

IEEE P802.3ar Task Force

Revised PAR

16 May 2006

PAR title

- 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 Amendment: Enhancements for Rate Limiting

PAR scope

- To specify IEEE 802.3 MAC parameters and minimal augmentation of MAC operation and management parameters of IEEE Std 802.3 to provide rate limiting.

PAR Item 5.3

- Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose of Proposed Standard:

- This project will enable accelerated deployment of Ethernet into emerging applications that require improved delay, delay variation and frame loss characteristics in the presence of known bottlenecks.

5.5 Need for the project: PAR purpose (14a)

- Ethernet networks are being used in an increasing number of application spaces that are sensitive to frame delay, delay variation and loss. Study Group presentations have shown that Ethernet networks can experience higher throughput, lower delay, and lower frame loss by performing rate limiting. Rate limiting is an effective technique to reduce buffer requirements when there are known/fixed bottlenecks in the networks. This will improve Ethernet in its growing number of applications.

5.6 Stakeholders for the project

- Network equipment, network silicon, media converter, and NIC manufacturers and users