

Project Number	Project Type	Working Group	Project Title	Scope	Approval PAR Date	Expiration PAR Date	Invitation Close Date	Ballot Close Date	Project Status
P802.1BA	Revision	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks--Audio Video Bridging (AVB) Systems	This standard defines profiles that select features, options, configurations, defaults, protocols and procedures of bridges, stations and Local Area Networks (LAN) that are necessary to build networks that are capable of transporting time sensitive audio and/or video data streams.	10 Feb 2021	31 Dec 2025	NA	NA	Draft Development
P802.1AS-2020/Cor 1	Corrigendum	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks--Timing and Synchronization for Time-Sensitive Applications - Corrigendum 1 Technical and Editorial Corrections:	Correction of technical and editorial errors identified by the IEEE 802.1 maintenance activity, documented at https://www.802-1.org/items?utf8=%E2%9C%93&search=802.1AS-2020&commit=Search . No new functionality will be defined.	10 Feb 2021	31 Dec 2025	NA	NA	Draft Development
P802.1AEdk	Amendment	C/LM/802.1 WG	Standard for Local and metropolitan area networks-Media Access Control (MAC) Security - Amendment 4: MAC Privacy protection	This amendment specifies privacy enhancements that complement existing IEEE Std 802.1AE MAC Security capabilities, and reduce the ability of external observers to correlate user data frames, their sizes, transmission timing and transmission frequency with users identities and activities. It specifies an encapsulation format that allows one or more user data frames and padding octets to be carried within the confidentiality protected data of consolidating frames, hiding the users MAC addresses and original frame sizes. The transmitter can balance the privacy improvement against the loss of efficiency and delay by controlling the sizes of consolidating frames and when they are transmitted. YANG configuration and operational state models are defined both for the existing functionality of IEEE Std 802.1AE and for the functionality to be added by this project. An SNMP MIB will be defined for the added functionality. This amendment also describes privacy considerations for the use, design, and deployment of bridged networks. This project includes technical and editorial corrections to existing IEEE Std 802.1AE functionality.	13 Feb 2020	31 Dec 2024	NA	NA	Draft Development
P802f	Amendment	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks: Overview and Architecture - Amendment: YANG Data Model for EtherTypes	This amendment specifies YANG modules that contain the EtherType information, including a compact human-readable name and description. The name and description for an initial set of EtherTypes are defined for inclusion in the IEEE Registration Authority EtherType public listing. This amendment also addresses errors and omissions in IEEE Std 802 description of existing functionality.	13 Feb 2020	31 Dec 2024	NA	NA	Draft Development
P802.1ASdm	Amendment	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications - Amendment: Hot Standby	This amendment specifies protocols, procedures, and managed objects for hot standby without use of the Best Master Clock Algorithm (BMCA), for time-aware systems, including: - A function that transforms the synchronized times of two generalized Precision Time Protocol (gPTP) domains into one synchronized time for use by applications; - A function that directs the synchronized time of one gPTP domain into a different gPTP domain; and - Mechanisms that determine whether a gPTP domain has sufficient quality to be used for hot standby. This amendment also addresses errors and omissions in the description of existing functionality.	03 Jun 2020	31 Dec 2024	NA	NA	Draft Development
P802.1Q	Revision	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks--Bridges and Bridged Networks	This standard specifies Bridges that interconnect individual LANs, each supporting the IEEE 802 MAC Service using a different or identical media access control method, to provide Bridged Networks and VLANs.	03 Jun 2020	31 Dec 2024	15 Nov 2020	NA	SA Ballot: Pre-Ballot
P802.1ASdn	Amendment	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks - Timing and Synchronization for Time-Sensitive Applications - Amendment: YANG Data Model	This amendment specifies a YANG data model that allows configuring and state reporting for all managed objects of the base standard. This amendment specifies a Unified Modeling Language (UML)-based figure to explain the managed objects and the associated YANG data model.	24 Sep 2020	31 Dec 2024	NA	NA	Draft Development

Project Number	Project Type	Working Group	Project Title	Scope	Approval PAR Date	Expiration PAR Date	Invitation Close Date	Ballot Close Date	Project Status
P802.1DP	New	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks – Time-Sensitive Networking for Aerospace Onboard Ethernet Communications	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.	03 Dec 2020	31 Dec 2024	NA	NA	Draft Development
P802.1Qcj	Amendment	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks – Bridges and Bridged Networks - Amendment: Automatic Attachment to Provider Backbone Bridging (PBB) services	This standard specifies the protocols, procedures and management objects for auto-attachment of network devices to Provider Backbone service instances by using Type, Length, Value (TLVs) within the Link Layer Discovery Protocol (LLDP)	11 Jun 2015	31 Dec 2021	NA	NA	Draft Development
P802.1CQ	New	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks: Multicast and Local Address Assignment	This standard specifies protocols, procedures, and management objects for locally-unique assignment of 48-bit and 64-bit addresses in IEEE 802 networks. Peer-to-peer address claiming and address server capabilities are specified.	05 Feb 2016	31 Dec 2022	NA	NA	Draft Development
P802.1ABcu	Amendment	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks - Station and Media Access Control Connectivity Discovery - Amendment: YANG Data Model	This amendment specifies a Unified Modeling Language (UML)-based information model and a YANG data model that allows configuration and status reporting for bridges and bridge components with regards to topology discovery (as specified by this standard) with the capabilities currently specified in clauses 10 (LLDP management) and 11 (LLDP MIB definitions). Additionally, this amendment will address errors or omissions to existing features.	28 Sep 2017	31 Dec 2021	NA	NA	Draft Development
P802.1Qcw	Amendment	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks–Bridges and Bridged Networks - Amendment: YANG Data Models for Scheduled Traffic, Frame Preemption, and Per-Stream Filtering and Policing	This amendment specifies a Unified Modeling Language (UML)-based information model and YANG data models that allow configuration and status reporting for bridges and bridge components (as specified by this standard) with the capabilities currently specified in clauses 12.29 (scheduled traffic), 12.30 (frame preemption) and 12.31 (per-stream filtering and policing) of this standard. It further defines the relationship between the information and data model and models for the other management capabilities specified in this standard. Additionally, this amendment will address errors or omissions to existing features related to the aforementioned clauses.	28 Sep 2017	31 Dec 2021	NA	NA	Draft Development
P802.1ACct	Amendment	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks – Media Access Control (MAC) Service Definition - Amendment Support for IEEE Std 802.15.3	This project adds support of the Internal Sublayer Service by the IEEE Std 802.15.3 MAC entity.	28 Sep 2017	31 Dec 2021	NA	NA	Draft Development
P60802	New	C/LM/802.1 WG	Time-Sensitive Networking Profile for Industrial Automation	This standard 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.	14 May 2018	31 Dec 2022	NA	NA	Draft Development
P802.1CBcv	Amendment	C/LM/802.1 WG	Draft Standard for Local and metropolitan area networks – Frame Replication and Elimination for Reliability - Amendment: Information Model, YANG Data Model and Management Information Base Module	This amendment specifies a Unified Modeling Language (UML) based information model for the capabilities currently specified in clauses 9 and 10 of this standard. A YANG data model and a Management Information Base (MIB) module both based on that UML model support configuration and status reporting. Additionally, this amendment addresses errors or omissions to existing features.	14 May 2018	31 Dec 2022	NA	NA	Draft Development
P802.1CBdb	Amendment	C/LM/802.1 WG	Draft Standard for Local and metropolitan area networks – Frame Replication and Elimination for Reliability - Amendment: Extended Stream Identification Functions	This amendment specifies procedures and managed objects that add new stream identification functions. Additionally this amendment addresses errors and clarifications.	14 May 2018	31 Dec 2022	NA	NA	Draft Development

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P802.1DC	New	C/LM/802.1 WG	Quality of Service Provision by Network Systems	This standard specifies procedures and managed objects for Quality of Service (QoS) features specified in IEEE Std 802.1Q, such as per-stream filtering and policing, queuing, transmission selection, flow control and preemption, in a network system which is not a bridge.	14 May 2018	31 Dec 2022	NA	NA	Draft Development
