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website or through transmittal to the Commission.

(b) Broadband internet access service is a mass-market retail service by wire or radio that provides the capability to transmit data to and receive data from all or substantially all internet endpoints, including any capabilities that are incidental to and enable the operation of the communications service, but excluding dial-up internet access service. This term also encompasses any service that the Commission finds to be providing a functional equivalent of the service described in the previous sentence or that is used to evade the protections set forth in this part.

(c) A network management practice is reasonable if it is appropriate and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband internet access service.

[83 FR 7922, Feb. 22, 2018]

PART 9—911 REQUIREMENTS

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Subpart A—Purpose and Definitions

§9.1 Purpose.

The purpose of this part is to set forth the 911 and E911 service requirements and conditions applicable to telecommunications carriers (subpart B); commercial mobile radio service (CMRS) providers (subpart C); interconnected Voice over Internet Protocol (VoIP) providers (subpart D); providers of telecommunications relay services (TRS) for persons with disabilities (subpart E); multi-line telephone systems (MLTS) (subpart F); and Mobile-Satellite Service (MSS) providers (subpart G). The rules in this part also include requirements to help ensure the resiliency, redundancy, and reliability of communications systems, particularly 911 and E911 networks and/or systems (subpart H).

§9.2 [Reserved]

§9.3 Definitions.

Terms with definitions including the ''(RR)'' designation are defined in the

same way in § 2.1 of this chapter and in the Radio Regulations of the International Telecommunication Union.

911 calls. Any call initiated by an end user by dialing 911 for the purpose of accessing an emergency service provider. For wireless carriers, all 911 calls include those they are required to transmit pursuant to subpart C of this part.

Alternative location information. Location information (which may be coordinate-based) sufficient to identify the caller's civic address and approximate in-building location, including floor level, in large buildings.

Appropriate local emergency authority. An emergency answering point that has not been officially designated as a Public Safety Answering Point (PSAP), but has the capability of receiving 911 calls and either dispatching emergency services personnel or, if necessary, relaying the call to another emergency service provider. An appropriate local emergency authority may include, but is not limited to, an existing local law enforcement authority, such as the police, county sheriff, local emergency medical services provider, or fire department.

Automated dispatchable location. Automatic generation of dispatchable location.

Automatic Location Information (ALI). Information transmitted while providing E911 service that permits emergency service providers to identify the geographic location of the calling party.

Automatic Number Identification (ANI). For 911 systems, the Automatic Number Identification (ANI) identifies the calling party and may be used as the callback number.

Commercial mobile radio service (CMRS). A mobile service that is:

(1)(i) Provided for profit, *i.e.*, with the intent of receiving compensation or monetary gain;

(ii) An interconnected service; and

(iii) Available to the public, or to such classes of eligible users as to be effectively available to a substantial portion of the public; or

(2) The functional equivalent of such a mobile service described in paragraph (1) of this definition.

(3) A variety of factors may be evaluated to make a determination whether the mobile service in question is the functional equivalent of a commercial mobile radio service, including: Consumer demand for the service to determine whether the service is closely substitutable for a commercial mobile radio service; whether changes in price for the service under examination, or for the comparable commercial mobile radio service, would prompt customers to change from one service to the other; and market research information identifying the targeted market for the service under review.

(4) Unlicensed radio frequency devices under part 15 of this chapter are excluded from this definition of Commercial mobile radio service.

Common carrier or *carrier.* Any common carrier engaged in interstate Communication by wire or radio as defined in section 3(h) of the Communications Act of 1934, as amended (the Act), and any common carrier engaged in intrastate communication by wire or radio, notwithstanding sections 2(b) and 221(b) of the Act. Communications assistant (CA). A person who transliterates or interprets conversation between two or more end users of TRS.

Configured. The settings or configurations for a particular MLTS installation have been implemented so that the MLTS is fully capable when installed of dialing 911 directly and providing MLTS notification as required under the statute and rules. This does not preclude the inclusion of additional dialing patterns to reach 911. However, if the system is configured with these additional dialing patterns, they must be in addition to the default direct dialing pattern.

Designated PSAP. The Public Safety Answering Point (PSAP) designated by the local or state entity that has the authority and responsibility to designate the PSAP to receive wireless 911 calls.

Dispatchable location. A location delivered to the PSAP with a 911 call that consists of the validated street address of the calling party, plus additional information such as suite, apartment or similar information necessary to adequately identify the location of

the calling party, except for Commercial Mobile Radio Service providers, which shall convey the location information required by subpart C of this part.

Earth station. A station located either on the Earth's surface or within the major portion of the Earth's atmosphere intended for communication:

(1) With one or more space stations; or

(2) With one or more stations of the same kind by means of one or more reflecting satellites or other objects in space. (RR)

Emergency Call Center. A facility that subscribers of satellite commercial mobile radio services call when in need of emergency assistance by dialing ''911'' on their mobile earth station terminals.

Feeder link. A radio link from a fixed earth station at a given location to a space station, or vice versa, conveying information for a space radiocommunication service other than the Fixed-Satellite Service. The given location may be at a specified fixed point or at any fixed point within specified areas. (RR)

Fixed-Satellite Service (FSS). A radiocommunication service between earth stations at given positions, when one or more satellites are used; the given position may be a specified fixed point or any fixed point within specified areas; in some cases this service includes satellite-to-satellite links, which may also be operated in the inter-satellite service; the Fixed-Satellite Service may also include feeder links of other space radiocommunication services. (RR)

Handset-based location technology. A method of providing the location of wireless 911 callers that requires the use of special location-determining hardware and/or software in a portable or mobile phone. Handset-based location technology may also employ additional location-determining hardware and/or software in the CMRS network and/or another fixed infrastructure.

iTRS access technology. Any equipment, software, or other technology issued, leased, or provided by an internet-based TRS provider that can be used to make and receive an internet-based TRS call.

Improvement to the hardware or software of the system. An improvement to the hardware or software of the MLTS, including upgrades to the core systems of the MLTS, as well as substantial upgrades to the software and any software upgrades requiring a significant purchase.

Interconnected VoIP service. (1) An interconnected Voice over Internet Protocol (VoIP) service is a service that:

(i) Enables real-time, two-way voice communications;

(ii) Requires a broadband connection from the user's location;

(iii) Requires internet protocol-compatible customer premises equipment (CPE); and

(iv) Permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network.

(2) Notwithstanding the foregoing, solely for purposes of compliance with the Commission's 911 obligations, an interconnected VoIP service includes a service that fulfills each of paragraphs (1)(i) through (iii) of this definition and permits users generally to terminate calls to the public switched telephone network.

Internet-based TRS (iTRS). A telecommunications relay service (TRS) in which an individual with a hearing or a speech disability connects to a TRS communications assistant using an Internet Protocol-enabled device via the internet, rather than the public switched telephone network. Except as authorized or required by the Commission, internet-based TRS does not include the use of a text telephone (TTY) or RTT over an interconnected voice over Internet Protocol service.

Internet Protocol Captioned Telephone Service (IP CTS). A telecommunications relay service that permits an individual who can speak but who has difficulty hearing over the telephone to use a telephone and an Internet Protocol-enabled device via the internet to simultaneously listen to the other party and read captions of what the other party is saying. With IP CTS, the connection carrying the captions between the relay service provider and

the relay service user is via the internet, rather than the public switched telephone network.

Internet Protocol Relay Service (IP Relay). A telecommunications relay service that permits an individual with a hearing or a speech disability to communicate in text using an Internet Protocol-enabled device via the internet, rather than using a text telephone (TTY) and the public switched telephone network.

Location-capable handsets. Portable or mobile phones that contain special location-determining hardware and/or software, which is used by a licensee to locate 911 calls.

MLTS notification. An MLTS feature that can send notice to a central location at the facility where the system is installed or to another person or organization regardless of location. Examples of notification include conspicuous on-screen messages with audible alarms for security desk computers using a client application, text messages for smartphones, and email for administrators. Notification shall include, at a minimum, the following information:

(1) The fact that a 911 call has been made;

(2) A valid callback number; and

(3) The information about the caller's location that the MLTS conveys to the public safety answering point (PSAP) with the call to 911; provided, however, that the notification does not have to include a callback number or location information if it is technically infeasible to provide this information.

Mobile Earth Station. An earth station in the Mobile-Satellite Service intended to be used while in motion or during halts at unspecified points. (RR)

Mobile-Satellite Service (MSS). (1) A radiocommunication service:

(i) Between mobile earth stations and one or more space stations, or between space stations used by this service; or

(ii) Between mobile earth stations, by means of one or more space stations.

(2) This service may also include feeder links necessary for its operation. (RR)

Mobile service. A radio communication service carried on between mobile stations or receivers and land stations, and by mobile stations communicating among themselves, and includes:

(1) Both one-way and two-way radio communications services;

(2) A mobile service which provides a regularly interacting group of base, mobile, portable, and associated control and relay stations (whether licensed on an individual, cooperative, or multiple basis) for private one-way or two-way land mobile radio communications by eligible users over designated areas of operation; and

(3) Any service for which a license is required in a personal communications service under part 24 of this chapter.

Network-based location technology. A method of providing the location of wireless 911 callers that employs hardware and/or software in the CMRS network and/or another fixed infrastructure, and does not require the use of special location-determining hardware and/or software in the caller's portable or mobile phone.

Multi-line telephone system or MLTS. A system comprised of common control units, telephone sets, control hardware and software and adjunct systems, including network and premises based systems, such as Centrex and VoIP, as well as PBX, Hybrid, and Key Telephone Systems (as classified by the Commission under part 68 of title 47, Code of Federal Regulations), and includes systems owned or leased by governmental agencies and non-profit entities, as well as for profit businesses.

Non-English language relay service. A telecommunications relay service that allows persons with hearing or speech disabilities who use languages other than English to communicate with voice telephone users in a shared language other than English, through a CA who is fluent in that language.

On-premises. In the context of a multi-line telephone system, within the fixed property (*e.g.* building(s), facilities, or campus) and under the operational control of a single administrative authority.

Person engaged in the business of installing an MLTS. A person that configures the MLTS or performs other tasks involved in getting the system

ready to operate. These tasks may include, but are not limited to, establishing the dialing pattern for emergency calls, determining how calls will route to the Public Switched Telephone Network (PSTN), and determining where the MLTS will interface with the PSTN. These tasks are performed when the system is initially installed, but they may also be performed on a more or less regular basis by the MLTS operator as the communications needs of the enterprise change. The MLTS installer may be the MLTS manager or a third party acting on behalf of the manager.

Person engaged in the business of managing an MLTS. The entity that is responsible for controlling and overseeing implementation of the MLTS after installation. These responsibilities include determining how lines should be distributed (including the adding or moving of lines), assigning and reassigning telephone numbers, and ongoing network configuration.

Person engaged in the business of manufacturing, importing, selling, or leasing an MLTS. A person that manufactures, imports, sells, or leases an MLTS.

Person engaged in the business of operating an MLTS. A person responsible for the day-to-day operations of the MLTS.

Pre-configured. An MLTS that comes equipped with hardware and/or software capable of establishing a setting that enables users to directly dial 911 as soon as the system is able to initiate calls to the public switched telephone network, so long as the MLTS is installed and operated properly. This does not preclude the inclusion of additional dialing patterns to reach 911. However, if the system is configured with these additional dialing patterns, they must be in addition to the default direct dialing pattern.

Private mobile radio service. A mobile service that meets neither the paragraph (1) nor paragraph (2) in the definition of *commercial mobile radio service* in this section. A mobile service that does not meet paragraph (1) in the definition of *commercial mobile radio service* in this section is presumed to be a private mobile radio service. Private mobile radio service includes the following:

(1) Not-for-profit land mobile radio and paging services that serve the licensee's internal communications needs as defined in part 90 of this chapter. Shared-use, cost-sharing, or cooperative arrangements, multiple licensed systems that use third party managers or users combining resources to meet compatible needs for specialized internal communications facilities in compliance with the safeguards of §90.179 of this chapter are presumptively private mobile radio services;

(2) Mobile radio service offered to restricted classes of eligible users. This includes entities eligible in the Public Safety Radio Pool and Radiolocation service.

