# P802.15.4

**Submitter Email:** bheile@ieee.org
**Type of Project:** Revision to IEEE Standard 802.15.4-2015
**PAR Request Date:** 09-Feb-2017
**PAR Approval Date:**
**PAR Expiration Date:**
**Status:** Unapproved PAR, PAR for a Revision to an existing IEEE Standard

**1.1 Project Number:** P802.15.4
**1.2 Type of Document:** Standard
**1.3 Life Cycle:** Full Use

**2.1 Title:** Standard for Low-Rate Wireless Networks

**Changes in title:** ~~IEEE~~ Standard for Low-Rate Wireless Networks

**3.1 Working Group:** Wireless Personal Area Network (WPAN) Working Group (C/LM/WG802.15)
**Contact Information for Working Group Chair**
**Name:** Robert Heile
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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
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**Contact Information for Standards Representative**
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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:** 07/2018
**4.3 Projected Completion Date for Submittal to RevCom**
**Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.:** 10/2018

**5.1 Approximate number of people expected to be actively involved in the development of this project:** 80

**5.2 Scope:** This standard defines the physical layer (PHY) and medium access control (MAC) sublayer specifications for low-data-rate wireless connectivity with fixed, portable, and moving devices with no battery or very limited battery consumption requirements. In addition, the standard provides modes that allow for precision ranging. PHYs are defined for devices operating in various license-exempt and other bands in a variety of geographic regions.

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

**5.4 Purpose:** The standard provides for ultra low complexity, ultra low cost, ultra low power consumption, and low data rate wireless connectivity among inexpensive devices, especially targeting the communications requirements of what in now commonly referred to as the Internet of Things. In addition, some of the alternate PHYs provide precision ranging capability that is accurate to one meter. Multiple PHYs are defined to support a variety of frequency bands.

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**5.5 Need for the Project:** There are a number errors, inconsistencies, and ambiguities in need of correction. Additionally there will be 6 completed amendments during the course of the revision that should be rolled up. These are 802.15.4n, 802.15.4q, 802.15.4s, 802.15.4t, 802.15.4u, and 802.15.4v

**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.

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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?:** No
**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:**