

Resolution of Comments on Project Authorization Request (PAR) and Criteria for Standards. Development (CSD)

IEEE P802.3cg 10 Mb/s Single Twisted Pair Ethernet Task Force

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7 March 2018

802.11 Comments

Comment: PAR 5.2.b.: suggested change (while your changing)

“This amendment defines 10 Mb/s Physical Layer (PHY) specifications and management parameters for operation, and associated optional provision of power, using a single balanced pair of conductors”

Response: Reject

5.2.b is the ‘Scope of the Project’ and therefore reference to the project’s activities is appropriate. The text of 5.2.b is not published in the final standard and therefore is not required to be changed.

Additional Comments

- Add connection length target for the standard to the CSD in Technical Feasibility.

Response: Accept.

Technical Feasibility

Each proposed IEEE 802 LMSC standard shall provide evidence that the project is technically feasible within the time frame of the project. At a minimum, address the following items to demonstrate technical feasibility:

- a) Demonstrated system feasibility.
- b) Proven similar technology via testing, modeling, simulation, etc.
- c) **Confidence in reliability.**

The proposed project will build on the array of Ethernet component and system design experience, and the broad knowledge base of Ethernet network operation.

Ethernet over a single balanced pair of conductors has been proven both technically and operationally in deployments at rates from 2 Mb/s up to **2.5 Gb/s**.

Single-pair power delivery has been proven technically feasible under IEEE P802.3bu. Implementation of single-pair powering for this project is feasible using a range of existing technologies.

Component vendors, including PHY vendors, cabling vendors and systems vendors have presented data on the feasibility of the necessary components for this project. Proposals which leverage existing technologies have been provided.

The reliability of Ethernet components and systems can be projected in the target environments with a high degree of confidence.

The project targets two PHYs with reaches of approximately 15 m and 1000 m, respectively.