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Draft PAR Confirmation Number: xxxxxxxxxx	
Submittal Email: tony@jeffree.co.uk	
Type of Project: Modify Existing Approved PAR	
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	
1.5 Is the balloting group aware of the PAR modification? No The balloting group has not been formed yet	
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(C/LM/WG802.1)	
Contact information for Working Group Chair Anthony Jeffree 11a Poplar Grove Sale, Cheshire M33 3AX GB tony@jeffree.co.uk Working Group Vice Chair: Paul Congdon 9489 Treelake Road Granite Bay, CA 95746 US, Email: paul.congdon@hp.com	
3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks(C/LM) Contact information for Sponsor Chair: Paul Nikolich 18 Bishops Lane Lynnfield, MA 01940 US p.nikolich@ieee.org Contact information for Standards Representative:	
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:	
5.2 Scope of Proposed Standard: This standard allows bridges to provide performance guarantees for time-sensitive (i.e. bounded latency and delivery variation), loss-sensitive real-time audio video (AV) data transmission (AV traffic). It specifies priority regeneration	Old Scope: This standard allows bridges to provide guarantees for time-sensitive (i.e. bounded latency and delivery variation), loss-sensitive real-time audio video (AV) data transmission (AV traffic). It specifies per priority ingress metering, priority regeneration,

and controlled bandwidth queue draining algorithms. Virtual Local Area Network (VLAN) tag encoded priority values are allocated, in aggregate, to segregate frames among controlled and non-controlled queues, allowing simultaneous support of both AV traffic and other bridged traffic over and between wired and wireless Local Area Networks (LANs).

and timing-aware queue draining algorithms. This standard uses the timing derived from IEEE 802.1AS. Virtual Local Area Network (VLAN) tag encoded priority values are allocated, in aggregate, to segregate frames among controlled and non-controlled queues, allowing simultaneous support of both AV traffic and other bridged traffic over and between wired and wireless Local Area Networks (LANs).

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

If yes, please explain: This standard makes use of functions defined in IEEE P802.1Qat - "Standard for Local and Metropolitan Area Networks - Virtual Bridged Local Area Networks - Amendment 9: Stream Reservation Protocol (SRP).

5.4 Purpose of Proposed Standard: Bridges are increasingly used to interconnect devices that support audio and video streaming applications. This standard will specify enhancements to the bridge relay function to provide performance guarantees that allow for time-sensitive traffic in a local area network and harmonize delay, jitter, and packet loss for wired (e.g., IEEE 802.3 - "Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications"), wireless (e.g., IEEE Std 802.11 - "Standard for Information Technology - Telecommunications and information exchange between systems - Local and Metropolitan networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications"), and mixed wired/wireless L2 networks.

Old Purpose: 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 and harmonize delay jitter and packet loss for wired (e.g., IEEE 802.3 - "Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications"), wireless (e.g., IEEE Std 802.11 - "Standard for Information Technology - Telecommunications and information exchange between systems - Local and Metropolitan networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) specifications"), and mixed wired/wireless L2 networks.

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) in mixed wired and wireless environments. 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 - "Standards for Local and Metropolitan Area Networks - Virtual Bridged Local Area Networks"). 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 - "Standard for Local and Metropolitan Area Networks: Media Access Control

(MAC) Bridges" 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)

5.2 (Scope) has been modified to reflect the fact that this project is no longer dependent upon P802.1AS. Section 5.3 has been modified to reflect the fact that this project is no longer dependent upon P802.1AS or P802.1AB Revision.

Contact the [NesCom Administrator](#)