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Standard

Superseded

IEEE 802.11-1999 - 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

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Standard Details

This standard is a revision of IEEE Std 802.11-1997. The Management Information Base according to OSI rules has been removed, many redundant management items have been removed, and Annex D has been completed with the Management Information Base according to SNMP. Minor changes have been made throughout the document.

Sponsor
Committee

C/LM - LAN/MAN Standards Committee

Status

Superseded

Superseded by

802.11-2007

Corrigendum

802.11b-1999/Cor 1-2001

Amendment

802.11a-1999



[802.11b-1999](#)

[802.11c-1998](#)

[802.11d-2001](#)

[802.11g-2003](#)

[802.11h-2003](#)

[802.11i-2004](#)

[802.11e-2005](#)

[802.11j-2004](#)

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Additional Resources Details

Interpretation	802.11-1999_interp.zip
Pars	Approved PAR
Historical Base Standard	802_11-1997

Working Group Details

Working Group	WG802.11 - Wireless LAN Working Group
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Working Group Chair	Dorothy Stanley
Sponsor Committee	C/LM - LAN/MAN Standards Committee
Society	C - IEEE Computer Society
IEEE Program Manager	Jonathan Goldberg
Active Projects	Active P802.11ay - IEEE Draft 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 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. Active P802.11ba - 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 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.

Active

[P802.11 - IEEE Draft 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](#)

Technical corrections and clarifications to IEEE Std 802.11 for wireless local area networks (WLANs) as well as enhancements to the existing medium access control (MAC) and physical layer (PHY) functions are specified in this revision.

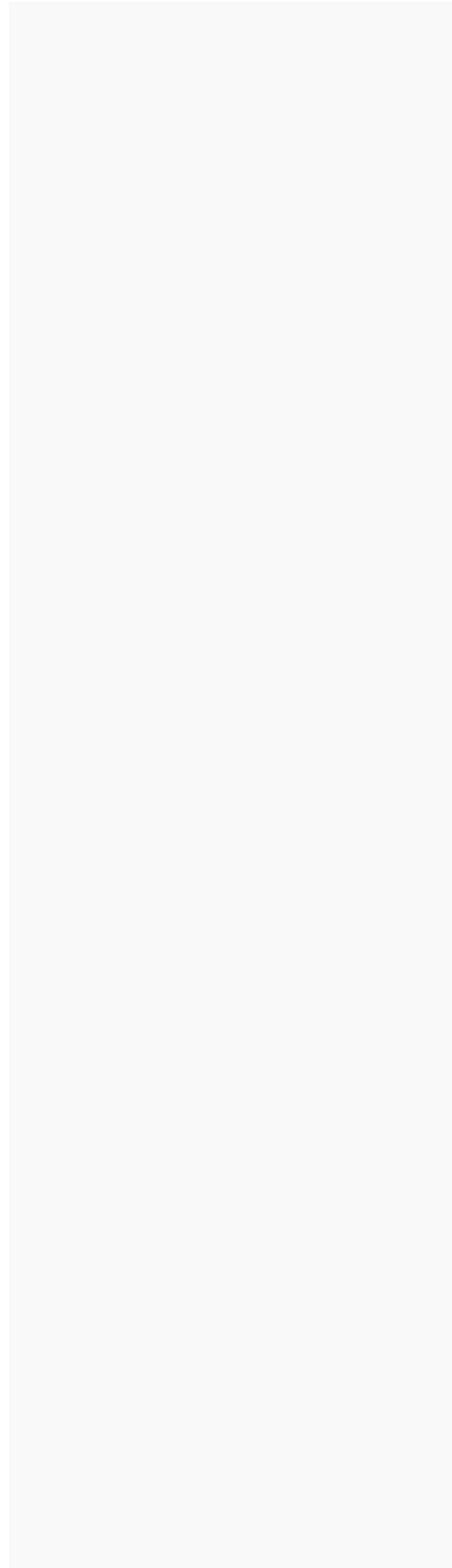
Active

[P802.11ax - IEEE Draft 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 High Efficiency WLAN](#)

This amendment defines modifications to both the IEEE 802.11 physical layer (PHY) and the medium access control (MAC) sublayer for high efficiency operation in frequency bands between 1 GHz and 7.125 GHz.

Active

[P802.11az - 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](#)

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.

Active

[P802.11bb - 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](#)

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.

