10.5 Criteria for standards development (five criteria)

Source: http://www.ieee802.org/PNP/approved/IEEE 802 OM v12.pdf

10.5.1 Broad market potential

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

a) Broad sets of applicability.

The proposed 'Recommended Practice for Network Reference Model and Functional Description of IEEE 802 Access Network' is applicable to IEEE 802 technologies for a broad set of deployment cases and should guide new users of IEEE 802 technologies in the appropriate arrangement of IEEE 802 standards for access networks.

b) Multiple vendors and numerous users.

Due to the applicability based on the use of the existing IEEE 802 access technologies, the standard is relevant to the vendors of IEEE 802 conformant equipment and will find usage for a variety of applications requiring communication infrastructures.

10.5.2 Compatibility

IEEE 802 LMSC defines a family of standards. All standards should be in conformance: IEEE Std 802, IEEE 802.1D, and IEEE 802.1Q. If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with IEEE 802.1 WG. In order to demonstrate compatibility with this criterion, the Five Criteria statement must answer the following questions.

a) Does the PAR mandate that the standard shall comply with IEEE Std 802, IEEE Std 802.1D and IEEE Std 802.1Q?

Yes

b) If not, how will the WG ensure that the resulting draft standard is compliant, or if not, receives appropriate review from the IEEE 802.1 WG?

10.5.3 Distinct identity

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

c) Substantially different from other IEEE 802 LMSC standards.

The standard is substantially different from all other IEEE 802 standards because no current standard specifies the network reference model and functional interactions for an IEEE 802 access network.

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

The standard provides a generic model and a functional description of access networks based on IEEE 802 technologies. As the functional description is derived from the existing IEEE 802 protocols, the uniqueness of the IEEE 802 standards provides uniqueness for the described solutions as well.

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

The specification will explain the use and combination of the existing IEEE 802 specifications for creating access networks guiding the reader in the selection of the appropriate specifications.

10.5.4 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.

The recommended practice will document a reference model comprising widely used IEEE 802 protocols and procedures for access networks building the base for further deployments and functional enhancements of the IEEE 802 protocol suite. Therefore system feasibility of a document describing the functional behavior of access networks based on IEEE 802 standards is given.

b) Proven technology, reasonable testing.

As the project is based on the existing IEEE 802 specifications, proven technologies and reasonable testing can be assumed. Recommended Practices do not include mandatory statements, and this specification is not intended to serve as the basis of statements of conformance.

c) Confidence in reliability.

As the project is based on the existing IEEE 802 protocols and will not add new protocol specifications, the reliability of the IEEE 802 protocols will not be impacted.

10.5.4.1 Coexistence of IEEE 802 LMSC wireless standards specifying devices for unlicensed operation

A WG proposing a wireless project is required to demonstrate coexistence through the preparation of a Coexistence Assurance (CA) document unless it is not applicable.

- The WG will create a CA document as part of the WG balloting process.
- If the WG elects not to create a CA document, it will explain to the Sponsor the reason the CA document is not applicable.

Not applicable to the project, as it will not address any changes to the IEEE 802 wireless standards.

10.5.5 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.

This specification will not increase cost since it is providing a reference for how to use existing protocols and for creating a model.