PAR Request Date: 08 March 2006	
PAR Approval Date:	
PAR Signature Page on File: No	
Type of Project: New IEEE Standard	
Status: Unapproved PAR, PAR for a New IEEE Standard	
1.1 Project No.: P802.1AS	
1.2 Type of Document: Standard	
1.3 Life Cycle: Full	
1.4 In Ballot N	

2.1 Title
Standard for Local and Metropolitan Area Networks – Timing and Synchronization for Time-Sensitive Applications in Bridged Local Area Networks

2.1 Amd/Cor Title

3.1 Working Group Name	Higher Layer LAN Protocols Working Group
Working Group Chair	Jeffree Tony A Consultant 11a Poplar Grove Sale, Cheshire M33 3AX United Kingdom Phone: +44-161-973-4278 Email: tony@jeffree.co.uk
Working Group Vice Chair	
3.2 Sponsor	IEEE Computer Society Local and Metropolitan Area Networks (C/LM)
Sponsor Chair	Nikolich Paul 18 Bishops Lane Lynnfield, MA 01940 Phone: 857-205-0050 Email: p.nikolich@ieee.org
3.3 Joint Sponsor	

4.1 Type of Ballot: Individual	
4.2 Expected Date of Submission for Initial Sponsor Ballot: 2009-12-00	
4.3 Projected Completion Date for Submittal to RevCom: 2010-07-00	
Explanation for Modified PAR that completion date is being extended past the original four-year life of the PAR:	
5.1 Approximate number of people expected to work on this project: 60	

5.2 Scope: This standard specifies the protocol and procedures used to ensure that the synchronization requirements are met for time sensitive applications, such as audio and video, across Bridged and Virtual Bridged Local Area Networks consisting of LAN media where the transmission delays are fixed and symmetrical; for example, IEEE 802.3 full duplex links. This includes the maintenance of synchronized time during normal operation and following addition, removal, or failure of network components and network reconfiguration. It specifies the use of IEEE 1588 specifications where applicable in the context of IEEE Stds 802.1D and 802.1Q. Synchronization to an externally provided timing signal (e.g., a recognized timing standard such as UTC or TAI) is not part of this standard but is not precluded.

5.3 Is the completion of this document contingent upon the completion of another document? N

5.4 Purpose: This standard enables stations attached to bridged LANs to meet the respective jitter, wander, and time synchronization requirements for time-sensitive applications.

5.5 WhyNeeded: The use of current IEEE 802 technologies for time sensitive applications, such as high quality audio/video streaming, does not assure that the applications can present data with acceptable jitter, wander, and deviation in time. This includes applications that involve multiple streams delivered to multiple endpoints. To facilitate the widespread use of bridged LANs for these applications, synchronization information is one of the components needed at each network element where time-sensitive application data are mapped or demapped or a time sensitive function is performed. The synchronization information provided to each network element will allow the jitter, wander, and time synchronization requirements of demanding applications, such as in a residential environment, to be met. Existing time synchronization standards, IEEE Std. 1588-2002 and IETF Request for Comments: 1305 (Network Time Protocol), because they operate at layer 3, impose unacceptable operational complexity and implementation costs on a developer of AV equipment. This standard will leverage the work of the IEEE 1588 WG to develop the additional specifications needed to address these requirements.

5.6 Stakeholders for the Standard: The stakeholders are any developer of AV equipment.

6.1.a. Intellectual Property? Yes   **Presented Date:** 2006-03-06

6.1.b. Copyright? No

6.1.c. Reg. Activity? No

7.1 Are there other standards or projects with a similar scope? Yes
Project Explanation:
The project specifies the use of IEEE 1588 specifications where applicable in the context of IEEE Stds 802.1D and 802.1Q.
Sponsor Organization:
Project/Standard Number:
Project/Standard Date: 0000-00-00
Project/Standard Title:

7.2 Future Adoptions? No
Technical Committee Name and Number:
Contact person:
Contact person Email Address:

7.3 HSE? No

7.4 Additional Explanatory Notes:
 Titles referenced are as follows: IEEE Std 802.3-2005, IEEE Standard for Information technology--Telecomunications and information exchange between systems--Local and metropolitan area networs-- specific requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specification; IEEE Std 802.1D-2004, IEEE Standard for Local and metropolitan area networks: Media Access Control (MAC) Bridges; IEEE Std 802.1Q-2005, IEEE Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area Networks

8.1 Sponsor Information:
Is the Scope of this project within the approved scope/definition of the Sponsor's Charter? Yes
Explanation: