IEEE 802.3 Major PAR form questions

The PAR form is completed on-line in though the myProject system. Many of the PAR question are proforma and are automatically complete by selecting a IEEE 802.3 amendment project. These items include Standards Committee and the Working Group officers. This slideset therefore provides the major items from the PAR form to assist in consensus building leading up to approving a completed draft PAR form.

All acronyms shall be spelled out at first use.

The following are the Major PAR responses for the IEEE P802.3dw draft PAR

To add a continuation slide: CTRL-M -> right click new slide -> Layout -> select 'Continued' layout

PAR item 2.1 – Project title

Project title: Standard for Ethernet Amendment:
Ethernet and Fault Managed Power (FMP)

Help text: The title of the base standard is uneditable. Please enter the amendment title in the text box. The title should be sufficiently unambigious, understandable by 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 Standards Association Ballot:

July 2029

Help text: Enter the date the draft standard is planned to be submitted to IEEE-SA for Initial Standards Association Ballot.

4.3 Projected Completion Date for Submittal to RevCom:

March 2030

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 Standards Association Ballot for the ballot process.** Cutoff dates for submitting draft standards to RevCom can be found in the yearly calendar located: http://standards.ieee.org/about/sasb/meetings.html.

PAR item 5.1 – Project participation

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

60

Help text: This includes Working Group members, additional non-voting participants.

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:

Define methodology for the coexistence of Fault Managed Power(FMP) with Ethernet on a variety of transmission medium, including necessary PHY and/or RS modifications required to support FMP.

DA: Specify additions and modifications of the Physical Layer (including reconciliation sublayers), management parameters, Ethernet support for time synchronization protocols, and optional power delivery supporting multiple powered devices on the 10 Mb/s mixing segment.

AF: Define methodology for the provision of power via balanced cabling to connected Data Terminal Equipment with 802.3 interfaces. The amount of power will be limited by cabling physics and regulatory considerations. Compatiblity with existing equipment will be considered.

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

5.3.1 If yes, please explain:

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:

As data speeds continue to increase, the amount of power that can be delivered in conjunction with Ethernet data has not kept up. Until recently, safety standards such as IEC 60950 and NFPA 70-2020 limited such power delivery to the 100-watt constraint used for Power over Ethernet (PoE). Recent enhancements to these safety standards have enabled a new method to deliver kilowatts while keeping energy levels safe in case of a fault. Systems are emerging from multiple manufacturers using varying techniques to detect faults and deliver the power within the new safety standards. Like PoE, these systems involve interaction between devices at the power source and at the powered load, creating a corresponding need for specifications for interoperability. This project's goal is to create the necessary specifications so that independently developed implementations can work together.

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:

From DA: End-users, vendors, system integrators, and providers of systems and components (e.g., sensors, actuators, instruments, controllers, elevator systems, HVAC systems, lighting systems, network infrastructure, security systems, user interfaces) for building (commercial and residential), industrial, and transportation (e.g. automotive, trains/trams) sectors.

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.

PAR item 7.1 – Similar scope

7.1 Are there other standards or projects with a similar scope? (Yes or No)?

No

If yes, please explain:

Help text: Identify any standard(s) or project(s) of similar scope(s), both within or outside of the IEEE, and explain the need for an additional standard in this area.

For any standard(s) or project(s) of similar scope(s) add 'Project slide(s)'
To add: CTRL-M -> right click new slide -> Layout -> select 'Project' layout

PAR item 8.1 – Additional notes

Additional Explanatory Notes:

If there is any further information that may assist NesCom in recommending approval for this project, include this information here. The title of any documents referenced in the PAR should be listed here.