PAR form items for SG review

For Study Group discussion and refinement Norfolk, VA, USA 12 May 2014

Major PAR form questions

The PAR form is completed on-line in the myProject system. Many of the PAR questions are proforma and are automatically completed by selecting an IEEE 802.3 amendment project. These items include sponsor and the Working Group officers.

This slideset therefore specifies the major items from the PAR form that require Study Group consensus for completing the on-line PAR submission.

PAR item 2.1 – Project title

Project title: Standard for Ethernet Amendment:

Physical Layer Specifications and Management Parameters for 1000 Mb/s operation over Plastic Optical Fiber

Help text: The title of the base standard is uneditable. Please enter the amendment title in the text box. The title should be sufficiently unambiguous, understandable by a NesCom member not from the society that submitted the PAR. All acronyms shall be spelled out in the title.

PAR item 4.2 and 4.3 Project dates

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

November 2015

Help text: Additional communication and input from other organizations or other IEEE Standards Sponsors should be encouraged through participation in the working group or the invitation pool prior to Sponsor Ballot.

4.3 Projected Completion Date for Submittal to RevCom:

May 2016

Help text: Enter the date the draft standard is planned to be submitted to RevCom for processing (not to exceed four years from the date of PAR submission). It is suggested to allow at least six months after Initial Sponsor Ballot for the ballot process. Cutoff dates for submitting draft standards to RevCom are generally in February, May, August, and October. Check the appropriate calendars for the specific dates as the draft matures. Use a best guess estimate for the PAR.

PAR item 5.2A – Standard scope

5.2A 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.

Help text: If this Amendment will change the scope statement of the complete document (base + Amendment), it can be edited and should be explained in the Additional Explanatory Notes field at the end of the PAR form. If this Amendment will not change the scope statement of the complete document the pre-populated text should be left as is.

PAR item 5.2B – Project scope

5.2B Scope of the Project:

This amendment adds physical layer (PHY) specifications for IEEE Std 802.3 operation at 1000 Mb/s using plastic optical fiber as the point-to-point data transmission medium. Appropriate management parameters will be enhanced or added in support of the PHY specifications.

Help text: State what the Amendment is changing or adding.

PAR item 5.3 – Project contingency

5.3 Is the completion of this standard contingent upon the completion of another standard (Yes or No)? If **yes**, please explain below: No

Help text: Your explanation should include how the standard is dependent upon the completion of another standard. Also, if applicable, why a PAR request is being submitted if the standard currently under development is not yet complete. The title and number of the standard which this project is contingent upon shall be included in the explanation.

PAR item 5.4 – Project purpose

5.4 Will the completed document (base + amendment) contain a purpose clause:

○ Yes ● No

Note: IEEE Std 802.3 does not contain a Purpose Clause.

PAR item 5.5 – Project need

5.5 Need for the Project:

Plastic optical fiber (POF) provides significant advantages over glass optical fiber (IEEE Std 802.3 already contains multimode and single mode glass fiber specifications at multiple speeds of operation). POF is a medium used in current automotive networks and with such networks migrating to Ethernet, maintaining POF as a medium option is a requirement for many manufacturers. Other markets like home networking benefit from the characteristics of POF as a medium option. POF requires virtually no training to terminate, its nonconductive cable construction increases installation options and its noise-immunity increases the application space for Ethernet.

Help text: The need for the project details the specific problem that the standard will resolve and the benefit that users will gain by the publication of the standard. The need statement should be brief, no longer than a few sentences.

PAR item 5.6 – Stakeholders

5.6 Stakeholders for the Standard:

Stakeholders identified to date include but are not limited to: users and producers of systems and components for the automotive, home networking, medical and similar industries where plastic optical fiber provides a viable alternative transmission medium to existing specified medium alternatives.

Help text: The stakeholders (e.g., telecom, medical, environmental) for the standard consist of any parties that have an interest in or may be impacted by the development of the standard.