

P802.15.4m

Submitter Email: bheile@ieee.org

Type of Project: Amendment to IEEE Standard 802.15.4-2006

PAR Request Date: 26-May-2011

PAR Approval Date:

PAR Expiration Date:

Status: Unapproved PAR, PAR for an Amendment to an existing IEEE Standard

1.1 Project Number: P802.15.4m

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 15.4: Wireless Medium Access Control (MAC) and Physical Layer (PHY) Specifications for Low Rate Wireless Personal Area Networks (WPANs) Amendment: TV White Space PHY Layer

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

Contact Information for Working Group Chair

Name: Robert F Heile

Email Address: bheile@ieee.org

Phone: 781-929-4832

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

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: 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 and also any necessary MAC changes needed to support this physical layer. The amendment enables operation in the available TV white space, 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. It supports accepted methods of TV White Space coexistence in existence at the time of development.

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 802.15.4 wireless networks to take advantage of the TV white space spectrum for use in large scale device command and control applications.

5.5 Need for the Project: There are many instances in large scale 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

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): This amendment also provides mechanisms that enable coexistence with other 802 systems in the same band.