

P802.15.4m

Submitter Email: bheile@ieee.org

Type of Project: Amendment to IEEE Standard 802.15.4-2011

PAR Request Date: 01-Aug-2011

PAR Approval Date: 10-Sep-2011

PAR Expiration Date: 31-Dec-2015

Status: PAR for an Amendment to an existing IEEE Standard

Root Project: 802.15.4-2011

1.1 Project Number: P802.15.4m

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: IEEE Standard for Local and Metropolitan Area Networks Part 15.4: Low Rate Wireless Personal Area Networks (LR-WPANs) Amendment: TV White Space Between 54 MHz and 862 MHz Physical Layer

3.1 Working Group: Wireless Personal Area Network (WPAN) Working Group (C/LM/WG802.15)

Contact Information for Working Group Chair

Name: Robert Heile

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Contact Information for Working Group Vice-Chair

None

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

Contact Information for Sponsor Chair

Name: Paul Nikolich

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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: 07/2013

4.3 Projected Completion Date for Submittal to RevCom: 02/2014

5.1 Approximate number of people expected to be actively involved in the development of this project: 150

5.2 Scope: This amendment specifies a physical layer for 802.15.4 meeting TV white space regulatory requirements in as many regulatory domains as practical and also any necessary Media Access Control (MAC) changes needed to support this physical layer. The amendment enables operation in the VHF/UHF TV broadcast bands between 54 MHz and 862 MHz, supporting typical data rates in the 40 kbits per second to 2000 kbits per second range, to realize optimal and power efficient device command and control applications.

5.3 Is the completion of this standard dependent upon the completion of another standard: Yes

If yes please explain: Protocol to Access White Space database (PAWS) or similar database protocol standard.

5.4 Purpose: This document will not include a purpose clause.

5.5 Need for the Project: There are many instances in large area device command and control applications where infrastructure requirements need to be minimized for effective deployment. These needs are effectively served by the ability to operate 802.15.4 class networks in the TV white space spectrum.

5.6 Stakeholders for the Standard: -Communication device manufacturers and users, Utility service providers, Infrastructure operators, Device component suppliers, Industrial Automation providers, Building Automation providers, Intelligent Traffic System Providers, Large Scale Monitoring for Safety providers.

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 (Item Number and Explanation): 5.2 Scope: This amendment also provides mechanisms that enable coexistence with other 802 systems in the same band.