IEEE P802.11
Wireless LANs

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| RCMA PAR Proposal  |
| Date: 08/24/2020 |
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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: Enhanced service with Data Privacy Protection

**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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Name:** Jon Rosdahl
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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:**
**4.3 Projected Completion Date for Submittal to RevCom:**

**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 Std 802.11 medium access control (MAC) specification to specify new mechanisms that improve user privacy.

This amendment preserves the existing IEEE Std 802.11 mechanisms that could fulfil current user privacy compliance obligations to enable secure deployment of data privacy services.

**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:**

Mobile devices incorporating IEEE Std 802.11 are ubiquitous, and IEEE std 802.11 compliant devices have been the target of various privacy related attacks, i.e. eavesdropping and user fingerprinting, which have created substantial privacy concerns. Personal mobile devices have been and currently are being used to obtain sensitive, personal information about the devices’ users such as where they go, when they go, to whom they speak to, what information they access, etc. The new privacy fulfillment mechanisms in IEEE Std 802.11 may affect the user experience.

**5.6 Stakeholders for the Standard:**

Manufacturers and users of semiconductors, personal computers, enterprise networking devices, consumer electronic devices, home networking equipment, and mobile devices; together with cellular 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?: No**

**If yes please explain:**

**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):**

1. Trust, security, and privacy are closely intertwined. Trust is necessary but insufficient to ensure security, and security is necessary but insufficient for privacy.
2. Data privacy is concerned with control of data that is, or can be used to construct, personally identifiable information (PII) and personally correlated information (PCI).
3. IEEE std 802.11 specifies a communications protocol, which contains data or auxiliary data related to a user. As such, use of 802.11 may generate PII and PCI.
4. Retaining user control of PII and PCI generated as a result of using 802.11 is a core goal.
5. IEEE 802E aims to identify the privacy threat models and associated solutions, and this proposed project aims at standardization of solutions that are applicable to 802.11. IEEE 802E provides the privacy compliances guidelines for this proposed project.