(3) 220–222 MHz land mobile service and Automatic Vehicle Monitoring systems (part 90 of this chapter) that do not offer interconnected service or that are not-for-profit; and

(4) Personal Radio Services under part 95 of this chapter (General Mobile Services, Radio Control Radio Services, and Citizens Band Radio Services); Maritime Service Stations (excluding Public Coast stations) (part 80 of this chapter); and Aviation Service Stations (part 87 of this chapter).

Pseudo Automatic Number Identification (Pseudo-ANI). A number, consisting of the same number of digits as ANI, that is not a North American Numbering Plan telephone directory number and may be used in place of an ANI to convey special meaning. The special meaning assigned to the pseudo-ANI is determined by agreements, as necessary, between the system originating the call, intermediate systems handling and routing the call, and the destination system.

Public safety answering point or PSAP. An answering point that has been designated to receive 911 calls and route them to emergency services personnel.

Public Switched Network. Any common carrier switched network, whether by wire or radio, including local exchange carriers, interexchange carriers, and mobile service providers, that uses the North American Numbering Plan in connection with the provision of switched services.

Real-Time Text (RTT). Text communications that are transmitted over

Internet Protocol (IP) networks immediately as they are created, *e.g.*, on a character-by-character basis.

Registered internet-based TRS user. An individual that has registered with a VRS, IP Relay, or IP CTS provider as described in § 64.611.

Registered Location. The most recent information obtained by a provider of interconnected VoIP service or telecommunications relay services (TRS), as applicable, that identifies the physical location of an end user.

Space station. A station located on an object which is beyond, is intended to go beyond, or has been beyond, the major portion of the Earth's atmosphere. (RR)

Speech-to-speech relay service (STS). A telecommunications relay service that allows individuals with speech disabilities to communicate with voice telephone users through the use of specially trained CAs who understand the speech patterns of persons with speech disabilities and can repeat the words spoken by that person.

Statewide default answering point. An emergency answering point designated by the State to receive 911 calls for either the entire State or those portions of the State not otherwise served by a local PSAP.

Station. A station equipped to engage in radio communication or radio transmission of energy (47 U.S.C. 153(k)).

Telecommunications relay services (TRS). Telephone transmission services that provide the ability for an individual who has a hearing or speech disability to engage in communication by wire or radio with a hearing individual in a manner that is functionally equivalent to the ability of an individual who does not have a hearing or speech disability to communicate using voice communication services by wire or radio. Such term includes services that enable two-way communication between an individual who uses a text telephone or other nonvoice terminal device and an individual who does not use such a device, speech-to-speech services, video relay services and non-English relay services. TRS supersedes the terms ''dual party relay system,'' ''message relay services,'' and ''TDD Relay.''

Text telephone (TTY). A machine that employs graphic communication in the transmission of coded signals through a wire or radio communication system. TTY supersedes the term ''TDD'' or ''telecommunications device for the deaf,'' and TT.

Video relay service (VRS). A telecommunications relay service that allows people with hearing or speech disabilities who use sign language to communicate with voice telephone users through video equipment. The video link allows the CA to view and interpret the party's signed conversation and relay the conversation back and forth with a voice caller.

Wireline E911 Network. A dedicated wireline network that:

(1) Is interconnected with but largely separate from the public switched telephone network;

(2) Includes a selective router; and

(3) Is used to route emergency calls and related information to PSAPs, designated statewide default answering points, appropriate local emergency authorities or other emergency answering points.

Subpart B—Telecommunications Carriers

§ 9.4 Obligation to transmit 911 calls.

All telecommunications carriers shall transmit all 911 calls to a PSAP, to a designated statewide default answering point, or to an appropriate local emergency authority as set forth in § 9.5.

§ 9.5 Transition to 911 as the universal emergency telephone number.

As of December 11, 2001, except where 911 is already established as the exclusive emergency number to reach a PSAP within a given jurisdiction, telecommunications carriers shall comply with the following transition periods:

(a) Where a PSAP has been designated, telecommunications carriers shall complete all translation and routing necessary to deliver 911 calls to a PSAP no later than September 11, 2002.

(b) Where no PSAP has been designated, telecommunications carriers shall complete all translation and routing necessary to deliver 911 calls to the

statewide default answering point no later than September 11, 2002.

(c) Where neither a PSAP nor a statewide default answering point has been designated, telecommunications carriers shall complete the translation and routing necessary to deliver 911 calls to an appropriate local emergency authority, within nine months of a request by the State or locality.

(d) Where no PSAP nor statewide default answering point has been designated, and no appropriate local emergency authority has been selected by an authorized state or local entity, telecommunications carriers shall identify an appropriate local emergency authority, based on the exercise of reasonable judgment, and complete all translation and routing necessary to deliver 911 calls to such appropriate local emergency authority no later than September 11, 2002.

(e) Once a PSAP is designated for an area where none had existed as of December 11, 2001, telecommunications carriers shall complete the translation and routing necessary to deliver 911 calls to that PSAP within nine months of that designation.

§9.6 Obligation for providing a permissive dialing period.

Upon completion of translation and routing of 911 calls to a PSAP, a statewide default answering point, to an appropriate local emergency authority, or, where no PSAP nor statewide default answering point has been designated and no appropriate local emergency authority has been selected by an authorized state or local entity, to an appropriate local emergency authority, identified by a telecommunications carrier based on the exercise of reasonable judgment, the telecommunications carrier shall provide permissive dialing between 911 and any other seven-or ten-digit emergency number or an abbreviated dialing code other than 911 that the public has previously used to reach emergency service providers until the appropriate State or local jurisdiction determines to phase out the use of such seven-or ten-digit number entirely and use 911 exclusively.

§9.7 Obligation for providing an intercept message.

Upon termination of permissive dialing, as provided under §9.6, telecommunications carriers shall provide a standard intercept message announcement that interrupts calls placed to the emergency service provider using either a seven-or ten-digit emergency number or an abbreviated dialing code other than 911 and informs the caller of the dialing code change.

§9.8 Obligation of fixed telephony providers to convey dispatchable location.

(a) Providers of fixed telephony services shall provide automated dispatchable location with 911 calls beginning January 6, 2021.

(b) Paragraph (a) of this section contains information-collection and recordkeeping requirements. Compliance will not be required until after approval by the Office of Management and Budget. The Commission will publish a document in the FEDERAL REGISTER announcing that compliance date and revising this paragraph accordingly.

Subpart C—Commercial Mobile Radio Service

§9.9 Definitions.

Interconnection or *Interconnected*. Direct or indirect connection through automatic or manual means (by wire, microwave, or other technologies such as store and forward) to permit the transmission or reception of messages or signals to or from points in the public switched network.

Interconnected service. (1) A service:

(i) That is interconnected with the public switched network, or interconnected with the public switched network through an interconnected service provider, that gives subscribers the capability to communicate to or receive communication from all other users on the public switched network; or

(ii) For which a request for such interconnection is pending pursuant to section 332(c)(1)(B) of the Communications Act, 47 U.S.C. 332(c)(1)(B).

(2) A mobile service offers interconnected service even if the service

allows subscribers to access the public switched network only during specified hours of the day, or if the service provides general access to points on the public switched network but also restricts access in certain limited ways. Interconnected service does not include any interface between a licensee's facilities and the public switched network exclusively for a licensee's internal control purposes.

§ 9.10 911 Service.

(a) *Scope of section.* Except as described in paragraph (r) of this section, the following requirements of paragraphs (a) through (q) of this section are only applicable to CMRS providers, excluding mobile satellite service (MSS) operators, to the extent that they:

(1) Offer real-time, two way switched voice service that is interconnected with the public switched network; and

(2) Use an in-network switching facility that enables the provider to reuse frequencies and accomplish seamless hand-offs of subscriber calls. These requirements are applicable to entities that offer voice service to consumers by purchasing airtime or capacity at wholesale rates from CMRS licensees.

(b) *Basic 911 service.* CMRS providers subject to this section must transmit all wireless 911 calls without respect to their call validation process to a Public Safety Answering Point, or, where no Public Safety Answering Point has been designated, to a designated statewide default answering point or appropriate local emergency authority pursuant to § 9.4, provided that ''all wireless 911 calls'' is defined as ''any call initiated by a wireless user dialing 911 on a phone using a compliant radio frequency protocol of the serving carrier.''

(c) *Access to 911 services.* CMRS providers subject to this section must be capable of transmitting 911 calls from individuals with speech or hearing disabilities through means other than mobile radio handsets, *e.g.*, through the use of Text Telephone Devices (TTY). CMRS providers that provide voice communications over IP facilities are not required to support 911 access via TTYs if they provide 911 access via real-time text (RTT) communications, in accordance with 47 CFR part 67, except that RTT support is not required to the extent that it is not achievable for a particular manufacturer to support RTT on the provider's network.

(d) *Phase I enhanced 911 services.* (1) As of April 1, 1998, or within six months of a request by the designated Public Safety Answering Point as set forth in paragraph (j) of this section, whichever is later, licensees subject to this section must provide the telephone number of the originator of a 911 call and the location of the cell site or base station receiving a 911 call from any mobile handset accessing their systems to the designated Public Safety Answering Point through the use of ANI and Pseudo-ANI.

(2) When the directory number of the handset used to originate a 911 call is not available to the serving carrier, such carrier's obligations under the paragraph (d)(1) of this section extend only to delivering 911 calls and available call party information, including that prescribed in paragraph (l) of this section, to the designated Public Safety Answering Point.

Note to paragraph (d): With respect to 911 calls accessing their systems through the use of TTYs, licensees subject to this section must comply with the requirements in paragraphs (d)(1) and (2) of this section, as to calls made using a digital wireless system, as of October 1, 1998.

(e) *Phase II enhanced 911 service.* Licensees subject to this section must provide to the designated Public Safety Answering Point Phase II enhanced 911 service, *i.e.*, the location of all 911 calls by longitude and latitude in conformance with Phase II accuracy requirements (*see* paragraph (h) of this section).

(f) *Phase-in for network-based location technologies.* Licensees subject to this section who employ a network-based location technology shall provide Phase II 911 enhanced service to at least 50 percent of their coverage area or 50 percent of their population beginning October 1, 2001, or within 6 months of a PSAP request, whichever is later; and to 100 percent of their coverage area or 100 percent of their population within 18 months of such a request or by October 1, 2002, whichever is later.

(g) *Phase-in for handset-based location technologies*. Licensees subject to this section who employ a handset-based location technology may phase in deployment of Phase II enhanced 911 service, subject to the following requirements:

(1) Without respect to any PSAP request for deployment of Phase II 911 enhanced service, the licensee shall:

(i) Begin selling and activating location-capable handsets no later than October 1, 2001;

(ii) Ensure that at least 25 percent of all new handsets activated are location-capable no later than December 31, 2001;

(iii) Ensure that at least 50 percent of all new handsets activated are location-capable no later than June 30, 2002; and

(iv) Ensure that 100 percent of all new digital handsets activated are location-capable no later than December 31, 2002, and thereafter.

(v) By December 31, 2005, achieve 95 percent penetration of location-capable handsets among its subscribers.

(vi) Licensees that meet the enhanced 911 compliance obligations through GPS-enabled handsets and have commercial agreements with resellers will not be required to include the resellers' handset counts in their compliance percentages.

(2) Once a PSAP request is received, the licensee shall, in the area served by the PSAP, within six months or by October 1, 2001, whichever is later:

(i) Install any hardware and/or software in the CMRS network and/or other fixed infrastructure, as needed, to enable the provision of Phase II enhanced 911 service; and

(ii) Begin delivering Phase II enhanced 911 service to the PSAP.

(3) For all 911 calls from portable or mobile phones that do not contain the hardware and/or software needed to enable the licensee to provide Phase II enhanced 911 service, the licensee shall, after a PSAP request is received, support, in the area served by the PSAP, Phase I location for 911 calls or other available best practice method of providing the location of the portable or mobile phone to the PSAP.

(4) Licensees employing handset-based location technologies shall ensure that location-capable portable or mobile phones shall conform to industry interoperability standards designed to enable the location of such phones by multiple licensees.

