

The PAR Copyright Release and [Signature Page](#) must be submitted by FAX to +1-732-875-0695 to the [NesCom Administrator](#).

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:
Submittal Email: pthaler@broadcom.com
Type of Project: PAR for an amendment to an existing Standard 802.1Q-2005
1.1 Project Number: P802.1Qaz
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?
2.1 Title of Standard: IEEE Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area Networks - Amendment: Enhanced Transmission Selection for Bandwidth Sharing Between Traffic Classes
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: 2009-01	
4.3 Projected Completion Date for Submittal to RevCom: 2009-05	
5.1 Approximate number of people expected to work on this project: 80	
5.2 Scope of Proposed Standard: This standard specifies enhancement of transmission selection to support allocation of bandwidth amongst traffic classes. When the offered load in a traffic class doesn't use its allocated bandwidth, enhanced transmission selection will allow other traffic classes to use the available bandwidth. The bandwidth-allocation priorities will coexist with strict priorities. It will include managed objects to support bandwidth allocation.	Old Scope:
5.3 Is the completion of this standard is dependent upon the completion of another standard: No If yes, please explain:	
5.4 Purpose of Proposed Standard: Networks prioritize traffic to provide different service characteristics to traffic classes. It is desirable to be able to share bandwidth between priorities carrying bursty high offered loads rather than servicing them with strict priority while allowing strict priority for time-sensitive and management traffic requiring minimum latency. Also, when traffic at a priority level doesn't use its allocation, it is desirable to allow other priorities to use that bandwidth. For example, IEEE P802.1Qau will specify congestion management. Congestion managed traffic classes can share a network with traditional best effort LAN classes. Enhanced transmission selection will provide uniform management for the sharing of bandwidth between congestion managed classes and traditional classes on a single bridged network. Priorities using enhanced transmission selection will coexist with priorities using 802.1Qav queuing for time-sensitive streams.	Old Purpose:
5.5 Need for the Project: There is significant customer interest and market opportunity for Ethernet as a consolidated Layer 2 solution in high-speed networks such as data centers, backplane fabrics, single and multi-chassis interconnects, computing clusters and storage networks. The differing service needs of applications supported on a consolidated Ethernet are supported by separate traffic classes. These applications often provide bursty loads for large transfers. Support of these classes on the same links requires the ability to allocate a guaranteed share of bandwidth to each class and to allow classes with offered load to fully utilize bandwidth when offered load for another class doesn't require its full share of bandwidth. Use of a consolidated network will realize operation and equipment cost benefits. This project allows a uniform management of bandwidth allocation between classes.	
5.6 Stakeholders for the Standard: Developers and users of networking for data center environments including networking IC developers, switch and NIC vendors, and users.	

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: 2007-07-16

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? Yes

If yes, please explain: IEEE P802.1Qav is adding a transmission selection mechanism for traffic shaping of bandwidth limited streams that have a reserved bandwidth allocation. Its traffic shaping constrains the managed class to use only its allocation regardless of the bandwidth use by other classes and spaces intervals between packets in the class. The transmission selection in this PAR is intended to allow bandwidth allocation amongst traffic types while allowing traffic in one class to use bandwidth unused by the offered load in other classes without traffic shaping constraints. This is suitable for carrying bursty traffic at high data rates.

and answer the following: Sponsor Organization: IEEE 802

Project/Standard Number: IEEE P802.1Qav

Project/Standard Date: 2007-02-27

Project/Standard Title: Forwarding and Queuing Enhancements for Time-Sensitive Streams

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:

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