P802.1Qdd	Amendment	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks--Bridges and Bridged Networks - Amendment: Resource Allocation Protocol	This amendment specifies protocols, procedures, and managed objects for a Resource Allocation Protocol (RAP) that uses the Link-local Registration Protocol (LRP) and supports and provides backwards compatibility with the stream reservation and quality of service capabilities, controls and protocols specified in IEEE Std 802.1Q. RAP provides support for accurate latency calculation and reporting, can use redundant paths established by other protocols, and is not limited to bridged networks.	27 Sep 2018	31 Dec 2022	NA	NA	Draft Development
P802.1Qcz	Amendment	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks--Bridges and Bridged Networks - Amendment: Congestion Isolation	This amendment specifies protocols, procedures and managed objects that support the isolation of congested data flows within data center environments. This is achieved by enabling systems to individually identify flows creating congestion, adjust transmission selection for packets of those flows, and signal to neighbors. This mechanism reduces head-of-line blocking for uncongested flows sharing a traffic class in lossless networks. Congestion Isolation is intended to be used with higher layer protocols that utilize end-to-end congestion control in order to reduce packet loss and latency. This amendment also addresses errors and omissions in the description of existing functionality.	27 Sep 2018	31 Dec 2022	05 Nov 2020	22 Feb 2021	SA Ballot: Comment Resolution
P802.1DF	New	C/LM/802.1 WG	Time-Sensitive Networking Profile for Service Provider Networks	This standard defines profiles of IEEE Std 802.1Q and IEEE Std 802.1CB that provide Time-Sensitive Networking (TSN) quality of service features for non-fronthaul shared service provider networks. The standard also provides use cases, and informative guidance for network operators on how to configure their networks for those use cases.	08 Feb 2019	31 Dec 2023	NA	NA	Draft Development
P802.1DG	New	C/LM/802.1 WG	Time-Sensitive Networking Profile for Automotive In-Vehicle Ethernet Communications	This standard specifies profiles for secure, highly reliable, deterministic latency, automotive in-vehicle bridged IEEE 802.3 Ethernet networks based on IEEE 802.1 Time-Sensitive Networking (TSN) standards and IEEE 802.1 Security standards.	08 Feb 2019	31 Dec 2023	NA	NA	Draft Development
P802.1ABdh	Amendment	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks - Station and Media Access Control Connectivity Discovery - Amendment: Support for Multiframe Protocol Data Units	This amendment specifies protocols, procedures and managed objects that support the transmission and reception of a set of Link Layer Discovery Protocol (LLDP) Type Length Values (TLVs) that exceed the space available in a single frame. This amendment defines the transmission of multiple frames, additional TLVs and the procedures needed to support the transmission of those TLVs across multiple frames. This amendment maintains existing functionality while communicating with a peer that supports updated functionality. This amendment defines a method to further restrict the size of the LLDP Data Unit (LLDPDU) and extensions in order to meet timing constraints in the network. This amendment also addresses errors and omissions in the description of existing functionality.	05 Sep 2019	31 Dec 2023	NA	NA	Draft Development
P802.1Qdj	Amendment	C/LM/802.1 WG	Standard for Local and Metropolitan Area Networks--Bridges and Bridged Networks - Amendment: Configuration Enhancements for Time-Sensitive Networking	This amendment specifies procedures, interfaces, and managed objects to enhance the three models of 'Time-Sensitive Networking (TSN) configuration'. It specifies enhancements to the User/Network Interface (UNI) to include new capabilities to support bridges and end stations in order to extend the configuration capability. This amendment preserves the existing separation between configuration models and protocol specifications. This amendment also addresses errors and omissions in the description of existing functionality.	05 Sep 2019	31 Dec 2023	NA	NA	Draft Development

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P802.11bh	Amendment	C/LM/802.11 WG	Standard for Information Technology--Telecommunications and Information Exchange Between Systems Local and Metropolitan Area Networks--Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment: Operation with Randomized and Changing MAC Addresses	<p>This amendment specifies modifications to the medium access control (MAC) mechanisms to preserve the existing services that might otherwise be restricted in environments where STAs in an Extended Service Set (ESS) use randomized or changing MAC addresses, without affecting user privacy. User privacy includes exposure of trackable information to third parties or exposure of an individual's presence or behavior.</p> <p>This amendment introduces mechanisms to enable session continuity in the absence of unique MAC address-to-STA mapping. For STAs in an ESS that use randomized or changing MAC addresses, this amendment preserves the ability to provide customer support, conduct network diagnostics and troubleshooting, and detect device arrival in a trusted environment.</p>	10 Feb 2021	31 Dec 2025	NA	NA	Draft Development
