IEEE 802.3 Criteria for Standards Development (CSD)

The IEEE 802 Criteria for Standards Development (CSD) are defined in Clause 14 of the IEEE 802 LAN/MAN Standards Committee (LMSC) Operations Manual. The criteria include project process requirements ("Managed Objects") and 5 Criteria (5C) requirements. The 5C are supplemented by subclause 4.5 'Criteria for Standards Development' of the 'IEEE 802.3 Ethernet Working Group Operations Manual'.

The following are the CSD Responses in relation to the IEEE P802.3dp PAR

Items required by the IEEE 802 CSD are shown in Black text and supplementary items required by IEEE 802.3 are shown in blue text.

Managed Objects

Describe the plan for developing a definition of managed objects. The plan shall specify one of the following:

- a) The definitions will be part of this project.
- b) The definitions will be part of a different project and provide the plan for that project or anticipated future project.
- c) The definitions will not be developed and explain why such definitions are not needed.
- The definitions will not be developed as this project will not require managed objects.

Coexistence

A WG proposing a wireless project shall prepare a Coexistence Assessment (CA) document unless it is not applicable.

- a) Will the WG create a CA document as part of the WG balloting process as described in Clause 13? (yes/no)
- b) If not, explain why the CA document is not applicable.
- No. A CA document is not applicable because the proposed project is not a wireless project.

Broad Market Potential

Each proposed IEEE 802 LMSC standard shall have broad market potential. At a minimum, address the following areas:

- a) Broad sets of applicability.
- b) Multiple vendors and numerous users.
- Many applications in building, industrial, and transportation sectors have begun the transition from legacy non-Ethernet networks to Ethernet. A large number of the emerging applications make use of Single-pair Power over Ethernet (SPoE) technologies specified by IEEE Std 802.3, including some in-process amendments. It is important that IEEE Std 802.3 provide guidance on which cabling standards are appropriate for use with SPoE. The guidance provided in this standard will be applicable to the users and vendors for all these applications.

Compatibility

Each proposed IEEE 802 LMSC standard should be in conformance with IEEE Std 802, IEEE 802.1AC, and IEEE 802.1Q. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with IEEE 802.1 WG prior to submitting a PAR to the Standards Committee.

- a) Will the proposed standard comply with IEEE Std 802, IEEE Std 802.1AC and IEEE Std 802.1Q?
- b) If the answer to a) is "no", supply the response from the IEEE 802.1 WG.
- c) Compatibility with IEEE Std 802.3
- d) Conformance with the IEEE Std 802.3 MAC
- There will be no changes to any data interface. The proposed standard will conform to 802.1D, 802.1Q and 802 comply with IEEE Std 802, IEEE Std 802.1AC and IEEE Std 802.1Q. This standard is applicable to only power delivery and is not a MAC/PHY standard. Therefore, this criterion is not relevant.

Distinct Identity

Each proposed IEEE 802 LMSC standard shall provide evidence of a distinct identity. Identify standards and standards projects with similar scopes and for each one describe why the proposed project is substantially different.

Substantially different from other IEEE 802.3 specifications/solutions.

• There are no other IEEE 802 standards that provide guidance or requirements that address this issue.

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.
- IEEE 802.3 SPoE has existed since the publication of IEEE Std 802.3bu-2016.
- The importance of using cabling that supports the current levels defined in the standard has been long established and understood. This standard provides requirements (including guidance) to improve the reliability and confidence in systems.

Economic Feasibility

Each proposed IEEE 802 LMSC standard shall provide evidence of economic feasibility. Demonstrate, as far as can reasonably be estimated, the economic feasibility of the proposed project for its intended applications. Among the areas that may be addressed in the cost for performance analysis are the following:

- a) Known cost factors.
- b) Balanced cost factors.
- c) Consideration of installation costs.
- d) Consideration of operational costs (e.g., energy consumption).
- e) Other areas, as appropriate.
- A) has no effect
- B) has no effect
- C) This standard will assist in correct installation, resulting in cost efficient and technically correct installations
- D) Does not apply
- E) This standard does not define new technology. It provides guidance for the use of SPoE that will increase the ability of the user to correctly deploy SPoE, leading to a reduction in the costs of deployment and an increase in adoption.