Draft PAR Confirmation Number

Submittal Email: eldad.perahia@intel.com

Type of Project: PAR for an amendment to existing Standard 802.11- 2007

1.1 Project Number: P802.11

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 Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications - Amendment: Enhancements for Very High Throughput for operation in bands below 6GHz

3.1 Name of Working Group: Wireless LAN Working Group(C/LM/WG802.11)
Contact information for Working Group Chair
Bruce Kraemer
517 La Costa Court
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Working Group Vice Chair: Jon Rosdahl
10871 N 5750 West
Highland, UT 84003
US, **Email:** jrosdahl@ieee.org

3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks(C/LM)
Contact information for Sponsor Chair:
Paul Nikolich
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Lynnfield, MA 01940
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Contact information for Standards Representative:

4.1 Type of Ballot: Individual	
4.2 Expected Date of Submission for Initial Sponsor Ballot: 2011- 12	
4.3 Projected Completion Date for Submittal to RevCom: 2012- 12	
5.1 Approximate number of people expected to work on this project: 100	
5.2 Scope of Proposed Standard: Scope of Proposed Standard: The scope of this project is to define an amendment that shall define standardized modifications to both the 802.11 physical layers (PHY) and the 802.11 Medium Access Control Layer (MAC) so that modes of operation can be enabled that are capable of supporting: o A maximum multi- STA throughput (measured at the MAC data service access point), of at least 1Gbps and a maximum single link throughput (measured at the MAC data service access point), of at least 500Mbps. o Below 6GHz carrier frequency operation excluding 2.4GHz operation and ensuring backward compatibility and coexistence with legacy IEEE802.11a/n devices in the 5GHz unlicensed band.	**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: The purpose of the project is to improve the 802.11 wireless local area network (LAN) user experience by providing significantly higher BSS throughput for existing WLAN application areas and to enable new market segments for operation below 6 GHz including distribution of multiple multimedia/data streams.	**Old Purpose:**
5.5 Need for the Project: As wireless networks are deployed, users are	

able to transition applications from fixed, non- wireless links to the convenience, freedom and versatility of wireless links. These transitions create an evolutionary demand to enhance the wireless network to support new classes of applications with higher bandwidth requirements. Wireless networks are particularly in need of continual enhancements since the link is by definition shared. This project will meet that evolving need for higher bandwidth in the projected completion timeframe and enable the transition of the next class of applications.

5.6 Stakeholders for the Standard: Semiconductor manufacturers, personal computer manufacturers, enterpise networking device manufacturers, consumer electronic device manufacturers.

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: 2008- 05- 12
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
Explanation:
Sponsor Organization:
Project/Standard Number:
Project/Standard Date: 0000- 00- 00
Project/Standard Title:

7.2 International Standards Activities
a. Adoptions
Is there potential for this standard to be adopted by another organization? No
Organization: ISO/IEC JTC1
Technical Committee Name:
Technical Committee Number:
Contact person Name:
Contact Phone:
Contact Email:
b. Joint Development
Is it the intent to develop this document jointly with another organization? No
Organization:

Technical Committee Name:
Technical Committee Number:
Contact person Name:
Contact Phone:
Contact Email:

c. Harmonization

Are you aware of another organization that may be interested in portions of this document in their standardization development efforts? No

Organization:
Technical Committee Name:
Technical Committee Number:
Contact person Name:
Contact Phone:
Contact Email:

8.1 Additional Explanatory Notes: (Item Number and Explanation)

• The project may include the capability to handle multiple simultaneous communications. • The multi- STA throughput is defined as the sum of the MAC SAP throughputs across all active transmissions within a set of STAs. • The 1Gbps maximum multi- STA throughput may be achieved when considering multiple simultaneously actively-communicating STAs, e.g., a BSS with 1 AP and at least 3 STAs. • Though the primary metric used in the scope of the project deals with MAC SAP throughput, the intent is to provide enhancements over IEEE802.11n on the following inter- dependent performance indicators: throughput at the MAC data SAP, range of operation, aggregate network capacity (spectrum efficiency), power consumption (peak and average).

Contact the NesCom Administrator