

# Five Criteria for 802.1AXbk – Link Aggregation Amendment: Protocol Addressing

## 1. Broad Market Potential

### a. Broad sets of applicability

Link Aggregation is used in a large variety of deployments. In some such deployments, Two-Port MAC Relays (TPMRs) and Provider Bridged Networks may be employed. The ability to aggregate links spanning such ~~devices-topologies~~ is highly desirable.

### b. Multiple vendors and numerous users

There has been interest expressed by multiple vendors in this capability. Link Aggregation has been implemented by multiple vendors and is widely deployed. There is already a market need for link aggregation to be able to span Provider Bridged Networks. As TPMRs are deployed, vendors and users will require the abilities provided by this project.

### c. Balanced costs (LAN versus attached stations)

The change in protocol addressing has no effect on the balance of costs ~~vis-à-vis~~ with respect to existing Link Aggregation technology.

## 2. Compatibility

This project is intended to make limited changes to the existing Link Aggregation standard that will improve its compatibility with the 802.1 MAC bridging standards, and in particular with the newly defined 802.1aj Two-Port MAC Relay.

## 3. Distinct Identity

### a. Substantially different from other IEEE 802 standards

There is only one link aggregation standard in IEEE 802.

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

As this project enhances the only existing IEEE 802 standard for link aggregation, it does not create a second solution.

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

IEEE Std 802.1AX is the ~~natural-only current reference-IEEE 802 standard~~ for link aggregation.

## 4. Technical Feasibility

### a. Demonstrated system feasibility

Similar techniques have been deployed as proprietary enhancements to IEEE 802 link aggregation.

### b. Proven technology, reasonable testing

Link aggregation is a proven technology and test methodologies are well understood.

### c. Confidence in reliability

Link aggregation is often deployed to enhance the reliability of data communication networks. The intended changes have no impact on the reliability of the link aggregation capability.

#### **d. Coexistence of 802 wireless standards specifying devices for unlicensed operation**

Not applicable.

### **5. Economic Feasibility**

#### **a. Known cost factors, reliable data**

The proposed changes have no impact on the cost factors applicable to link aggregation.

#### **b. Reasonable cost for performance**

| The proposed changes have ~~no~~ negligible impact on the cost factors applicable to link aggregation.

#### **c. Consideration of installation costs**

| The proposed changes have ~~no~~ minimal impact on the cost factors applicable to link aggregation.