(h) *Phase II accuracy*. Licensees subject to this section shall comply with the following standards for Phase II location accuracy and reliability, to be tested and measured either at the county or at the PSAP service area geographic level, based on outdoor measurements only:

(1) Network-based technologies:

(i) 100 meters for 67 percent of calls, consistent with the following benchmarks:

(A) One year from January 18, 2011, carriers shall comply with this standard in 60 percent of counties or PSAP service areas. These counties or PSAP service areas must cover at least 70 percent of the population covered by the carrier across its entire network. Compliance will be measured on a per-county or per-PSAP basis using, at the carrier's election, either:

(*1*) Network-based accuracy data; or

(*2*) Blended reporting as provided in paragraph (h)(1)(iv) of this section.

(B) Three years from January 18, 2011, carriers shall comply with this standard in 70 percent of counties or PSAP service areas. These counties or PSAP service areas must cover at least 80 percent of the population covered by the carrier across its entire network. Compliance will be measured on a per-county or per-PSAP basis using, at the carrier's election, either:

(*1*) Network-based accuracy data; or

(*2*) Blended reporting as provided in paragraph (h)(1)(iv) of this section.

(C) Five years from January 18, 2011, carriers shall comply with this standard in 100% of counties or PSAP service areas covered by the carrier. Compliance will be measured on a per-county or per-PSAP basis, using, at the carrier's election, either:

(*1*) Network-based accuracy data;

(*2*) Blended reporting as provided in paragraph (h)(1)(iv) of this section; or

(*3*) Handset-based accuracy data as provided in paragraph (h)(1)(v) of this section.

(ii) 300 meters for 90 percent of calls, consistent with the following benchmarks:

(A) Three years from January 18, 2011, carriers shall comply with this standard in 60 percent of counties or PSAP service areas. These counties or PSAP service areas must cover at least 70 percent of the population covered by the carrier across its entire network. Compliance will be measured on a per-county or per-PSAP basis using, at the carrier's election, either:

(*1*) Network-based accuracy data; or

(*2*) Blended reporting as provided in paragraph (h)(1)(iv) of this section.

(B) Five years from January 18, 2011, carriers shall comply in 70 percent of counties or PSAP service areas. These counties or PSAP service areas must cover at least 80 percent of the population covered by the carrier across its entire network. Compliance will be measured on a per-county or per-PSAP basis using, at the carrier's election, either:

(*1*) Network-based accuracy data; or

(*2*) Blended reporting as provided in paragraph (h)(1)(iv) of this section.

(C) Eight years from January 18, 2011, carriers shall comply in 85 percent of counties or PSAP service areas. Compliance will be measured on a per-county or per-PSAP basis using, at the carrier's election, either:

(*1*) Network-based accuracy data;

(*2*) Blended reporting as provided in paragraph (h)(1)(iv) of this section; or

(*3*) Handset-based accuracy data as provided in paragraph (h)(1)(v) of this section.

(iii) County-level or PSAP-level location accuracy standards for network-based technologies will be applicable to those counties or PSAP service areas, on an individual basis, in which a network-based carrier has deployed Phase II in at least one cell site located within a county's or PSAP service area's boundary. Compliance with the requirements of paragraphs (h)(1)(i) and (ii) of this section shall be measured and reported independently.

(iv) Accuracy data from both network-based solutions and handset-based solutions may be blended to measure compliance with the accuracy requirements of paragraphs (h)(1)(i)(A) through (C) and paragraphs (h)(1)(ii)(A) through (C) of this section. Such blending shall be based on weighting accuracy data in the ratio of assisted GPS (''A–GPS'') handsets to non-A–GPS handsets in the carrier's subscriber base. The weighting ratio shall be applied to the accuracy data from each solution and measured against the network-based accuracy requirements of paragraph (h)(1) of this section.

(v) A carrier may rely solely on handset-based accuracy data in any county or PSAP service area if at least 85 percent of its subscribers, network-wide, use A–GPS handsets, or if it offers A–GPS handsets to subscribers in that county or PSAP service area at no cost to the subscriber.

(vi) A carrier may exclude from compliance particular counties, or portions of counties, where triangulation is not technically possible, such as locations where at least three cell sites are not sufficiently visible to a handset. Carriers must file a list of the specific counties or portions of counties where they are using this exclusion within 90 days following approval from the Office of Management and Budget for the related information collection. This list must be submitted electronically into PS Docket No. 07–114, and copies must be sent to the National Emergency Number Association, the Association of Public-Safety Communications Officials-International, and the National Association of State 9–1–1 Administrators. Further, carriers must submit in the same manner any changes to their exclusion lists within thirty days of discovering such changes. This exclusion has sunset as of January 18, 2019.

(2) Handset-based technologies:

(i) Two years from January 18, 2011, 50 meters for 67 percent of calls, and 150 meters for 80 percent of calls, on a per-county or per-PSAP basis. However, a carrier may exclude up to 15 percent of counties or PSAP service areas from the 150-meter requirement based upon heavy forestation that limits handset-based technology accuracy in those counties or PSAP service areas.

(ii) Eight years from January 18, 2011, 50 meters for 67 percent of calls, and 150 meters for 90 percent of calls, on a per-county or per-PSAP basis. However, a carrier may exclude up to 15 percent of counties or PSAP service areas from the 150-meter requirement based upon heavy forestation that limits handset-

based technology accuracy in those counties or PSAP service areas.

(iii) Carriers must file a list of the specific counties or PSAP service areas where they are using the exclusion for heavy forestation within 90 days following (approval from the Office of Management and Budget for the related information collection). This list must be submitted electronically into PS Docket No. 07–114, and copies must be sent to the National Emergency Number Association, the Association of Public-Safety Communications Officials-International, and the National Association of State 9–1–1 Administrators. Further, carriers must submit in the same manner any changes to their exclusion lists within thirty days of discovering such changes.

(iv) Providers of new CMRS networks that meet the definition of covered CMRS providers under paragraph (a) of this section must comply with the requirements of paragraphs (h)(2)(i) through (iii) of this section. For this purpose, a ''new CMRS network'' is a CMRS network that is newly deployed subsequent to the effective date of the Third Report and Order in PS Docket No. 07–114 and that is not an expansion or upgrade of an existing CMRS network.

(3) Latency (Time to First Fix): For purposes of measuring compliance with the location accuracy standards of this paragraph, a call will be deemed to satisfy the standard only if it provides the specified degree of location accuracy within a maximum latency period of 30 seconds, as measured from the time the user initiates the 911 call to the time the location fix appears at the location information center: Provided, however, that the CMRS provider may elect not to include for purposes of measuring compliance therewith any calls lasting less than 30 seconds.

(i) *Indoor location accuracy for 911 and testing requirements*—(1) *Definitions*. The terms as used in this section have the following meaning:

(i) *Dispatchable location*. A location delivered to the PSAP by the CMRS provider with a 911 call that consists of the street address of the calling party, plus additional information such as suite, apartment or similar information necessary to adequately identify the location of the calling party. The street address of the calling party must be validated and, to the extent possible, corroborated against other location information prior to delivery of dispatchable location information by the CMRS provider to the PSAP.

(ii) *Media Access Control (MAC) Address*. A location identifier of a Wi-Fi access point.

(iii) *National Emergency Address Database (NEAD)*. A database that uses MAC address information to identify a dispatchable location for nearby wireless devices within the CMRS provider's coverage footprint.

(iv) *Nationwide CMRS provider*. A CMRS provider whose service extends to a majority of the population and land area of the United States.

(v) *Non-nationwide CMRS provider*. Any CMRS provider other than a nationwide CMRS provider.

(vi) *Test cities*. The six cities (San Francisco, Chicago, Atlanta, Denver/Front Range, Philadelphia, and Manhattan Borough) and surrounding geographic areas that correspond to the six geographic regions specified by the February 7, 2014 ATIS Document, ''Considerations in Selecting Indoor Test Regions,'' for testing of indoor location technologies.

(2) *Indoor location accuracy standards*. CMRS providers subject to this section shall meet the following requirements:

(i) *Horizontal location*. (A) Nationwide CMRS providers shall provide; dispatchable location, or; x/y location within 50 meters, for the following percentages of wireless 911 calls within the following timeframes, measured from the effective date of the adoption of this rule:

(*1*) Within 2 years: 40 percent of all wireless 911 calls.

(*2*) Within 3 years: 50 percent of all wireless 911 calls.

(*3*) Within 5 years: 70 percent of all wireless 911 calls.

(*4*) Within 6 years: 80 percent of all wireless 911 calls.

(B) Non-nationwide CMRS providers shall provide; dispatchable location or; x/y location within 50 meters, for the following percentages of wireless 911 calls within the following timeframes, measured from the effective date of the adoption of this rule:

(*1*) Within 2 years: 40 percent of all wireless 911 calls.

(*2*) Within 3 years: 50 percent of all wireless 911 calls.

(*3*) Within 5 years or within six months of deploying a commercially-operating VoLTE platform in their network, whichever is later: 70 percent of all wireless 911 calls.

(*4*) Within 6 years or within one year of deploying a commercially-operating VoLTE platform in their network, whichever is later: 80 percent of all wireless 911 calls.

(ii) *Vertical location*. CMRS providers shall provide vertical location information with wireless 911 calls as described in this section within the following timeframes measured from the effective date of the adoption of this rule:

(A) Within 3 years: All CMRS providers shall make uncompensated barometric data available to PSAPs with respect to any 911 call placed from any handset that has the capability to deliver barometric sensor information.

(B) Within 3 years: Nationwide CMRS providers shall develop one or more z-axis accuracy metrics validated by an independently administered and transparent test bed process as described in paragraph (i)(3)(i) of this section, and shall submit the proposed metric or metrics, supported by a report of the results of such development and testing, to the Commission for approval.

(C) By April 3, 2021: In each of the top 25 cellular market areas (CMAs), nationwide CMRS providers shall deploy either dispatchable location or z-axis technology.

(D) By April 3, 2023: In each of the top 50 CMAs, nationwide CMRS providers shall deploy either dispatchable location or z-axis technology.

(E) By April 3, 2025: Nationwide CMRS providers shall deploy on a nationwide basis either dispatchable location or z-axis technology.

(F) Non-nationwide CMRS providers that serve any of the top 25 or 50 CMAs will have an additional year to meet each of the benchmarks in paragraphs (i)(2)(ii)(C) and (D) of this section. All non-nationwide providers will have an additional year to meet the benchmark in paragraph (i)(2)(ii)(E) of this section by deploying either dispatchable location or z-axis technology throughout their network footprint.

(G) By January 6, 2022: All CMRS providers shall provide dispatchable location with wireless E911 calls if it is technically feasible for them to do so.

(H) CMRS providers that deploy z-axis technology must do so consistent with the following z-axis accuracy metric: Within 3 meters above or below (plus or minus 3 meters) the handset for 80% of wireless E911 calls made from the z-axis capable device. CMRS providers must deliver z-axis information in Height Above Ellipsoid. Where available to the CMRS provider, floor level information must be provided in addition to z-axis location information.

(I) CMRS providers that deploy z-axis technology must do so according to the following options:

(*1*) In each area where z-axis technology is used, deploy the technology to cover 80 percent of the population or 80 percent of the buildings that exceed three stories; or

(*2*) Deploy z-axis capable handsets enabled with z-axis technology on a nationwide basis (or throughout the CMRS provider's network footprint, as applicable).

(J) CMRS providers that deploy z-axis technology must comply with the following:

(*1*) CMRS providers must activate all network infrastructure necessary to support z-axis location by z-axis capable devices throughout the deployment area.

(*2*) CMRS providers may deploy z-axis technology upgrades by means of over-the-top applications as well as operating system or firmware upgrades. CMRS providers deploying z-axis technology must affirmatively push the z-axis technology to all existing z-axis capable device models on the provider's network that can receive it, and CMRS providers must continue to support the z-axis technology on these devices thereafter.

(*3*) A CMRS provider using the handset-based deployment option must make the technology available to existing z-axis capable devices nationwide; a CMRS provider using a CMA-based deployment option must make the technology available to all z-axis capable devices in the CMA. For all

new z-axis capable devices marketed to consumers, the z-axis technology must be pre-installed.

(*4*) A CMRS provider will be deemed to have met its z-axis technology deployment obligation so long as it either pre-installs or affirmatively pushes the location technology to end users so that they receive a prompt or other notice informing them that the application or service is available and what they need to do to download and enable the technology on their phone. A CMRS provider will be deemed in compliance with its z-axis deployment obligation if it makes the technology available to the end user in this manner even if the end user declines to use the technology or subsequently disables it.

