



P802.1ASdr

Submitter Email:

Type of Project: Amendment to IEEE Standard 802.1AS-2020

Project Request Type: Initiation / Amendment

PAR Request Date:
PAR Approval Date:
PAR Expiration Date:
PAR Status: Draft

Root Project: 802.1AS-2020

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

1.3 Life Cycle: Full Use

2.1 Project Title: IEEE Standard for Local and Metropolitan Area Networks--Timing and Synchronization

for Time-Sensitive Applications Amendment: Alternative Terminology

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

3.1.1 Contact Information for Working Group Chair:

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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

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3.2.2 Contact Information for Standards Committee Vice Chair:

Name: James Gilb

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3.2.3 Contact Information for Standards Representative:

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4.1 Type of Ballot: Individual

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

Jul 2022

4.3 Projected Completion Date for Submittal to RevCom: Mar 2023

5.1 Approximate number of people expected to be actively involved in the development of this project: 60

5.2.a Scope of the complete standard: This standard specifies protocols, procedures, and managed objects used to ensure that the synchronization requirements are met for time-sensitive applications, such as audio, video, and time-sensitive control, across networks, for example, IEEE 802 and similar media. This includes the maintenance of synchronized time during normal operation and following addition, removal, or failure of network components and network reconfiguration. It specifies the use of IEEE 1588(TM) specifications where applicable in the context of IEEE Std 802.1Q(TM)-2018.1 Synchronization to an externally provided timing signal [e.g., a recognized timing standard such as Coordinated Universal Time (UTC) or International Atomic Time (TAI)] is not part of this standard but is not precluded.

5.2.b Scope of the project: This amendment replaces the non-inclusive terms identified by IEEE P1588g with the same alternative suitable and inclusive terminology.

5.3 Is the completion of this standard contingent upon the completion of another standard? Yes **Explanation:** The amendment depends upon the alternative terminology selected by IEEE P1588g. The Project Authorization Request (PAR) is submitted prior to the completion of IEEE P1588g to expedite changes and industry alignment on inclusive terminology.

5.4 Purpose: This standard enables systems to meet the respective jitter, wander, and time - synchronization requirements for time-sensitive applications, including those that involve multiple streams delivered to multiple end stations. To facilitate the widespread use of packet networks for these applications,

synchronization information is one of the components needed at each network element where time-sensitive application data are mapped or demapped or a time-sensitive function is performed. This standard leverages the work of the IEEE 1588 Working Group by developing the additional specifications needed to address these requirements.

- **5.5 Need for the Project:** IEEE Std 802.1AS-2020, as a profile of IEEE Std 1588-2019, uses non-inclusive terms such as "master" and "slave" to describe port states and clock roles in a PTP network. IEEE SA has recently resolved that IEEE standards should be written in such a way as to avoid non-inclusive and insensitive terminology. IEEE P1588g is developing a consensus on the preferred alternative terminology. In order to avoid confusion in industry, this project selects from the IEEE P1588g alternative terms to describe PTP functionality.
- **5.6 Stakeholders for the Standard:** Developers, manufacturers, distributors, or users of time-sensitive applications, components, and equipment.

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 Std 802.1Q, IEEE Standard for Local and metropolitan area networks - Bridges and Bridged Networks IEEE Std 1588-2019, IEEE Standard for a Precision Clock Synchronization Protocol for Network Measurement and Control Systems

IEEE P1588g - Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems Amendment: Master-slave optional alternative terminology

UTC - Coordinated Universal Time

TAI - International Atomic Time

PTP - Precision Time Protocol