

# IEEE Standard for Wireless Access in Vehicular Environments— Security Services for Applications and Management Messages

## Amendment 1

IEEE Vehicular Technology Society

Sponsored by the  
Intelligent Transportation Systems Committee

# IEEE Standard for Wireless Access in Vehicular Environments— Security Services for Applications and Management Messages

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**Intelligent Transportation Systems Committee  
of the  
IEEE Vehicular Technology Society**

Approved 28 September 2017

**IEEE-SA Standards Board**

**Abstract:** Secure message formats and processing for use by Wireless Access in Vehicular Environments (WAVE) devices, including methods to secure WAVE management messages and methods to secure application messages are defined. Administrative functions necessary to support the core security functions are described.

**Keywords:** cryptography, IEEE 1609.2™, security, wireless access in vehicular environments (WAVE)

#### **Acknowledgment**

The IEEE P1609 Working Group would like to acknowledge significant contributions made to this standard by Drew van Duren.

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The Institute of Electrical and Electronics Engineers, Inc.  
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PDF: ISBN 978-1-5044-4270-1 STD22746  
Print: ISBN 978-1-5044-4271-8 STDPD22746

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## Introduction

This introduction is not part of IEEE Std 1609.2a-2017, IEEE Standard for Wireless Access in Vehicular Environments—Security Services for Applications and Management Messages—Amendment 1.

This amendment addresses multiple needs to enhance and extend IEEE Std 1609.2-2016:

- Since the publication of IEEE Std 1609.2-2016, a number of errors, omissions, and ambiguities have been discovered, which this amendment corrects.
- Industry stakeholders have requested additional functionality, in particular better support for compact expressions of ranges of Service Specific Permissions (SSPs).
- Test vectors are provided to enable implementers to gain confidence in correctness of their implementation before running interoperability tests.
- Additional informative material is provided to assist implementers of the standard and users of the security services in understanding the intended implementation and use.

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# IEEE Standard for Wireless Access in Vehicular Environments— Security Services for Applications and Management Messages

## Amendment 1

NOTE—The editing instructions contained in this amendment define how to merge the material contained therein into the existing base standard and its amendments to form the comprehensive standard.<sup>1</sup>

The editing instructions are shown in **bold italics**. Four editing instructions are used: change, delete, insert, and replace. **Change** is used to make corrections in existing text or tables. The editing instruction specifies the location of the change and describes what is being changed by using ~~strike through~~ (to remove old material) and underscore (to add new material). **Delete** removes existing material. **Insert** adds new material without disturbing the existing material. Insertions may require renumbering. Also, renumbering instructions are given in the editing instruction. **Replace** is used to make changes in figures or equations by removing the existing figure or equation and replacing it with a new one. Editing instructions, change markings, and this NOTE will not be carried over into future editions because the changes will be incorporated into the base standard.

### 3. Definitions, abbreviations, and acronyms

#### 3.1 Definitions

*Delete the following definitions:*

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<sup>1</sup> Notes in text, tables, and figures of a standard are given for information only and do not contain requirements needed to implement this standard.