IEEE 802.3 Maintenance Task Force Report

Adam Healey, Broadcom Inc. Chair, IEEE 802.3 Maintenance TF

19 January 2023

Topic

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

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

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approval date (i.e., the standard will be labeled Inactive and reserved for historical reference).

[Note that IEEE Std 802.3.1-2013 may be revised even if "Inactive"]

Path forward

- Revise IEEE Std 802.3.1-2013 and update the MIB
- Revise IEEE Std 802.3.2-2019 and update the data model
- Maintain IEEE Std 802.3.1 active status
- Bring companion documents into alignment with IEEE Std 802.3

IEEE 802.3 Maintenance Task Force

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) Management Information Base (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 addresses 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.

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.

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.

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.

PAR item 8.1 – Additional Explanatory Notes

8.1 Additional Explanatory Notes:

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

Item #2.1: While 'YANG' (developed by the Internet Engineering Task Force) appears to be an acronym, its expansion 'Yet Another Next Generation' is not meaningful. It is vital to keep 'YANG' in the project title to inform potential participants and the target readership of the standard.

IEEE 802.3.1 revision PAR motion

- Approve the IEEE P802.3.1 Revision to IEEE Std 802.3.1-2013 (IEEE 802.3.1b) PAR in P802d3d1_PAR_draft_0123_r1.pdf.
- M: A. Healey S: M. Hajduczenia
- Technical (≥75%)
- Passed / Failed ????

IEEE 802.3.2 revision PAR motion

- Approve the IEEE P802.3.2 Revision to IEEE Std 802.3.2-2019 (IEEE 802.3.2a) PAR in P802d3d2_PAR_draft_0123_r1.pdf.
- M: A. Healey S: M. Hajduczenia
- Technical (≥75%)
- Passed / Failed ????

Next steps

IEEE 802 EC teleconference meeting: 7 February

NesCom submittal deadline: 17 February

SASB meeting series: 28 to 30 March