ATIS-0700010.v002

ATIS Standard on -

Enhanced Wireless Emergency Alert (eWEA) via EPS Public Warning System Specification

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Alliance for Telecommunications Industry Solutions

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Abstract

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

D. Zelmer, WTSC Chair (AT&T)

M. Younge, WTSC Vice Chair (T-Mobile)

P. Musgrove, WTSC SN Chair (AT&T)

G. Schumacher, WTSC SN Vice Chair (Sprint)

D. Sennett, Technical Editor (AT&T)

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 and 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 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-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 Enhanced Wireless Emergency Alert (eWEA) standard for the eWEA via Evolved Packet System (EPS) Public Warning System (PWS) and is based upon the WEA enhancements identified in the September 2016 FCC Report & Order on WEA Enhancements, FCC 16-127 [Ref 11]. This specification supersedes ATIS-0700010, *CMAS via EPS Public Warning System Specification,* and its associated Supplement A. Any assumptions, requirements, and principles from the original published ATIS-0700010 and the associated ATIS-0700010 Supplement A that are applicable to eWEA are included in this ATIS specification.

1 Scope, Purpose, & Application

1.1 Scope

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

The support of eWEA via the Evolved Multicast Broadcast Multimedia Service (eMBMS) is beyond the scope of this Standard.

This standard is not intended to describe an overall end-to-end eWEA or PWS architecture and may include clarifications that may be lacking in existing 3GPP specifications.

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

> NOTE: ATIS-0700036, *eWEA Mobile Device Behavior (MDB) Specification (a revised version of J-STD-100)* [Ref 9], also supports the eWEA functionality of this Standard, even though this access technology is not explicitly referred in the eWEA mobile device behavior specification.

1.2 Purpose

The purpose of this standard is to describe the use of the EPS PWS for the delivery of eWEA messages. The standard includes the mapping of eWEA 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 eWEA messages to the warning message delivery service on EPS.