IEEE 802.3 Maintenance Task Force Closing Report

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13 March 2025

Proposed corrigendum project

- It was observed that the issue raised in Maintenance Request #1473 would be better addressed as a corrigendum since it is an error that could (slightly) impact compliance testing of products
- Proposed responses to major PAR form questions posted
- <u>Announcement</u> sent to reflector 28 February 2025 with an invitation to review proposed responses and comment
- Incorporated all comments received as of Tuesday 11 March AoE
- Submitted draft PAR to IEEE 802 LMSC for consideration under the "Expedited Review" process for ordinary maintenance items
- Consideration is contingent on WG approval

IEEE P802.3-2022/Cor 2 (IEEE 802.3dr)

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 "corrigendum" 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 1.1 – Corrigendum number

1.1 Corrigendum number: 2

Help text: Corrigendum are identified by number after the project number and approval date of the standard. (ex. P1234-2009/Cor 1) If this is the first Corrigendum for this standard, please fill in "1". If it is not the first corrigendum for this standard, determine the number of the last corrigendum and fill in the next number accordingly.

PAR item 2.1 – Corrigendum title

2.1 Corrigendum title: Multi-Gigabit Optical Automotive Ethernet Transmitter Distortion Figure Of Merit

PAR items 4.2 and 4.3 – Project dates

4.2 Expected date of submission of draft to the IEEE SA for initialStandards Association Ballot:08/2025

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:02/2026

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:

10

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

PAR item 5.2a – Scope of the complete standard

5.2a Scope of the complete standard:

This standard defines Ethernet local area, access and metropolitan area networks. Ethernet is specified at selected speeds of operation; and uses a common media access control (MAC) specification and management information base (MIB). The Carrier Sense Multiple Access with Collision Detection (CSMA/CD) MAC protocol specifies shared medium (half duplex) operation, as well as full duplex operation. Speed specific Media Independent Interfaces (MIIs) provide an architectural and optional implementation interface to selected Physical Layer entities (PHY). The Physical Layer encodes frames for transmission and decodes received frames with the modulation specified for the speed of operation, transmission medium and supported link length. Other specified capabilities include: control and management protocols, and the provision of power over selected twisted pair PHY types.

[Unchanged.]

Help text: If this Corrigendum will change the scope statement of the complete document (base + Corrigendum), it can be edited and should be explained in the Additional Explanatory Notes field at the end of the PAR form. If this Corrigendum will not change the scope statement of the complete document the pre-populated text should be left as is.

PAR item 5.2b – Scope of the proposed changes

5.2b Scope of the proposed changes:

The scope of the proposed changes is corrections to the Transmitter Distortion Figure of Merit (TDFOM) normalization factors specified in Table 166–16.

Help text: State what the corrigendum is changing.

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 clause

5.4 Will this document contain a purpose clause: **No.**

Note: IEEE Std 802.3 does not contain a Purpose Clause.

PAR item 5.5 – Need for the project

5.5 Need for the Project:

The normalization factors in Table 166–16 are intended to yield Transmitter Distortion Figure of Merit (TDFOM) equal to 0 dB in Equation (166–16) for an ideal transmitter. However, the current values of the normalization factors in Table 166–16 do not achieve this result and need to be corrected.

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:

End-users, automotive manufacturers, system integrators, and providers of systems and components (e.g., cameras, sensors, actuators, artificial intelligence processors, instruments, controllers, network infrastructure, user interfaces, and servers) for automotive applications.

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 – Explanatory notes

8.1 Additional Explanatory Notes:

Items 5.2.b and 5.5: Equation (166–16) and Table 166–16 are published in the IEEE Std 802.3cz-2023 amendment of IEEE Std 802.3-2022.

Help text: If there is any further information that may assist NesCom in recommending approval for this project, include this information here. The title of any documents referenced in the PAR should be listed here.

Motion

- Approve the IEEE P802.3-2022/Cor 2 corrigendum PAR in <u>https://mentor.ieee.org/802-ec/dcn/25/ec-25-0065-00-LMSC-ieee-p802-3-2022-cor-2-draft-par.pdf</u>.
- M: L. Torres S: A. Healey
- Technical (<u>></u> 75%)

Back-up slides

Changes to proposed responses (comparison to 9 March version)

PAR item 2.1 – Corrigendum title

2.1 Corrigendum title: Multi-Gigabit Optical Automotive Ethernet Transmitter Distortion Figure Of Merit (TDFOM)

PAR item 5.2b – Scope of the proposed changes

5.2b Scope of the proposed changes:

The scope of this project the proposed changes is corrections to the Transmitter Distortion Figure of Merit (TDFOM) normalization factors specified in Table 166–16.

Help text: State what the corrigendum is changing.

PAR item 5.5 – Need for the project

5.5 Need for the Project:

The normalization factors in Table 166–16 are intended to yield <u>Transmitter Distortion</u> <u>Figure of Merit (TDFOM)</u> equal to 0 dB in Equation (166–16) for an ideal transmitter. However, the current values of the normalization factors in Table 166–16 do not achieve this result and need to be corrected.

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.