

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: bob.grow@ieee.org
Type of Project: PAR for an amendment to an existing Standard 802.3-2005
1.1 Project Number: P802.3az
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 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: Media Access Control Parameters, Physical Layers and Management Parameters for Energy Efficient Ethernet
3.1 Name of Working Group: Ethernet Working Group
Contact information for Working Group Chair Robert M Grow Email: bob.grow@intel.com Phone: 858-679-2077
Contact Information for Working Group Vice Chair David J Law Email: david_law@ieee.org Phone: +44-131-665-7264
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: 2009-07

4.3 Projected Completion Date for Submittal to RevCom: 2010-03

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

5.2 Scope of Proposed Standard: The proposed standard will include a symmetric protocol to facilitate transition to and from lower power consumption in response to changes in network demand. The transition will not cause loss of link as observed by higher layer protocols. The project will also specify PHY enhancements as required for a selected subset of PHY types to improve energy efficiency.

Old Scope:

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

Yes

If yes, please explain: To meet IEEE-SA requirements for revision of a standard, this project will not go to Sponsor ballot until completion of the current revision of IEEE Std 802.3 (P802.3 and P802.1AX).

5.4 Purpose of Proposed Standard: Most Ethernet links have significant periods of low utilization or no utilization for application data traffic. This project will take advantage of this to provide energy savings in the PHY and enable energy savings in the system which will deliver reduction in total cost of operation.

Old Purpose:

5.5 Need for the Project: Market pressure and legislative action worldwide is demanding improvements in energy efficiency of networked systems. Energy costs are a major component of operating cost. Energy Efficient Ethernet (EEE) features will be explicitly or implicitly required by a significant fraction of Ethernet edge connections in the future. Energy consumption and efficiency will become a major factor in the choice of network solutions, especially in data centers. EEE capabilities will be important as Ethernet becomes an enabler for low duty cycle, consumer class applications. EEE capabilities will enable new system level energy management techniques that will save energy beyond the network interface. EEE will address interface changes required to improve energy efficiency.

5.6 Stakeholders for the Standard: Ethernet is pervasive, with a consequent pervasive set of stakeholders. This includes and is not limited to: component providers (e.g., cabling and integrated circuit), system product providers (e.g., switch and NIC), network providers (e.g. installers, network support, enterprise network implementers), bandwidth providers (e.g., carriers), software providers (e.g., network management), and the users of any of these products or services.

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: 2007-05-29

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? Yes

If Yes, the following questions must be answered:

Technical Committee Name and Number: ISO SC6 WG1

Other Organization Contact Information:

Contact person:

Contact Email address: r.tasker@dl.ac.uk

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](#)