

# P802.3cc

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

**Type of Project:** Amendment to IEEE Standard 802.3-2015

**PAR Request Date:** 18-Mar-2016

**PAR Approval Date:** 12-May-2016

**PAR Expiration Date:** 31-Dec-2020

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

**Root Project:** 802.3-2015

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

**1.2 Type of Document:** Standard

**1.3 Life Cycle:** Full Use

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**2.1 Title:** Standard for Ethernet Amendment: Physical Layer and Management Parameters for Serial 25 Gb/s Ethernet Operation Over Single-Mode Fiber

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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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**Contact Information for Working Group Vice-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**

**Name:** Paul Nikolich

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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:** 01/2018

**4.3 Projected Completion Date for Submittal to RevCom**

**Note:** Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 08/2018

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**5.1 Approximate number of people expected to be actively involved in the development of this project:** 25

**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:** The scope of this project is to add point-to-point single-mode fiber Physical Medium Dependent (PMD) options for serial 25 Gb/s operation at reaches greater than 100 m by specifying additions to, and appropriate modifications of, IEEE Std 802.3.

**5.3 Is the completion of this standard dependent upon the completion of another standard:** Yes

**If yes please explain:** This project is dependent on IEEE P802.3by and will use the MAC and Physical Coding Sublayer (PCS) from that amendment.

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

**5.5 Need for the Project:** The project is needed to provide multiple system operators and telecommunications operators with an IEEE 802.3 25 Gb/s Ethernet serial interconnect solution at reaches greater than 100 meters using single-mode fiber (SMF) for application areas including enterprise campus, carrier metro and other similar areas.

**5.6 Stakeholders for the Standard:** Users and producers of systems and components for enterprise campus and carrier metro Ethernet 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 #5.2: The full title of IEEE Std 802.3 is IEEE Standard for Ethernet. Item #5.3: The full title of IEEE P802.3by is Draft Standard for Ethernet Amendment: Media Access Control Parameters, Physical Layers and Management Parameters for 25 Gb/s Operation