

IEEE 802.3 Maintenance Task Force

18 January 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
- ISO/IEC JTC 1/SC 6 update
- Revision of IEEE Std 802.3.1-2013 and IEEE Std 802.3.2-2019
- IANA-MAU-MIB discussion
- Future meetings

Agenda motion

- Motion #1: Approve the agenda
 - M: G. Thompson S: M. Hajduczenia
 - Procedural (> 50%)
 - Passed by unanimous consent

- November 2022 minutes were posted on 16 November 2022

- Motion #2: Approve the [November 2022](#) minutes
 - M: S. Carlson S: M. Laubach
 - Procedural (> 50%)
 - Passed by unanimous consent

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/>
 - Session access code: **XXXXXX**

- For more information, please see...
 - http://ieee802.org/3/minutes/attendance_procedures.pdf

Consideration of maintenance requests

Maintenance request status

- 1 new request received since the November 2022 meeting
- 11 open maintenance requests
- Current status of open requests
 - Approved 0
 - Balloting 0
 - Ready for ballot 10
 - Awaiting clarification 0
 - Errata 0
 - To be categorized 1
- 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
1402	01-Dec-22	802.3-2022	135F.1	Typo

Maintenance request 1402

- Typo in 135F.1...

The 50GAUI-~~1~~² C2C or 100GAUI-2 C2C channel is specified in 135F.4. The recommended channel insertion loss is described in 120D.1.




- Set status to “Ready for ballot”

Complete: Y In scope: Y Errata: N

ISO/IEC JTC 1/SC 6 update

[Submission plan update]

Original 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...	Additional amendments as appropriate...



Current status of submissions

- Intent is to submit IEEE Std 802.3-2022 for adoption around 12 February
- It has been recommended that amendments not be submitted until IEEE Std 802.3-2022 has completed the adoption process
- Therefore, no action to be taken at this meeting

Revision 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.

IEEE Std 802.3.1-2013 revision (IEEE 802.3.1b)

Major PAR form questions

Major PAR form questions

- The PAR form is completed on-line through the myProject system. Many of the PAR questions are pro forma and are automatically completed by selecting a “revision” project.
- These slides propose responses to the major items from the PAR form to assist in consensus building leading up to approving a completed draft PAR form.

PAR item 2.1 – Project title

Project title: **Standard for Ethernet Structure of Management Information version 2 (SMIv2) Data Model Definitions**

Help text: The title shall not contain the acronym "IEEE". This is added to the title when the standard publishes. All other acronyms shall be spelled out in the title. Typically titles begin with "Standard for...", "Guide for..." or "Recommended Practice for...". If a general term is used to represent ranges (e.g. high, medium, low) within the title, scope, or purpose, numerically define such ranges where they first appear (title, scope, or purpose, as applicable).

PAR items 4.2 and 4.3 – Project dates

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Standards Committee Ballot:

07/2024

Help text: Enter the date the draft standard is planned to be submitted to IEEE SA for Initial Standards Association Ballot.

4.3 Projected Completion Date for Submittal to RevCom:

01/2025

Help text: Enter the date the draft standard is planned to be submitted to RevCom for processing (not to exceed four years from the date of PAR submission). It is suggested to allow at least six months after Initial Standards Association Ballot for the ballot process.

PAR item 5.1 – Project participation

5.1 Approximate number of people expected to be actively involved in the development of this project:

20

Help text: This includes Working Group members and additional nonvoting participants.

PAR item 5.2 – Scope of proposed standard

5.2 Scope of proposed standard:

This standard defines Structure of Management Information version 2 (SMIv2) MIB module specifications for IEEE Std 802.3 Ethernet and associated managed object branch and leaf assignments used in the variable descriptors in IEEE Std 802.3 Variable Request operations, administration, and maintenance protocol data unit (OAMPDU).

Help text: The Scope should appear as it will in the draft standard. The scope of the standard shall explain in statements of fact what is covered in the standard and, if necessary, what is not covered in the standard in other words, the technical boundaries of the document. The scope should be succinct so that it can be abstracted for bibliographic purposes. The Scope stated on the PAR shall be written in present tense, in complete sentences, and with proper grammar as it is intended to appear in the published standard. All acronyms shall be spelled out at first use. The title and (if appropriate) date of any document referenced in the Scope shall be listed in the Additional Explanatory Notes field at the end of this PAR form.

PAR item 5.3 – Project contingency

5.3 Is the completion of this standard contingent upon the completion of another standard?

No.

Help text: Your explanation should include how the standard is dependent upon the completion of another standard. Also, if applicable, why a PAR request is being submitted if the standard currently under development is not yet complete. The title and number of the standard which this project is contingent upon shall be included in the explanation.

PAR item 5.4 – Purpose

5.4 Purpose:

The purpose of the standard is to define Structure of Management Information version 2 (SMIv2) MIB module specifications for IEEE Std 802.3 and associated managed object branch and leaf assignments and publish them in a machine-readable format.

