

P802.11af

Submitter Email: rkennedy1000@gmail.com

Type of Project: Amendment to IEEE Standard 802.11-2007

PAR Request Date: 02-Oct-2009

PAR Approval Date: 09-Dec-2009

PAR Expiration Date: 31-Dec-2013

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

Project Record: 802.11

1.1 Project Number: P802.11af

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; Amendment: TV White Spaces Operation

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

Contact Information for Working Group Chair

Name: Bruce Kraemer

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Contact Information for Working Group Vice-Chair

Name: Adrian P Stephens

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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

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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: 12/2012

4.3 Projected Completion Date for Submittal to RevCom: 10/2013

5.1 Approximate number of people expected to be actively involved in the development of this project: 50

5.2 Scope: An amendment that defines modifications to both the 802.11 physical layers (PHY) and the 802.11 Medium Access Control Layer (MAC), to meet the legal requirements for channel access and coexistence in the TV White Space.

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

5.4 Purpose: The purpose of this amendment is to allow 802.11 wireless networks to be used in the TV white space.

5.5 Need for the Project: With the global transition to Digital TV (DTV), sub-Gigahertz RF spectrum is becoming available, much of it for unlicensed, license exempt and/or lightly licensed use. This project will make the necessary MAC and PHY changes to enable 802.11 products to take advantage of this additional spectrum.

5.6 Stakeholders for the Standard: Manufacturers and users of semiconductor, personal computer, enterprise networking devices, consumer electronic devices, home networking equipment, mobile devices with its improved propagation characteristics and improved indoor wall penetration and hence range.

Intellectual Property

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

6.1.b. 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?: Yes

If Yes please explain: IEEE P802.22 addresses one product segment of the new regulatory rules.

and answer the following

Sponsor Organization: IEEE

Project/Standard Number: P802.22

Project/Standard Date:

Project/Standard Title: Draft Standard for Wireless Regional Area Networks Part 22: Cognitive Wireless RAN Medium Access Control (MAC) and Physical Layer (PHY) specifications: Policies and procedures for operation in the TV Bands

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?: Do Not Know

Organization:

Technical Committee Name:

Technical Committee Number:

Contact Name:

Phone:

Email:

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?: Do Not Know

Organization:

Technical Committee Name:

Technical Committee Number:

Contact Name:

Phone:

Email:

8.1 Additional Explanatory Notes (Item Number and Explanation): 8.1 Additional Explanatory Notes: (Item Number and Explanation)

5.2 Scope - TV White Space is defined in the US by the November 2008 FCC Part 15 Subpart H Television Band Devices rules. Ofcom (UK) is in the process of making this Digital Dividend band available, and the EU has conducted a consultation on the TV band. The project will adapt to changes in the regulations, as they progress. It is in the best interest of users and the industry to strive for a level of coexistence between wireless systems in the TVWS bands. This standard provides mechanisms for coexistence with other systems operating in the TV bands.

7.1 Are there other standards or projects with a similar scope?

Explanation: IEEE P1900.4a addresses mobile wireless access in white space frequency bands

Sponsor Organization: IEEE

Project/Standard Number: P1900.4a

Project/Standard Date: 0000-00-00

Project/Standard Title: Amendment: Architecture and Interfaces for Dynamic Spectrum Access Networks in White Space Frequency Bands

Explanation: Ecma International is standardizing communications in Television White Spaces

Sponsor Organization: Ecma International

Project/Standard Number: TC48-TG1

Project/Standard Date: 0000-00-00

Project/Standard Title: Wireless Communications using Television White Spaces (TVWS).

Explanation: IEEE P802.16h addresses one product segment of the new regulatory rules.

Sponsor Organization: IEEE

Project/Standard Number: P802.16

Project/Standard Date: 0000-00-00

Project/Standard Title: IEEE Standard for Information Technology - Telecommunications and Information Exchange Between Systems - Local and Metropolitan Area Networks - Specific Requirements - Part 16: Air Interface for Fixed Broadband Wireless Access Systems, Improved Coexistence Mechanisms for License-Exempt Operation