802.16g Five Criteria, Revision 0

CRITERIA FOR STANDARDS DEVELOPMENT (FIVE CRITERIA)

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).

IEEE 802.16 systems require management features. At present, those features are not standardized. A management plane standard for 802.16 would be broadly applicable.

Multiple vendors, from all around the world have participated in the study group process that developed this PAR and 5 Criteria

The costs of management features in base and subscriber stations are unlikely to be out of balance, since the definition of manageability features in both cases will be similar.

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 with 802.
Each standard in the IEEE 802 family of standards shall include a definition of managed objects which are compatible with systems management standards.

1. **The proposed project will be developed in conformance with the 802 Overview and Architecture.**
2. **The proposed project will be developed in conformance with 802.1D, 802.1Q, 802.1f.**
3. **Managed objects will be defined consistent with existing policies and practices for 802.1 standards.**

Consideration will be made to ensure compatibility with the 802 architectural model including at least 802, 802.2, 802.1D, 802.1f and 802.1Q.

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.

a) There exists no other management plane standard for 802.16 systems. The management plane is out of scope of the base 802.16 standard.
b) The proposal for the standard is to develop a single set of management features
c) It will be obvious from the title and content of the standard that it is a standard defining management plane behavior for 802.16.

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
    a. **Management planes are integral parts of most wireless communication systems. Thus they are demonstrably feasible.**
    b. **Management planes are a proven and testable aspect of wireless communication systems as demonstrated through widespread deployment in millions of systems.**
    c. **Management plane implementations are widely deployed and are thus widely demonstrated to have the capacity to be reliable.**

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.

a) **Management planes are a integral part of wireless communication systems. Standardizing such behavior is unlikely to add additional costs to implementations.**
b) **Management planes are a necessary part of wireless communication systems, as such they are essential to achieve a reasonable performance in return for the system cost**
c) **The management plane as specified in the proposed standard will typically be directly included in devices and not require additional installation costs. In addition, a standardized management plane may serve to reduce installation costs of 802.16 systems.**