Existing Standards

Superseded

[802.11a-1999 - IEEE Standard for Telecommunications and Information Exchange Between Systems - LAN/MAN Specific Requirements - Part 11: Wireless Medium Access Control \(MAC\) and physical layer \(PHY\) specifications: High Speed Physical Layer in the 5 GHz band](#)

Changes and additions to IEEE Std. 802.11-1999 are provided to support the new highrate physical layer (PHY) for operation in the 5 GHz band.

Superseded

[802.11b-1999 - IEEE Standard for Information](#)

[Technology - Telecommunications and information exchange between systems - Local and Metropolitan networks - Specific requirements - Part 11: Wireless LAN Medium Access Control \(MAC\) and Physical Layer \(PHY\) specifications: Higher Speed Physical Layer \(PHY\) Extension in the 2.4 GHz band](#)

Changes and additions are provided for IEEE Std 802.11b-1999 to support the higher rate Physical Layer for operation in the 2.4 GHz band.

Superseded

[802.11b-1999/Cor 1-2001 - IEEE Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Networks - Specific Requirements - Part 11: Wireless LAN Medium Access Control \(MAC\) and Physical Layer \(PHY\) Specifications: Higher Speed Physical Layer \(PHY\) Extension in the 2.4 GHz Band - Corrigendum 1](#)

Changes and additions are provided for IEEE Std 802.11b-1999 to support the higher rate Physical Layer for operation in the 2.4 GHz band.

Superseded

[802.11c-1998 - IEEE Standard for Information Technology - Telecommunications and information exchange between systems - Local area networks - Media access control \(MAC\) bridges - Supplement for support by IEEE 802.11](#)

To add a subclause under 2.5 Support of the Internal Sublayer Service by specific MAC Procedures to cover bridge operation with IEEE 802.11 MACs. This supplement to IS 10038 (802.1D) will be developed by the 802.11 Working Group in cooperation with the 802.1 Working Group.

Superseded

802.11d-2001 - IEEE Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 11: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications Amendment 3: Specification for operation in additional regulatory domains

This amendment specifies the extensions to IEEE Std 802.11 ? for Wireless Local Area Networks providing specifications for conformant operation beyond the original six regulatory domains of that standard. These extensions provide a mechanism for an IEEE Std 802.11 access point to deliver the required radio transmitter parameters to an IEEE Std 802.11 mobile station, which allows that station to configure its radio to operate within the applicable regulations of a geographic or political subdivision. This mechanism is applicable to all IEEE Std 802.11 PHY types. A secondary benefit of the mechanism described in this amendment is the ability for an IEEE Std 802.11 mobile station to roam between regulatory domains

Withdrawn

802.11F-2003 - IEEE Trial-Use Recommended Practice for Multi-Vendor Access Point Interoperability Via an Inter-Access Point Protocol Across Distribution Systems Supporting IEEE 802.11 Operation

Recommended practices for implementation of an Inter-Access Point Protocol (IAPP) on a Distribution System (DS) supporting ISO/IEC 8802-11:1999 and IEEE 802.11? wireless local access network (WLAN) links are described. The recommended DS utilizes an IAP that provides the necessary capabilities to achieve multi-vendor Access Point (AP) interoperability within the DS. This IAPP is described for a DS consisting of IEEE 802? LAN components utilizing an Internet Engineering Task Force (IETF) Internet Protocol (IP) environment. Throughout this recommended practice, the terms ISO/IEC 8802-11:1999, IEEE 802.11, and

IEEE Std 802.11-1999 are used interchangeably to refer to the same document, ISO/IEC 8802-11:1999, and its amendements and supplements published at the time this recommended practice was adopted.

Superseded

[802.11g-2003 - IEEE Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 11: Wireless LAN Medium Access Control \(MAC\) and Physical Layer \(PHY\) Specifications: Further Higher Data Rate Extension in the 2.4 GHz Band](#)

Changes and additions to IEEE Std 802.11, 1999 Edition, as amended by IEEE Stds 802.11a-1999, 802.11b-1999, 802.11b-1999/Cor 1-2001, and 802.11d-2001, are provided to support the further higher data rate extension for operation in the 2.4 GHz band.

