# P60802

This PAR is valid until 31-Dec-2025. The original PAR was approved on 14-May-2018. It was extended on 21-Sep-2022, modified on 21-Sep-2022 and then modified on 21-Sep-2023.

**PAR Extension Request Date:**
**PAR Extension Approval Date:**
**Number of Previous Extensions Requested:** 1

**1. Number of years that the extension is being requested:** 1
**2. Why an Extension is Required (include actions to complete):** This is a joint project between IEC SC 65C and IEEE 802.1. From the IEEE 802.1 perspective, the development of the standard is complete, Standards Association balloting has been completed, and the draft is ready to be submitted to RevCom. However, IEC is currently preparing the draft for the Final Draft International Standard (FDIS) ballot.  The draft needs to be reviewed by IEEE 802.1 to review any changes and determine if an IEEE SA recirculation ballot is needed.  This PAR extension is being requested in case this project is delayed past the PAR expiration date.
**3.1. What date did you begin writing the first draft:** 18 Jul 2018
**3.2. How many people are actively working on the project:** 40
**3.3. How many times a year does the working group meet?**
   **In person:** 6
   **Via teleconference:** 30
**3.4. How many times a year is a draft circulated to the working group:** 2
**3.5. What percentage of the Draft is stable:** 100%
**3.6. How many significant work revisions has the Draft been through:** 6
**4. When will/did initial Standards Association Balloting begin:** Aug 2024

**When do you expect to submit the proposed standard to RevCom:** Sep 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:** Modify / New
**PAR Request Date:** 09 Aug 2023
**PAR Approval Date:** 21 Sep 2023
**PAR Expiration Date:** 31 Dec 2025
**PAR Status:** Active
**Root PAR:** P60802
**Root PAR Approved on:** 20 Sep 2022
**Root PAR Expiration Date:** 31 Dec 2025

**1.1 Project Number:** P60802
**1.2 Type of Document:** Standard
**1.3 Life Cycle:** Full Use

**2.1 Project Title:** Time-Sensitive Networking Profile for Industrial Automation

**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:** May 2024
**Change to Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot:** May ~~2023~~ 2024
**4.3 Projected Completion Date for Submittal to RevCom:** May 2025
**Change to Projected Completion Date for Submittal to RevCom:** May ~~2024~~ 2025

---

**5.1 Approximate number of people expected to be actively involved in the development of this project:** 40
**5.2 Scope of proposed standard:** This document defines time-sensitive networking profiles for industrial automation. The profiles select features, options, configurations, defaults, protocols, and procedures of bridges, end stations, and LANs to build industrial automation networks. This document specifies YANG modules defining read-only information available online and offline as a digital data sheet. This document also specifies YANG modules for remote procedure calls and actions to address requirements arising from industrial automation networks.
**Change to scope of proposed standard:** This document defines time-sensitive networking profiles for industrial automation. The profiles select features, options, configurations, defaults, protocols, and procedures of bridges, end stations, and LANs to build industrial automation networks. This document ~~also~~ specifies YANG modules defining read-only information available online and offline as a digital data sheet. This document also specifies YANG modules for remote procedure calls and actions to address requirements arising from industrial automation networks.

**5.3 Is the completion of this standard contingent upon the completion of another standard?** Yes
**Explanation:** IEEE P802.1ASdm: This standard will use hot standby time synchronization being specified by IEEE P802.1ASdm.
IEEE P802.1ASdn: This standard will use the YANG data model being specified by IEEE P802.1ASdn.
IEEE P802.1Qdj: This standard will use the configuration enhancements being specified by IEEE P802.1Qdj.
**5.4 Purpose:** This document will not include a purpose clause.
**5.5 Need for the Project:** IEEE 802 standards address a very wide range of networking scenarios. Users and vendors of interoperable bridged time-sensitive networks for industrial automation need guidelines for the selection and the use of IEEE 802 standards and features in order to be able to deploy converged networks to simultaneously support operations technology traffic and other traffic.
**5.6 Stakeholders for the Standard:** Developers, providers, vendors, and users of networking services and components for industrial automation equipment. These components may include bridges, end stations, network interface cards, and integrated circuits.

---

**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?** Yes
**7.2.1 Organization:** IEC
**Change to Organization:** IEC
**Technical Committee Name:** Industrial networks
**Change to Technical Committee Name:** Industrial networks
**Technical Committee Number:** SC65C
**Change to Technical Committee Number:** SC65C
**7.2.2 Organization:** IEC
**Change to Organization:** IEC
**Technical Committee Name:** Industrial networks
**Change to Technical Committee Name:** Industrial networks
**Technical Committee Number:** SC65C
**Change to Technical Committee Number:** SC65C
**7.2.3 Organization:** IEC
**Change to Organization:** IEC
**Technical Committee Name:** Industrial networks
**Change to Technical Committee Name:** Industrial networks
**Technical Committee Number:** SC65C

**Change to Technical Committee Number:** SC65C
**7.2.4 Organization:** IEC
**Change to Organization:** IEC
**Technical Committee Name:** Industrial networks
**Change to Technical Committee Name:** Industrial networks
**Technical Committee Number:** SC65C
**Change to Technical Committee Number:** SC65C

---

**8.1 Additional Explanatory Notes:** #5.2 While 'YANG' (developed by the Internet Engineering Task Force) appears to be an acronym, its expansion 'Yet Another Next Generation' is not meaningful. YANG is a data modeling language for the definition of data sent over network management protocols.
#5.2 The Remote Procedure Calls (RPCs) provided by the YANG modules of the base standards cited by IEC/IEEE 60802 are not satisfactory for industrial automation use cases. Therefore, the IEC/IEEE 60802 Time-Sensitive Networking Profile for Industrial Automation will specify RPCs for industrial automation.
#5.3 IEEE P802.1ASdm Draft Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications - Amendment: Hot Standby;
IEEE P802.1ASdn Draft Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications - Amendment: YANG Data Model; IEEE IEEE P802.1Qdj Draft Standard for Local and Metropolitan Area Networks--Bridges and Bridged Networks
Amendment: Configuration Enhancements for Time-Sensitive Networking

**Change to Additional Explanatory Notes:** #5.2 While 'YANG' (developed by the Internet Engineering Task Force) appears to be an acronym, its expansion 'Yet Another Next Generation' is not meaningful. YANG is a data modeling language for the definition of data sent over network management protocols. #5.2 The Remote Procedure Calls (RPCs) provided by the YANG modules of the base standards cited by IEC/IEEE 60802 are not satisfactory for industrial automation use cases. Therefore, the IEC/IEEE 60802 Time-Sensitive Networking Profile for Industrial Automation will specify RPCs for industrial automation. #5.3 IEEE P802.1ASdm Draft Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications - Amendment: Hot Standby;IEEE P802.1ASdn Draft Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications - Amendment: YANG Data Model; IEEE IEEE P802.1Qdj Draft Standard for Local and Metropolitan Area Networks--Bridges and Bridged NetworksAmendment: Configuration Enhancements for Time-Sensitive Networking