
P802.1DP

Submitter Email:**Type of Project:** New IEEE Standard**Project Request Type:** Initiation / New**PAR Request Date:****PAR Approval Date:****PAR Expiration Date:****PAR Status:** Draft

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/LM/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/LM)**3.2.1 Contact Information for Standards Committee Chair:****Name:** Paul Nikolich**Email Address:** p.nikolich@ieee.org**3.2.2 Contact Information for Standards Committee Vice Chair:****Name:** James Gilb**Email Address:** gilb@ieee.org**3.2.3 Contact Information for Standards Representative:****Name:** James Gilb**Email Address:** gilb@ieee.org

4.1 Type of Ballot: Individual**4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot:**
Jun 2022**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.