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

Draft PAR Confirmation Number: 175787384.18794

Submittal Email: tony@jeffree.co.uk

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

1.1 Project Number: P802.1Qau

**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: 10: Congestion Notification.

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** 

Email:

Phone:

**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: 2008-07

4.3 Projected Completion Date for Submittal to RevCom: 2009-07

5.1 Approximate number of people expected to work on this project: 20

**5.2 Scope of Proposed Standard:** This standard specifies protocols, procedures and managed objects that support congestion management of long-lived data flows within network domains of limited bandwidth delay product. This is achieved by enabling bridges to signal congestion

information to end stations capable of transmission rate limiting to avoid frame loss. This mechanism enables support for higher layer protocols that are highly loss or latency sensitive. VLAN tag encoded priority values are allocated to segregate frames subject to congestion control, allowing simultaneous support of both congestion controlled and other higher layer protocols. This standard does not specify communication or reception of congestion notification information to or from stations outside the congestion controlled domain or encapsulation of frames from those stations across the domain.

## **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:** Data center networks and backplane fabrics employ applications that depend on the delivery of data packets with a lower latency and much lower probability of packet loss than is typical of IEEE 802 VLAN bridged networks. This amendment will support the use of a single bridged local area network for these applications as well as traditional LAN applications.

**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 short-range networks such as data centers, backplane fabrics, single and multi-chassis interconnects, computing clusters, and storage networks. These applications currently use Layer 2 networks that offer very low latency and controlled frame loss due to congestion. Use of a consolidated network will realize operational and equipment cost benefits.

**5.6 Stakeholders for the Standard:** Developers and users of networking for data center and backplane Ethernet 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: 2006-05-15 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:** 

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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? If no, please explain:

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