The PAR Copyright Release and <u>Signature Page</u> must be submitted by FAX to +1-732-875-0695 to the <u>NesCom Administrator</u>.

If you have any questions, please contact the NesCom Administrator.

Once you approve and submit the following information, changes may only be made through the NesCom Administrator.

Draft PAR Confirmation Number: 187132067.12193

Submittal Email: tony@jeffree.co.uk

Type of Project: Amendment to an Existing Standard 802.1Q-2005

1.1 Project Number: P802.1Qav

1.2 Type of Document: Standard for

1.3 Life Cycle: Full

1.4 Is this project in ballot now? No

2.1 Title of Standard: IEEE Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area Networks - Amendment: Forwarding and Queuing Enhancements for Time-Sensitive Streams

3.1 Name of Working Group: Higher Layer LAN Protocols Working Group

Contact information for Working Group Chair

Tony A Jeffree

Email: tony@jeffree.co.uk Phone: +44-161-973-4278

Contact Information for Working Group Vice Chair

Paul Congdon

Email: paul.congdon@hp.com

Phone: 916-785-5753

3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area

Networks (C/LM)

Contact information for Sponsor Chair:

Paul Nikolich

Email: p.nikolich@ieee.org Phone: 857-205-0050

Contact information for Standards Representative:

Email: Phone:

3.3 Joint Sponsor:/ ()

Contact information for Sponsor Chair:

Email:

Phone:

Contact information for Standards Representative:

Email: Phone:

4.1 Type of Ballot: Individual

4.2 Expected Date of Submission for Initial Sponsor Ballot: 2010-07

- 4.3 Projected Completion Date for Submittal to RevCom: 2010-12
- 5.1 Approximate number of people expected to work on this project: 30
- **5.2 Scope of Proposed Standard:** This standard allows bridges to provide guarantees for time-sensitive (i.e. bounded latency and delivery variation), loss-sensitive real-time audio video data transmission. It specifies per priority ingress metering, priority regeneration, and timing-aware queue draining algorithms. This standard uses the timing derived from 802.1AS. VLAN tag encoded priority values are allocated in aggregate to segregate frames among controlled and non-controlled queues, allowing simultaneous support of both AV Bridging and other bridged traffic.

Old Scope:

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

If yes, please explain: This standard uses Timing and Synchronization in Bridged LANs (P802.1AS), refers to SRP (P802.1Qat), and is dependent on a refision of the Link Layer Discovery Protocol (P802.1AB).

5.4 Purpose of Proposed Standard: Bridges are increasingly used to interconnect devices that support audio and video streaming application. This standard will specify enhancements to bridge relay function to provide performance guarantees to allow for time-sensitive traffic in a local area network.

Old Purpose:

5.5 Need for the Project: Most if not all entertainment media going forward is in digital form. Audio and video streaming and interactive applications over bridged LANs need to be enhanced to have comparable real-time performance of legacy out-of-band analog media distribution. There is significant vendor and end-user interest and market opportunity to consolidate layer 2 solution for both computer networking (e.g. internet access) and audio video services (e.g. home consumer electronics, professional A/V applications, etc). The use of such consolidated network will realize operational and equipment costbenefits.

This standard defines a set of enhancements to the Virtual Bridged LAN (802.1Q). This will enable end-to-end quality of service guarantee agreement for audio and video streaming negotiated over SRP protocol to be realized in a bridged LAN, while interoperating with existing 802.1D and Q bridges. There is currently no interoperability among bridges that support Audio and Video streaming, nor generally accepted means of achieving such service guarantees in a bridged LAN.

5.6 Stakeholders for the Standard: Developers and Users of bridged LAN and end-point systems supporting audio video and other latency sensitive applications.

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes

If yes, state date: 2006-09-26

If no, please explain:

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

If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No If yes, please explain:

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

If yes, please explain:

and answer the following: Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Future Adoptions

Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? No

If Yes, the following questions must be answered:

Technical Committee Name and Number:

Other Organization Contact Information:

Contact person:

Contact Email address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

7.4 Additional Explanatory Notes: (Item Number and Explanation)

8.1 Sponsor Information:

Is the scope of this project within the approved scope/definition of the Sponsor's Charter? Yes If no, please explain:

Submit to NesCom

Save and Come Back Later

Contact the NesCom Administrator