**Wireless Specialty Networks (WSN)**

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| Project | IEEE P802.15 Working Group for Wireless Specialty Networks (WSN) | |
| Title | **802.15.4 Revision PAR Working Draft** | |
| Date Submitted | [10 May 2022] | |
| Source | [Phil Beecher]  [Wi-SUN Alliance] | email: [pbeecher@wi-sun.org] |
| Re: | [March 802.15 Plenary Meeting held virtually] | |
| Abstract | [IEEE 802.15 Working Group & CAC Minutes] | |
| Purpose | [Official minutes of the Working Group Opening/Closing and CAC Sessions] | |
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P802.15

**Type of Project:** Revision to IEEE Standard 802.15.4-2020

**Project Request Type:** Initiation / Revision

**PAR Request Date:** dd MMM yyyy

**PAR Approval Date:** dd MMM yyyy

**PAR Expiration Date:** 31 Dec 2025

**PAR Status:** Active

**Root Project:** 802.15.4-2020

* 1. **Project Number:** P802.15.4
  2. **Type of Document:** Standard
  3. **Life Cycle:** Full Use

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

* 1. **Working Group:** Wireless Specialty Networks (WSN) Working Group (C/LM/802.15 WG)

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* 1. **Society and Committee:** IEEE Computer Society/LAN/MAN Standards Committee(C/LM)

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* 1. **Type of Ballot:** Individual

# Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot:

April 2024

# Projected Completion Date for Submittal to RevCom: Jun 2024

* 1. **Approximate number of people expected to be actively involved in the development of this project:** 50
  2. **Scope of proposed standard:** 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 a variety of geographic regions.

# Is the completion of this standard contingent upon the completion of another standard? No

* 1. **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 is 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.
  2. **Need for the Project:** This project is needed to incorporate accumulated maintenance changes (editorial and technical corrections) into the standard and to include approved amendments. The amendments include IEEE Std 802.15.4w, IEEE Std 802.15.4y, IEEE Std 802.15.4z, IEEE Std 802.15.4aa which are approved. One additional amendment is currently under development.
  3. **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.

# Intellectual Property

* + 1. **Is the Standards Committee aware of any copyright permissions needed for this project?**

No

# Is the Standards Committee aware of possible registration activity related to this project?

Yes

**Explanation:** The RAC may want to review for correct and consistent usage of registry terms.

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

* 1. **Is it the intent to develop this document jointly with another organization?** No

**8.1 Additional Explanatory Notes:** 5.5 The amendment currently under development is:

1. P802.15.4ab - Amendment: Enhanced Ultra Wide-Band (UWB) Physical Layers (PHYs) and Associated Medium Access and Control (MAC) sublayer Enhancements