The PAR Copyright Release and <u>Signature Page</u> must be submitted by FAX to +1-732-875-0695 to the <u>NesCom Administrator</u>. If you have any questions, please contact the NesCom Administrator.

Once you approve and submit the following information, changes may only be made through the NesCom Administrator.

Draft PAR Confirmation Number: 186046127.16174 Submittal Email: bheile@ieee.org **Type of Project:** Amendment to an Existing Standard 802.15.4-2006 1.1 Project Number: P802.15.4d 1.2 Type of Document: Standard for 1.3 Life Cycle: Full 1.4 Is this project in ballot now? No 2.1 Title of Standard: 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: 3.1 Name of Working Group: Wireless Personal Area Network (WPAN) Working Group Contact information for Working Group Chair Robert F Heile Email: bheile@ieee.org Phone: 781-929-4832 **Contact Information for Working Group Vice Chair** Email: Phone: 3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks (C/LM) **Contact information for Sponsor Chair:** Paul Nikolich Email: p.nikolich@ieee.org Phone: 857-205-0050 **Contact information for Standards Representative:** Email: Phone: 3.3 Joint Sponsor:/() **Contact information for Sponsor Chair:** Email: Phone: **Contact information for Standards Representative:** Email: Phone: 4.1 Type of Ballot: Individual 4.2 Expected Date of Submission for Initial Sponsor Ballot: 2008-03 4.3 Projected Completion Date for Submittal to RevCom: 2008-07 5.1 Approximate number of people expected to work on this project: 100 5.2 Scope of Proposed Standard: This Project will define an amendment to the existing standard 802.15.4-2006. The proposed amendment shall be limited to defining a new PHY

1 of 3 9/19/2006 10:20 PM

Old Scope:

and such changes to the MAC as are necessary to support a new

frequency allocation (950 MHz) in Japan. The amendment shall completely follow the new technical conditions described in Japanese ministerial ordinance. The amendment shall coexist with

passive tag systems in the band.

5.3 Is the completion of this standard is dependent upon the completion of another standard: No If yes, please explain:

5.4 Purpose of Proposed Standard: It was always the intention for 802.15.4 to include support for an unlicensed sub 1GHz band in Japan, but none was available. The Japanese regulatory authority has now defined an unlicensed 950MHz band for RFID systems and hence this sub 1GHz band can also be used for IEEE802.15.4 in Japan for the first time. Interference in 950 MHz is lower than that in 2.4 GHz. Transmission distance in 950 MHz is also longer than that in 2.4 GHz. Due to improved range and reliability, this makes it appropriate for many applications for which 2.4GHz is not appropriate. The amendment to 802.15.4 will standardize a new PHY and necessary changes to the existing MAC to support Japanese 950 MHz.

Old Purpose:

5.5 Need for the Project: 802.15.4 has always embraced operation in 2 bands: 2.4GHz for global use and sub 1 GHz bands as regionally available. Currently 802.15.4 supports 906-928 MHz band in the US and the 868MHz band in Europe. This amendment will allow for similar operation in the sub 1GHz band in Japan for applications benefiting from better propagation characteristics – such as automatic meter reading and industrial control and monitoring Japan is a large and important market which makes undertaking a project like this worthwhile.

5.6 Stakeholders for the Standard: Given the expected broad deployment and use of wireless sensor and control networks in every aspect of the environment, the stakeholders are practically everybody.

Intellectual Property

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes

If yes, state date: 2006-09-19

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? Yes

If yes, please explain: MAC addresses

7.1 Are there other standards or projects with a similar scope? No

If yes, please explain:

and answer the following: Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Future Adoptions

Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? Do not know at this time

If Yes, the following questions must be answered:

Technical Committee Name and Number:

Other Organization Contact Information:

Contact person:

Contact Email address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

7.4 Additional Explanatory Notes: (Item Number and Explanation)

8.1 Sponsor Information:

Is the scope of this project within the approved scope/definition of the Sponsor's Charter? Yes If no, please explain:

Submit to NesCom

Save and Come Back Later

2 of 3 9/19/2006 10:20 PM

Contact the NesCom Administrator

3 of 3