



ATIS-0700025.v002

ATIS Standard on -

**Wireless Emergency Alert (WEA) International Roaming
Specification**



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Published by

Alliance for Telecommunications Industry Solutions
1200 G Street, NW, Suite 500
Washington, DC 20005

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Wireless Emergency Alert (WEA) International Roaming Specification

Alliance for Telecommunications Industry Solutions

Approved February 17, 2020.

Abstract

This standard provides the requirements for presentation of emergency alerts when U.S. and Canadian users are roaming throughout the U.S. and Canada, when U.S. and Canadian users roam elsewhere in the world where 3GPP PWS-based alerting is supported, and when international roamers from beyond North America roam into North America with a 3GPP PWS-capable mobile device. This Standard supports the requirements of the FCC Report & Order 16-127 and the FCC Order on Reconsideration 17-143.

Foreword

The Alliance for Telecommunication Industry Solutions (ATIS) serves the public through improved understanding between carriers, customers, and manufacturers. The Wireless Technologies and Systems Committee (WTSC) develops and recommends standards and technical reports related to wireless and/or mobile services and systems, including service descriptions and wireless technologies. WTSC develops and recommends positions on related subjects under consideration in other North American, regional, and international standards bodies.

The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages. The word *may* denotes an optional capability that could augment the standard. The standard is fully functional without the incorporation of this optional capability.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, WTSC 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time of consensus on this document, WTSC, which was responsible for its development, had the following leadership:

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- M. Younge, WTSC Vice Chair (T-Mobile)
- P. Musgrove, WTSC SN Chair (AT&T)
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The WTSC Systems and Networks (SN) Subcommittee was responsible for the development of this document.

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Preface

The authority-to-individual emergency alerting capability to mobile devices was originally called Commercial Mobile Alert System (CMAS) in the first three Reports and Orders from the FCC. This standard was originally developed based upon the CMAS terminology and CMAS was operational in April 2012. However, in February 2013, the FCC renamed Commercial Mobile Alert System (CMAS) to Wireless Emergency Alerts (WEA) with associated updates to the appropriate sections of Part 11 of the 47 CFR. Subsequently, the FCC has issued additional enhancements and rules for this government-to-citizen emergency alerting to mobile devices capability and these are identified as modifications to WEA.

Consequently, this specification may use both the term CMAS and the term WEA. These terms should be considered as equivalent terms with WEA being the preferred term.

1 Scope, Purpose, & Application

1.1 Scope

The scope of this standard is to identify the capabilities of mobile devices to support Wireless Emergency Alert (WEA) international roaming.

3GPP Public Warning System (PWS)-based systems for wireless emergency alerting have been and will continue to be deployed in various countries during the next few years. It is highly desirable that a user from one country be able to roam to another country and still have the ability to receive a wireless emergency alert in the roamed-to area. Operators in different countries will likely use differing applications in the User Equipment (UE) to support PWS in their home country. The use of differing UE applications to support PWS from one country to the next will provide a challenge to support international roaming for WEA (an instance of a PWS-based system in the United States) and Wireless Public Alerting Service (WPAS) (an instance of a PWS-based system in Canada). The broadcast of differing languages in PWS messages in different countries also provides a challenge to support international roaming for WEA. These challenges are addressed in this standard.

The Earthquake and Tsunami Warning System (ETWS) is outside the scope of this standard.

1.2 Purpose

The purpose of this WEA international roaming standard is to provide requirements to mobile device manufacturers that allow for emergency alerts to be delivered and displayed to U.S. and Canadian users roaming throughout the U.S. and Canada, to allow for emergency alerts to be delivered and displayed when U.S. and Canadian users roam elsewhere in the world where 3GPP PWS-based alerting solutions are implemented, and to allow for emergency alerts to be delivered and displayed to roamers with PWS-capable mobile devices from beyond North America when they roam into North America.

1.3 Application

This standard is applicable to mobile devices that support PWS as specified in 3GPP TS 22.268 [Ref 5].