(K) CMRS providers must validate dispatchable location technologies intended for indoor location in accordance with the provisions of paragraph (i)(3)(i) of this section.

(L) In each CMA where dispatchable location is used, nationwide CMRS providers must ensure that dispatchable location is supported by a sufficient number of total dispatchable location reference points to equal 25 percent of the CMA population.

(M) A z-axis capable device is one that can measure and report vertical location without a hardware upgrade. For z-axis location solutions that rely on barometric pressure sensor information, only devices that have such sensors installed shall be considered z-axis capable. In the case of location solutions that do not require barometric pressure sensor information, both devices with and without barometric sensors shall be considered z-axis capable, provided that they are software-upgradable.

(iii) *Compliance*. Within 60 days after each benchmark date specified in paragraphs (i)(2)(i) and (ii) of this section, CMRS providers must certify that they are in compliance with the location accuracy requirements applicable to them as of that date. CMRS providers shall be presumed to be in compliance by certifying that they have complied with the test bed and live call data provisions described in paragraph (i)(3) of this section.

(A) All CMRS providers must certify that the indoor location technology (or technologies) used in their networks are deployed consistently with the manner in which they have been tested in the test bed. A CMRS provider must update certification whenever it introduces a new technology into its network or otherwise modifies its network, such that previous performance in the test bed would no longer be consistent with the technology's modified deployment.

(B) CMRS providers that provide quarterly reports of live call data in one or more of the six test cities specified in paragraph (i)(1)(vi) of this section must certify that their deployment of location technologies throughout their coverage area is consistent with their deployment of the same technologies in the areas that are used for live call data reporting.

(C) Non-nationwide CMRS providers that do not provide service or report quarterly live call data in any of the six test cities specified in paragraph (i)(1)(vi) of this section must certify that they have verified based on their own live call data that they are in compliance with the requirements of paragraphs (i)(2)(i)(B) and (i)(2)(ii) of this section.

(iv) *Enforcement*. PSAPs may seek Commission enforcement within their geographic service area of the requirements of paragraphs (i)(2)(i) and (ii) of this section, but only so long as they have implemented policies that are designed to obtain all location information made available by CMRS providers when initiating and delivering 911 calls to the PSAP. Prior to seeking Commission enforcement, a PSAP must provide the CMRS provider with [30] days written notice, and the CMRS provider shall have an opportunity to address the issue informally. If the issue has not been addressed to the PSAP's satisfaction within 90 days, the PSAP may seek enforcement relief.

(3) *Indoor location accuracy testing and live call data reporting*—(i) *Indoor location accuracy test bed*. CMRS providers must establish the test bed described in this section within 12 months of the effective date of this rule. CMRS providers must validate technologies intended for indoor location, including

dispatchable location technologies and technologies that deliver horizontal and/or vertical coordinates, through an independently administered and transparent test bed process, in order for such technologies to be presumed to comply with the location accuracy requirements of this paragraph. The test bed shall meet the following minimal requirements in order for the test results to be considered valid for compliance purposes:

(A) Include testing in representative indoor environments, including dense urban, urban, suburban and rural morphologies;

(B) Test for performance attributes including location accuracy (ground truth as measured in the test bed), latency (Time to First Fix), and reliability (yield); and

(C) Each test call (or equivalent) shall be independent from prior calls and accuracy will be based on the first location delivered after the call is initiated.

(D) In complying with paragraph (i)(3)(i)(B) of this section, CMRS providers shall measure yield separately for each individual indoor location morphology (dense urban, urban, suburban, and rural) in the test bed, and based upon the specific type of location technology that the provider intends to deploy in real-world areas represented by that particular morphology. CMRS providers must base the yield percentage based on the number of test calls that deliver a location in compliance with any applicable indoor location accuracy requirements, compared to the total number of calls that successfully connect to the testing network. CMRS providers may exclude test calls that are dropped or otherwise disconnected in 10 seconds or less from calculation of the yield percentage (both the denominator and numerator).

(ii) *Collection and reporting of aggregate live 911 call location data.* CMRS providers providing service in any of the Test Cities or portions thereof must collect and report aggregate data on the location technologies used for live 911 calls in those areas.

(A) CMRS providers subject to this section shall identify and collect information regarding the location technology or technologies used for each 911 call in the reporting area during the calling period.

(B) CMRS providers subject to this section shall report Test City call location data on a quarterly basis to the Commission, the National Emergency Number Association, the Association of Public Safety Communications Officials, and the National Association of State 911 Administrators, with the first report due 18 months from the effective date of rules adopted in this proceeding.

(C) CMRS providers subject to this section shall also provide quarterly live call data on a more granular basis that allows evaluation of the performance of individual location technologies within different morphologies (e.g., dense urban, urban, suburban, rural). To the extent available, live call data for all CMRS providers shall delineate based on a per technology basis accumulated and so identified for:

(*1*) Each of the ATIS ESIF morphologies;

(*2*) On a reasonable community level basis; or

(*3*) By census block. This more granular data will be used for evaluation and not for compliance purposes.

(D) Non-nationwide CMRS providers that operate in a single Test City need only report live 911 call data from that city or portion thereof that they cover. Non-nationwide CMRS providers that operate in more than one Test City must report live 911 call data only in half of the regions (as selected by the provider). In the event a non-nationwide CMRS provider begins coverage in a Test City it previously did not serve, it must update its certification pursuant to paragraph (i)(2)(iii)(C) of this section to reflect this change in its network and begin reporting data from the appropriate areas. All non-nationwide CMRS providers must report their Test City live call data every 6 months, beginning 18 months from the effective date of rules adopted in this proceeding.

(E) Non-nationwide CMRS providers that do not provide coverage in any of the Test Cities can satisfy the requirement of this paragraph (i)(3)(ii) by collecting and reporting data based on the largest county within its footprint. In

addition, where a non-nationwide CMRS provider serves more than one of the ATIS ESIF morphologies, it must include a sufficient number of representative counties to cover each morphology.

(iii) *Data retention.* CMRS providers shall retain testing and live call data gathered pursuant to this section for a period of 2 years.

(4) *Submission of plans and reports.* The following reporting and certification obligations apply to all CMRS providers subject to this section, which may be filed electronically in PS Docket No. 07–114:

(i) *Initial implementation plan.* No later than 18 months from the effective date of the adoption of this rule, nationwide CMRS providers shall report to the Commission on their plans for meeting the indoor location accuracy requirements of paragraph (i)(2) of this section. Non-nationwide CMRS providers will have an additional 6 months to submit their implementation plans.

(ii) *Progress reports.* No later than 18 months from the effective date of the adoption of this rule), each CMRS provider shall file a progress report on implementation of indoor location accuracy requirements. Non-nationwide CMRS providers will have an additional 6 months to submit their progress reports. All CMRS providers shall provide an additional progress report no later than 36 months from the effective date of the adoption of this rule. The 36-month reports shall indicate what progress the provider has made consistent with its implementation plan, and the nationwide CMRS providers shall include an assessment of their deployment of dispatchable location solutions. For any CMRS provider participating in the development of the NEAD database, this progress report must include detail as to the implementation of the NEAD database described in paragraphs (i)(4)(iii) and (iv) of this section.

(iii) *NEAD privacy and security plan.* Prior to activation of the NEAD but no later than 18 months from the effective date of the adoption of this rule, the nationwide CMRS providers shall file with the Commission and request approval for a security and privacy plan for the administration and operation of the NEAD. The plan must include the identity of an administrator for the NEAD, who will serve as a point of contact for the Commission and shall be accountable for the effectiveness of the security, privacy, and resiliency measures.

(iv) *Dispatchable location use certification.* Prior to use of dispatchable location information to meet the Commission's 911 horizontal and indoor location accuracy requirements in paragraphs (i)(2)(i) and (ii) of this section, CMRS providers must certify that neither they nor any third party they rely on to obtain dispatchable location information will use dispatchable location information or associated data for any non-911 purpose, except with prior express consent or as otherwise required by law. The certification must state that CMRS providers and any third party they rely on to obtain dispatchable location information will implement measures sufficient to safeguard the privacy and security of dispatchable location information.

(v) *Z-axis use certification.* Prior to use of z-axis information to meet the Commission's 911 vertical location accuracy requirements in paragraph (i)(2)(ii) of this section, CMRS providers must certify that neither they nor any third party they rely on to obtain z-axis information will use z-axis information or associated data for any non-911 purpose, except with prior express consent or as otherwise required by law. The certification must state that CMRS providers and any third party they rely on to obtain z-axis information will implement measures sufficient to safeguard the privacy and security of z-axis location information.

(j) *Confidence and uncertainty data.* (1) Except as provided in paragraphs (j)(2) through (4) of this section, CMRS providers subject to this section shall provide for all wireless 911 calls, whether from outdoor or indoor locations, x- and y-axis (latitude, longitude) and z-axis (vertical) confidence and uncertainty information (C/U data) on a per-call basis upon the request of a PSAP. The data shall specify:

(i) The caller's location with a uniform confidence level of 90 percent, and;

(ii) The radius in meters from the reported position at that same confidence level. All entities responsible for transporting confidence and uncertainty between CMRS providers and PSAPs, including LECs, CLECs, owners of E911 networks, and emergency service providers, must enable the transmission of confidence and uncertainty data provided by CMRS providers to the requesting PSAP.

(2) Upon meeting the 3-year timeframe pursuant to paragraph (i)(2)(i) of this section, CMRS providers shall provide with wireless 911 calls that have a dispatchable location the C/U data for the x- and y-axis (latitude, longitude) required under paragraph (j)(1) of this section.

(3) Upon meeting the 6-year timeframe pursuant to paragraph (i)(2)(i) of this section, CMRS providers shall provide with wireless 911 calls that have a dispatchable location the C/U data for the x- and y-axis (latitude, longitude) required under paragraph (j)(1) of this section.

(4) Upon meeting the timeframes pursuant to paragraph (i)(2)(ii) of this section, CMRS providers shall provide with wireless 911 calls that have a dispatchable location the confidence and uncertainty data for z-axis (vertical) information required under paragraph (j)(1) of this section. Where available to the CMRS provider, CMRS providers shall provide with wireless 911 calls that have floor level information the confidence and uncertainty data for z-axis (vertical) information required under paragraph (j)(1) of this section.

(k) *Provision of live 911 call data for PSAPs*. Notwithstanding other 911 call data collection and reporting requirements in paragraph (i) of this section, CMRS providers must record information on all live 911 calls, including, but not limited to, the positioning source method used to provide a location fix associated with the call. CMRS providers must also record the confidence and uncertainty data that they provide pursuant to paragraphs (j)(1)–(4) of this section. This information must be made available to PSAPs upon request, and shall be retained for a period of two years.

(l) *Reports on Phase II plans*. Licensees subject to this section shall report to the Commission their plans for implementing Phase II enhanced 911 service, including the location-determination technology they plan to employ and the procedure they intend to use to verify conformance with the Phase II accuracy requirements by November 9, 2000. Licensees are required to update these plans within thirty days of the adoption of any change. These reports and updates may be filed electronically in a manner to be designated by the Commission.

(m) *Conditions for enhanced 911 services*—(1) *Generally*. The requirements set forth in paragraphs (d) through (h)(2) and in paragraph (j) of this section shall be applicable only to the extent that the administrator of the applicable designated PSAP has requested the services required under those paragraphs and such PSAP is capable of receiving and using the requested data elements and has a mechanism for recovering the PSAP's costs associated with them.

(2) *Commencement of six-month period*. (i) Except as provided in paragraph (m)(2)(ii) of this section, for purposes of commencing the six-month period for carrier implementation specified in paragraphs (d), (f) and (g) of this section, a PSAP will be deemed capable of receiving and using the data elements associated with the service requested, if it can demonstrate that it has:

(A) Ordered the necessary equipment and has commitments from suppliers to have it installed and operational within such six-month period; and

(B) Made a timely request to the appropriate local exchange carrier for the necessary trunking, upgrades, and other facilities.

