IEEE 802 Security Study Group Strawman PAR & 5 Criteria

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Purpose of Study Group

- Identify Objective
- Recommend placement of project
- Create PAR and 5 Criteria

Identify Objective

- 1st Objective
  - Create generic 802 secure data exchange protocol
- 2nd Objective
  - Use 802.1X
    - Authentication framework
    - Key Management

Objective

- 802.10 already has a secure data exchange protocol and key management protocol
- 802.10 SDE not widely deployed.

Recommend project placement

- Placement in 802.10
- Create new 802.10 SDE
- Use 802.1X as a new Authentication and Key Management Protocol for 802.10

PAR Title

4. Title of Document:

Draft [Standard for Interoperable LAN/MAN Security (SILS): Amendment : SDE and KMP update]

PAR Question

12. Scope of Proposed Project

[Projected output including technical boundaries. REVISED STANDARDS - Projected output including the scope of the original standard, amendments and additions. Please be brief (less than 5 lines).]:

PAR Answer

12. Scope of Proposed Project:

To create a new secure data exchange format and to provide for 802.1X as a key management protocol.

PAR Question

13. Purpose of Proposed Project:

[Intended users and user benefits. REVISION STANDARDS - Purpose of the original standard and reason for the standard's revision. Please be brief (less than 5 lines).]:

PAR Answer

13. Purpose of Proposed Project:

This amendment will increase the usage of 802.10.

5 Criteria field

1. Broad Market Potential

A standards project authorized by IEEE 802 shall have a broad market potential. Specifically, it shall have the potential for:

a) Broad sets of applicability.

b) Multiple vendors and numerous users.

c) Balanced costs (LAN versus attached stations).

5 Criteria entry

1. Broad Market Potential

This project will enhance the function and capability of all 802 LAN technologies and 802 devices.

5 Criteria field

2. Compatibility

IEEE 802 defines a family of standards. All standards shall be in conformance with the IEEE 802.1 Architecture, Management and Interworking documents as follows: 802. Overview and Architecture, 802.1D, 802.1Q and parts of 802.1f. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed…

5 Criteria entry

2. Compatibility

This standard will define a protocol and management elements which can be implemented on LAN/MAN stations. It will conform to IEEE Std. 802-2001 Architecture, Management and Interworking. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with 802.10.

5 Criteria field

3. Distinct Identity

Each IEEE 802 standard shall have a distinct identity. To achieve this, each authorized project shall be:

a) Substantially different from other IEEE 802 standards.

b) One unique solution per problem (not two solutions to a problem).

c) Easy for the document reader to select the relevant specification.

5 Criteria entry

3. Distinct Identity

There is no other IEEE standard that has the same scope or purpose.

5 Criteria field

4. Technical Feasibility

For a project to be authorized, it shall be able to show its technical feasibility. At a minimum, the proposed project shall show:

a) Demonstrated system feasibility.

b) Proven technology, reasonable testing.

c) Confidence in reliability.

5 Criteria entry

4. Technical Feasibility

A number of 802.1X solutions exist today which have been shipping commercially for several years. Also, the 802.11i draft uses 802.1X for key management. The proposed standard will be modeled after these solutions. The original 802.10 SDE will be looked at for reasons that created limited deployment.

5 Criteria field

5. Economic Feasibility

For a project to be authorized, it shall be able to show economic feasibility (so far as can reasonably be estimated), for its intended applications. At a minimum, the proposed project shall show:

a) Known cost factors, reliable data.

b) Reasonable cost for performance.

c) Consideration of installation costs.

5 Criteria entry

5. Economic Feasibility

The proposed standard will benefit and not adversely impact the economic factors associated with existing LAN/MAN solutions.