P802.1AS

Type of Project: Revision to IEEE Standard 802.1AS-2025
Project Request Type: Initiation / Revision
PAR Request Date:
PAR Approval Date:
PAR Expiration Date:
PAR Status: Draft
Root Project: 802.1AS-2025

1.1 Project Number: P802.1AS
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Project Title: Standard for Local and Metropolitan Area Networks--Timing and Synchronization for Time-Sensitive Applications
Change to Title: ~~IEEE~~ Standard for Local and Metropolitan Area Networks--Timing and Synchronization for Time-Sensitive Applications

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
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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
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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: Nov 2028
4.3 Projected Completion Date for Submittal to RevCom: Nov 2029

5.1 Approximate number of people expected to be actively involved in the development of this project: 50
5.2 Scope of proposed 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™ specifications where applicable in the context of IEEE Std 802.1Q™. 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.

5.3 Is the completion of this standard contingent upon the completion of another standard? Yes
Change to Is the completion of this standard contingent upon the completion of another standard? ~~No~~ Yes
Explanation: This is a maintenance roll-up of IEEE Std 802.1AS-2025 with amendments IEEE Std 802.1ASed and IEEE P802.1ASds. Depending on their progress to approval, other amendments and corrigenda may also be included.
Change to Explanation: This is a maintenance roll-up of IEEE Std 802.1AS-2025 with amendments IEEE Std 802.1ASed and IEEE P802.1ASds. Depending on their progress to approval, other amendments and

corrigenda may also be included.

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: This revision project is needed in order to incorporate approved amendments and corrigenda, to incorporate technical and editorial corrections to existing functionality; to maintain consistency in the consolidated text; and restructure to improve readability and maintainability.

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5.6 Stakeholders for the Standard: Developers, manufacturers, distributors, or users of time-sensitive applications, components, and equipment.

6.1 Intellectual Property

6.1.2 Is the Standards Committee aware of possible registration activity related to this project? lookup value missing

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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

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8.1 Additional Explanatory Notes: 5.2:

IEEE 1588-2019 - IEEE Standard for a Precision Clock Synchronization Protocol for Networked Measurement and Control Systems

IEEE 802.1Q-2022 - IEEE Standard for Local and Metropolitan Area Networks–Bridges and Bridged Networks

5.3:

IEEE 802.1ASed-2026 - IEEE Standard for Local and Metropolitan Area Networks: Timing and Synchronization for Time-Sensitive Applications — Amendment: Fault-Tolerant Timing with Time Integrity

IEEE P802.1ASds - IEEE Draft Standard for Local and Metropolitan Area Networks: Timing and Synchronization for Time-Sensitive Applications — Amendment: Support for the IEEE Std 802.3 Clause 4 Media Access Control (MAC) operating in half-duplex