P802.11bi	Amendment	C/LM/802.11 WG	Standard for Information Technology--Telecommunications and Information Exchange Between Systems Local and Metropolitan Area Networks--Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment: Enhanced Service with Data Privacy Protection	<p>This amendment specifies modifications to the IEEE Std 802.11 medium access control (MAC) specification to specify new mechanisms that address and improve user privacy.</p>	10 Feb 2021	31 Dec 2025	NA	NA	Draft Development
P802.11	Revision	C/LM/802.11 WG	Standard for Information Technology -- Telecommunications and Information Exchange Between Systems Local and Metropolitan Area Networks -- Specific Requirements - Part 11: Wireless Local Area Network (LAN) Medium Access Control (MAC) and Physical Layer (PHY) Specifications	<p>The scope of this standard is to define one medium access control (MAC) and several physical layer (PHY) specifications for wireless connectivity for fixed, portable, and moving stations (STAs) within a local area.</p>	10 Feb 2021	31 Dec 2025	NA	NA	Draft Development
P802.11bf	Amendment	C/LM/802.11 WG	Standard for Information Technology -- Telecommunications and Information Exchange Between Systems Local and Metropolitan Area Networks -- Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment: Enhancements for Wireless Local Area Network (WLAN) Sensing	<p>This amendment defines modifications to the IEEE 802.11 medium access control layer (MAC) and to the Directional Multi Gigabit (DMG) and enhanced DMG (EDMG) PHYs to enhance Wireless Local Area Network (WLAN) sensing (SENS) operation in license-exempt frequency bands between 1 GHz and 7.125 GHz and above 45 GHz.</p> <p>This amendment enables:</p> <ul style="list-style-type: none"> • Stations to perform one or more of the following: to inform other stations of their WLAN sensing capabilities, to request and setup transmissions that allow for WLAN sensing measurements to be performed, to indicate that a transmission can be used for WLAN sensing, and to exchange WLAN sensing feedback and information, • WLAN sensing measurements to be obtained using transmissions that are requested, unsolicited, or both, and • A MAC service interface for layers above the MAC to request and retrieve WLAN sensing measurements. <p>This amendment defines modifications to the PHY service interface of the High Throughput (HT), Very High Throughput (VHT), High Efficiency (HE) and Extremely High Throughput (EHT) PHYs.</p> <p>This amendment provides backward compatibility and coexistence with legacy IEEE 802.11 devices operating in the same band.</p>	24 Sep 2020	31 Dec 2024	NA	NA	Draft Development

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P802.11ay	Amendment	C/LM/802.11 WG	Standard for Information Technology–Telecommunications and Information Exchange Between Systems Local and Metropolitan Area Networks–Specific Requirements Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications – Amendment: Enhanced Throughput for Operation in License-Exempt Bands Above 45 GHz	<p>This amendment defines standardized modifications to both the IEEE 802.11 physical layers (PHY) and the IEEE 802.11 medium access control layer (MAC) that enables at least one mode of operation capable of supporting a maximum throughput of at least 20 gigabits per second (measured at the MAC data service access point), while maintaining or improving the power efficiency per station.</p> <p>This amendment defines operations for license-exempt bands above 45 GHz while ensuring backward compatibility and coexistence with legacy directional multi-gigabit stations (defined by the IEEE 802.11ad amendment) operating in the same band.</p>	26 Mar 2015	31 Dec 2021	03 Jul 2019	20 Dec 2020	RevCom Agenda(24 Mar 2021)
P802.11ba	Amendment	C/LM/802.11 WG	Standard for Information Technology–Telecommunications and Information Exchange Between Systems Local and Metropolitan Area Networks–Specific Requirements Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment: Wake-up Radio Operation	<p>This amendment defines a physical (PHY) layer specification and defines modifications to the medium access control (MAC) layer specification that enables operation of a wake-up radio (WUR). The wake-up frames carry only control information. The reception of the wake-up frame by the WUR can trigger a transition of the primary connectivity radio out of sleep. The WUR is a companion radio to the primary connectivity radio and meets the same range requirement as the primary connectivity radio. The WUR devices coexist with legacy IEEE 802.11 devices in the same band. The WUR has an expected active receiver power consumption of less than one milliwatt.</p>	07 Dec 2016	31 Dec 2021	07 Aug 2019	21 Dec 2020	RevCom Agenda(24 Mar 2021)
