference host after the meeting, and should be treated as a public statement that could appear in the minutes. The public chat function shall only be used for official business related to the meeting, as determined by the Chair. Parallel discussions between participants using the public chat function can be a distraction from the meeting and the Chair or designee will ask participants to cease such discussions should they occur.

Agenda

- Review and approve agenda
- Approve meeting minutes
- Guidelines for IEEE-SA Meetings
- IEEE-SA Copyright policy
- Participation in IEEE 802 Meetings
- Attendance procedures
- Consideration of maintenance requests
- ISO/IEC JTC 1/SC 6 update
- Revision of IEEE Std 802.3.1-2013 and IEEE Std 802.3.2-2019
- Future meetings

Agenda motion

- Motion #1: Approve the agenda
 - M: G. Thompson S: S. Carlson
 - Procedural (> 50%)
 - Passed by unanimous consent
- July 2022 minutes were posted on 14 July 2022
- Motion #2: Approve the [July 2022](#) minutes
 - M: D. Law S: S. Carlson
 - Procedural (> 50%)
 - Passed by unanimous consent

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.

PARTICIPANTS HAVE A DUTY TO INFORM THE IEEE

- Participants 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
- Participants should 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**

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 WORKING GROUP 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. Formally object to the discussion immediately.

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**

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>

Participant behavior in IEEE-SA activities is guided by the IEEE Codes of Ethics & Conduct

- All participants in IEEE-SA activities are expected to adhere to the core principles underlying the:
 - [IEEE Code of Ethics](#)
 - [IEEE Code of Conduct](#)
- The core principles of the IEEE Codes of Ethics & Conduct are to:
 - *Uphold the highest standards of integrity, responsible behavior, and ethical and professional conduct*
 - *Treat people fairly and with respect, to not engage in harassment, discrimination, or retaliation, and to protect people's privacy.*
 - *Avoid injuring others, their property, reputation, or employment by false or malicious action*
- The most recent versions of these Codes are available at <http://www.ieee.org/about/corporate/governance>

Participants in the IEEE-SA “*individual process*” shall act independently of others, including employers

- The [IEEE-SA Standards Board Bylaws](#) require that “*participants in the IEEE standards development individual process shall act based on their qualifications and experience*”
- This means participants:
 - **Shall act & vote** based on their personal & independent opinions derived from their expertise, knowledge, and qualifications
 - **Shall not act or vote** based on any obligation to or any direction from any other person or organization, including an employer or client, regardless of any external commitments, agreements, contracts, or orders
 - **Shall not direct** the actions or votes of other participants or retaliate against other participants for fulfilling their responsibility to act & vote based on their personal & independently developed opinions
- By participating in standards activities using the “*individual process*”, you are deemed to accept these requirements; if you are unable to satisfy these requirements then you shall immediately cease any participation

IEEE-SA standards activities shall allow the fair & equitable consideration of all viewpoints

- The [IEEE-SA Standards Board Bylaws](#) (clause 5.2.1.3) specifies that “*the standards development process shall not be dominated by any single interest category, individual, or organization*”
 - This means no participant may exercise “*authority, leadership, or influence by reason of superior leverage, strength, or representation to the exclusion of fair and equitable consideration of other viewpoints*” or “*to hinder the progress of the standards development activity*”
- This rule applies equally to those participating in a standards development project and to that project’s leadership group
- Any person who reasonably suspects that dominance is occurring in a standards development project is encouraged to bring the issue to the attention of the Standards Committee or the project’s IEEE-SA Program Manager

Attendance procedures

- IEEE Meeting Attendance Tool
 - <http://imat.ieee.org/>
- For more information, please see...
 - http://ieee802.org/3/minutes/attendance_procedures.pdf

Consideration of maintenance requests

Maintenance request status

- 2 new requests received since the July 2022 meeting
- 10 open maintenance requests
- Current status of open requests
 - Approved 0
 - Balloting 0
 - Ready for ballot 6
 - Awaiting clarification 0
 - Errata 0
 - To be categorized 4
- Also see http://www.ieee802.org/3/maint/requests/open_num.html

Maintenance requests to be categorized

- For consideration this week

No.	Date	Standard	Clause	Subject
1398	23-May-22	802.3-2022	Various, see details	Primitive name
1399	06-Jun-22	802.3-2022	56.1.3	Split Table 56-1 by media type
1400	13-Jul-22	802.3-2022	4.1.2.2	Description of collision
1401	09-Sep-22	802.3-2022	144.3.5	Remove GLID from list

Maintenance request 1398

- Considered in July 2022, but a update to the revision request with corrected revision text was missed
- The name of the primitive "MCRS_**ECH**" should be "MCRS_**ESH**", since it is generated every time an **ESH** EQ is read from the EnvRx buffer
- Make the following changes in 143.3.1.2.3
143.3.1.2.3 ~~MCRS_ECH~~MCRS_ESH[ch].indication(Llid) primitive
... generates the ~~MCRS_ECH~~MCRS_ESH[ch].indication(Llid) primitive ...
- [Re-]set status to “Ready for ballot”

Complete: Y In scope: Y Errata: N

Maintenance request 1399

- Reorganize Table 56–1 into a three-part table split by media (and update cross-references to Table 56–1 accordingly)
 - Table 56–1a for EPON
 - Table 56–1b for point-to-point fiber
 - Table 56–1c for copper
- Mock-up illustrating proposed changes provided
- Set status to “Ready for ballot”

Complete: Y In scope: Y Errata: N

Maintenance request 1400

- In 4.1.2.2...