Superseded

[802.11h-2003 - IEEE Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 11: Wireless LAN Medium Access Control \(MAC\) and Physical Layer \(PHY\) Specifications - Spectrum and Transmit Power Management Extensions in the 5 GHz Band in Europe](#)

IEEE Std 802.11h-2003 Part 11: Wireless Medium Access Control (MAC) and Physical Layer (PHY) specifications: Amendment 5: Spectrum and Transmit Power Management Extensions in the 5 GHz band in Europe

Superseded

[802.11i-2004 - IEEE 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 6: Medium Access Control (MAC) Security Enhancements

This amendment defines security mechanisms for IEEE 802.11. It includes a definition of WEP for backward compatibility with the original standard, IEEE Std 802.11, 1999 Edition. It defines TKIP and CCMP, which provide more robust data protection mechanisms than WEP affords. This amendment introduces the concept of a security association into IEEE 802.11, and defines security association management protocols called the 4-Way Handshake and the Group Key Handshake. Finally, it specifies how IEEE 802.1X may be utilized by IEEE 802.11 LANs to effect authentication. An Interpretation is available at <http://standards.ieee.org/findstds/interps/802.11i-2004.html>

Superseded

802.11e-2005 - IEEE Standard for Information technology--Local and metropolitan area networks--Specific requirements--Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment 8: Medium Access Control (MAC) Quality of Service Enhancements

This amendment defines the medium access control (MAC) procedures to support local area network (LAN) applications with quality of service (QoS) requirements. The procedures include the transport of voice, audio, and video over IEEE 802.11 wireless LANs (WLANs).

Superseded

802.11j-2004 - IEEE 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
7:4.9 GHz-5 GHz Operation in Japan](#)

This amendment specifies the extensions to IEEE Std 802.11[?] for Wireless Local Area Networks providing mechanisms for operation in the 4.9 GHz and 5 GHz bands in Japan. This amendment is based on IEEE Std 802.11[?], 1999 Edition (Reaff 2003), as amended by IEEE Stds 802.11a[?]-1999, 802.11b[?]-1999, 802.11b-1999/Cor 1-2001, 802.11d[?]-2001, 802.11g[?]-2003, 802.11h[?]-2003, and 802.11i[?]-2004.

Superseded

[802.11-2007 - IEEE 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](#)

This revision specifies technical corrections and clarifications to IEEE Std 802.11 for wireless local area networks (WLANS) as well as enhancements to the existing medium access control (MAC) and physical layer (PHY) functions. It also incorporates Amendments 1 through 8 including a corrigendum. The "IEEE Get Program" grants public access to view and download individual PDFs of select standards at no charge. Visit <http://standards.ieee.org/about/get/index.html> for details.

Superseded

[802.11u-2011 - IEEE Standard for Information
Technology-Telecommunications and information
exchange between systems-Local and Metropolitan
networks-specific requirements-Part II: Wireless LAN
Medium Access Control \(MAC\) and Physical Layer](#)

[\(PHY\) specifications: Amendment 9: Interworking with External Networks](#)

This amendment specifies enhancements to the IEEE 802.11 medium access control (MAC) that support wireless local area network (WLAN) interworking with external networks. It enables higher layer functionalities to provide overall end-to-end solutions. The main goals of this amendment are aiding network discovery and selection, enabling information transfer from external networks, enabling emergency services, and interfacing subscription service provider networks (SSPNs) to IEEE 802.11 networks that support interworking with external networks.

Superseded

[802.11v-2011 - IEEE Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 11: Wireless LAN Medium Access Control \(MAC\) and Physical Layer \(PHY\) specifications Amendment 8: IEEE 802.11 Wireless Network Management](#)

This amendment provides Wireless Network Management enhancements to the IEEE 802.11 MAC, and PHY, extending radio measurements to effect a complete and coherent upper layer interface for managing IEEE 802.11 devices in wireless networks.

Superseded

[802.11w-2009 - IEEE 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 4: Protected Management Frames](#)

This amendment specifies the extensions to IEEE Std 802.11 for wireless local area networks (WLANs) providing mechanisms for protecting management

frames.

Superseded

[802.11y-2008 - IEEE Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 11: Wireless LAN Medium Access Control \(MAC\) and Physical Layer \(PHY\) Specifications Amendment 3: 3650-3700 MHz Operation in USA](#)

This amendment defines enhancements to the IEEE 802.11 physical layer (PHY) and medium access control (MAC) to support operation in the 3650-3700 MHz band in the United States.

Superseded

[802.11k-2008 - IEEE Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 11: Wireless LAN Medium Access Control \(MAC\)and Physical Layer \(PHY\) Specifications Amendment 1: Radio Resource Measurement of Wireless LANs](#)

This amendment specifies the extensions to IEEE Std 802.11 for Wireless LANs providing mechanisms for Radio Resource Measurement.

