

support and perform at its CMS provider gateways.

(a) *General.* The CMS provider gateway must provide secure, redundant, and reliable connections to receive Alert Messages from the Federal alert gateway. Each CMS provider gateway must be identified by a unique IP address or domain name.

(b) *Authentication and Validation.* The CMS provider gateway must authenticate interactions with the Federal alert gateway, and validate Alert Message integrity and parameters. The CMS provider gateway must provide an error message immediately to the Federal alert gateway if a validation fails.

(c) *Security.* The CMS provider gateway must support standardized IP-based security mechanisms such as a firewall, and support the defined CMAS “C” interface and associated protocols between the Federal alert gateway and the CMS provider gateway.

(d) *Geographic Targeting.* The CMS provider gateway must determine whether the provider has elected to transmit an Alert Message within a specified alert area and, if so, map the Alert Message to an associated set of transmission sites.

(e) *Message Management.* (1) Formatting. The CMS provider gateway is not required to perform any formatting, reformatting, or translation of an Alert Message, except for transcoding a text, audio, video, or multimedia file into the format supported by mobile devices.

(2) Reception. The CMS provider gateway must support a mechanism to

stop and start Alert Message deliveries from the Federal alert gateway to the CMS provider gateway.

(3) Prioritization. The CMS provider gateway must process an Alert Message on a first in-first out basis except for Presidential Alerts, which must be processed before all non-Presidential alerts.

(4) Distribution. A Participating CMS provider must deploy one or more CMS provider gateways to support distribution of Alert Messages and to manage Alert Message traffic.

(5) Retransmission. The CMS provider gateway must manage and execute Alert Message retransmission, and support a mechanism to manage congestion within the CMS provider’s infrastructure.

(f) *CMS Provider Profile.* The CMS provider gateway will provide profile information on the CMS provider for the Federal alert gateway to maintain at the Federal alert gateway. This profile information must be provided by an authorized CMS provider representative to the Federal alert gateway administrator. The profile information must include the data listed in Table 10.320(f) and must comply with the following procedures:

(1) The information must be provided 30 days in advance of the date when the CMS provider begins to transmit CMAS alerts.

(2) Updates of any CMS provider profiles must be provided in writing at least 30 days in advance of the effective change date.

TABLE 10.320(f)—CMSP PROFILE ON FEDERAL ALERT GATEWAY

Profile parameter	Parameter election	Description
CMSP Name .....	.....	Unique identification of CMSP.
CMSP gateway Address .....	IP address or Domain Name. Alternate IP address .....	Optional and subject to implementation.
Geo-Location Filtering .....	<yes/no> .....	If “yes” the only CMAM issued in the listed states will be sent to the CMSP gateway. If “no”, all CMAM will be sent to the CMSP gateway.
If yes, list of states .....	CMAC Geocode for state .....	List can be state name or abbreviated state name.

**§ 10.330 Provider infrastructure requirements.**

This section specifies the general functions that a Participating CMS Provider is required to perform within their infrastructure. Infrastructure

functions are dependent upon the capabilities of the delivery technologies implemented by a Participating CMS Provider.

(a) Distribution of Alert Messages to mobile devices.

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(b) Authentication of interactions with mobile devices.

(c) Reference Points D & E. Reference Point D is the interface between a CMS Provider gateway and its infrastructure. Reference Point E is the interface between a provider's infrastructure and mobile devices including air interfaces. Reference Points D and E protocols are defined and controlled by each Participating CMS Provider.

### § 10.340 Digital television transmission towers retransmission capability.

Licenseses and permittees of non-commercial educational broadcast television stations (NCE) or public broadcast television stations (to the extent such stations fall within the scope of those terms as defined in section 397(6) of the Communications Act of 1934 (47 U.S.C. 397(6))) are required to install on, or as part of, any broadcast television digital signal transmitter, equipment to enable the distribution of geographically targeted alerts by commercial mobile service providers that have elected to transmit CMAS alerts. Such equipment and technologies must have the capability of allowing licenseses and permittees of NCE and public broadcast television stations to receive CMAS alerts from the Alert Gateway over an alternate, secure interface and then to transmit such CMAS alerts to CMS Provider Gateways of participating CMS providers. This equipment must be installed no later than eighteen months from the date of receipt of funding permitted under section 606(b) of the WARN Act or 18 months from the effective date of these rules, whichever is later.

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### § 10.350 CMAS testing requirements.

This section specifies the testing that will be required, no later than the date of deployment of the CMAS, of CMAS components.

(a) *Required Monthly Tests.* Testing of the CMAS from the Federal Alert Gateway to each Participating CMS Provider's infrastructure shall be conducted monthly.

(1) A Participating CMS Provider's Gateway shall support the ability to receive a required monthly test (RMT)

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message initiated by the Federal Alert Gateway Administrator.

(2) Participating CMS Providers shall schedule the distribution of the RMT to their CMAS coverage area over a 24 hour period commencing upon receipt of the RMT at the CMS Provider Gateway. Participating CMS Providers shall determine the method to distribute the RMTs, and may schedule over the 24 hour period the delivery of RMTs over geographic subsets of their coverage area to manage traffic loads and to accommodate maintenance windows.

(3) A Participating CMS Provider may forego an RMT if the RMT is pre-empted by actual alert traffic or if an unforeseen condition in the CMS Provider infrastructure precludes distribution of the RMT. A Participating CMS Provider Gateway shall indicate such an unforeseen condition by a response code to the Federal Alert Gateway.

(4) The RMT shall be initiated only by the Federal Alert Gateway Administrator using a defined test message. Real event codes or alert messages shall not be used for the CMAS RMT message.

(5) A Participating CMS Provider shall distribute an RMT within its CMAS coverage area within 24 hours of receipt by the CMS Provider Gateway unless pre-empted by actual alert traffic or unable due to an unforeseen condition.

(6) A Participating CMS Provider may provide mobile devices with the capability of receiving RMT messages.

(7) A Participating CMS Provider must retain an automated log of RMT messages received by the CMS Provider Gateway from the Federal Alert Gateway.

(b) *Periodic C Interface Testing.* In addition to the required monthly tests, a Participating CMS Provider must participate in periodic testing of the interface between the Federal Alert Gateway and its CMS Provider Gateway. This periodic interface testing is not intended to test the CMS Provider's infrastructure nor the mobile devices but rather is required to ensure the availability/viability of both gateway functions. Each CMS Provider Gateway shall send an acknowledgement to the Federal Alert Gateway upon receipt of