

## P802.15.4j

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**Submitter Email:** bheile@ieee.org

**Type of Project:** Amendment to IEEE Standard 802.15.4-2006

**PAR Request Date:** 02-Oct-2010

**PAR Approval Date:**

**PAR Expiration Date:**

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

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**1.1 Project Number:** P802.15.4j

**1.2 Type of Document:** Standard

**1.3 Life Cycle:** Full Use

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**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: Alternative Physical Layer Extension to support Medical Body Area Network (MBAN) services operating in the 2360-2400 MHz band

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**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

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**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

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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:** 11/2011

**4.3 Projected Completion Date for Submittal to RevCom:** 05/2012

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**5.1 Approximate number of people expected to be actively involved in the development of this project:** 20

**5.2 Scope:** This amendment defines a physical layer for 802.15.4 current revision in the 2360 to 2400 MHz band which complies with FCC MBAN rules and any modifications to the MAC needed to support this physical layer.

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

**5.4 Purpose:** This amendment describes support for Medical Body Area Network (MBAN) services operating in the band from 2360 to 2400 MHz. The FCC rules define the use of the MBAN band. The definition of this amendment allows 15.4 and MAC amendments such as 15.4e to be used in the MBAN band.

**5.5 Need for the Project:** 802.15.4 has always supported operation in appropriate frequency bands and an opportunity is now available to extend the operation of 15.4 into a band that is reserved for MBAN use. The FCC has made a NPRM (FCC NPRM 09-57) to allocate the band 2360 to 2400 MHz for Medical Body Area Network (or MBAN) systems using body sensor devices. Service and technical rules may allow such devices to operate in this band either on a licensed-by-rule basis under the Medical Device Radiocommunication Service (MedRadio Service) in Part 95 or on a licensed and non-exclusive basis under Part 90 along with a frequency coordination model to minimize interference to incumbent users in the band. This amendment will define an alternate PHY and the necessary modifications to the MAC that are needed to support the PHY operation according to the FCC rules in the MBAN band.

**5.6 Stakeholders for the Standard:** Wireless networks are already deployed to provide the flexible deployment of patient monitoring and home healthcare provision. The stakeholders include patients and healthcare providers both within hospitals and in residential

environments along with service providers that offer remote support facilities. Medical equipment manufacturers are also stakeholders for the standard.

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### **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

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

**If Yes please explain:** 802.15.6 is working on body area networks with potential medical applications

**and answer the following**

**Sponsor Organization:** IEEE 802

**Project/Standard Number:** 802.15.6

**Project/Standard Date:** 01-Dec-2011

**Project/Standard Title:** Draft Standard for Body Area Networks

**7.2 Joint Development**

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

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