In half duplex mode, if multiple stations attempt to transmit at the same time, it is possible for them to interfere with each other's transmissions, in spite of their attempts to avoid this by deferring. When transmissions from two or more stations overlap, the resulting contention is called a collision. Collisions occur only in half duplex mode, where a collision indicates that there is more than one station attempting to use the shared physical medium. In full duplex mode, two stations may transmit to each other simultaneously without causing interference.

- Set status to “Ready for ballot”

Complete: Y In scope: Y Errata: N

Maintenance request 1401

- In the last line of 144.3.5

Instead, a registered ONU shall accept all envelopes containing any of the following LLID values:

-- The specific PLID value assigned to this ONU during registration

...

-- Any ULID~~or GLID~~ assigned to this ONU by management

- ONU cannot accept envelopes with GLID values because the GLID values may never appear in envelope headers
- Set status to “Ready for ballot”

Complete: Y In scope: Y Errata: N

ISO/IEC JTC 1/SC 6 update

[Submission plan, motions]

ISO/IEC JTC 1/SC 6 submission plan

Meeting	Submit for preview	Submit for approval
September 2022	IEEE Std 802.3-2022	
November 2022	IEEE Std 802.3dd-2022 IEEE Std 802.3cs-2022 IEEE Std 802.3db-2022 IEEE Std 802.3ck-2022	IEEE Std 802.3-2022
January 2023	IEEE Std 802.3de-2022 IEEE Std 802.3cx-20xx IEEE Std 802.3cz-20xx IEEE Std 802.3cy-20xx	IEEE Std 802.3dd-2022 IEEE Std 802.3cs-2022 IEEE Std 802.3db-2022 IEEE Std 802.3ck-2022
March 2023	Additional amendments as appropriate...	IEEE Std 802.3de-2022 IEEE Std 802.3cx-20xx IEEE Std 802.3cz-20xx IEEE Std 802.3cy-20xx

Submission for preview motion

- Submit IEEE Std 802.3dd-2022, IEEE Std 802.3cs-2022, IEEE Std 802.3db-2022, and IEEE Std 802.3ck-2022 to ISO/IEC JTC 1/SC 6 for preview in anticipation that these standards will later be submitted to ISO/IEC JTC1 for ratification as an ISO/IEC standard under the PSDO process.
 - M: D. Law S: G. Thompson
 - Technical ($\geq 75\%$)
 - Passed by unanimous consent

Submission for approval motion

- Submit IEEE Std 802.3-2022 to ISO/IEC JTC 1/SC 6 for approval under the PSDO process.
 - M: G. Thompson S: M. Hajduczenia
 - Technical ($\geq 75\%$)
 - Passed by unanimous consent

Status of IEEE Std 802.3.1-2013 and IEEE Std 802.3.2-2019

[Discussion]

Status of IEEE Std 802.3.1

- **IEEE-SA Standards Board Operations Manual, 9.2 Removal from active status**

Every IEEE Standard shall be considered for transfer to inactive status by the IEEE-SA Standards Board at the beginning of the next calendar year after it is ten years past its approval date (i.e., the standard will be labeled Inactive and reserved for historical reference).

IEEE Std 802.3.1-2013 will be removed from active status unless revised
[Note that IEEE Std 802.3.1-2013 may be revised even if “Inactive”]

Possible path forward

- If we choose to revise IEEE Std 802.3.1, do we merely implement the open maintenance change (see 1383) or also update the MIB?

[It was suggested that we revise IEEE 802.3.1 and update the MIB.]

- There is also an open maintenance request for IEEE Std 802.3.2 (see 1380)
- Should IEEE Std 802.3.2 also be amended or revised?
- Should the IEEE Std 802.3.2 data model also be updated?

[It was suggested that we revise IEEE 802.3.2 and update the data model.]

- **IEEE 802.3.1a (Revision to IEEE Std 802.3.1) PAR**
- **5.5 Need for the Project:** Ethernet network administrators need standard specifications for MIB modules so that different devices on their networks can be managed in a consistent fashion. Several amendments to IEEE Std 802.3 have been approved recently, and MIB modules specified in IEEE Std 802.3.1 must be updated to reflect these amendments.

Possible next steps

- To revise IEEE Std 802.3.1-2013 and/or IEEE Std 802.3.2-2019, draft revision PARs need to be generated for consideration
- Volunteer(s) to assist in the generation of draft PARs are solicited

Future meetings

- Future meetings will be announced on the Task Force reflector

Adjourn