

# P802.3bz

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**Submitter Email:** [david\\_law@ieee.org](mailto:david_law@ieee.org)

**Type of Project:** Amendment to IEEE Standard 802.3-2012

**PAR Request Date:** 24-Jan-2015

**PAR Approval Date:** 26-Mar-2015

**PAR Expiration Date:** 31-Dec-2019

**Status:** PAR for an Amendment to an existing IEEE Standard

**Root Project:** 802.3-2012

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**1.1 Project Number:** P802.3bz

**1.2 Type of Document:** Standard

**1.3 Life Cycle:** Full Use

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**2.1 Title:** Standard for Ethernet Amendment: Media Access Control Parameters, Physical Layers and Management Parameters for 2.5 Gb/s and 5 Gb/s Operation

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**3.1 Working Group:** Ethernet Working Group (C/LM/WG802.3)

**Contact Information for Working Group Chair**

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**3.2 Sponsoring Society and Committee:** IEEE Computer Society/LAN/MAN Standards Committee (C/LM)

**Contact Information for Sponsor Chair**

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**4.1 Type of Ballot:** Individual

**4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot:** 01/2017

**4.3 Projected Completion Date for Submittal to RevCom:** 08/2017

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**5.1 Approximate number of people expected to be actively involved in the development of this project:** 45

**5.2.a. Scope of the complete standard:** 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.

**5.2.b. Scope of the project:** This amendment defines Ethernet Media Access Control (MAC) parameters, physical layer specifications, and management objects for the transfer of Ethernet format frames at 2.5 Gb/s and 5 Gb/s over balanced twisted pair transmission media used in structured cabling.

**5.3 Is the completion of this standard dependent upon the completion of another standard:** No

**5.4 Purpose:** This document will not include a purpose clause.

**5.5 Need for the Project:** There is a need for greater than 1 Gb/s Ethernet connectivity over structured twisted pair wiring to serve existing and growing needs of IEEE Std 802.11ac-2013 based enterprise wireless access points that approach 2Gb/s and 4Gb/s for IEEE Std 802.11ac-2013

Wave 1 and Wave 2 respectively. Availability of 2.5 Gb/s and 5 Gb/s signaling technologies enables interconnect solutions for enterprise wireless access points to switch applications to be served over structured Category 5e or better twisted pair cabling.

**5.6 Stakeholders for the Standard:** Users and producers of systems and components for the enterprise wired and wireless networks.

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#### **Intellectual Property**

**6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?:** No

**6.1.b. Is the Sponsor aware of possible registration activity related to this project?:** No

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**7.1 Are there other standards or projects with a similar scope?:** No

#### **7.2 Joint Development**

**Is it the intent to develop this document jointly with another organization?:** No

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**8.1 Additional Explanatory Notes (Item Number and Explanation):** Item 5.5, title of IEEE Std 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.