P802.11az	Amendment	C/LM/802.11 WG	Standard for Information Technology - Telecommunications and Information Exchange Between Systems Local and Metropolitan Area Networks - Specific Requirements Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Enhancements for Positioning	<p>This amendment defines modifications to both the IEEE 802.11 medium access control layer (MAC) and physical layers (PHY) of High Throughput (HT), Very High Throughput (VHT), Directional Multi Gigabit (DMG) and PHYs under concurrent development (e.g. High Efficiency WLAN (HEW), Next Generation 60GHz (NG60)) that enables determination of absolute and relative position with better accuracy than the Fine Timing Measurement (FTM) protocol executing on the same PHY-type, while reducing existing wireless medium use and power consumption and is scalable to dense deployments. This amendment also defines modifications that enable secured exchange of measurement and positioning information.</p> <p>This amendment requires backward compatibility and coexistence with legacy devices. Backward compatibility with legacy 802.11 devices implies that devices implementing this amendment shall (a) maintain data communication compatibility and (b) support the Fine Timing Measurement (FTM) protocol.</p>	15 Feb 2018	31 Dec 2021	NA	NA	Draft Development

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P802.11bb	Amendment	C/LM/802.11 WG	Standard for Information Technology--Telecommunications and Information Exchange Between Systems Local and Metropolitan Area Networks--Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment: Light Communications	<p>This amendment specifies a new PHY layer and modifications to the IEEE 802.11 MAC that enable operation of wireless light communications (LC).</p> <p>This amendment specifies a PHY that provides: 1) Uplink and downlink operations in 380 nm to 5,000 nm band, 2) All modes of operation achieve minimum single-link throughput of 10 Mb/s and at least one mode of operation that achieves single-link throughput of at least 5 Gb/s, as measured at the MAC data service access point (SAP), 3) Interoperability among solid state light sources with different modulation bandwidths.</p> <p>This amendment specifies changes to the IEEE 802.11 MAC that are limited to the following: 1) Hybrid coordination function (HCF) channel access, 2) Overlapping basic service set (OBSS) detection and coexistence, 3) Existing power management modes of operation (excluding new modes), and modifications to other clauses necessary to support these changes.</p>	14 May 2018	31 Dec 2022	NA	NA	Draft Development
P802.11bc	Amendment	C/LM/802.11 WG	Standard for information technology--Telecommunications and information exchange between systems Local and metropolitan area networks--Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment: Enhanced Broadcast Service	<p>This amendment specifies modifications to the IEEE 802.11 medium access control (MAC) specifications that enable enhanced transmission and reception of broadcast data both in an infrastructure BSS where there is an association between the transmitter and the receiver(s) and in cases where there is no association between transmitter(s) and receiver(s).</p> <p>This amendment introduces origin authenticity protection for broadcast data frames.</p>	05 Dec 2018	31 Dec 2022	NA	NA	Draft Development
P802.11bd	Amendment	C/LM/802.11 WG	Standard for information technology--Telecommunications and information exchange between systems Local and metropolitan area networks--Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment: Enhancements for Next Generation V2X	<p>This amendment defines modifications to both the IEEE 802.11 Medium Access Control layer (MAC) and Physical Layers (PHY) for vehicle to everything (V2X) communications for 5.9 GHz band as defined in clauses E.2.3 and E.2.4 of IEEE Std 802.11(TM)-2016; and, optionally, in the 60 GHz frequency band (57 GHz to 71 GHz) as defined in clause E.1 of IEEE Std 802.11(TM)-2016.</p> <p>This amendment defines at least one mode that achieves at least 2 times higher throughput (measured at the MAC data service access point) than as in IEEE Std 802.11(TM)-2016 operating at maximum mandatory data rate as defined in the 5.9 GHz band (12 Mb/s in a 10 MHz channel), in high mobility channel environments at vehicle speeds up to 250 km/h (closing speeds up to 500 km/h); this amendment also defines at least one mode that achieves at least 3dB lower sensitivity level (longer range), than that of the lowest data rate defined in IEEE Std 802.11(TM)-2016 operating in 5.9 GHz band (3 Mb/s in a 10 MHz channel); and this amendment defines procedures for at least one form of positioning in conjunction with V2X communications.</p> <p>This amendment shall provide interoperability, coexistence, backward compatibility, and fairness with deployed OCB (Outside the Context of a BSS) devices.</p>	05 Dec 2018	31 Dec 2022	NA	NA	Draft Development

