IEEE P802.11
Wireless LANs

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| A PAR Proposal for BCS |
| Date: 2018-07-03 |
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# PAR

**P802.11**

**Submitter Email:**
**Type of Project:** Amendment to IEEE Standard 802.11
**PAR Request Date:**
**PAR Approval Date:
PAR Expiration Date:
Status:** Unapproved PAR, PAR for an amendment to an existing IEEE Standard

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

**2.1 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: Broadcast Service

**3.1 Working Group:** Wireless LAN Working Group (C/LM/WG802.11)
**Contact Information for Working Group Chair Name:** Dorothy Stanley
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**3.2 Sponsoring Society and Committee:** IEEE Computer Society/LAN/MAN Standards Committee (C/LM)
**Contact Information for Sponsor Chair**

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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:**July 2021
**4.3 Projected Completion Date for Submittal to RevCom:**March 2022

**5.1 Approximate number of people expected to be actively involved in the development of this project:** 50.

**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 specifies modifications to the IEEE 802.11 medium access control (MAC) specifications that enable enhanced transmission and reception of broadcast data.

**5.3 Is the completion of this standard dependent 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:**

The number of mobile devices incorporating IEEE 802.11 is steadily growing.

Broadcast service through IEEE 802.11 creates new market

It provides low cost, unlicensed broadcast method.

Broadcast Services extends the reach of WLAN to markets and use cases that require efficient distribution of local information such as:

* Information announcement systems in public locations, e.g., airports, stadium, etc.
* Sensor information collection, e.g., asset tracking
* Non-safety related transportation applications operating in unlicensed bands

Some of the broadcast use cases have needs for protecting broadcast traffic and also the privacy of that traffic, in ways that are not addressed by the current standard.

**5.6 Stakeholders for the Standard:**

Stakeholders include chip makers to deliver PHY and MAC sub-systems, mobile devices, personal computers, consumer electronics, as well as system integrators, telecom operators, transportation industries, multiple system operators and video content suppliers.

**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?: Yes**

**If yes please explain:** Project may define new management frames (extending the existing IEEE 802.11 frame structure) to support its new features. These frames will include fields that contain 48-bit MAC addresses. It is not expected that any new namespaces for allocation under

RAC control will be defined.

**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**

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

5.2b: The project considers broadcasting data without association.

5.5: The current IEEE 802.11 standard has a GTKSA security framework for multicast. This security framework uses a single shared key with a symmetric algorithm. This means any STA in the BSS can forge broadcast frames. The GTKSA security framework works well only if all the stations in the BSS are trusted.