



P802.1DP

This PAR is valid until 31-Dec-2024.

PAR Extension Request Date: PAR Extension Approval Date:

Number of Previous Extensions Requested: 0

- 1. Number of years that the extension is being requested: 2
- **2. Why an Extension is Required (include actions to complete):** Being the first joint project between SAE and IEEE SA, coordination between the respective working groups took longer than expected causing a delay in the development of the draft standard. Actions to complete include completion of Working Group balloting and Standards Association balloting.
- 3.1. What date did you begin writing the first draft: 26 Jan 2023
- 3.2. How many people are actively working on the project:30
- 3.3. How many times a year does the working group meet?

In person: 6

Via teleconference: 20

- 3.4. How many times a year is a draft circulated to the working group: 3
- 3.5. What percentage of the Draft is stable: 90%
- **3.6.** How many significant work revisions has the Draft been through: 3
- 4. When will/did initial Standards Association Balloting begin: Nov 2024

When do you expect to submit the proposed standard to RevCom: Jul 2025

Has this document already been adopted by another source? (if so please identify) No

For an extension request, the information on the original PAR below is not open to modification.

Type of Project: New IEEE Standard
Project Request Type: Initiation / New
PAR Request Date: 02 Oct 2020
PAR Approval Date: 03 Dec 2020
PAR Expiration Date: 31 Dec 2024

PAR Status: Active

1.1 Project Number: P802.1DP **1.2 Type of Document:** Standard

1.3 Life Cycle: Full Use

2.1 Project Title: Standard for Local and Metropolitan Area Networks – Time-Sensitive Networking for Aerospace Onboard Ethernet Communications

3.1 Working Group: Higher Layer LAN Protocols Working Group(C/LAN/MAN/802.1 WG)

3.1.1 Contact Information for Working Group Chair:

Name: Glenn Parsons

Email Address: glenn.parsons@ericsson.com

3.1.2 Contact Information for Working Group Vice Chair:

Name: Jessy Rouyer

Email Address: jessy.rouyer@nokia.com

3.2 Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee(C/LAN/MAN)

3.2.1 Contact Information for Standards Committee Chair:

Name: James Gilb

Email Address: gilb_ieee@tuta.com

3.2.2 Contact Information for Standards Committee Vice Chair:

Name: David Halasz

Email Address: dave.halasz@ieee.org

3.2.3 Contact Information for Standards Representative:

Name: George Zimmerman

Email Address: george@cmephyconsulting.com

4.1 Type of Ballot: Individual

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

4.3 Projected Completion Date for Submittal to RevCom: Apr 2023

5.1 Approximate number of people expected to be actively involved in the development of this project: 30

- **5.2 Scope of proposed standard:** This standard specifies profiles of IEEE 802.1 Time-Sensitive Networking (TSN) and IEEE 802.1 Security standards for aerospace onboard bridged IEEE 802.3 Ethernet networks. The profiles select features, options, configurations, defaults, protocols, and procedures of bridges, end stations, and Local Area Networks to build deterministic networks for aerospace onboard communications.
- **5.3 Is the completion of this standard contingent upon the completion of another standard?** No **5.4 Purpose:** This standard specifies profiles for designers, implementers, integrators, and certification agencies of deterministic IEEE 802.3 Ethernet networks that support a broad range of aerospace onboard applications including those requiring security, high availability and reliability, maintainability, and bounded latency.
- **5.5 Need for the Project:** The aerospace segment does not have profiles of IEEE 802.1 TSN standards. The lack of standardized TSN profiles makes the definition of the aerospace manufacturers' requirements and the implementation of those requirements by suppliers more difficult and costly. Thus, there is a need to standardize the selection and use of IEEE 802.1 and IEEE 802.3 standards and features in order to be able to deploy secure, highly-reliable converged networks, and enable certification as a basis for compliance and design assurance.
- **5.6 Stakeholders for the Standard:** Developers, integrators, aerospace manufacturers and suppliers, test equipment vendors, certification agencies, and users of networking services and components for aerospace.

6.1 Intellectual Property

- **6.1.1** Is the Standards Committee aware of any copyright permissions needed for this project? No
- **6.1.2** Is the Standards Committee aware of possible registration activity related to this project? No
- 7.1 Are there other standards or projects with a similar scope? No
- 7.2 Is it the intent to develop this document jointly with another organization? No
- **8.1 Additional Explanatory Notes:** 5.2: IEEE 802.1 Time-Sensitive Networking standards as listed at: https://1.ieee802.org/tsn/;
- IEEE 802.1 Security standards as listed at: https://1.ieee802.org/security/;
- IEEE Std 802.3-2018 IEEE Standard for Ethernet and its amendments as listed at: https://www.ieee802.org/3/index.html.
- 5.2 and 5.4: Support for the 802.3 Medium Access Control (MAC) Service is dependent on it being deterministic.
- 7.2: The intent is to develop this document jointly with SAE Avionics Networks AS-1 A2.