PAR DRAFT for consideration by NGEABT SG Architecture AdHoc

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2.1 Project Title

IEEE Standard for Ethernet Amendment:

Media Access Control Parameters, Physical Layers and Management Parameters for *(speeds between 1G & 10G, e.g. 2.5G, 5G)* Gb/s Operation.

11/20/14 – Will revisit speed language when we have made some more progress on objectives

Other PAR Fields (1)

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*

5.1 Approximate number of people expected to be actively involved in the development of this project: *30*

5.2 Scope: <next slide>

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

5.4 Purpose: This document will not include purpose clause

11/20/14 – Dates are major hand waves – need checking, but not right now.
11/25 – when do we need to improve dates – DC to think about schedule, depends on closing major topics in January.

5.2 Scope (a) & (b)

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 parameters for the transfer of Ethernet format frames at *(speeds between 1G and 10G)* over balanced twisted pair transmission media used in structured cabling.

11/20/14 – Will revisit speed language when we have made some more progress on objectives

5.5 Need for the Standard

- There is a need for greater than 1 Gb/s Ethernet connectivity over ~~installed~~ structured twisted pair wiring to serve existing and growing needs of IEEE 802.11ac based enterprise wireless access points. Availability of *(speeds between 1G and 10G)* Gb/s signaling technologies enables interconnect solutions for enterprise wireless access points to switch applications to be served over ~~installed~~ structured ~~Cat 5e/6~~ Cat5e or better twisted pair cabling. ~~*Existing 10GBASE-T solutions do not serve up to 100 meters over Cat 6, and does not serve Cat 5e cabling.*~~

11/20/14 – rewording as per call on 11/20.
11/25 – GZ – suggest putting in draft text for speeds assuming no major push back on objectives.

Other PAR Fields (2)

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

6.1 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

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

7.2 Joint Development: No.

8.1 Additional Explanatory Notes (Item Number and Explanation) :

This amendment will comply with IEEE Std 802, IEEE Std 802.1AC and IEEE Std 802.1Q

~~(this note to be deleted: The above being explicit in 5C compatibility subpart a) answer).~~

11/20/14 – do we need the note?.
11/25/14 – check with YK – he says "remove"