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Type of Project: Modify Existing Approved PAR

PAR Request Date: 07-Feb-2010

PAR Approval Date: 25-Mar-2010

PAR Expiration Date: 31-Dec-2012

Status: Modification to a Previously Approved PAR for the Revision of a Standard 1609.4-2006

Root PAR: P1609.4 **Approved on:** 26-Sep-2008

Project Record: 1609.4

1.1 Project Number: P1609.4

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Standard for Wireless Access in Vehicular Environments (WAVE) - Multi-Channel Operation

3.1 Working Group: Dedicated Short Range Communication Working Group (VT/ITS/1609_WG)

Contact Information for Working Group Chair

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3.2 Sponsoring Society and Committee: IEEE Vehicular Technology Society/Intelligent Transportation Systems (VT/ITS)

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Name: Dennis Bodson

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Contact Information for Standards Representative

None

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 07/2010

4.3 Projected Completion Date for Submittal to RevCom: 12/2010

5.1 Approximate number of people expected to be actively involved in the development of this project: 26

5.2 Scope: The scope of this standard is the specification of medium access control (MAC) sublayer functions and services that support multi-channel wireless connectivity between IEEE 802.11 Wireless Access in Vehicular Environments (WAVE) devices.

Old Scope: This standard describes multi-channel wireless radio operations, WAVE mode, medium access control (MAC) and physical layers (PHYs), including the operation of control channel (CCH) and service channel (SCH) interval timers, parameters for priority access, channel switching and routing, management services, and primitives designed for multi-channel operations.

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

5.4 Purpose: To enable effective mechanisms that control the operation of upper layer data transfers across multiple channels, without requiring knowledge of physical layer (PHY) parameters, and describe the multi-channel operation channel routing and switching for different scenarios.

Old Purpose: To enable effective mechanisms that control the operation of upper layer across multiple channels, without requiring knowledge of PHY parameters, and describe the multi-channel operation channel routing and switching for different scenarios.

5.5 Need for the Project: The Dedicated Short Range Communication (DSRC) 5.9GHz band was allocated to the Intelligent Transportation System (ITS) by the Federal Communication Commission (FCC). The ITS program is managed by the Federal Highway Administration Joint Program Office for ITS. The requirement for use of multi-channel wireless communications is based on the medium access and physical layer protocol and services initially defined in the ASTM Standard E2213-03, Dedicated Short Range Communications (DSRC), now revised as the draft standard, IEEE 802.11p, Wireless Access to Vehicular Environments (WAVE),

under consideration in IEEE 802.11p Task Group. The upper layer protocols and services requirements are described the IEEE P1609 family of standards that use IEEE 802.11p. Standardization of the upper layer protocols and services support the vehicle-to-vehicle and vehicle-to-roadside communication requirements of the U.S. Department of Transportation National ITS Architecture and the U.S. Department of Transportation ITS Joint Program Office initiatives. Benefits for the ITS program in enabling wireless communications is for vehicle operators, dispatch centers, traffic management centers, emergency response centers, route guidance, safety and amber alerts, and response to traveler emergencies. Experience from the Vehicle-Infrastructure Integration project, requirements identified during and after the development of the trial-use standard, and comments submitted regarding the trial-use standard will be considered during the revision project.

5.6 Stakeholders for the Standard: The stakeholders for the project are the U.S. Department of Transportation Joint Intelligent Transportation Systems Office, automobile manufacturers, State and local transportation officials, toll authorities and toll tag manufacturers, public safety officials, commercial vehicle manufacturers, and public transit officials.

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

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

7.2 International Activities

a. Adoption

Is there potential for this standard (in part or in whole) to be adopted by another national, regional or international organization?: No

b. Joint Development

Is it the intent to develop this document jointly with another organization?: No

c. Harmonization

Are you aware of another organization that may be interested in portions of this document in their standardization development efforts?: No

8.1 Additional Explanatory Notes (Item Number and Explanation): The working group members determined that a simplified scope statement was needed since there were changes made in the draft that required the modification of the scope statement during the revision development cycle. There is no change to purpose or need statement.