(ii) For purposes of commencing the six-month period for carrier implementation specified in paragraphs (f) and (g) of this section, a PSAP that is Phase I-capable using a Non-Call Path Associated Signaling (NCAS) technology will be deemed capable of receiving and using the data elements associated with Phase II service if it can demonstrate that it has made a timely

request to the appropriate local exchange carrier for the ALI database upgrade necessary to receive the Phase II information.

(3) *Tolling of six-month period.* Where a wireless carrier has served a written request for documentation on the PSAP within 15 days of receiving the PSAP's request for Phase I or Phase II enhanced 911 service, and the PSAP fails to respond to such request within 15 days of such service, the six-month period for carrier implementation specified in paragraphs (d), (f), and (g) of this section will be tolled until the PSAP provides the carrier with such documentation.

(4) *Carrier certification regarding PSAP readiness issues.* At the end of the six-month period for carrier implementation specified in paragraphs (d), (f), and (g) of this section, a wireless carrier that believes that the PSAP is not capable of receiving and using the data elements associated with the service requested may file a certification with the Commission. Upon filing and service of such certification, the carrier may suspend further implementation efforts, except as provided in paragraph (m)(4)(x) of this section.

(i) As a prerequisite to filing such certification, no later than 21 days prior to such filing, the wireless carrier must notify the affected PSAP, in writing, of its intent to file such certification. Any response that the carrier receives from the PSAP must be included with the carrier's certification filing.

(ii) The certification process shall be subject to the procedural requirements set forth in §§1.45 and 1.47 of this chapter.

(iii) The certification must be in the form of an affidavit signed by a director or officer of the carrier, documenting:

(A) The basis for the carrier's determination that the PSAP will not be ready;

(B) Each of the specific steps the carrier has taken to provide the E911 service requested;

(C) The reasons why further implementation efforts cannot be made until the PSAP becomes capable of receiving and using the data elements associated with the E911 service requested; and

(D) The specific steps that remain to be completed by the wireless carrier and, to the extent known, the PSAP or other parties before the carrier can provide the E911 service requested.

(iv) All affidavits must be correct. The carrier must ensure that its affidavit is correct, and the certifying director or officer has the duty to personally determine that the affidavit is correct.

(v) A carrier may not engage in a practice of filing inadequate or incomplete certifications for the purpose of delaying its responsibilities.

(vi) To be eligible to make a certification, the wireless carrier must have completed all necessary steps toward E911 implementation that are not dependent on PSAP readiness.

(vii) A copy of the certification must be served on the PSAP in accordance with §1.47 of this chapter. The PSAP may challenge in writing the accuracy of the carrier's certification and shall serve a copy of such challenge on the carrier. See §§1.45 and 1.47 and 1.720 through 1.740 of this chapter.

(viii) If a wireless carrier's certification is facially inadequate, the six-month implementation period specified in paragraphs (d), (f), and (g) of this section will not be suspended as provided for in paragraph (m)(4) of this section.

(ix) If a wireless carrier's certification is inaccurate, the wireless carrier will be liable for noncompliance as if the certification had not been filed.

(x) A carrier that files a certification under this paragraph (m)(4) shall have 90 days from receipt of the PSAP's written notice that it is capable of receiving and using the data elements associated with the service requested to provide such service in accordance with the requirements of paragraphs (d) through (h) of this section.

(5) *Modification of deadlines by agreement.* Nothing in this section shall prevent Public Safety Answering Points and carriers from establishing, by mutual consent, deadlines different from those imposed for carrier and PSAP compliance in paragraphs (d), (f), and (g)(2) of this section.

(n) *Dispatch service.* A service provider covered by this section who offers dispatch service to customers may

meet the requirements of this section with respect to customers who use dispatch service either by complying with the requirements set forth in paragraphs (b) through (e) of this section, or by routing the customer's emergency calls through a dispatcher. If the service provider chooses the latter alternative, it must make every reasonable effort to explicitly notify its current and potential dispatch customers and their users that they are not able to directly reach a PSAP by calling 911 and that, in the event of an emergency, the dispatcher should be contacted.

(o) *Non-service-initialized handsets.* (1) Licensees subject to this section that donate a non-service-initialized handset for purposes of providing access to 911 services are required to:

(i) Program each handset with 911 plus the decimal representation of the seven least significant digits of the Electronic Serial Number, International Mobile Equipment Identifier, or any other identifier unique to that handset;

(ii) Affix to each handset a label which is designed to withstand the length of service expected for a non-service-initialized phone, and which notifies the user that the handset can only be used to dial 911, that the 911 operator will not be able to call the user back, and that the user should convey the exact location of the emergency as soon as possible; and

(iii) Institute a public education program to provide the users of such handsets with information regarding the limitations of non-service-initialized handsets.

(2) Manufacturers of 911-only handsets that are manufactured on or after May 3, 2004, are required to:

(i) Program each handset with 911 plus the decimal representation of the seven least significant digits of the Electronic Serial Number, International Mobile Equipment Identifier, or any other identifier unique to that handset;

(ii) Affix to each handset a label which is designed to withstand the length of service expected for a non-service-initialized phone, and which notifies the user that the handset can only be used to dial 911, that the 911 operator will not be able to call the user back, and that the user should convey the exact location of the emergency as soon as possible; and

(iii) Institute a public education program to provide the users of such handsets with information regarding the limitations of 911-only handsets.

(3) The following definitions apply for purposes of this paragraph.

(i) *Non-service-initialized handset.* A handset for which there is no valid service contract with a provider of the services enumerated in paragraph (a) of this section.

(ii) *911-only handset.* A non-service-initialized handset that is manufactured with the capability of dialing 911 only and that cannot receive incoming calls.

(p) *Reseller obligation.* (1) Beginning December 31, 2006, resellers have an obligation, independent of the underlying licensee, to provide access to basic and enhanced 911 service to the extent that the underlying licensee of the facilities the reseller uses to provide access to the public switched network complies with § 9.10(d) through (g).

(2) Resellers have an independent obligation to ensure that all handsets or other devices offered to their customers for voice communications and sold after December 31, 2006 are capable of transmitting enhanced 911 information to the appropriate PSAP, in accordance with the accuracy requirements of § 9.10(i).

(q) *Text-to-911 requirements*—(1) *Covered text provider.* Notwithstanding any other provisions in this section, for purposes of this paragraph (q) of this section, a ''covered text provider'' includes all CMRS providers as well as all providers of interconnected text messaging services that enable consumers to send text messages to and receive text messages from all or substantially all text-capable U.S. telephone numbers, including through the use of applications downloaded or otherwise installed on mobile phones.

(2) *Automatic bounce-back message.* An automatic text message delivered to a consumer by a covered text provider in response to the consumer's attempt to send a text message to 911 when the consumer is located in an area where text-to-911 service is unavailable or the covered text provider does not support

text-to-911 service generally or in the area where the consumer is located at the time.

(3) *Provision of automatic bounce-back messages.* No later than September 30, 2013, all covered text providers shall provide an automatic bounce-back message under the following circumstances:

(i) A consumer attempts to send a text message to a Public Safety Answering Point (PSAP) by means of the three-digit short code ''911''; and

(ii) The covered text provider cannot deliver the text because the consumer is located in an area where:

(A) Text-to-911 service is unavailable; or

(B) The covered text provider does not support text-to-911 service at the time.

(4) *Automatic bounce-back message exceptions.* (i) A covered text provider is not required to provide an automatic bounce-back message when:

(A) Transmission of the text message is not controlled by the provider;

(B) A consumer is attempting to text 911, through a text messaging application that requires CMRS service, from a non-service initialized handset;

(C) When the text-to-911 message cannot be delivered to a PSAP due to failure in the PSAP network that has not been reported to the provider; or

(D) A consumer is attempting to text 911 through a device that is incapable of sending texts via three digit short codes, provided the software for the device cannot be upgraded over the air to allow text-to-911.

(ii) The provider of a preinstalled or downloadable interconnected text application is considered to have ''control'' over transmission of text messages for purposes of paragraph (q)(4)(i)(A) of this section. However, if a user or a third party modifies or manipulates the application after it is installed or downloaded so that it no longer supports bounce-back messaging, the application provider will be presumed not to have control.

(5) *Automatic bounce-back message minimum requirements.* The automatic bounce-back message shall, at a minimum, inform the consumer that text-to-911 service is not available and advise the consumer or texting program user to use another means to contact emergency services.

(6) *Temporary suspension of text-to-911 service.* Covered text providers that support text-to-911 must provide a mechanism to allow PSAPs that accept text-to-911 to request temporary suspension of text-to-911 service for any reason, including, but not limited to, network congestion, call taker overload, PSAP failure, or security breach, and to request resumption of text-to-911 service after such temporary suspension. During any period of suspension of text-to-911 service, the covered text provider must provide an automatic bounce-back message to any consumer attempting to text to 911 in the area subject to the temporary suspension.

(7) *Roaming.* Notwithstanding any other provisions in this section, when a consumer is roaming on a covered text provider's host network pursuant to §20.12, the covered text provider operating the consumer's home network shall have the obligation to originate an automatic bounce-back message to such consumer when the consumer is located in an area where text-to-911 service is unavailable, or the home provider does not support text-to-911 service in that area at the time. The host provider shall not impede the consumer's 911 text message to the home provider and/or any automatic bounce-back message originated by the home provider to the consumer roaming on the host network.

(8) *Software application provider.* A software application provider that transmits text messages directly into the SMS network of the consumer's underlying CMRS provider satisfies the obligations of paragraph (q)(3) of this section provided it does not prevent or inhibit delivery of the CMRS provider's automatic bounce-back message to the consumer.

(9) *911 text message.* A 911 text message is a message, consisting of text characters, sent to the short code ''911'' and intended to be delivered to a PSAP by a covered text provider, regardless of the text messaging platform used.

(10) *Delivery of 911 text messages.* (i) No later than December 31, 2014, all covered text providers must have the capability to route a 911 text message to a

PSAP. In complying with this requirement, covered text providers must obtain location information sufficient to route text messages to the same PSAP to which a 911 voice call would be routed, unless the responsible local or state entity designates a different PSAP to receive 911 text messages and informs the covered text provider of that change. All covered text providers using device-based location information that requires consumer activation must clearly inform consumers that they must grant permission for the text messaging application to access the wireless device's location information in order to enable text-to-911. If a consumer does not permit this access, the covered text provider's text application must provide an automated bounce-back message as set forth in paragraph (q)(3) of this section.

(ii) Covered text providers must begin routing all 911 text messages to a PSAP by June 30, 2015, or within six months of the PSAP's valid request for text-to-911 service, whichever is later, unless an alternate timeframe is agreed to by both the PSAP and the covered text provider. The covered text provider must notify the Commission of the dates and terms of the alternate timeframe within 30 days of the parties' agreement.

(iii) Valid Request means that:

(A) The requesting PSAP is, and certifies that it is, technically ready to receive 911 text messages in the format requested;

(B) The appropriate local or state 911 service governing authority has specifically authorized the PSAP to accept and, by extension, the covered text provider to provide, text-to-911 service; and

(C) The requesting PSAP has provided notification to the covered text provider that it meets the foregoing requirements. Registration by the PSAP in a database made available by the Commission in accordance with requirements established in connection therewith, or any other written notification reasonably acceptable to the covered text provider, shall constitute sufficient notification for purposes of this paragraph.

(iv) The requirements set forth in paragraphs (q)(10)(i) through (iii) of this section do not apply to in-flight text messaging providers, MSS providers, or IP Relay service providers, or to 911 text messages that originate from Wi-Fi only locations or that are transmitted from devices that cannot access the CMRS network.

(v) No later than January 6, 2022, covered text providers must provide the following location information with all 911 text messages routed to a PSAP: Automated dispatchable location, if technically feasible; otherwise, either end-user manual provision of location information, or enhanced location information, which may be coordinate-based, consisting of the best available location that can be obtained from any available technology or combination of technologies at reasonable cost.

(11) *Access to SMS networks for 911 text messages.* To the extent that CMRS providers offer Short Message Service (SMS), they shall allow access by any other covered text provider to the capabilities necessary for transmission of 911 text messages originating on such other covered text providers' application services. Covered text providers using the CMRS network to deliver 911 text messages must clearly inform consumers that, absent an SMS plan with the consumer's underlying CMRS provider, the covered text provider may be unable to deliver 911 text messages. CMRS providers may migrate to other technologies and need not retain SMS networks solely for other covered text providers' 911 use, but must notify the affected covered text providers not less than 90 days before the migration is to occur.

