CRITERIA FOR STANDARDS DEVELOPMENT (CSD) for a proposed PAR:

P802.1AEdk

IEEE Standard for Local and Metropolitan Area Networks: Media Access Control (MAC) Security Amendment: MAC Privacy protection

The text of the CSD given here in italics is that provided on the IEEE 802 website under 'IEEE 802 Procedural Documents' based on IEEE 802 LMSC Operations Manuals approved 15 November 2013 and last edited 20 January 2014. Responses to the questions asked in the CSD are given in roman font.

1. IEEE 802 criteria for standards development (CSD)

The CSD documents an agreement between the WG and the Sponsor that provides a description of the project and the Sponsor's requirements more detailed than required in the PAR. The CSD consists of the project process requirements, 1.1, and the 5C requirements, 1.2.

1.1 Project process requirements

1.1.1 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.

Managed object definitions will be provided by defining YANG models for both base IEEE Std 802.1AE MAC Security (MACsec) functionality and for MAC Privacy protection. This amendment will also define managed objects in the form of an SNMP MIB for MAC Privacy protection. Definition of managed objects in the form of an SNMP MIB is already part of IEEE Std 802.1AE. If this amendment to IEEE Std 802.1AE results in changes that need to be accompanied by changes to the definition of those managed objects, then the necessary changes will be developed as part of this project.

1.1.2 Coexistence

A WG proposing a wireless project shall demonstrate coexistence through the preparation of a Coexistence Assurance (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.

This is not a wireless project so a Coexistence Assurance (CA) document is not applicable.

1.2 5C requirements

1.2.1 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.*

There is widespread interest in improving privacy protections, and multiple vendors and users of MACsec solutions have participated in the development of this project proposal.

1.2.2 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 Sponsor.

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.*

The review and response is not required if the proposed standard is an amendment or revision to an existing standard for which it has been previously determined that compliance with the above IEEE 802 standards is not possible. In this case, the CSD statement shall state that this is the case.

The amendment will be in conformance with IEEE Std 802, IEEE 802.1AC, and IEEE 802.1Q. It will fit within the existing framework provided by IEEE 802.1AE and IEEE 802.1X.

1.2.3 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.

IEEE 802.1AE is already a recognized and established standard. This project enhances IEEE 802.1AE to meet expressed customer needs; it does not duplicate existing capabilities. There is no other IEEE 802 standard or approved project that overlaps with the Scope of this project.

1.2.4 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.*

Trial implementations of this technology have already been developed, their developers are supporting standardization of the technology.

1.2.5 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) *Balanced costs (infrastructure versus attached stations).*
   b) *Known cost factors.*
   c) *Consideration of installation costs.*
   d) *Consideration of operational costs (e.g., energy consumption).*
   e) *Other areas, as appropriate.*

   The implementation costs of this technology do not represent a significant increase to the costs of providing security.

   The benefits of privacy protection are considered by the users who are supporting this project to outweigh any increase in operational costs (e.g. due to additional bandwidth use).