P802.11ba

This PAR is valid until 31-Dec-2020.

PAR Extension Request Date:
PAR Extension Approval Date:
Extension Request Submitter Email:
Number of Previous Extensions Requested: 0

1. Number of years that the extension is being requested: 1
2. Why an Extension is Required (include actions to complete): An extension is needed to complete IEEE-SA balloting of the draft amendment. P802.11ba D6.0 completed initial IEEE-SA ballot on March 18, 2020, with 91% approval and 116 technical and editorial comments. Comment resolution is underway. The plan is to have the draft standard approved by the end of 2020. This extension request is a precautionary measure to account for any unforeseen circumstances and delays.
3.1. What date did you begin writing the first draft: 06 Feb 2018
3.2. How many people are actively working on the project:100
3.3. How many times a year does the working group meet?
In person: 6
Via teleconference: 15
3.4. How many times a year is a draft circulated to the working group: 4
3.5. What percentage of the Draft is stable: 99%
3.6. How many significant work revisions has the Draft been through: 6
4. When will/did initial Standards Association Balloting begin: Feb 2020

When do you expect to submit the proposed standard to RevCom: Oct 2020
Has this document already been adopted by another source? (if so please identify) No

For an extension request, the information on the original PAR below is not open to modification.

Submitter Email: adrian.p.stephens@ieee.org
Type of Project: Amendment to IEEE Standard 802.11-2016
Project Request Type: Initiation / Amendment
PAR Request Date: 19 Sep 2016
PAR Approval Date: 07 Dec 2016
PAR Expiration Date: 31 Dec 2020
PAR Status: Active
Root Project: 802.11-2016

1.1 Project Number: P802.11ba
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Project Title: Standard for Information Technology--Telecommunications and Information Exchange Between Systems Local and Metropolitan Area Networks--Specific Requirements Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications Amendment: Wake-up Radio Operation

3.1 Working Group: Wireless LAN Working Group(C/LM/802.11 WG)
3.1.1 Contact Information for Working Group Chair:
Name: Dorothy Stanley
Email Address: dstanley1389@gmail.com
3.1.2 Contact Information for Working Group Vice Chair:
Name: Jon Rosdahl
Email Address: jrosdahl@ieee.org
3.2 Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee(C/LM)
3.2.1 Contact Information for Standards Committee Chair:
Name: Paul Nikolich
Email Address: p.nikolich@ieee.org
3.2.2 Contact Information for Standards Committee Vice Chair:
Name: James Gilb

Email Address: gilb@ieee.org

3.2.3 Contact Information for Standards Representative:

Name: James Gilb

Email Address: gilb@ieee.org

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot: Nov 2019

4.3 Projected Completion Date for Submittal to RevCom: May 2020

5.1 Approximate number of people expected to be actively involved in the development of this project: 100

5.2.a Scope of the complete standard: The scope of this standard is to define one medium access control (MAC) and several physical layer (PHY) specifications for wireless connectivity for fixed, portable, and moving stations (STAs) within a local area.

5.2.b Scope of the project: This amendment defines a physical (PHY) layer specification and defines modifications to the medium access control (MAC) layer specification that enables operation of a wake-up radio (WUR). The wake-up frames carry only control information. The reception of the wake-up frame by the WUR can trigger a transition of the primary connectivity radio out of sleep. The WUR is a companion radio to the primary connectivity radio and meets the same range requirement as the primary connectivity radio. The WUR devices coexist with legacy IEEE 802.11 devices in the same band. The WUR has an expected active receiver power consumption of less than one milliwatt.

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

5.4 Purpose: The purpose of this standard is to provide wireless connectivity for fixed, portable, and moving stations within a local area. This standard also offers regulatory bodies a means of standardizing access to one or more frequency bands for the purpose of local area communication.

5.5 Need for the Project: Low power devices manifest themselves in a number of applications and Internet-of-Things (IOT) usage cases. These use cases include healthcare, smart home, industrial sensors, wearables, etc. Devices used in these applications are usually powered by a battery. Prolonging the battery lifetime while in some use cases also maintaining low latency becomes an imperative requirement. A typical OFDM active receiver consumes tens to hundreds of milliwatts. To further reduce power consumption, devices use power save modes. Devices based on the IEEE 802.11 power save modes periodically wake up from a sleep state to receive information from an access point (AP) and to know whether there are data to receive from the AP. The longer the devices stay in the sleep state, the lower power the devices consume but at the expense of increased latency of data reception. Power efficient mechanisms need to be used with battery-operated devices while maintaining low latency where it is required.

5.6 Stakeholders for the Standard: Manufacturers and users of semiconductors, personal computers, enterprise networking devices, consumer electronic devices, home networking equipment, producers of industrial sensors, mobile devices, and cellular operators.

6.1 Intellectual Property

6.1.1 Is the Standards Committee aware of any copyright permissions needed for this project? No

6.1.2 Is the Standards Committee 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 Is it the intent to develop this document jointly with another organization? No

---

8.1 Additional Explanatory Notes :