(r) *Contraband Interdiction System (CIS) requirement.* CIS providers regulated as private mobile radio service (*see* § 9.3) must transmit all wireless 911 calls without respect to their call validation process to a Public Safety Answering Point, or, where no Public Safety Answering Point has been designated, to a designated statewide default answering point or appropriate local emergency authority pursuant to § 9.4, provided that ''all wireless 911 calls'' is defined as ''any call initiated by a wireless user dialing 911 on a phone using a compliant radio frequency protocol of the serving carrier.'' This requirement shall not apply

if the Public Safety Answering Point or emergency authority informs the CIS provider that it does not wish to receive 911 calls from the CIS provider.

(s) *Compliance date(s).* Paragraphs (i)(2)(ii)(C) and (D), (i)(4)(iv) and (v), (j)(4), (k), and (q)(10)(v) of this section contain information-collection and recordkeeping requirements. Compliance with paragraphs (i)(2)(ii)(C) and (D), (i)(4)(iv) and (v), (j)(4), (k) and (q)(10)(v) will not be required until after approval by the Office of Management and Budget. The Commission will publish a document in the FEDERAL REGISTER announcing compliance dates with those paragraphs and revising this paragraph (s) accordingly.

[84 FR 66760, Dec. 5, 2019, as amended at 85 FR 2675, Jan. 16, 2020; 85 FR 53246, Aug. 28, 2020]

Subpart D—Interconnected Voice over Internet Protocol Services

§9.11 E911 Service.

(a) *Before January 6, 2021, for fixed services and before January 6, 2022, for non-fixed services*—(1) *Scope.* The following requirements of paragraphs (a)(1) through (5) of this section are only applicable to providers of interconnected VoIP services, except those interconnected VoIP services that fulfill each paragraphs (1)(i) through (iii) of the definition of interconnected VoIP service in §9.3, and also permit users generally to terminate calls to the public switched telephone network. Further, the following requirements apply only to 911 calls placed by users whose Registered Location is in a geographic area served by a Wireline E911 Network (which, as defined in §9.3, includes a selective router).

(2) *E911 Service.* As of November 28, 2005:

(i) Interconnected VoIP service providers must, as a condition of providing service to a consumer, provide that consumer with E911 service as described in this section;

(ii) Interconnected VoIP service providers must transmit all 911 calls, as well as ANI and the caller's Registered Location for each call, to the PSAP, designated statewide default answering point, or appropriate local emergency authority that serves the caller's Registered Location and that has been designated for telecommunications carriers pursuant to §9.4, provided that ''all 911 calls'' is defined as ''any voice communication initiated by an interconnected VoIP user dialing 911;''

(iii) All 911 calls must be routed through the use of ANI and, if necessary, pseudo-ANI, via the dedicated Wireline E911 Network; and

(iv) The Registered Location must be available to the appropriate PSAP, designated statewide default answering point, or appropriate local emergency authority from or through the appropriate automatic location information (ALI) database.

(3) *Service Level Obligation.* Notwithstanding the provisions in paragraph (a)(2) of this section, if a PSAP, designated statewide default answering point, or appropriate local emergency authority is not capable of receiving and processing either ANI or location information, an interconnected VoIP service provider need not provide such ANI or location information; however, nothing in this paragraph affects the obligation under paragraph (a)(2)(iii) of this section of an interconnected VoIP service provider to transmit via the Wireline E911 Network all 911 calls to the PSAP, designated statewide default answering point, or appropriate local emergency authority that serves the caller's Registered Location and that has been designated for telecommunications carriers pursuant to §9.4.

(4) *Registered Location requirement.* As of November 28, 2005, interconnected VoIP service providers must:

(i) Obtain from each customer, prior to the initiation of service, the physical location at which the service will first be used; and

(ii) Provide their end users one or more methods of updating their Registered Location, including at least one option that requires use only of the CPE necessary to access the interconnected VoIP service. Any method used must allow an end user to update the Registered Location at will and in a timely manner.

(5) *Customer notification.* Each interconnected VoIP service provider shall:

(i) Specifically advise every subscriber, both new and existing, prominently and in plain language, of the

circumstances under which E911 service may not be available through the interconnected VoIP service or may be in some way limited by comparison to traditional E911 service. Such circumstances include, but are not limited to, relocation of the end user's IP-compatible CPE, use by the end user of a non-native telephone number, broadband connection failure, loss of electrical power, and delays that may occur in making a Registered Location available in or through the ALI database;

(ii) Obtain and keep a record of affirmative acknowledgement by every subscriber, both new and existing, of having received and understood the advisory described in paragraph (a)(5)(i) of this section; and

(iii) Either—

(A) Distribute to its existing subscribers, and to each new subscriber prior to the initiation of that subscriber's service, warning stickers or other appropriate labels warning subscribers if E911 service may be limited or not available and instructing the subscriber to place them on or near the equipment used in conjunction with the interconnected VoIP service; or

(B) Notify existing subscribers, and each new subscriber prior to the initiation of that subscriber's service, by other conspicuous means if E911 service may be limited or not available.

(b) *On or after January 6, 2021, for fixed services, and on or after January 6, 2022, for non-fixed services*—(1) *Scope*. The following requirements of paragraphs (b)(1) through (5) of this section are only applicable to all providers of interconnected VoIP services. Further, these requirements apply only to 911 calls placed by users whose dispatchable location is in a geographic area served by a Wireline E911 Network (which, as defined in § 9.3, includes a selective router).

(2) *E911 Service*—(i) Interconnected VoIP service providers must, as a condition of providing service to a consumer, provide that consumer with E911 service as described in this section;

(ii) Interconnected VoIP service providers must transmit the following to the PSAP, designated statewide default answering point, or appropriate local emergency authority that serves the caller's dispatchable location and that has been designated for telecommunications carriers pursuant to § 9.4:

(A) All 911 calls, provided that ''all 911 calls'' is defined as ''any voice communication initiated by an interconnected VoIP user dialing 911;''

(B) ANI; and

(C) The location information described in paragraph (b)(4) of this section.

(iii) All 911 calls must be routed through the use of ANI and, if necessary, pseudo-ANI, via the dedicated Wireline E911 Network, provided that nothing in this subparagraph shall preclude routing the call first to a national emergency call center to ascertain the caller's location in the event that the interconnected VoIP service provider is unable to obtain or confirm the caller's location information; and

(iv) The location information described in paragraph (b)(4) of this section must be available to the appropriate PSAP, designated statewide default answering point, or appropriate local emergency authority from or through the appropriate automatic location information (ALI) database.

(3) *Service level obligation*. Notwithstanding the provisions in paragraph (b)(2) of this section, if a PSAP, designated statewide default answering point, or appropriate local emergency authority is not capable of receiving and processing either ANI or location information, an interconnected VoIP service provider need not provide such ANI or location information; however, nothing in this paragraph affects the obligation under paragraph (b)(2)(iii) of this section of an interconnected VoIP service provider to transmit via the Wireline E911 Network all 911 calls to the PSAP, designated statewide default answering point, or appropriate local emergency authority that serves the caller's dispatchable location and that has been designated for telecommunications carriers pursuant to § 9.4.

(4) *Location requirements*. To meet E911 service requirements, interconnected VoIP service providers must provide location information with each 911 call as follows:

(i) Fixed interconnected VoIP services. Providers of fixed interconnected

VoIP services must provide automated dispatchable location with each 911 call.

(ii) Non-fixed interconnected VoIP services. For non-fixed interconnected VoIP service (service that is capable of being used from more than one location), interconnected VoIP service providers must provide location information in accordance with paragraph (b)(4)(ii)(A) of this section, if technically feasible. Otherwise, interconnected VoIP service providers must either provide location information in accordance with paragraph (b)(4)(ii)(B) or (C), or meet paragraph (b)(4)(ii)(D) of this section.

(A) Provide automated dispatchable location, if technically feasible.

(B) Provide Registered Location information that meets the following requirements:

(*1*) The service provider has obtained from the customer, prior to the initiation of service, the Registered Location (as defined in §9.3) at which the service will first be used;

(*2*) The service provider has provided end users one or more methods of updating their Registered Location, including at least one option that requires use only of the CPE necessary to access the interconnected VoIP service. Any method used must allow an end user to update the Registered Location at will and in a timely manner; and

(*3*) The service provider must identify whether the service is being used to call 911 from a different location than the Registered Location, and if so, either:

(*i*) Prompt the customer to provide a new Registered Location; or

(*ii*) Update the Registered Location without requiring additional action by the customer.

(C) Provide Alternative Location Information as defined in §9.3.

(D) Route the caller to a national emergency call center.

(5) *Customer notification.* (i) Each interconnected VoIP service provider shall specifically advise every subscriber, both new and existing, prominently and in plain language, of the circumstances under which E911 service may not be available through the interconnected VoIP service or may be in some way limited by comparison to traditional E911 service. Such circumstances include, but are not limited to, relocation of the end user's IP-compatible CPE, use by the end user of a non-native telephone number, broadband connection failure, loss of electrical power, and delays that may occur in making a dispatchable location available in or through the ALI database;

(ii) Each interconnected VoIP service provider shall obtain and keep a record of affirmative acknowledgement by every subscriber, both new and existing, of having received and understood the advisory described in paragraph (b)(5)(i) of this section; and

(iii) Each interconnected VoIP service provider shall either:

(A) Distribute to its existing subscribers, and to each new subscriber prior to the initiation of that subscriber's service, warning stickers or labels warning subscribers if E911 service may be limited or not available, and instructing the subscriber to place them on or near the equipment used in conjunction with the interconnected VoIP service; or

(B) Notify existing subscribers, and each new subscriber prior to the initiation of that subscriber's service, by other conspicuous means if E911 service may be limited or not available.

(c) Paragraphs (b)(2)(ii) and (iv), (b)(4), and (b)(5)(ii) and (iii) of this section contain information-collection and recordkeeping requirements. Compliance will not be required until after approval by the Office of Management and Budget. The Commission will publish a document in the FEDERAL REGISTER announcing that compliance date and revising this paragraph accordingly.

§9.12 Access to 911 and E911 service capabilities.

(a) *Access.* Subject to the other requirements of this part, an owner or controller of a capability that can be used for 911 or E911 service shall make that capability available to a requesting interconnected VoIP provider as set forth in paragraphs (a)(1) and (2) of this section.

(1) If the owner or controller makes the requested capability available to a

CMRS provider, the owner or controller must make that capability available to the interconnected VoIP provider. An owner or controller makes a capability available to a CMRS provider if the owner or controller offers that capability to any CMRS provider.

(2) If the owner or controller does not make the requested capability available to a CMRS provider within the meaning of paragraph (a)(1) of this section, the owner or controller must make that capability available to a requesting interconnected VoIP provider only if that capability is necessary to enable the interconnected VoIP provider to provide 911 or E911 service in compliance with the Commission's rules.

(b) *Rates, terms, and conditions.* The rates, terms, and conditions on which a capability is provided to an interconnected VoIP provider under paragraph (a) of this section shall be reasonable. For purposes of this paragraph, it is evidence that rates, terms, and conditions are reasonable if they are:

(1) The same as the rates, terms, and conditions that are made available to CMRS providers, or

(2) In the event such capability is not made available to CMRS providers, the same rates, terms, and conditions that are made available to any telecommunications carrier or other entity for the provision of 911 or E911 service.

(c) *Permissible use.* An interconnected VoIP provider that obtains access to a capability pursuant to this section may use that capability only for the purpose of providing 911 or E911 service in accordance with the Commission's rules.

Subpart E—Telecommunications Relay Services for Persons with Disabilities

§ 9.13 Jurisdiction.

Any violation of this subpart E by any common carrier engaged in intrastate communication shall be subject to the same remedies, penalties, and procedures as are applicable to a violation of the Act by a common carrier engaged in interstate communication. For purposes of this subpart, all regulations and requirements applicable to common carriers shall also be applicable to providers of interconnected VoIP service as defined in § 9.3.

§ 9.14 Emergency calling requirements.

