P802.1BA - Audio Video Bridging (AVB) Systems

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Broad Market Potential

- Broad set(s) of applicability
- Multiple vendors and numerous users
- Balanced cost (LAN vs. attached stations)
 - Audio and video streaming applications represent a new and very broad application space for IEEE 802 technologies. In order to properly exploit the application space, a standard is needed that defines the components and options that will be needed for an 802 network that supports AV.
 - Many vendors and users have expressed their support for a standard that describes the use of bridged LANs for AV applications.
 - As this standard will be selecting components and options based on existing 802 standards, it does not upset the existing cost model for LANs, bridges and end stations.

Compatibility with IEEE Std. 802.1

- Conformance with 802 Overview and Architecture
- Conformance with 802.1D, 802.1Q
- Conformance with 802 Functional Requirements
- The proposed standard will select profiles from other 802 Bridging and MAC standards, and as such, will conform to the aforementioned documents.
- The standard does not modify the existing specifications, characteristics and control protocols of 802 standard MACs and bridges.

Distinct Identity

- Substantially different from other IEEE 802 standards
- Unique solution for problem (not two alternatives / problem)
- Easy for document reader to select relevant spec.
- There is no existing 802 standard or approved project that provides the overall guidance needed to construct an AV network from 802 standard components.
- The proposed standard will act as a pointer to the other standards that are relevant for the construction of an AV network; it will therefore be the obvious starting point for anyone wishing to find that information.

Technical Feasibility

- Demonstrated system feasibility; reports working models
- Proven technology, reasonable testing
- Confidence in reliability
 - As this standard will be selecting components and defaults based on existing 802 standards, the feasibility of those standards will also apply to the solutions described in this standard.
 - The existing standards that will be profiled by this standard constitute proven, reliable technology.

Economic Feasibility

- Known cost factors, reliable data
- Reasonable cost for performance expected
- Consideration of installation costs
- Cost factors are no different from the cost factors for the component standards that will be used.
- Cost for performance is no different from the cost factors for the component standards that will be used.
- The objective of this standard is to minimize installation costs by providing profile selections that allow "plug-andplay" functionality.