Help text: A purpose statement is encouraged but not mandatory. A paragraph describing the purpose of the standard is not mandatory in the draft. However, if included, the purpose of the standard and its intended application shall be included in a separate subclause (1.2). The purpose shall explain why the standards project is needed. If the document will not include a purpose statement choose "No" and leave the purpose field blank. The Purpose stated on the PAR shall be written in present tense, in complete sentences, and with proper grammar as it is intended to appear in the published standard. The title and (if appropriate) date of any document referenced in the Purpose shall be listed in the Additional Explanatory Notes field at the end of this PAR form..

PAR item 5.5 – Need for the project

5.5 Need for the Project:

This revision is to address accumulated maintenance changes as well as appropriate updates to the IEEE Std 802.3.1 Structure of Management Information version 2 (SMIv2) MIB modules to support IEEE Std 802.3 amendments published since IEEE Std 802.3.1 was last revised.

Help text: The need for the project details the specific problem that the standard will resolve and the benefit that users will gain by the publication of the standard. The need statement should be brief, no longer than a few sentences.

PAR item 5.6 – Stakeholders

5.6 Stakeholders for the Standard:

Ethernet network component suppliers, system suppliers, network management software suppliers, network administrators.

Help text: The stakeholders (e.g., telecom, medical, environmental) for the standard consist of any parties that have an interest in or may be impacted by the development of the standard.

PAR item 6.1.2 – Registration Activity

6.1.2 Is the Standards Committee aware of possible registration activity related to this project?

Yes. RAC review of previously reviewed text is appropriate to assure terminology and descriptions of usage are current.

Help text: The stakeholders (e.g., telecom, medical, environmental) for the standard consist of any parties that have an interest in or may be impacted by the development of the standard.

PAR item 8.1 – Additional Explanatory Notes

8.1 Additional Explanatory Notes:

Items #2.1 and #5.2: IEEE Std 802.3.1-2013 was the only IEEE 802.3 Management Information Base (MIB) module standard when it was first developed, hence it was titled 'Standard for Management Information Base (MIB) Definitions for Ethernet'. Since then, IEEE 802.3 has developed IEEE Std 802.3.2-2019 'Standard for Ethernet YANG Data Model Definitions' which defines YANG MIB modules in addition to the SMIv2 MIB modules defined in IEEE Std 802.3.1. This revision is being used as an opportunity to update the IEEE Std 802.3.1 title and scope to reflect it is no longer the only IEEE 802.3 MIB Module standard, and that it contains SMIv2 MIB modules.

Items #5.2, #5.4 and #5.5: IEEE Std 802.3 - IEEE Standard for Ethernet

IEEE Std 802.3.2-2019 revision (IEEE 802.3.2a)

Major PAR form questions

PAR item 2.1 – Project title

Project title: **Standard for Ethernet YANG Data Model Definitions**

Help text: The title shall not contain the acronym "IEEE". This is added to the title when the standard publishes. All other acronyms shall be spelled out in the title. Typically titles begin with "Standard for...", "Guide for..." or "Recommended Practice for...". If a general term is used to represent ranges (e.g. high, medium, low) within the title, scope, or purpose, numerically define such ranges where they first appear (title, scope, or purpose, as applicable).

PAR items 4.2 and 4.3 – Project dates

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Standards Committee Ballot:

07/2024

Help text: Enter the date the draft standard is planned to be submitted to IEEE SA for Initial Standards Association Ballot.

4.3 Projected Completion Date for Submittal to RevCom:

01/2025

Help text: Enter the date the draft standard is planned to be submitted to RevCom for processing (not to exceed four years from the date of PAR submission). It is suggested to allow at least six months after Initial Standards Association Ballot for the ballot process.

PAR item 5.1 – Project participation

5.1 Approximate number of people expected to be actively involved in the development of this project:

20

Help text: This includes Working Group members and additional nonvoting participants.

PAR item 5.2 – Scope of proposed standard

5.2 Scope of complete standard:

This standard defines YANG data models for IEEE Std 802.3 Ethernet.

Help text: The Scope should appear as it will in the draft standard. The scope of the standard shall explain in statements of fact what is covered in the standard and, if necessary, what is not covered in the standard in other words, the technical boundaries of the document. The scope should be succinct so that it can be abstracted for bibliographic purposes. The Scope stated on the PAR shall be written in present tense, in complete sentences, and with proper grammar as it is intended to appear in the published standard. All acronyms shall be spelled out at first use. The title and (if appropriate) date of any document referenced in the Scope shall be listed in the Additional Explanatory Notes field at the end of this PAR form.

PAR item 5.3 – Project contingency

5.3 Is the completion of this standard contingent upon the completion of another standard?

No.

Help text: Your explanation should include how the standard is dependent upon the completion of another standard. Also, if applicable, why a PAR request is being submitted if the standard currently under development is not yet complete. The title and number of the standard which this project is contingent upon shall be included in the explanation.

PAR item 5.4 – Purpose

5.4 Purpose:

The purpose of the standard is to define YANG models for IEEE Std 802.3 and publish these models in a machine-readable format.

