



J-STD-102

**JOINT ATIS/TIA CMAS FEDERAL ALERT GATEWAY TO  
CMSP GATEWAY INTERFACE TEST SPECIFICATION**

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#### J-STD-102, *Joint ATIS/TIA CMAS Federal Alert Gateway to CMSP Gateway Interface Test Specification*

Is an ATIS & TIA Joint Standard developed by the **WTSC-G3GSN** Subcommittee under the **ATIS Wireless Technologies and Systems Committee (WTSC)** and the **TR-45.8 Core Networks - Mobile and Personal Communications Standards** Subcommittee under the **TIA Engineering Committee TR-45**.

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# JOINT ATIS/TIA CMAS FEDERAL ALERT GATEWAY TO CMSP GATEWAY INTERFACE TEST SPECIFICATION

**Alliance for Telecommunications Industry Solutions**

Approved January 2011

## **Abstract**

This Standard defines the operational testing procedures for communications between the Federal Alert Gateway and the Commercial Mobile Service Provider (CMSP) Gateway over the Reference Point "C" Interface including any processing functionality within the FEMA-administered Commercial Mobile Alert Service (CMAS) entities and within the CMSP-administered CMAS entities that directly impact communications over the Reference Point "C" Interface.

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The mandatory requirements are designated by the words *must/shall* and recommendations by the words *may/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 message definitions in the Annexes of this document are color coded related to their functionality and interpretation

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.

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The **ATIS WTSC-G3GSN** Subcommittee and the **TIA TR-45.8** Subcommittee were responsible for the development of this document.

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# Joint ATIS/TIA CMAS Federal Alert Gateway to CMSP Gateway Interface Test Specification

## 1 SCOPE, PURPOSE, & APPLICATION

This Standard is a joint Standard between the Alliance for Telecommunications Industry Solutions (ATIS) and the Telecommunications Industry Association (TIA).

### 1.1 Scope

This Standard defines operational testing procedures for the communications between the Federal Alert Gateway and the Commercial Mobile Service Provider (CMSP) Gateway over the C-Interface. This includes operational testing of all processing functionality within the FEMA-administered Commercial Mobile Alert Service (CMAS) entities and the CMSP-administered CMAS entities that directly impacts communications over the C-Interface. Operational testing of all other processing within the FEMA and CMSP entities including the CMSP infrastructure is beyond the scope of this Standard.

### 1.2 Purpose

The purpose of interface testing is to evaluate whether systems or components transmit data and control information correctly to each other. In addition, the tests defined in this Standard may be used during regression testing when updates are made to either the Federal Alert Gateway or the CMSP Gateway.

Specifically, the Joint ATIS/TIA CMAS Federal Alert Gateway to CMSP Gateway Interface Testing Specification defines a set of tests to verify the following minimal set of functionality during interface and regression testing:

- ◆ Ability to complete the C-Interface startup procedures:
- ◆ Ability to bring up the IPSec tunnel.
- ◆ Ability to bring up the TCP/IP connection.
- ◆ Ability to receive, process, and acknowledge valid CMAS Alert, Update, Cancel, and Required Monthly Test (RMT) messages.
- ◆ Ability to handle transmission control cease and resume messages.
- ◆ Ability to handle link test messages.
- ◆ Ability to perform CAP retrieval.

This Standard is not intended to define test cases for the complete development lifecycle, nor is it intended to provide complete requirements verification or complete compliance testing. Requirements verification testing is typically performed during the unit, integration, and system testing phases and is beyond the scope of this Standard.