Superseded

[802.11n-2009 - IEEE Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 11: Wireless LAN Medium Access Control \(MAC\)and Physical Layer \(PHY\) Specifications Amendment 5: Enhancements for Higher Throughput](#)

This amendment defines modifications to both the 802.11 physical layers (PHY) and the 802.11 Medium Access Control Layer (MAC) so that modes of operation can be enabled that are capable of much

higher throughputs, with a maximum throughput of at least 100Mb/s, as measured at the MAC data service access point (SAP). An Interpretation is available at <http://standards.ieee.org/findstds/interps/802.11n-2009.html>

Superseded

[802.11p-2010 - IEEE Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 11: Wireless LAN Medium Access Control \(MAC\) and Physical Layer \(PHY\) Specifications Amendment 6: Wireless Access in Vehicular Environments](#)

This amendment specifies the extensions to IEEE Std 802.11 for wireless local area networks (WLANs) providing wireless communications while in a vehicular environment.

Superseded

[802.11r-2008 - IEEE Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 11: Wireless LAN Medium Access Control \(MAC\) and Physical Layer \(PHY\) Specifications Amendment 2: Fast Basic Service Set \(BSS\) Transition](#)

This amendment specifies the extensions to IEEE Std 802.11-2007 for wireless local area networks (WLANs) providing mechanisms for fast basic service set (BSS) transition.

Superseded

[802.11z-2010 - IEEE Standard for Information technology-- Local and metropolitan area networks-- Specific requirements-- Part 11: Wireless LAN Medium Access Control \(MAC\) and Physical Layer \(PHY\) specifications Amendment 7: Extensions to](#)

Direct-Link Setup (DLS)

This amendment provides direct-link setup enhancements to the IEEE 802.11 MAC and PHY, extending direct-link setup to be independent of the access point (AP), and adding power save capabilities. The direct-link setup is made independent of the AP by tunneling the protocol messages inside data frames.

Superseded

802.11s-2011 - IEEE 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 10: Mesh Networking

This amendment describes protocols for IEEE 802.11 stations to form self-configuring multi-hop networks that support both broadcast/multicast and unicast data delivery.

Superseded

802.11aa-2012 - IEEE 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 2: MAC Enhancements for Robust Audio Video Streaming

Amendment to IEEE Std 802.11(TM)-2012. This amendment specifies enhancements to the IEEE 802.11 medium access control (MAC) for robust audio video (AV) streaming, while maintaining coexistence with other types of traffic.

Superseded

[802.11ac-2013 - IEEE 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 4: Enhancements for Very High Throughput for Operation in Bands below 6 GHz.](#)

The purpose of this amendment is to improve the IEEE 802.11? wireless local area network (WLAN) user experience by providing significantly higher basic service set (BSS) throughput for existing WLAN application areas and to enable new market segments for operation below 6 GHz including distribution of multiple multimedia/data streams.

Superseded

[802.11-2012 - IEEE 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](#)

This revision specifies technical corrections and clarifications to IEEE Std 802.11 for wireless local area networks (WLANS) as well as enhancements to the existing medium access control (MAC) and physical layer (PHY) functions. It also incorporates Amendments 1 to 10 published in 2008 to 2011.

Superseded

[802.11ad-2012 - IEEE 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 3: Enhancements for Very High Throughput in the 60](#)

GHz Band

This amendment defines modifications to both the IEEE 802.11 physical layers (PHYs) and the IEEE 802.11 medium access control layer (MAC) to enable operation in frequencies around 60 GHz and capable of very high throughput.

Superseded

802.11ae-2012 - IEEE 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 1: Prioritization of Management Frames

A mechanism for prioritization of management frames is provided and a protocol to communicate management frame prioritization policy is specified in this amendment.

Superseded

802.11af-2013 - IEEE 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 5: Television White Spaces (TVWS) Operation

Enhancements to the IEEE 802.11 physical layers (PHYs) and medium access control (MAC) sublayer to support operation in the white spaces in television bands are defined.