(a) *Emergency call handling requirements for TTY-based TRS providers.* TTY-based TRS providers must use a system for incoming emergency calls that, at a minimum, automatically and immediately transfers the caller to an appropriate Public Safety Answering Point (PSAP). An appropriate PSAP is either a PSAP that the caller would have reached if the caller had dialed 911 directly, or a PSAP that is capable of enabling the dispatch of emergency services to the caller in an expeditious manner.

(b) *Additional emergency calling requirements applicable to internet-based TRS providers.* (1) The requirements of paragraphs (b)(2)(i) and (iv) of this section shall not apply to providers of VRS and IP Relay to which § 9.14(c) and (d) apply.

(2) Each provider of internet-based TRS shall:

(i) When responsible for placing or routing voice calls to the public switched telephone network, accept and handle emergency calls and access, either directly or via a third party, a commercially available database that will allow the provider to determine an appropriate PSAP, designated statewide default answering point, or appropriate local emergency authority that corresponds to the caller's location, and to relay the call to that entity;

(ii) Implement a system that ensures that the provider answers an incoming emergency call before other non-emergency calls (*i.e.*, prioritize emergency calls and move them to the top of the queue);

(iii) Provide 911 and E911 service in accordance with paragraphs (c) through (e) of this section, as applicable;

(iv) Deliver to the PSAP, designated statewide default answering point, or appropriate local emergency authority, at the outset of the outbound leg of an emergency call, at a minimum, the name of the relay user and location of the emergency, as well as the name of the relay provider, the CA's callback

number, and the CA's identification number, thereby enabling the PSAP, designated statewide default answering point, or appropriate local emergency authority to re-establish contact with the CA in the event the call is disconnected;

(v) In the event one or both legs of an emergency call are disconnected (*i.e.*, either the call between the TRS user and the CA, or the outbound voice telephone call between the CA and the PSAP, designated statewide default answering point, or appropriate local emergency authority), immediately re-establish contact with the TRS user and/or the appropriate PSAP, designated statewide default answering point, or appropriate local emergency authority and resume handling the call; and

(vi) Ensure that information obtained as a result of this section is limited to that needed to facilitate 911 services, is made available only to emergency call handlers and emergency response or law enforcement personnel, and is used for the sole purpose of ascertaining a user's location in an emergency situation or for other emergency or law enforcement purposes.

(c) *E911 Service for VRS and IP Relay before January 6, 2021, for fixed services, and before January 6, 2022, for non-fixed services*—(1) *Scope*. The following requirements of paragraphs (c)(1) through (4) of this section are only applicable to providers of VRS or IP Relay. Further, these requirements apply only to 911 calls placed by registered users whose Registered Location is in a geographic area served by a Wireline E911 Network and is available to the provider handling the call.

(2) *E911 Service*. VRS or IP Relay providers must, as a condition of providing service to a user:

(i) Provide that user with E911 service as described in this section;

(ii) Request, at the beginning of each emergency call, the caller's name and location information, unless the VRS or IP Relay provider already has, or has access to, Registered Location information for the caller;

(iii) Transmit all 911 calls, as well as ANI, the caller's Registered Location, the name of the VRS or IP Relay provider, and the CA's identification number for each call, to the PSAP, designated statewide default answering point, or appropriate local emergency authority that serves the caller's Registered Location and that has been designated for telecommunications carriers pursuant to §9.4, provided that ''all 911 calls'' is defined as ''any communication initiated by an VRS or IP Relay user dialing 911'';

(iv) Route all 911 calls through the use of ANI and, if necessary, pseudo-ANI, via the dedicated Wireline E911 Network, provided that nothing in this subparagraph shall preclude routing the call first to a call center to ascertain the caller's location in the event that the VRS or IP Relay provider believes the caller may not be located at the Registered Location; and

(v) Make the Registered Location, the name of the VRS or IP Relay provider, and the CA's identification number available to the appropriate PSAP, designated statewide default answering point, or appropriate local emergency authority from or through the appropriate automatic location information (ALI) database.

(3) *Service level obligation*. Notwithstanding the provisions in paragraph (c)(2) of this section, if a PSAP, designated statewide default answering point, or appropriate local emergency authority is not capable of receiving and processing either ANI or location information, a VRS or IP Relay provider need not provide such ANI or location information; however, nothing in this paragraph affects the obligation under paragraph (c)(2)(iv) of this section of a VRS or IP Relay provider to transmit via the Wireline E911 Network all 911 calls to the PSAP, designated statewide default answering point, or appropriate local emergency authority that serves the caller's Registered Location and that has been designated for telecommunications carriers pursuant to §9.4.

(4) *Registered location requirement*. VRS and IP Relay providers must:

(i) Obtain from each Registered internet-based TRS user, prior to the initiation of service, the physical location at which the service will first be used; and

(ii) If the VRS or IP Relay is capable of being used from more than one location, provide their registered internet-based TRS users one or more methods of updating the user's Registered Location, including at least one option that requires use only of the iTRS access technology necessary to access the VRS or IP Relay. Any method used must allow a registered internet-based TRS user to update the Registered Location at will and in a timely manner.

(d) *E911 Service for VRS and IP Relay on or after January 6, 2021, for fixed services, and on or after January 6, 2022, for non-fixed services*—(1) *Scope*. The following requirements of paragraphs (d)(1) through (4) of this section are only applicable to providers of VRS or IP Relay. Further, these requirements apply only to 911 calls placed by registered users whose dispatchable location is in a geographic area served by a Wireline E911 Network and is available to the provider handling the call.

(2) *E911 Service*. VRS or IP Relay providers must, as a condition of providing service to a user:

(i) Provide that user with E911 service as described in this section;

(ii) Request, at the beginning of each emergency call, the caller's name and dispatchable location, unless the VRS or IP relay provider already has, or has access to the location information described in paragraph (d)(4) of this section;

(iii) Transmit the following to the PSAP, designated statewide default answering point, or appropriate local emergency authority that serves the caller's dispatchable location and that has been designated for telecommunications carriers pursuant to § 9.4:

(A) All 911 calls, provided that ''all 911 calls'' is defined as ''any communication initiated by an VRS or IP Relay user dialing 911;''

(B) ANI, the name of the VRS or IP Relay provider, and the CA's identification number for each call; and

(C) The location information described in paragraph (d)(4) of this section.

(iv) Route all 911 calls through the use of ANI and, if necessary, pseudo-ANI, via the dedicated Wireline E911 Network, provided that nothing in this subparagraph shall preclude routing the call first to a call center to ascertain the caller's location in the event that the VRS or IP Relay provider is unable to obtain or confirm the caller's location information; and

(v) Make the location information described in paragraph (d)(4) of this section, the name of the VRS or IP Relay provider, and the CA's identification number available to the appropriate PSAP, designated statewide default answering point, or appropriate local emergency authority from or through the appropriate automatic location information (ALI) database.

(3) *Service level obligation*. Notwithstanding the provisions in paragraph (d)(2) of this section, if a PSAP, designated statewide default answering point, or appropriate local emergency authority is not capable of receiving and processing either ANI or location information, a VRS or IP Relay provider need not provide such ANI or location information; however, nothing in this paragraph affects the obligation under paragraph (d)(2)(iv) of this section of a VRS or IP Relay provider to transmit via the Wireline E911 Network all 911 calls to the PSAP, designated statewide default answering point, or appropriate local emergency authority that serves the caller's dispatchable location and that has been designated for telecommunications carriers pursuant to § 9.4.

(4) *Location requirements*. To meet E911 service requirements, VRS and IP Relay providers must provide location information with each 911 call as follows:

(i) Fixed VRS and IP Relay services. Providers of fixed VRS and IP Relay services must provide automated dispatchable location with each 911 call.

(ii) Non-fixed VRS and IP Relay services. For non-fixed VRS and IP Relay services (service that is capable of being used from more than one location), VRS and IP Relay service providers must provide location information in accordance with paragraph (d)(4)(ii)(A) of this section, if technically feasible. Otherwise, VRS and IP Relay service providers must either provide location information in accordance with paragraph (d)(4)(ii)(B) or (C),

or meet paragraph (d)(4)(ii)(D) of this section.

(A) Provide automated dispatchable location, if technically feasible.

(B) Provide Registered Location information that meets the following requirements:

(*1*) The service provider has obtained from the customer, prior to the initiation of service, the Registered Location (as defined in §9.3) at which the service will first be used;

(*2*) The service provider has provided end users one or more methods of updating their Registered Location, including at least one option that requires use only of the internet-based TRS access technology necessary to access the VRS or IP Relay. Any method used must allow an end user to update the Registered Location at will and in a timely manner; and

(*3*) If the VRS or IP Relay is capable of being used from more than one location, if it is not possible to automatically determine the Registered internet-based TRS user's location at the time of the initiation of an emergency call, verify the current location with the user at the beginning of an emergency call.

(C) Provide Alternative Location Information as defined in §9.3.

(D) Route the caller to a call center.

(e) *E911 Service for IP CTS on or after January 6, 2021, for fixed services, and on or after January 6, 2022, for non-fixed services*—(1) *Scope*. The following requirements of paragraphs (e)(1) through (4) of this section are only applicable to ''covered IP CTS providers,'' who are providers of IP CTS to the extent that the IP CTS provider, itself or through an entity with whom the IP CTS provider contracts, places or routes voice calls to the public switched telephone network. Further, these requirements apply only to 911 calls placed by a registered user whose dispatchable location is in a geographic area served by a Wireline E911 Network and is available to the provider handling the call.

(2) *E911 Service*. Covered IP CTS providers must, as a condition of providing service to a user:

(i) Provide that user with E911 service as described in this section;

(ii) Transmit or provide the following to the PSAP, designated statewide default answering point, or appropriate local emergency authority that serves the caller's dispatchable location and that has been designated for telecommunications carriers pursuant to §9.4:

(A) All 911 calls, provided that ''all 911 calls'' is defined as ''any communication initiated by an IP CTS user dialing 911;''

(B) With the call, a telephone number that is assigned to the caller and that enables the PSAP, designated statewide default answering point, or appropriate local emergency authority to call the 911 caller back directly, while enabling the caller to receive captions on the callback; and

(C) The location information described in paragraph (e)(4) of this section.

(iii) Route all 911 calls through the use of ANI and, if necessary, pseudo-ANI, via the dedicated Wireline E911 Network, provided that nothing in this subparagraph shall preclude routing the call first to a call center to ascertain the caller's location in the event that the covered IP CTS provider is unable to obtain or confirm the caller's location information; and

(iv) Make the location information described in paragraph (e)(4) of this section and callback number available to the appropriate PSAP, designated statewide default answering point, or appropriate local emergency authority from or through the appropriate automatic location information (ALI) database.

(3) *Service level obligation*. Notwithstanding the provisions in paragraph (e)(2) of this section, if a PSAP, designated statewide default answering point, or appropriate local emergency authority is not capable of receiving and processing either ANI or location information, a covered IP CTS provider need not provide such ANI or location information; however, nothing in this paragraph affects the obligation under paragraph (e)(2)(iii) of this section of a covered IP CTS provider to transmit via the Wireline E911 Network all 911 calls to the PSAP, designated statewide default answering point, or appropriate local emergency authority that

serves the caller's dispatchable location and that has been designated for telecommunications carriers pursuant to § 9.4.

(4) *Location requirements.* To meet E911 service requirements, covered IP CTS providers must provide location information with each 911 call as follows:

(i) Fixed IP CTS. Providers of fixed IP CTS must provide automated dispatchable location with each 911 call.

(ii) Non-fixed IP CTS. For non-fixed IP CTS (service that is capable of being used from more than one location), covered IP CTS providers must provide location information in accordance with paragraph (e)(4)(ii)(A) of this section, if technically feasible. Otherwise, covered IP CTS providers must either provide location information in accordance with paragraph (e)(4)(ii)(B) or (C), or meet paragraph (e)(4)(iii)(D) of this section.

(A) Provide automated dispatchable location, if technically feasible.

(B) Provide Registered Location information that meets the following requirements:

(*1*) The service provider has obtained from the customer, prior to the initiation of service, the Registered Location (as defined in § 9.3) at which the service will first be used; and

(*2*) The service provider has provided end users one or more methods of updating their Registered Location, including at least one option that requires use only of the internet-based TRS access technology necessary to access the IP CTS. Any method used must allow an end user to update the Registered Location at will and in a timely manner.

