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AMENDMENT 3
2020-08

**Telecommunications and exchange
between information technology
systems — Requirements for local and
metropolitan area networks —**

Part 11:

**Wireless LAN medium access control
(MAC) and physical layer (PHY)
specifications**

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**AMENDMENT 3: Enhancements for very
high throughput to support Chinese
millimeter wave frequency bands
(60 GHz and 45 GHz)**

*Télécommunications et échange entre systèmes informatiques —
Exigences pour les réseaux locaux et métropolitains —*

*Partie 11: Spécifications du contrôle d'accès du milieu sans fil (MAC)
et de la couche physique (PHY)*

*AMENDEMENT 3: Améliorations pour un très haut débit afin de
prendre en charge les bandes de fréquences millimétriques chinoises
(60 GHz et 45 GHz)*



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Website: www.iso.org

Institute of Electrical and Electronics Engineers, Inc
3 Park Avenue, New York
NY 10016-5997, USA

Email: stds.ipr@ieee.org
Website: www.ieee.org

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IEEE Std 802.11aj™-2018
(Amendment to IEEE Std 802.11™-2016
as amended by IEEE Std 802.11ai™-2016
and IEEE Std 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 3: Enhancements for Very High Throughput to Support Chinese Millimeter Wave Frequency Bands (60 GHz and 45 GHz)

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Approved 15 February 2018

IEEE-SA Standards Board

Abstract: 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.

Keywords: beamforming, CDMG, China directional multi-gigabit, China millimeter-wave multi-gigabit, CMMG, DBC, DCS, dynamic bandwidth control, dynamic channel selection, IEEE 802.11™, IEEE 802.11aj™, opportunistic transmission, spatial sharing

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Menzo M. Wentink
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Xingxin Zhang
Yan Zhang
Mu Zhao
Xiaowu Zhao
Jun Zheng
Yan Zhou
Chunhui Zhu
Lan Zhuo
Juan Carlos Zuniga

Major contributions were received from the following individuals:

Edward Au
Jiamin Chen
Jixin Chen
Qian Chen
Zhe Chen
Carlos Cordeiro
Guanglong Du
Marc Emmelmann
Xiaojing Fan
Wei Feng
Bo Gao
Xinlu Gao
Ning Ge
Nan Guo
Peng Hao
Shiwen He
Wei Hong
Frank Hsu
Jingyi Hu
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Haiming Wang
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Weimin Xing
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Mariana Goldhamer	Stephen Mccann	James Yee
David Goodall	Michael Montemurro	Oren Yuen
Randall Groves	Michael Newman	Changming Zhang
Du Guanglong	Nicks A. Nikjoo	Jiayin Zhang
Michael Gundlach	Paul Nikolich	Xingxin Zhang
Mark Hamilton	Yong Niu	Yong-Ping Zhang
Xiao Han	Robert O'Hara	Xiangyang Zhao
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Introduction

This introduction is not part of IEEE Std 802.11aj-2018, IEEE Standard for Information technology—Local and metropolitan area networks—Specific requirements—Part 11: Wireless LAN MAC and PHY Specifications—Amendment 3: Enhancements for Very High Throughput to Support Chinese Millimeter Wave Frequency Bands (60 GHz and 45 GHz).

The purpose of this amendment is to support operation in the Chinese millimeter wave frequency bands (60 GHz and 45 GHz) to enable multi-Gb/s throughput.

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