**IEEE P802.15**

**Wireless Personal Area Networks**

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| Project | IEEE P802.15 Working Group for Wireless Personal Area Networks (WPANs) | |
| Title |  | |
| Date Submitted | [9 May, 2014] | |
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| Re: |  | |
| Abstract | [Working draft of SRU PAR] | |
| Purpose | [For discussion] | |
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**PAR**

**1.1 Assigned Project Number:** P802.15.4\_ (to be assigned by IEEE-SA)

**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: Radio Resource Measurement Mechanisms for Efficient Spectrum Resources Usage in WPANs

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

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

**4.1 Sponsor Balloting Information:** Individual

**4.2 Expected Date of submission of draft to IEEE-SA for Initial Sponsor Ballot:** July, 2016

**4.3 Projected Completion Date for Submittal to RevCom:** July, 2017

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

**5.2 Scope of the proposed standard:**This amendment to IEEE Std 802.15.4 defines radio resource measurement mechanisms for efficient spectrum resource utilization in WPANs. It specifies:  
- radio resource measurement functions;  
- information elements and data structures for the radio rsource measurements; and  
- procedures for collecting and exchanging radio resource measurement information to/with PAN coordinator.

**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 define radio resource measurement mechanisms in 802.15.4 WPANs. The specified radio resource measurement mechanisms will facilitate management functions in WPAN so that it can efficiently operate in spectrum resources usage.

**5.5 Need for the Project:**As various wireless systems are deployed in the shared and license exempt frequency bands including 2.4GHz and 915MHz bands, heavy interference has been occurred that limits the performance of the wireless systems. In order for these wireless systems to operate in better quality, a standardized set of radio resource measurement mechanisms is needed which will facilitate management functions in WPAN to achieve more efficient spectrum resource utilization.

**5.6 Stakeholders for the Standard:**wireless device manufacturers, equipment manufacturers, wireless sensor application developers, and users.

**6.1 Intellectual Property**

**a. Is the Sponsor aware of any copyright permissions needed for this project?:** No

**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

**7.3 International Standards Activities**

**a. Adoptions - Is there potential for this standard to be adopted by another organization?:** No

**b. Harmonization - Are you aware of another organization that may be interested in portions of this document in their standardization development efforts?:** No

**7.4 Does the sponsor foresee a longer term need for testing and/or certification services to assure conformity to the standard?:** No

**Additionally, is it anticipated that testing methodologies will be specified in the standard to assure consistency in evaluating conformance to the criteria specified in the standard?:** No

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