**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 | [12 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 of 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:** 100

**5.2 Scope of the proposed standard:**This amendment to IEEE Std 802.15.4 defines MAC related functions to enable spectrum resource measurement. It specifies  
- spectrum resource measurements, such as packet error ratio, delay, etc,  
- information elements and data structures to capture these measurements,   
- procedures for collecting and exchanging spectrum resource measurement information with higher layers or other devices.

**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 enable effective spectrum resource management in IEEE 802.15.4 for improved coexistence, better throughput, and improved interference mitigation among other things.

**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 limited performance of the wireless systems. In order for these wireless systems to operate more effectively, a standardized set of spectrum resource measurements is needed that will facilitate management functions in these networks.

**5.6 Stakeholders for the Standard:**The stakeholders include manufacturers and users of telecom, medical, environmental, energy, and consumer electronics equipment and manufacturers and users of equipment involving the use of wireless sensor and control networks.

**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):**