P802.3bk

Submitter Email: david_law@ieee.org
Type of Project: Amendment to IEEE Standard 802.3-2008
PAR Request Date: 03-Feb-2012
PAR Approval Date: 29-Mar-2012
PAR Expiration Date: 31-Dec-2016
Status: PAR for an Amendment to an existing IEEE Standard
Root Project: 802.3-2008

1.1 Project Number: P802.3bk
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Title: IEEE Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Specific requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications Amendment: Physical Layer Specifications and Management Parameters for Extended Ethernet Passive Optical Networks

3.1 Working Group: Ethernet Working Group (C/LM/WG802.3)
Contact Information for Working Group Chair
  Name: David Law
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  Name: Wael Diab
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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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Contact Information for Standards Representative
None

4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 07/2013
4.3 Projected Completion Date for Submittal to RevCom: 08/2014

5.1 Approximate number of people expected to be actively involved in the development of this project: 25
5.2 Scope: The scope of this project is to amend IEEE Std 802.3 to add at least one physical layer specification, possibly optical power budget extenders, and management parameters necessary for Ethernet Passive Optical Networks (EPON) to support optical loss budgets in excess of those specified in IEEE Std 802.3-2008 (Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Specific requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications) and IEEE Std 802.3av-2009 (Standard for Information technology--Telecommunications and information exchange between systems--Local and metropolitan area networks--Specific requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications, Amendment 1: Physical Layer Specifications and Management Parameters for 10 Gb/s Passive Optical Networks).

5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: The purpose of this project is to extend the optical loss budgets supported by Ethernet Passive Optical Networks to support higher density and longer reach applications, while optimizing costs of ownership.

5.5 Need for the Project: The project is needed to enable broadband service providers to utilize Ethernet Passive Optical Networks (EPON) at longer reach, higher split ratios or both for more cost-effective scaling.
The project will allow for the expansion of the EPON service area and reduced cost per subscriber.
Additional benefits include reduction of the footprint and power consumption of central office equipment, as well as minimization of service upgrade and fiber deployment costs, while increasing customer density per central office and allowing central office consolidation.

5.6 Stakeholders for the Standard: The stakeholders include telecom system and component vendors,

telecommunications carriers, and multiple system operators (MSOs).

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?: Yes
If Yes please explain: There is a regional project of similar scope in CCSA but there is a desire for a single international standard.

and answer the following
   Sponsor Organization: CCSA
   Project/Standard Number: YD/T 1688.4-2011
   Project/Standard Date:
   Project/Standard Title: xPON
Technical specification of optical transceiver module for xPON Part 4: optical transceiver module for 10G EPON OLT/ONU
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):