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P802.11be	Amendment	C/LM/802.11 WG	Standard for Information technology--Telecommunications and information exchange between systems Local and metropolitan area networks--Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment: Enhancements for Extremely High Throughput (EHT)	This amendment defines standardized modifications to both the IEEE Std 802.11 physical layers (PHY) and the Medium Access Control Layer (MAC) that enable at least one mode of operation capable of supporting a maximum throughput of at least 30 Gbps, as measured at the MAC data service access point (SAP), with carrier frequency operation between 1 and 7.250 GHz while ensuring backward compatibility and coexistence with legacy IEEE Std 802.11 compliant devices operating in the 2.4 GHz, 5 GHz, and 6 GHz bands. This amendment defines at least one mode of operation capable of improved worst case latency and jitter.	21 Mar 2019	31 Dec 2023	NA	NA	Draft Development
P802.16t	Amendment	C/LM/802.15 WG	Standard for Air Interface for Broadband Wireless Access Systems - Amendment - Fixed and Mobile Wireless Access in Narrowband Channels	This project specifies operation in licensed spectrum with channel bandwidths greater than or equal to 5 kHz and less than 100 kHz. The project specifies a new PHY, and changes to the MAC as necessary to support the PHY. The amendment is frequency independent but focuses on spectrum less than 2 GHz. The range and data rate supported by the narrower channels are commensurate with those of the base standard, as scaled by the reduced channel bandwidth. The project also amends IEEE Std 802.16 as required to support aggregated operation in adjacent and non-adjacent channels.	03 Dec 2020	31 Dec 2024	NA	NA	Draft Development
P802.15.7a	Amendment	C/LM/802.15 WG	Standard for Local and Metropolitan Area Networks - Part 15.7: Short-Range Optical Wireless Communications - Amendment: Higher Speed, Longer Range Optical Camera Communication (OCC)	This amendment defines a high-rate Optical Camera Communications (OCC) Physical Layer (PHY) using light wavelengths from 10 000 nm to 190 nm in optically transparent media. It is capable of delivering data rates up to 100 Mb/s and is designed for point-to-point and point-to-multipoint communication. Adaptation to varying channel conditions and maintaining connectivity during high mobility (speeds up to 350 km/h), flicker mitigation, RF co-existence, and a communication range of up to 200 m, are included. MIMO (e.g. MIMO-OFDM) is utilized to deal with high-levels of optical interference while maintaining high-rate data transmission. Relaying mechanisms are included enabling heterogeneous operation with existing RF wireless data communications standards. The Amendment adheres to applicable eye safety regulations.	24 Sep 2020	31 Dec 2024	NA	NA	Draft Development
P802.15.13	New	C/LM/802.15 WG	Standard for Multi-Gigabit per Second Optical Wireless Communications (OWC), with Ranges up to 200 meters, for both stationary and mobile devices	This standard defines a Physical (PHY) and Media Access Control (MAC) layer using light wavelengths from 10 000 nm to 190 nm in optically transparent media for optical wireless communications. The standard is capable of delivering data rates up to 10 Gb/s at distances in the range of 200 m unrestricted line of sight. It is designed for point to point and point to multi point communications in both non-coordinated and coordinated topologies. For coordinated topologies with more than one peer coordinator there will be a master coordinator. The standard includes adaptation to varying channel conditions and maintaining connectivity while moving within the range of a single coordinator or moving between coordinators.	03 Jun 2020	31 Dec 2021	29 Oct 2020	13 Jan 2021	SA Ballot: Comment Resolution
P802.15.4aa	Amendment	C/LM/802.15 WG	Standard for Low-Rate Wireless Networks - Amendment: Higher data rate extension to IEEE 802.15.4 Smart Utility Network (SUN) Frequency Shift Keying (FSK) Physical layer (PHY)	This amendment defines a data rate extension of SUN FSK PHY to IEEE Std 802.15.4-2020. It adds data rate extensions for the SUN FSK modulation and channel parameters. These extensions focus on the Japanese frequency band, 920 to 928 MHz.	03 Dec 2020	31 Dec 2024	NA	NA	Draft Development