Active

802.11ah-2016 - IEEE 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 2: Sub 1 GHz License Exempt Operation](#)

Modifications to both the IEEE 802.11(TM) physical layer (PHY) and the medium access control (MAC) sublayer to enable operation of license-exempt IEEE 802.11 wireless networks in frequency bands below 1 GHz, excluding the television (TV) White Space bands, with a transmission range up to 1 km and a minimum data rate of at least 100 Kb/s are defined in this amendment. (The PDF of this standard is available at no cost compliments of the IEEE GET program at <http://ieeexplore.ieee.org/browse/standards/get-program/page/>)

Active

[802.11ai-2016 - IEEE 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 1: Fast Initial Link Setup](#)

Mechanisms that provide IEEE Std 802.11 networks with fast initial link setup methods that do not degrade the security offered by Robust Security Network Association (RSNA) already defined in IEEE Std 802.11 are defined in this amendment. (The PDF of this standard is available at no cost compliments of the IEEE GET program <http://ieeexplore.ieee.org/browse/standards/get-program/page/>)

Active

[802.11aj-2018 - IEEE 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 3: Enhancements for Very High Throughput to Support Chinese Millimeter Wave Frequency Bands(60 GHz and 45 GHz)

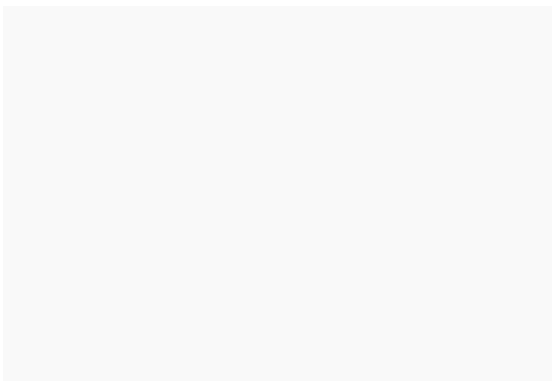
The IEEE 802.11? directional multi-gigabit (DMG) physical layer (PHY) and the medium access control (MAC) layer are modified by this amendment to IEEE Std 802.11?-2016 to enable operation in the Chinese millimeter wave frequency band around 60 GHz. This amendment also defines modifications to the IEEE 802.11 PHY and MAC layer to enable operation in the Chinese millimeter wave frequency band around 45 GHz. (The PDF of this standard is available at no cost to you compliments of the IEEE GET program <https://ieeexplore.ieee.org/browse/standards/get-program/page/>)

Active

802.11-2016 - IEEE 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

Technical corrections and clarifications to IEEE Std 802.11 for wireless local area networks (WLANs) as well as enhancements to the existing medium access control (MAC) and physical layer (PHY) functions are specified in this revision. Amendments 1 to 5 published in 2012 and 2013 have also been incorporated into this revision.(The PDF of this standard is available at no cost compliments of the IEEE GET program <http://ieeexplore.ieee.org/browse/standards/get-program/page/>)

Active



[802.11ak-2018 - IEEE 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 4: Enhancements for Transit Links Within Bridged Networks](#)

Protocols, procedures, and managed objects to enhance the ability of IEEE 802.11? media to provide transit links internal to IEEE 802.1Q? bridged networks are specified in this amendment to IEEE Std 802.11?-2016.

Active

[802.11aq-2018 - IEEE 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 5: Preassociation Discovery](#)

Modifications to IEEE Std 802.11?-2016, above the physical layer (PHY), to enable delivery of preassociation service discovery information to IEEE 802.11 stations (STAs) are defined in this amendment., above the physical layer (PHY), to enable delivery of preassociation service discovery information to IEEE Std 802.11 stations (STAs).

Active

[8802-11:2012/Amd.1:-2014 - ISO/IEC/IEEE International Standard 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 1:
Prioritization of Management Frames \(adoption of
IEEE Std 802-11ae-2012\)](#)

A mechanism for prioritization of management frames is provided and a protocol to communicate management frame prioritization policy is specified in this amendment.

Active

[8802-11:2012/Amd.3:-2014 - ISO/IEC/IEEE
International 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 3:
Enhancements for Very High Throughput in the 60
GHz Band \(adoption of IEEE Std 802.11ad-2012\)](#)

This amendment defines modifications to both the IEEE 802.11 physical layers (PHYs) and the IEEE 802.11 medium access control layer (MAC) to enable operation in frequencies around 60 GHz and capable of very high throughput.

Active

[8802-11:2012/Amd4-2015 - ISO/IEC/IEEE
International Standard - 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 4](#)

The purpose of this amendment is to improve the ISO/IEC/IEEE 8802.11(TM) wireless local area network (WLAN) user experience by providing significantly higher basic service set (BSS) throughput for existing WLAN application areas and to enable new market segments for operation below 6 GHz

including distribution of multiple multimedia/data streams.

Active

8802-11:2012/Amd5-2015 - ISO/IEC/IEEE International Standard -- 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 5

Enhancements to the ISO/IEC/IEEE 8802.11(TM) physical layers (PHYs) and medium access control (MAC) sublayer to support operation in the white spaces in television bands are defined.



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