

P802.11

Submitter Email: jrosdahl@ieee.org

Type of Project: Revision to IEEE Standard

PAR Request Date: 07-Oct-2008

PAR Approval Date: 10-Dec-2008

PAR Expiration Date: 31-Dec-2012

Status: PAR for a Revision to an existing IEEE Standard 802.11-2007

Project Record:

1.1 Project Number: P802.11

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: 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

Old Title: 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

3.1 Working Group: Wireless LAN Working Group (C/LM/WG802.11)

Contact Information for Working Group Chair

Name: Bruce Kraemer

Email Address: bkraemer@marvell.com

Phone: 321-751-3988

Contact Information for Working Group Vice-Chair

Name: Jon Rosdahl

Email Address: jrosdahl@ieee.org

Phone: 801-756-1496

3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks (C/LM)

Contact Information for Sponsor Chair

Name: Paul Nikolich

Email Address: p.nikolich@ieee.org

Phone: 857.205.0050

Contact Information for Standards Representative

None

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 11/2009

4.3 Projected Completion Date for Submittal to RevCom: 03/2011

5.1 Approximate number of people expected to be actively involved in the development of this project: 300

5.2 Scope: The scope of this standard is to define one medium access control (MAC) and several physical layer (PHY) specifications for wireless connectivity for fixed, portable, and moving stations (STAs) within a local area.

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

5.4 Purpose: The purpose of this standard is to provide wireless connectivity for fixed, portable, and moving stations within a local area. This standard also offers regulatory bodies a means of standardizing access to one or more frequency bands for the purpose of local area communication.

Old Scope: The scope of this standard is to define one medium access control (MAC) and several physical layer (PHY) specifications for wireless connectivity for fixed, portable, and moving stations (STAs) within a local area.

Old Purpose: The purpose of this standard is to provide wireless connectivity to automatic machinery, equipment, or STAs that require rapid deployment, which may be portable or hand-held, or which may be mounted on moving vehicles within a local area. This standard also offers regulatory bodies a means of standardizing access to one or more frequency bands for the purpose of local area communication.

Specifically, this standard

Describes the functions and services required by an IEEE 802.11 -compliant device to operate

within ad hoc and infrastructure networks as well as the aspects of STA mobility (transition) within those networks.

Defines the MAC procedures to support the asynchronous MAC service data unit (MSDU) delivery services.

Defines several PHY signaling techniques and interface functions that are controlled by the IEEE 802.11 MAC.

Permits the operation of an IEEE 802.11-conformant device within a wireless local area network (WLAN) that may coexist with multiple overlapping IEEE 802.11 WLANs.

Describes the requirements and procedures to provide data confidentiality of user information being transferred over the wireless medium (WM) and authentication of IEEE 802.11-conformant devices.

Defines mechanisms for dynamic frequency selection (DFS) and transmit power control (TPC) that may be used to satisfy regulatory requirements for operation in the 5 GHz band. The regulations and conformance tests are listed in Clause 2

Defines the MAC procedures to support local area network (LAN) applications with quality of service (QoS) requirements, including the transport of voice, audio, and video.

5.5 Need for the Project: The reason for this project is to incorporate accumulated maintenance changes (editorial and technical corrections) into 802.11-2007, and roll up of approved amendments to the standard. The approved amendments as of the filing of the revision PAR include IEEE 802.11k-2008, IEEE 802.11r-2008, and IEEE 802.11y-2008 amendments.

5.6 Stakeholders for the Standard: The stakeholders of this standard are the developers and users of the Wireless LAN devices, including service providers, manufacturers, health care workers, retail service providers, and many others.

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: 08-Sep-2008

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project?: No

6.1.c. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: No

7.2 International Activities

a. Adoption

Is there potential for this standard (in part or in whole) to be adopted by another national, regional or international organization?: Yes

Organization: ISO/IEC JTC1

Technical Committee Name: Subcommittee 6

Technical Committee Number: SC6

Contact Name: Robin Tasker

Phone: +44 (0) 1925

Email: rtasker@dl.ac.uk

b. Joint Development

Is it the intent to develop this document jointly with another organization?: No

c. Harmonization

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

8.1 Additional Explanatory Notes (Item Number and Explanation): 5.4: The Purpose in the existing standard includes a sub-paragraph describing each amendment that was included since the original standard. The proposed Purpose Statement in this

Revision PAR is to make a concise purpose statement and to provide the extra information in an different area in the document outside the Purpose clause. The Title and Scope are not proposed to change.