

802.17d (802.17-REV)

***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:

- Broad sets of applicability.

802.17 is applicable to campus, inter-POP, intra-POP, metro aggregation, cell site backhaul, and enterprise networks.

- Multiple vendors and numerous users.

802.17 is already used in many applications by service providers and campuses throughout the world.

- Balanced costs (LAN versus attached stations).

An efficient bandwidth sharing mechanism provides optimum cost / performance.

Compatibility

IEEE 802 defines a family of standards. All standards should be in conformance with the IEEE 802.1 Architecture, Management, and Interworking documents as follows: IEEE 802. Overview and Architecture, IEEE 802.1D, IEEE 802.1Q, and parts of IEEE 802.1F.

- If any variances in conformance emerge, they shall be thoroughly disclosed and reviewed with IEEE 802.1.

The Resilient Packet Ring standard is fully compatible with the 802 Overview and Architecture document, and the relevant portions of 802.1D, 802.1Q and 802.1f.

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

The Resilient Packet Ring standard includes a MIB that is compatible with the Simple Network Management Protocol.

Distinct Identity

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

- Substantially different from other IEEE 802 standards.
There is no other IEEE 802 standard which address the unique combination of bandwidth multiplication, dynamic and fair bandwidth allocation on a ring, plug-and-play management, and topology discovery.
- One unique solution per problem (not two solutions to a problem).
A single protocol is defined.
- Easy for the document reader to select the relevant specification.
The text is well organized.

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:

- Demonstrated system feasibility.
802.17-based products exist from many vendors.
- Proven technology, reasonable testing.
802.17-based products are in use throughout the developed world.
- Confidence in reliability.
802.17 is known for its thorough robustness.

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:

- **Known cost factors, reliable data.**
The proposed revision maintains existing costs.
- **Reasonable cost for performance.**
The proposed revision maintains existing costs for performance.
- **Consideration of installation costs.**
The proposed revision maintains existing installation costs.