

IEEE 802.3 Maintenance Task Force

14 November 2023

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

Voting at electronic meetings

- 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.

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

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
- IEEE P802.3-2022/Cor1 proposal
- Future meetings

Agenda motion

- Motion #1: Approve the agenda
 - M: S. Carlson S: D. Law
 - Procedural (> 50%)
 - Passed by unanimous consent 2:11 pm HST
- September 2023 minutes were posted on 13 September 2023
- Motion #2: Approve the [September 2023](#) minutes
 - M: S. Carlson S: M. Hajduczenia
 - Procedural (> 50%)
 - Passed by unanimous consent 2:13 pm HST

GUIDELINES FOR IEEE SA 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>

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>
- IEEE SA Best Practices for IEEE Standards Development
 - http://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/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

- 4 new requests received (not including post-deadline requests)
- 29 open maintenance requests
- Current status of open requests
 - Approved 0
 - Balloting 0
 - Ready for ballot 21
 - Awaiting clarification 0
 - Errata 0
 - To be categorized 8
- Also see http://www.ieee802.org/3/maint/requests/open_num.html

Maintenance requests to be categorized

- Deadline for consideration at this meeting was 9 October
- For consideration this week

No.	Date	Standard	Clause	Subject
1413	18-Aug-23	802.3-2022	99.4.7.7	SMDS_ENCODE() definition
1414	18-Aug-23	802.3-2022	99.4.7.7	Typo
1415	07-Sep-23	802.3-2022	149.8.2.1	Error in return loss limit
1416	07-Sep-23	802.3cy-2023	165.8.2.1	Error in return loss limit
1417	20-Sep-23	802.3ck-2022	161.5.3.8	am_rxpayloads derivation
1418	20-Sep-23	802.3-2022	Figure 36-3	Incorrect title
1419	22-Sep-23	802.3-2022	Figure 99-6	Missing action
1420	29-Sep-23	802.3ck-2022	116.4	Incorrect delay constraints

Maintenance request 1413

- IEEE Std 802.3-2022, 99.4.7.7
- Amend the definition of the SMDS_ENCODE() function
Otherwise it returns a vector containing 0xD5 (i.e., SFD). Produces eight rPLS_DATA.request primitives based on the 8-bit vector. Consumes 8 pPLS_DATA.request primitives containing the SFD.
- Added text corresponds to the actual transmission of the SMD and follows the style of the description of similar operations e.g., in SMDC_ENCODE()
- Set the status to “Ready for Ballot”

Complete: Y
In scope: Y
Errata: N

Maintenance request 1414

- IEEE Std 802.3-2022, Figure 99–6 Receive Processing state diagram
- Change the variable rRxDV to rRxDv in the transition from INIT_RX_PROC to IDLE_RX_PROC and from IDLE_RX_PROC to pMAC_DATA_VALID.
- Set status to “Ready for ballot”

Complete: Y
In scope: Y
Errata: N

Maintenance request 1415

- IEEE Std 802.3-2022, Equation (149–27)
- Change $MDI_Return_Loss(f) \leq \dots$ to $MDI_Return_Loss(f) \geq \dots$
- Set status to “Ready for Ballot”

Complete: Y
In scope: Y
Errata: N

Maintenance request 1416

- IEEE Std 802.3cy-2023, Equation (165-42)
- Change $MDI_Return_Loss(f) \leq \dots$ to $MDI_Return_Loss(f) \geq \dots$
- In addition, move the text “meets equation constraint” in Figure 165-38 from above the curve corresponding to Equation (165-42) to below
- Set status to “Ready for Ballot”

Complete: Y
In scope: Y
Errata: N

Maintenance request 1417

- IEEE Std 802.3ck-2022, 161.5.3.8
- The derivation of am_rxpayloads from am_rxmapped is not the inverse of the mapping of am_txpayloads to am_txmapped
- Due to the incorrect mapping, other data will be misinterpreted as BIP values and this in turn will yield incorrect (saturated) error counts
- Set status to “Ready for Ballot”

Complete: Y In scope: Y Errata: N

Maintenance request 1418

- IEEE Std 802.3-2022, Figure 36–3 PCS reference diagram
- Change the figure title from “PCS reference diagram” to “PCS transmit and receive bit order”
- The figure is not a reference diagram for the entire PCS
- Set status to “Ready for Ballot”

Complete: Y In scope: Y Errata: N

Maintenance request 1419

- IEEE Std 802.3-2022, Figure 99–6 Receive Processing state diagram
- In the DISCARD_KEEP_S state, add pRX_DV(TRUE) after DISCARD
- The DISCARD function invokes pRX_DV(FALSE) after inserting an invalid FCS to cause the pMAC to terminate the incoming packet and issue a MA-DATA.indication to the MAC client
- However, since pRX_DV(TRUE) is not subsequently invoked, the pMAC is unable to process a start of packet while discarding an errored packet even when keepSaferD is TRUE
- See request for a more detailed description of the issue
- Set status to “Ready for Ballot”

Complete: Y In scope: Y Errata: N

Maintenance request 1420

- IEEE Std 802.3ck-2022, Table 116–7
- Change the values inserted for 400GBASE-KR4 and 400GBASE-CR4 to 16384 bit times and 32 pause_quanta (40.96 ns is unchanged)
- The current values are not correct for a 400 Gb/s MAC data rate (and do not agree with the subclause references included in the same table)
- Set status to “Ready for Ballot”

Complete: Y In scope: Y Errata: N

IEEE P802.3-2022/Cor 1 proposal

[Review draft PAR, motion]

Corrigendum PAR motion

- Approve the IEEE P802-2022/Cor 1 corrigendum PAR in http://www.ieee802.org/3/maint/public/P802.3-2022_Cor_1_PAR_draft.pdf.
 - M: S. Carlson S: M. Hajduczenia
 - Technical ($\geq 75\%$)
 - Passed by unanimous consent 2:43 pm HST

Future meetings

- Next meeting is expected to occur during the January 2024 Working Group interim meeting series
- Meeting details will be announced on the Task Force reflector

Adjourn