P802.15.4-2020/Cor 2	Corrigendum	C/LM/802.15 WG	Standard for Low-Rate Wireless Networks - Corrigendum 2: Correction of errors preventing backward compatibility	This corrigendum addresses a significant error found in approved IEEE Std 802.15.4-2020 in the SUN OFDM PHY PHR.	24 Sep 2020	31 Dec 2024	NA	NA	Draft Development

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P802.15.12	New	C/LM/802.15 WG	Upper Layer Interface (ULI) for IEEE 802.15.4 Low-Rate Wireless Networks	This standard defines an Upper Layer Interface (ULI) sublayer in Layer 2 (L2), between Layer 3 (L3) and the IEEE 802.15.4 Media Access Control (MAC) sublayer. The ULI provides data and management service access points (SAPs) for interface to the IEEE 802.15.4 MAC. The ULI adapts L3 protocols and provides operational configuration including network and radio regulation requirements of the IEEE 802.15.4 MAC. Furthermore, the ULI integrates optional upper Layer 2 functionalities focused on interfacing to the IEEE 802.15.4 MAC such as Key Management Protocols (KMPs), L2 routing (L2R) protocols, L2 fragmentation, and Internet Engineering Task Force (IETF) IPv6 over the TimeSlotted Channel Hopping (TSCH) mode of IEEE Std 802.15.4 (6TiSCH) Operation Protocol (6TOP). Finally, the ULI provides protocol differentiation, using mechanisms such as EtherType Protocol Differentiation (EPD) to support multiple, diverse higher layer protocols, and header compression.	12 May 2016	31 Dec 2022	NA	NA	Draft Development
P802.15.4y	Amendment	C/LM/802.15 WG	Standard for Low-Rate Wireless Networks - Amendment Defining Support for Advanced Encryption Standard (AES)-256 Encryption and Security Extensions	This amendment defines security extensions to IEEE Std 802.15.4 adding AES-256-CCM plus a cipher suite/authentication method registry and a process for inclusion of additional algorithms. The registry defines a capability to align IEEE Std 802.15.4 with the security requirements of higher layer standards.	14 May 2018	31 Dec 2022	06 Nov 2020	21 Feb 2021	SA Ballot: Comment Resolution
P802.15.9	Revision	C/LM/802.15 WG	Standard for Transport of Key Management Protocol (KMP) Datagrams	This standard defines security key management extensions to address session key generation (both 128-bit and 256-bit key lengths), the creation and/or transport of broadcast/multicast keys, and security algorithm agility. This standard maintains backwards compatibility with IEEE Std 802.15.9-2016.	05 Sep 2019	31 Dec 2023	03 Dec 2020	21 Feb 2021	SA Ballot: Comment Resolution
P802.19.3	New	C/LM/802.19 WG	Recommended Practice for Local and Metropolitan Area Networks - Part 19: Coexistence Methods for 802.11 and 802.15.4 based systems operating in the Sub-1 GHz Frequency Bands	This recommended practice provides guidance on the implementation, configuration and commissioning of systems sharing spectrum between IEEE Std 802.11ah-2016 and IEEE Std 802.15.4 Smart Utility Networking (SUN) Frequency Shift Keying (FSK) Physical Layer (PHY) operating in Sub-1 GHz frequency bands.	05 Dec 2018	31 Dec 2022	20 Aug 2020	05 Jan 2021	RevCom Agenda(24 Mar 2021)
P802.3cw	Amendment	C/LM/802.3 WG	Standard for Ethernet - Amendment: Physical Layers and Management Parameters for 400 Gb/s Operation over DWDM (dense wavelength division multiplexing) systems	Define physical layer specifications and management parameters for the transfer of Ethernet format frames at 400 Gb/s at reaches greater than 10 km over DWDM systems.	13 Feb 2020	31 Dec 2024	NA	NA	Draft Development
P802.3ct	Amendment	C/LM/802.3 WG	Standard for Ethernet - Amendment: Physical Layers and Management Parameters for 100 Gb/s Operation over DWDM (dense wavelength division multiplexing) systems	Define physical layer specifications and management parameters for the transfer of Ethernet format frames at 100 Gb/s at reaches greater than 10 km over DWDM systems.	13 Feb 2020	31 Dec 2023	26 Aug 2020	30 Jan 2021	SA Ballot: Comment Resolution
P802.3cx	Amendment	C/LM/802.3 WG	Standard for Ethernet - Amendment: Media Access Control (MAC) service interface and management parameters to support improved Precision Time Protocol (PTP) timestamping accuracy	Define optional enhancements to Ethernet support for time synchronization protocols to provide improved timestamp accuracy in support of ITU-T Recommendation G.8273.2 'Class C' and 'Class D' system time error performance requirements.	13 Feb 2020	31 Dec 2024	NA	NA	Draft Development
