

# P1722

---

**Submitter Email:** rboatright@harman.com

**Type of Project:** Modify Existing Approved PAR

**PAR Request Date:** 30-Apr-2010

**PAR Approval Date:** 17-Jun-2010

**PAR Expiration Date:** 31-Dec-2011

**Status:** Modification to a Previously Approved PAR

**Root PAR:** P1722 **Approved on:** 07-Jun-2007

**Project Record:** No Project Record

---

**1.1 Project Number:** P1722

**1.2 Type of Document:** Standard

**1.3 Life Cycle:** Full Use

---

**2.1 Title:** Standard for Layer 2 Transport Protocol for Time Sensitive Applications in Bridged Local Area Networks

**Old Title:** Standard for Layer 2 Transport Protocol for Time Sensitive Applications in Bridged Local Area Networks

---

**3.1 Working Group:** Audio/Video Bridging Layer2 Transport (C/MS/P1722)

**Contact Information for Working Group Chair**

**Name:** Robert Boatright

**Email Address:** rboatright@harman.com

**Phone:** 801-733-7519

**Contact Information for Working Group Vice-Chair**

None

---

**3.2 Sponsoring Society and Committee:** IEEE Computer Society/Microprocessor Standards Committee (C/MS)

**Contact Information for Sponsor Chair**

**Name:** James Davis

**Email Address:** bob@scsi.com

**Phone:** 408-353-2706/408-857-1273 Cell

**Contact Information for Standards Representative**

None

---

**4.1 Type of Ballot:** Individual

**4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot:** 12/2010

**4.3 Projected Completion Date for Submittal to RevCom:** 05/2011

---

**5.1 Approximate number of people expected to be actively involved in the development of this project:** 25

**5.2 Scope:** This standard specifies the protocol, data encapsulations, and presentation time procedures used to ensure interoperability between audio and video based end stations that use

standard networking services provided by all IEEE 802 networks meeting

QoS requirements for time-sensitive applications by leveraging concepts of IEC 61883.

**Old Scope:** This standard specifies the protocol, data encapsulations, connection management and presentation time procedures used to ensure interoperability between audio and video based end stations that use

standard networking services provided by all IEEE 802 networks meeting

QoS requirements for time-sensitive applications by leveraging concepts of IEC 618831-7.

**5.3 Is the completion of this standard dependent upon the completion of another standard:** Yes

**If yes please explain:** Yes this standard will rely upon:

IEEE standard for Local and Metropolitan Area Networks: Timing and Synchronization for Time-Sensitive Applications in Bridged Local Area Networks (P802.1AS)

IEEE standard for Local and Metropolitan Area Networks: Virtual Bridged Local Area Networks - Amendment 9: Stream Reservation Protocol (SRP) (P802.1Qat)

IEEE standard for Local and Metropolitan Area Networks: Virtual Bridged Local Area Networks - Amendment 11: Forwarding and Queuing for Time-Sensitive Streams (P802.1Qav)

**5.4 Purpose:** This standard will facilitate interoperability between stations that stream time-sensitive audio and/or video across LANs providing time synchronization and latency/bandwidth services by defining the packet format protocols and synchronization mechanisms.

**Old Purpose:** This standard will facilitate interoperability between stations that stream time-sensitive audio and/or video across LANs providing time synchronization and latency/bandwidth services by defining the packet format and stream setup, control, and teardown protocols.

**5.5 Need for the Project:** Increasingly, entertainment media is digitally transported. Streaming audio/video and interactive applications over bridged LANs need to have comparable real-time performance with legacy analog distribution. There is significant end-user and vendor interest in defining a simple yet common method for handling real-time audio/video suitable for consumer electronics, professional A/V applications, etc.

Technologies such as IEEE 1394, Bluetooth and USB exist today but each has their own encapsulation, protocols, timing control, etc. such that building interworking functions is difficult. The use of a common audio/video transport over multiple IEEE 802 network types will realize operational and equipment cost benefits.

By ensuring that all IEEE 802 wired and wireless devices share a common set of transport mechanisms for time-sensitive audio/video streams, we lessen the effort of producing interworking units between IEEE 802 and other digital networks.

**5.6 Stakeholders for the Standard:** The stakeholders are developers and users of bridged LAN and end-point systems supporting time sensitive i.e. audio/video applications.

---

## Intellectual Property

**6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?:** No

**6.1.b. Is the Sponsor aware of possible registration activity related to this project?:** Yes

**If yes please explain:** It is anticipated this protocol will require the assignment of an EtherType Field to identify the payload contents as being compliant with Audio/Video Bridging Layer 2 Transport Protocol

---

**7.1 Are there other standards or projects with a similar scope?:** No

## 7.2 International Activities

### a. Adoption

**Is there potential for this standard (in part or in whole) to be adopted by another national, regional or international organization?:** Do Not Know

**Organization:**

**Technical Committee Name:**

**Technical Committee Number:**

**Contact Name:**

**Phone:**

**Email:**

### b. Joint Development

**Is it the intent to develop this document jointly with another organization?:** No

### c. Harmonization

**Are you aware of another organization that may be interested in portions of this document in their standardization development efforts?:** No

---

**8.1 Additional Explanatory Notes (Item Number and Explanation):** Our scope initially specified we were "leveraging concepts of IEC 61883 parts 1-7" however since then 61883 part 8 has been ratified and it seems to make more sense to just specify "IEC 61883" and not mention the specific sections. Also, we decided to not address "connection management" in our standard and instead are doing that work in another committee, IEEE P1722.1.

5.3 - The standards listed in this section will be completed in a timely fashion consistent with the dates given for this project in 4.2 and 4.3.

1 - 802.1Qav is complete and has been published.

2 - 802.1Qat has completed Sponsor ballot and is on the cusp of completing final comment resolution recirc balloting.

3 - 802.1AS has completed Sponsor Ballot and is in comment resolution; recirc ballot to commence very soon.