



FEASIBILITY STUDY

ATIS-0700027

FEASIBILITY STUDY FOR WEA CELL BROADCAST GEO-TARGETING

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ATIS-0700027, *Feasibility Study for WEA Cell Broadcast Geo-Targeting*

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Feasibility Study for WEA Cell Broadcast Geo-Targeting

Alliance for Telecommunications Industry Solutions

Approved December 2, 2015

Abstract

This feasibility study performs a technical analysis of the geo-targeting of Wireless Emergency Alert (WEA) Messages. This feasibility study is in response to Recommendations 3.6 and 3.7 of the December 2014 Federal Communications Commission (FCC) Communications Security, Reliability & Interoperability Council (CSRIC) Working Group 2 Wireless Emergency Alerts final report of December 3, 2014.

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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ATIS Standard on –

Feasibility Study for WEA Cell Broadcast Geo-Targeting

1 Scope, Purpose, & Application

1.1 Scope

The scope of this document is a feasibility study of the geo-targeting of Wireless Emergency Alert (WEA) Messages to address recommendations from the Federal Communications Commission (FCC) Communications Security, Reliability & Interoperability Council (CSRIC).

1.2 Purpose

At the December 3, 2014 meeting, the FCC CSRIC approved the final report from the CSRIC Working Group 2, Wireless Emergency Alerts [Ref 1].

The FCC has received the recommendations from the CSRIC working group and at the time of the completion of this feasibility study, the FCC has issued a Notice of Proposed Rulemaking (NPRM). The CSRIC working group report does contain recommendations that require action by the Alliance for Telecommunications Industry Solutions (ATIS). Specifically, Recommendation 3.6 [Ref 1] (as quoted below) tasks industry to study cell broadcast geo-targeting for WEA alerts:

“Recommendation 3.6: It is recommended that industry, FEMA and Alert Originators collaborate on an ATIS/TIA feasibility study of WEA Cell Broadcast Geo-targeting. The feasibility study will investigate technology enhancements, including mobile-assisted geo-targeting, for enhancing the delivery of alert messages to a given geocode, circle, or polygon. The WEA Cell Broadcast Geo-targeting feasibility study should leverage the results of research, including the DHS Studies on Geo-targeting which are currently underway. The results of the ATIS/TIA feasibility study will be reported at the regular WEA partner meetings hosted by the FCC-CTIA-DHS-FEMA-NWS-CMSPs.

Note: This WEA Cell Broadcast Geo-targeting feasibility study should include the evaluation of simple versus complex polygons, number of maximum points in polygon, polygons with crossing lines within the polygon, responsibility for validation of polygons, multiple polygons, multiple circles, and combinations of polygons and circles.”

Recommendation 3.7 of the CSRIC working group report [Ref 1] (as quoted below) requires the study be completed one year after acceptance of the recommendation by the CSRIC (that were accepted on December 3, 2014).

“Recommendation 3.7 It is recommended that the WEA Cell Broadcast Geo-targeting feasibility study in Recommendation 3.6 be completed within one year after this recommendation is adopted by the full CSRIC in order to be available for input into the FCC rule making process.”

1.3 Application

This feasibility study is applicable to commercial mobile service providers (CMSPs), to the FCC, to the FCC CSRIC and to the WEA stakeholders that include the FCC, the Cellular Telecommunications Industry Association (CTIA), the Department of Homeland Security (DHS), the Federal Emergency Management Agency (FEMA), the National Weather Service (NWS), and CMSPs.