P802.3cz	Amendment	C/LM/802.3 WG	Standard for Ethernet - Amendment: Physical Layer Specifications and Management Parameters for Multi-Gigabit Optical Automotive Ethernet	Specify additions to and appropriate modifications of IEEE Std 802.3 to add Physical Layer specifications and management parameters for multi-gigabit optical Ethernet for application in the automotive environment.	03 Jun 2020	31 Dec 2024	NA	NA	Draft Development
P802.3cy	Amendment	C/LM/802.3 WG	Standard for Ethernet - Amendment: Physical Layer Specifications and Management Parameters for greater than 10 Gb/s Electrical Automotive Ethernet	Specify additions to and appropriate modifications of IEEE Std 802.3 to add greater than 10 Gb/s electrical Physical Layer specifications for symmetrical and asymmetrical operation and management parameters for media and operating conditions for applications in the automotive environment.	03 Jun 2020	31 Dec 2024	NA	NA	Draft Development

Project Number	Project Type	Working Group	Project Title	Scope	Approval PAR Date	Expiration PAR Date	Invitation Close Date	Ballot Close Date	Project Status
P802.3db	Amendment	C/LM/802.3 WG	Standard for Ethernet - Amendment: Physical Layer Specifications and Management Parameters for 100 Gb/s, 200 Gb/s, and 400 Gb/s Operation over Optical Fiber using 100 Gb/s Signaling	This project specifies additions to and appropriate modifications of IEEE Std 802.3 and adds Physical Layer specifications and management parameters for 100 Gb/s, 200 Gb/s, and 400 Gb/s Ethernet optical interfaces for server attachment and other intra-data center applications using 100 Gb/s signaling over optical fiber.	03 Jun 2020	31 Dec 2024	NA	NA	Draft Development
P802.3da	Amendment	C/LM/802.3 WG	Standard for Ethernet - Amendment: Physical Layer Specifications and Management Parameters for Enhancement of 10 Mb/s Operation over Single Balanced Pair Multidrop Segments	Specify additions and modifications of the Physical Layer (including reconciliation sublayers), management parameters, Ethernet support for time synchronization protocols, and optional power delivery supporting multiple powered devices on the 10 Mb/s mixing segment.	03 Jun 2020	31 Dec 2024	NA	NA	Draft Development
P802.3	Revision	C/LM/802.3 WG	Standard for Ethernet	This standard defines Ethernet local area, access and metropolitan area networks. Ethernet is specified at selected speeds of operation; and uses a common media access control (MAC) specification and management information base (MIB). The Carrier Sense Multiple Access with Collision Detection (CSMA/CD) MAC protocol specifies shared medium (half duplex) operation, as well as full duplex operation. Speed specific Media Independent Interfaces (MIIs) provide an architectural and optional implementation interface to selected Physical Layer entities (PHY). The Physical Layer encodes frames for transmission and decodes received frames with the modulation specified for the speed of operation, transmission medium and supported link length. Other specified capabilities include: control and management protocols, and the provision of power over selected twisted pair PHY types.	24 Sep 2020	31 Dec 2024	NA	NA	Draft Development
P802.3ck	Amendment	C/LM/802.3 WG	Standard for Ethernet - Amendment: Physical Layer Specifications and Management Parameters for 100 Gb/s, 200 Gb/s, and 400 Gb/s Electrical Interfaces Based on 100 Gb/s Signaling	This project is to specify additions to and appropriate modifications of IEEE Std 802.3 to add Physical Layer specifications and Management Parameters for 100 Gb/s, 200 Gb/s, and 400 Gb/s electrical interfaces based on 100 Gb/s signaling.	14 May 2018	31 Dec 2022	NA	NA	Draft Development
P802.3cp	Amendment	C/LM/802.3 WG	Standard for Ethernet - Amendment: Bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s Optical Access PHYs	The scope of the project defines physical layer specifications and management parameters for symmetric bidirectional 10 Gb/s, 25 Gb/s, and 50 Gb/s operation over single strand of single mode fiber of at least 10 km.	05 Dec 2018	31 Dec 2022	14 Nov 2020	22 Feb 2021	SA Ballot: Comment Resolution
P802.3cs	Amendment	C/LM/802.3 WG	Standard for Ethernet - Amendment: Physical Layers and management parameters for increased-reach point-to-multipoint Ethernet optical subscriber access (Super-PON)	This amendment adds physical layer specifications and management parameters for optical subscriber access supporting point-to-multipoint operations using wavelength division multiplexing over an increased-reach (up to at least 50 km) passive optical network (PON).	05 Dec 2018	31 Dec 2022	NA	NA	Draft Development
P802.3cv	Amendment	C/LM/802.3 WG	Standard for Ethernet - Amendment: Maintenance #15: Power over Ethernet	This project implements editorial and technical corrections, refinements, and clarifications to Clause 145, Power over Ethernet, and related portions of the standard. No new features are added by this project.	05 Sep 2019	31 Dec 2023	04 Oct 2020	19 Feb 2021	SA Ballot: Comment Resolution