P802.15.4n

Submitter Email: <u>bheile@ieee.org</u> Type of Project: Amendment to IEEE Standard 802.15.4-2011 PAR Request Date: 16-Feb-2012 PAR Approval Date: PAR Expiration Date: Status: Unapproved PAR, PAR for an Amendment to an existing IEEE Standard

1.1 Project Number: P802.15.4n 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: Physical Layer Utilizing Dedicated Medical Bands in China

 3.1 Working Group: Wireless Personal Area Network (WPAN) Working Group (C/LM/WG802.15)
 Contact Information for Working Group Chair Name: Robert Heile Email Address: <u>bheile@ieee.org</u> 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
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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: 05/2014

5.1 Approximate number of people expected to be actively involved in the development of this project: 150 **5.2 Scope:** This amendment defines a physical layer for IEEE Std. 802.15.4 utilizing the approved 174-216 MHz, 407-425 MHz and 608-630 MHz medical bands in China. This amendment defines modifications to the Medium Access Control (MAC) layer needed to support this new physical layer.

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

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

5.5 Need for the Project: The Ministry of Industry and Information Technology of the People's Republic of China has approved the 174-216 MHz, 407-425 MHz and 608-630 MHz bands for medical information transmission. IEEE Std. 802.15.4 has always supported operation in appropriate frequency bands and an opportunity is now available to extend the operation of IEEE Std. 802.15.4 into the bands approved for Chinese medical use. It is a good extension to amend the IEEE Std. 802.15.4 standards for Medical Body Area Network (MBAN) systems using devices in the above Chinese medical bands. This Project will define an alternate PHY and the necessary modifications to the MAC that are needed to support the PHY operation according to the Ministry of Industry and Information Technology of the People's Republic of China rules doc. # MIIT XBW 2005-423in the Chinese medical bands.

5.6 Stakeholders for the Standard: The stakeholders include medical equipment manufacturers, patients and healthcare providers both within hospitals and in residential environments. Stakeholders also include remote support facilities service 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?: Yes

If Yes please explain: IEEE Std. 802.15.6 has completed a standard on body area networks with a much broader scope having potential medical applications. IEEE P802.15.4J is working doing something similar to this proposed amendment but

IEEE P802.15.4j addresses USA dedicated vs China dedicated medical bands. See 8.1 below for additional information.

and answer the following

Sponsor Organization: IEEE Computer Society/LAN/MAN Standards Committee (C/LM) Project/Standard Number: IEEE Std. 802.15.6 (complete), IEEE P802.15.4j (in development) Project/Standard Date: 01-Feb-2013 Project/Standard Title: IEEE Std. 802.15.6: Standard for Wireless Body Area Networks

IEEE P802.15.4j: Amendment: Alternative Physical Layer Extension to support Medical Body Area Network (MBAN) services operating in the 2360-2400 MHz band

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): Comment for 7.1

IEEE Std. 802.15.6 addresses communication in the vicinity of, or inside a human body. It targets significantly higher data rates and even lower power consumption applications than possible with IEEE Std. 802.15.4. Comment for 7.1

IEEE P802.15.4j is a similar to this amendment but is addressing the use of the new US FCC 2360-2400 MHz band dedicated for medical applications (approval pending) rather than the 174-216 MHz, 407-425 MHz or 608-630 MHz Chinese bands dedicated for medical applications.