**IEEE P802.19**

**Wireless Coexistence**

|  |  |  |
| --- | --- | --- |
| Project | IEEE P802.19 Wireless Coexistence WG | |
| Title | **Coexistence in Unlicensed frequency Bands PAR** | |
| Date Submitted | May 14, 2015 | |
| Source | Naotaka Sato (Sony)  Chen Sun (Sony China) Sho Furuichi (Sony) Hyunduk Kang (ETRI) | E-mail: [naotaka.sato@ieee.org](mailto:naotaka.sato@ieee.org)  E-mail: [Chen.Sun@sony.com.cn](mailto:Chen.Sun@sony.com.cn)  E-mail: [Sho.Furuichi@jp.sony.com](mailto:Sho.Furuichi@jp.sony.com)  E-mail: [henry@etri.re.kr](mailto:henry@etri.re.kr) |
| Re: | [] | |
| Abstract | [] | |
| Purpose | [] | |
| Notice | This document has been prepared to assist the IEEE P802.19. It is offered as a basis for discussion and is not binding on the contributing individual(s) or organization(s). The material in this document is subject to change in form and content after further study. The contributor(s) reserve(s) the right to add, amend or withdraw material contained herein. | |
| Release | The contributor acknowledges and accepts that this contribution becomes the property of IEEE and may be made publicly available by IEEE P802.19. | |

Submitter Email: shellhammer@ieee.org

Type of Project: Amendment to IEEE Standard 802.19.1-2014

PAR Request Date: xx-xxx-2015

PAR Approval: xx-xxx-2015

PAR Expiration Date: xx-xxx-2017

Status: PAR for an Amendment to an existing IEEE Standard

1.1 Project Number: P802.19.1a

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 19: TV White Spaces Coexistence Methods Amendment: Coexistence Methods for geo-location capable devices operating under general authorization

3.1 Working Group: Coexistence TAG (C/LM/WG802.19)

Contact Information for Working Group Chair Name: Stephen Shellhammer

Email Address: shellhammer@ieee.org

Phone: (858) 658-1874

Contact Information for Working Group Vice-Chair

None

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

Name: James Gilb

Email Address: gilb@ieee.org

Phone: 858-229-4822

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 12/2016

4.3 Projected Completion Date for Submittal to RevCom: 10/2017

5.1 Approximate number of people expected to be actively involved in the development of this project: 30

5.2.a. Scope of the complete standard: The standard specifies radio technology independent methods for coexistence among dissimilar or independently operated TV Band Device (TVBD) networks and dissimilar TV Band Devices.

5.2.b. Scope of the project: This amendment to IEEE 802.19.1-2014 defines the network-based coexistence information exchange among networks and devices to enable network-based coexistence management. It specifies procedures and protocols for collection and exchanging coexistence information of heterogeneous networks, spectrum resource measurements and network performance metrics, such as packet error ratio, delay, etc, and information elements and data structures to capture coexistence information.

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

5.4 Purpose: The purpose of the standard is to enable the family of IEEE 802 Wireless Standards to most effectively use, under general authorization, frequency bands such as TV band White Spaces, the5GHz license-exempt bands and the general authorized access in 3.5GHz bands by providing standard network-based coexistence methods among dissimilar or independently operated networks of unlicensed devices and dissimilar unlicensed devices with geo-location capability. This standard addresses coexistence for IEEE 802 networks and devices and will also be useful for non IEEE 802 networks and devices.

5.5 Need for the Project: Existing IEEE 802 standards groups are developing standards and amendments, to comply with the regulatory rules for general authorization such as the TV band white spaces, the 5GHz license-exempt bands and the general authorized access in 3.5GHz bands. Other non-IEEE 802 wireless standards under general authorization such as the TV band White Spaces, the 5GHz license-exempt bands and the general authorized access in 3.5GHz bands are also in development.

5.6 Stakeholders for the Standard: Designers of MAC/PHY standards and implementations in the TV band white spaces, the 5GHz license-exempt bands and the general authorized access in 3.5GHz bands.

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?: 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?: No

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):

Section 5.2b (Scope)

The term “network-based” means that the information for coexistence among heterogeneous networks is exchanged over IP-based network.

Section 5.2b (Scope)

The term “geo-location capable” means the capability of identifying geographical coordinate with certain accuracy.

Section 5.2b (Scope)

The term “devices operating under general authorization” means that devices would be entitled to use the spectrum with no individual frequency planning/coordination (not be entitled to interference protection from the others) and includes that the devices are specified in Part 15, Title 47 of the Code of Federal Regulations such as TV bands, 900MHz, 2.4GHz, and 5GHz bands and Part 96, Title 47 of the Code of Federal Regulations such as general authorized access in 3.5GHz bands.