## <unassigned>

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Type of Project: New IEEE Standard
PAR Request Date: 08-Sep-2018

PAR Approval Date: PAR Expiration Date:

Status: Unapproved PAR, PAR for a New IEEE Standard

1.1 Project Number: <unassigned>

1.2 Type of Document: Recommended Practice

1.3 Life Cycle: Full Use

**2.1 Title:** Standard for Information Technology 1 - Telecommunications and 2 Information Exchange Between 3 Systems - Local and Metropolitan 4 Area Networks - Specific 5 Requirements - Part 19: Coexistence Methods for Sub-1 GHz Bands

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

**Contact Information for Working Group Chair** 

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3.2 Sponsoring Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee (C/LM)

**Contact Information for Sponsor Chair** 

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4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 01/2020

4.3 Projected Completion Date for Submittal to RevCom

Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 02/2021

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

**5.2 Scope:** This recommended practice provides guidance on the implementation, configuration and commissioning of systems based on IEEE Std 802.11 S1G PHY and/or IEEE Std 802.15.4 SUN FSK PHY operating in Sub-1GHz bands so to achieve the best possible performance when sharing spectrum. This recommended practice includes recommendations to address regional regulatory requirements and constraints for license exempt operation.

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

**5.4 Purpose:** The purpose of the recommended practice is to enable the family of IEEE 802(R) wireless standards, specifically IEEE Std 802.15.4 and IEEE Std 802.11, to most effectively operate in license exempt bands below 1-GHz by providing best practices and coexistence methods independently operated TVBD networks. This recommended practice uses existing features of the referenced standards and provides guidance to implementers and users of IEEE 802(R) wireless standards.

**5.5** Need for the Project: There are many millions of devices based on IEEE Std 802.15.4 are currently operating in sub 1 GHz bands, and the field is expanding rapidly. Critical applications, such as grid modernization (smart grid) and internet of things (IoT) are using the low to moderate data rates capabilities of IEEE Std 802.15.4. IEEE Std 802.11 operates in the same bands and provides higher data rates. In anticipation of yet unforeseen usage models enabled by emerging technology, and fully realize the opportunity for successful deployment of products sharing the spectrum, strategies and tactics to achieve good coexistence performance are critical.

This recommended practice enables the family of IEEE 802(R) wireless standards, specifically IEEE Std 802.15.4 and IEEE Std 802.11, to most effectively operate in license exempt Sub-1GHz bands, by providing best practices and coexistence methods. This recommended practice uses existing features of the referenced standards and provides guidance to implementers and users of IEEE 802(R) wireless standards.

**5.6 Stakeholders for the Standard:** The stakeholders include silicon vendors, equipment manufacturers, utility network operators, with applications including smart grid, smart city, internet of things (IoT), home automation, medical and environmental monitoring.

## **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 Joint Development

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

8.1 Additional Explanatory Notes: