



ATIS-0700010.v004

ATIS Standard on -

**Wireless Emergency Alert (WEA) 3.0 via EPS Public Warning  
System Specification**



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# Wireless Emergency Alert (WEA) 3.0 via EPS Public Warning System Specification

Alliance for Telecommunications Industry Solutions

Approved April 6, 2022

## Abstract

This Standard describes the use of the Evolved Packet System (EPS) Public Warning System (PWS) for the broadcast of Wireless Emergency Alert (WEA) 3.0 messages and includes the mapping of WEA 3.0 application level messages to the Cell Broadcast Center (CBC) message structure as used within the EPS.

## Foreword

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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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- T. Brooks, WTSC SN Chair (T-Mobile US)
- P. Musgrove, WTSC SN Vice Chair (AT&T)
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The WTSC Systems & 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 & Orders from the Federal Communications Commission (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 CMAS to Wireless Emergency Alert (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-individual emergency alerting capability to mobile devices 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.

This ATIS specification is the WEA 3.0 standard for the WEA via Evolved Packet System (EPS) Public Warning System (PWS) and is based upon the cumulative WEA enhancements identified up through the January 2018 FCC Second Report & Order and Second Order on Reconsideration, FCC 13-4 [Ref 22]. The use of the term WEA in this specification refers to WEA 3.0, unless otherwise specifically indicated.

The regulatory background is described in detail in the Service Description in ATIS-0700035 [Ref 19].

## 1 Scope, Purpose, & Application

### 1.1 Scope

The scope of this standard is the support of WEA 3.0 via the EPS PWS. This standard covers the mapping of WEA 3.0 messages onto the 3rd Generation Partnership Project (3GPP)-defined PWS message structure within the EPS.

This standard is not intended to describe an overall end-to-end WEA 3.0 architecture, but includes clarifications that may be lacking in existing 3GPP specifications.

The WEA 3.0 interface with the Federal network and the mobile device behavior upon reception of a WEA 3.0 alert are specified in separate standards [Ref 9 & 10].

NOTE: ATIS-0700036 *Wireless Emergency Alert (WEA) 3.0 Mobile Device Behavior (MDB) Specification* [Ref 9], also supports the WEA 3.0 functionality of this Standard even though this access technology is not explicitly referenced in the WEA 3.0 MDB specification.

### 1.2 Purpose

The purpose of this standard is to describe the use of the EPS PWS for the delivery of WEA 3.0 messages. The standard includes the mapping of WEA 3.0 application level messages to the Cell Broadcast Center (CBC) message structure as used within the EPS.

### 1.3 Application

This standard is applicable to the mapping of WEA 3.0 messages to the Warning Message Delivery service on EPS.