Help text: A purpose statement is encouraged but not mandatory. A paragraph describing the purpose of the standard is not mandatory in the draft. However, if included, the purpose of the standard and its intended application shall be included in a separate subclause (1.2). The purpose shall explain why the standards project is needed. If the document will not include a purpose statement choose "No" and leave the purpose field blank. The Purpose stated on the PAR shall be written in present tense, in complete sentences, and with proper grammar as it is intended to appear in the published standard. The title and (if appropriate) date of any document referenced in the Purpose shall be listed in the Additional Explanatory Notes field at the end of this PAR form..

PAR item 5.5 – Need for the project

5.5 Need for the Project:

This revision is to addresses accumulated maintenance changes as well as appropriate updates to the IEEE Std 802.3.2 YANG modules to support IEEE Std 802.3 amendments published since IEEE Std 802.3.2 was first published.

Help text: The need for the project details the specific problem that the standard will resolve and the benefit that users will gain by the publication of the standard. The need statement should be brief, no longer than a few sentences.

PAR item 5.6 – Stakeholders

5.6 Stakeholders for the Standard:

Ethernet network component suppliers, system suppliers, network management software suppliers, network administrators.

Help text: The stakeholders (e.g., telecom, medical, environmental) for the standard consist of any parties that have an interest in or may be impacted by the development of the standard.

PAR item 6.1.2 – Registration Activity

6.1.2 Is the Standards Committee aware of possible registration activity related to this project?

Yes. RAC review of previously reviewed text is appropriate to assure terminology and descriptions of usage are current.

Help text: The stakeholders (e.g., telecom, medical, environmental) for the standard consist of any parties that have an interest in or may be impacted by the development of the standard.

PAR item 8.1 – Additional Explanatory Notes

8.1 Additional Explanatory Notes:

Item #5.2, #5.4 and #5.5: IEEE Std 802.3 IEEE Standard for Ethernet

Help text: The stakeholders (e.g., telecom, medical, environmental) for the standard consist of any parties that have an interest in or may be impacted by the development of the standard.

Revision PAR motion

- Approve the IEEE P802.3.1 Revision to IEEE Std 802.3.1-2013 (IEEE 802.3.1b) PAR in http://www.ieee802.org/3/maint/public/P802d3d1_PAR_draft_0123.pdf and the IEEE P802.3.2 Revision to IEEE Std 802.3.2-2019 (IEEE 802.3.2a) PAR in http://www.ieee802.org/3/maint/public/P802d3d2_PAR_draft_0123.pdf.
- M: M. Hajduczenia S: R. Grow
- Technical ($\geq 75\%$)
- Passed by unanimous consent

Next steps

- IEEE 802.3 WG interim meeting: 19 January
- IEEE 802 EC teleconference meeting: 7 February
- NesCom submittal deadline: 17 February
- SASB meeting series: 28 to 30 March

IANA-MAU-MIB

[Marek Hajduczenia]

IANA-MAU-MIB

- IANA-MAU-MIB is available online at:
<https://www.iana.org/assignments/ianamau-mib/ianamau-mib.xhtml>
- The last technical update on August 10, 2022, with the scope "Added MAU types specified in IEEE Std 802.3cu-2021"
- With the publication of IEEE Std 802.3-2022 (new baseline), revision of IANA-MAU-MIB is required, given the number of amendments and changes incorporated in this revision.
- If consented, changes to IANA-MAU-MIB can be introduced via the IETF Designated Expert.

Updates /1

- The following standards have no aPHYType / aMAUType entries, no changes to IANA-MAU-MIB is needed
 - IEEE Std 802.3bt-2018
 - IEEE Std 802.3cq-2020
 - IEEE Std 802.3cr-2021
 - IEEE Std 802.3cv-2021
- The following standards were verified and already present in the latest release of the IANA-MAU-MIB
 - IEEE Std 802.3cb-2018
 - IEEE Std 802.3cd-2018
 - IEEE Std 802.3cn-2019
 - IEEE Std 802.3cg-2019
 - IEEE Std 802.3cu-2021

Updates /2

- Changes necessary to the latest release of the IANA-MAU-MIB:
 - change "[IEEE802.3] refers to IEEE Std 802.3, 2018 Edition" to "[IEEE802.3] refers to IEEE Std 802.3-2022"
 - add coverage for IEEE Std 802.3cm-2020 (entries for 400GBASE-SR8 and 400GBASE-SR4.2)
 - add coverage for IEEE Std 802.3ch-2020 (entries for 2.5GBASE-T1, 5GBASE-T1, and 10GBASE-T1)
 - add coverage for IEEE Std 802.3ca-2020 (multiple entries)
 - add coverage for IEEE Std 802.3ct-2021 (entry for 100GBASE-ZR)
 - add coverage for IEEE Std 802.3cp-2021 (multiple entries)

Future meetings

- Future meetings will be announced on the Task Force reflector

Adjourn