ATIS-0700006.v002

ATIS Standard on -

Enhanced Wireless Emergency Alert (eWEA) via GSM/UMTS Cell Broadcast Service Specification

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Alliance for Telecommunications Industry Solutions

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Abstract

This Standard describes the use of the GSM/UMTS Cell Broadcast Service for the broadcast of WEA messages and includes the mapping of WEA application level messages to the Cell Broadcast Service message structure. 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)

P. Sanders, Technical Editor (one2many)

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 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 based upon the WEA enhancements identified in the September 2016 FCC Report & Order on WEA Enhancements, FCC 16-127 [Ref 5]. This specification supersedes ATIS-0700006, *CMAS via GSM/UMTS Cell Broadcast Service Specification,* and its associated Supplement A. Any assumptions, requirements, and principles from the original published ATIS-0700006 and the associated ATIS-0700006 Supplement A applicable to eWEA are included in this ATIS Standard.

1 Scope, Purpose, & Application

1.1 Scope

The scope of this standard is the support of Enhanced Wireless Emergency Alert (eWEA) via the Global System for Mobile Communications (GSM)/Universal Mobile Telecommunications System (UMTS) Cell Broadcast Service. This standard covers the mapping of eWEA messages onto the 3GPP-defined Cell Broadcast Service.

This standard is not intended to describe an overall end-to-end eWEA or Cell Broadcast architecture and may include clarifications of Cell Broadcast Service that may be lacking in existing 3GPP specifications. The implementation guidelines and best practices for the Cell Broadcast Service are provided in a separate ATIS Standard [Ref 4] which contains clarifications applicable to any application that uses the Cell Broadcast Service and is not necessarily restricted to eWEA.

eWEA does not require modifications to the 3GPP-defined Cell Broadcast Service.

The eWEA interface with the Federal network and the mobile device behavior upon reception of a eWEA alert is specified in separate standards [Ref 8 and 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 GSM/UMTS Cell Broadcast Service for the broadcast of eWEA messages. The standard includes the mapping of eWEA application level messages to the Cell Broadcast Service message structure.

1.3 Application

This standard is applicable to the mapping of eWEA messages to the Cell Broadcast Service on GSM or UMTS networks.