

5 Criteria for P802.1ay - PBBTE

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).

This project is intended to provide traffic engineered paths for Provider Backbone Bridged P802.1ah networks using existing Bridged and Virtual Bridged LAN technologies. Despite user demand and initial deployment of scalable, traffic engineered, point-to-point path solutions for 802 networks no standards currently exist.

Most major carriers are currently deploying traffic engineered path solutions within their networks to meet the demands of transition from existing leased line service.

The costs related to this technology should be broadly similar to those of existing Bridging technology based on 802.1Q-2005/802.1ad.

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 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.

This standard will be compatible with work evolving in the current projects P802.1ah and P802.1ag.

This project will be compatible with existing 802.1 Architecture, Management and Interworking standards.

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.

There is no other IEEE standards or projects that allows traffic engineered paths with complete route selection freedom within a Bridged network.

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.

The proposed standard will be based on existing, proven, standardized, Bridged LAN and Virtual Bridged LAN technology. This technology is widely implemented, is highly reliable.

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.

The technology that will be developed in the proposed standard will not differ significantly from the economic factors associated with existing Bridged LAN and Virtual Bridged LAN technologies. The costs factors for Virtual Bridged LAN technology are favorable when compared to existing provider networks based on MPLS or SONET.