(C) Provide Alternative Location Information as defined in § 9.3.

(D) Route the caller to a call center.

(f) Paragraphs (d)(2)(ii), (iii), and (v), (d)(4), (e)(2)(ii) and (iv), and (e)(4) of this section contain information-collection and recordkeeping requirements. Compliance will not be required until after approval by the Office of Management and Budget. The Commission will publish a document in the FEDERAL REGISTER announcing that compliance date and revising this paragraph accordingly.

Subpart F—Multi-Line Telephone Systems

§ 9.15 Applicability.

The rules in this subpart F apply to:

(a) A person engaged in the business of manufacturing, importing, selling, or leasing multi-line telephone systems;

(b) A person engaged in the business of installing, managing, or operating multi-line telephone systems;

(c) Any multi-line telephone system that is manufactured, imported, offered for first sale or lease, first sold or leased, or installed after February 16, 2020.

§ 9.16 General obligations—direct 911 dialing, notification, and dispatchable location.

(a) *Obligation of manufacturers, importers, sellers, and lessors.* (1) A person engaged in the business of manufacturing, importing, selling, or leasing multi-line telephone systems may not manufacture or import for use in the United States, or sell or lease or offer to sell or lease in the United States, a multi-line telephone system, unless such system is pre-configured such that, when properly installed in accordance with paragraph (b) of this section, a user may directly initiate a call to 911 from any station equipped with dialing facilities, without dialing any additional digit, code, prefix, or post-fix, including any trunk-access code such as the digit 9, regardless of whether the user is required to dial such a digit, code, prefix, or post-fix for other calls.

(2) A person engaged in the business of manufacturing, importing, selling, or leasing multi-line telephone systems may not manufacture or import for use in the United States, or sell or lease or offer to sell or lease in the United States, a multi-line telephone system, unless such system has the capability, after proper installation in accordance with paragraph (b) of this section, of providing the dispatchable location of the caller to the PSAP with 911 calls.

(b) *Obligation of installers, managers, or operators.* (1) A person engaged in the business of installing, managing, or operating multi-line telephone systems may not install, manage, or operate for

use in the United States such a system, unless such system is configured such that a user may directly initiate a call to 911 from any station equipped with dialing facilities, without dialing any additional digit, code, prefix, or post-fix, including any trunk-access code such as the digit 9, regardless of whether the user is required to dial such a digit, code, prefix, or post-fix for other calls.

(2) A person engaged in the business of installing, managing, or operating multi-line telephone systems shall, in installing, managing, or operating such a system for use in the United States, configure the system to provide MLTS notification to a central location at the facility where the system is installed or to another person or organization regardless of location, if the system is able to be configured to provide the notification without an improvement to the hardware or software of the system. MLTS notification must meet the following requirements:

(i) MLTS notification must be initiated contemporaneously with the 911 call, provided that it is technically feasible to do so;

(ii) MLTS notification must not delay the call to 911; and

(iii) MLTS notification must be sent to a location where someone is likely to see or hear it.

(3) A person engaged in the business of installing multi-line telephone systems may not install such a system in the United States unless it is configured such that it is capable of being programmed with and conveying the dispatchable location of the caller to the PSAP with 911 calls consistent with paragraphs (i), (ii) and (iii) of this section. A person engaged in the business of managing or operating multi-line telephone systems may not manage or operate such a system in the United States unless it is configured such that the dispatchable location of the caller is conveyed to the PSAP with 911 calls consistent with paragraphs (i), (ii) and (iii) of this section.

(i) Dispatchable location requirements for on-premises fixed telephones associated with a multi-line telephone system. An on-premises fixed telephone associated with a multi-line telephone system shall provide automated dispatchable location no later than January 6, 2021;

(ii) Dispatchable location requirements for on-premises non-fixed devices associated with a multi-line telephone system. No later than January 6, 2022, an on-premises non-fixed device associated with a multi-line telephone system shall provide to the appropriate PSAP automated dispatchable location, when technically feasible; otherwise, it shall provide dispatchable location based on end user manual update, or alternative location information as defined in §9.3.

(iii) Dispatchable location requirements for off-premises devices associated with a multi-line telephone system. No later than January 6, 2022, an off-premises device associated with a multi-line telephone system shall provide to the appropriate PSAP automatic dispatchable location, if technically feasible; otherwise, it shall provide dispatchable location based on end user manual update, or enhanced location information, which may be coordinate-based, consisting of the best available location that can be obtained from any available technology or combination of technologies at reasonable cost.

(c) *Compliance date.* Paragraphs (b)(3)(i) through (iii) of this section contain information-collection and recordkeeping requirements. Compliance will not be required until after approval by the Office of Management and Budget. The Commission will publish a document in the FEDERAL REGISTER announcing that compliance date and revising this paragraph accordingly.

§9.17 Enforcement, compliance date, State law.

(a) *Enforcement.* (1) Sections 9.16(a)(1) and (b)(1) and (2) shall be enforced under title V of the Communications Act of 1934, as amended, 5 U.S.C. 501 *et seq.*, except that section 501 applies only to the extent that such section provides for the punishment of a fine.

(2) In the event of noncompliance with §9.16(b), the person engaged in the business of managing the multi-line telephone system shall be presumed to be responsible for the noncompliance.

(3) Persons alleging a violation of the rules in §9.16 may file a complaint

under the procedures set forth in §§ 1.711 through 1.737 of this chapter.

(b) *Compliance date.* The compliance date for this subpart F is February 16, 2020, unless otherwise noted. Accordingly, the requirements in this subpart apply to a multi-line telephone system that is manufactured, imported, offered for first sale or lease, first sold or leased, or installed after February 16, 2020, unless otherwise noted.

(c) *Effect on State law.* Nothing in § 9.16(a)(1) and (b)(1) and (2) is intended to alter the authority of State commissions or other State or local agencies with jurisdiction over emergency communications, if the exercise of such authority is not inconsistent with this subpart.

Subpart G—Mobile-Satellite Service

§ 9.18 Emergency Call Center service.

(a) Providers of Mobile-Satellite Service to end-user customers (47 CFR part 25, subparts A through D) must provide Emergency Call Center service to the extent that they offer real-time, two way switched voice service that is interconnected with the public switched network and use an in-network switching facility which enables the provider to reuse frequencies and/or accomplish seamless hand-offs of subscriber calls. Emergency Call Center personnel must determine the emergency caller's phone number and location and then transfer or otherwise redirect the call to an appropriate public safety answering point. Providers of Mobile-Satellite Services that use earth terminals that are not capable of use while in motion are exempt from providing Emergency Call Center service for such terminals.

(b) Each Mobile-Satellite Service carrier that is subject to the provisions of paragraph (a) of this section must maintain records of all 911 calls received at its emergency call center. By October 15, of each year, Mobile-Satellite Service carriers providing service in the 1.6/2.4 GHz and 2 GHz bands must submit a report to the Commission regarding their call center data, current as of September 30 of that year. By June 30, of each year, Mobile-Satellite Service carriers providing service in bands other than 1.6/2.4 GHz and 2 GHz must submit a report to the Commission regarding their call center data, current as of May 31 of that year. These reports must include, at a minimum, the following:

(1) The name and address of the carrier, the address of the carrier's emergency call center, and emergency call center contact information;

(2) The aggregate number of calls received by the call center each month during the relevant reporting period;

(3) An indication of how many calls received by the call center each month during the relevant reporting period required forwarding to a public safety answering point and how many did not require forwarding to a public safety answering point.

Subpart H—Resiliency, Redundancy, and Reliability of 911 Communications

§ 9.19 Reliability of covered 911 service providers.

(a) *Definitions.* Terms in this section shall have the following meanings:

(1) *Aggregation point.* A point at which network monitoring data for a 911 service area is collected and routed to a network operations center (NOC) or other location for monitoring and analyzing network status and performance.

(2) *Certification.* An attestation by a certifying official, under penalty of perjury, that a covered 911 service provider:

(i) Has satisfied the obligations of paragraph (c) of this section.

(ii) Has adequate internal controls to bring material information regarding network architecture, operations, and maintenance to the certifying official's attention.

(iii) Has made the certifying official aware of all material information reasonably necessary to complete the certification.

(iv) The term ''certification'' shall include both an annual reliability certification under paragraph (c) of this section and an initial reliability certification under paragraph (d)(1) of this section, to the extent provided under paragraph (d)(1).

(3) *Certifying official.* A corporate officer of a covered 911 service provider with supervisory and budgetary authority over network operations in all relevant service areas.

(4) *Covered 911 service provider.* (i) Any entity that:

(A) Provides 911, E911, or NG911 capabilities such as call routing, automatic location information (ALI), automatic number identification (ANI), or the functional equivalent of those capabilities, directly to a public safety answering point (PSAP), statewide default answering point, or appropriate local emergency authority as defined in §9.3; and/or

(B) Operates one or more central offices that directly serve a PSAP. For purposes of this section, a central office directly serves a PSAP if it hosts a selective router or ALI/ANI database, provides equivalent NG911 capabilities, or is the last service-provider facility through which a 911 trunk or administrative line passes before connecting to a PSAP.

(ii) The term ''covered 911 service provider'' shall not include any entity that:

(A) Constitutes a PSAP or governmental authority to the extent that it provides 911 capabilities; or

(B) Offers the capability to originate 911 calls where another service provider delivers those calls and associated number or location information to the appropriate PSAP.

(5) *Critical 911 circuits.* 911 facilities that originate at a selective router or its functional equivalent and terminate in the central office that serves the PSAP(s) to which the selective router or its functional equivalent delivers 911 calls, including all equipment in the serving central office necessary for the delivery of 911 calls to the PSAP(s). Critical 911 circuits also include ALI and ANI facilities that originate at the ALI or ANI database and terminate in the central office that serves the PSAP(s) to which the ALI or ANI databases deliver 911 caller information, including all equipment in the serving central office necessary for the delivery of such information to the PSAP(s).

(6) *Diversity audit.* A periodic analysis of the geographic routing of network components to determine whether they are physically diverse. Diversity audits may be performed through manual or automated means, or through a review of paper or electronic records, as long as they reflect whether critical 911 circuits are physically diverse.

(7) *Monitoring links.* Facilities that collect and transmit network monitoring data to a NOC or other location for monitoring and analyzing network status and performance.

(8) *Physically diverse.* Circuits or equivalent data paths are Physically Diverse if they provide more than one physical route between end points with no common points where a single failure at that point would cause both circuits to fail. Circuits that share a common segment such as a fiber-optic cable or circuit board are not Physically diverse even if they are logically diverse for purposes of transmitting data.

(9) *911 service area.* The metropolitan area or geographic region in which a covered 911 service provider operates a selective router or the functional equivalent to route 911 calls to the geographically appropriate PSAP.

(10) *Selective router.* A 911 network component that selects the appropriate destination PSAP for each 911 call based on the location of the caller.

(11) *Tagging.* An inventory management process whereby critical 911 circuits are labeled in circuit inventory databases to make it less likely that circuit rearrangements will compromise diversity. A covered 911 service provider may use any system it wishes to tag circuits so long as it tracks whether critical 911 circuits are physically diverse and identifies changes that would compromise such diversity.

(b) *Provision of reliable 911 service.* All covered 911 service providers shall take reasonable measures to provide reliable 911 service with respect to circuit diversity, central-office backup power, and diverse network monitoring. Performance of the elements of the certification set forth in paragraphs (c)(1)(i), (c)(2)(i), and (c)(3)(i) of this section shall be deemed to satisfy the requirements of this paragraph. If a covered 911 service provider cannot certify that it has performed a given element, the Commission may determine that such

provider nevertheless satisfies the requirements of this paragraph based upon a showing in accordance with paragraph (c) of this section that it is taking alternative measures with respect to that element that are reasonably sufficient to mitigate the risk of failure, or that one or more certification elements are not applicable to its network.

(c) *Annual reliability certification*. One year after the initial reliability certification described in paragraph (d)(1) of this section and every year thereafter, a certifying official of every covered 911 service provider shall submit a certification to the Commission as follows.

(1) *Circuit auditing*. (i) A covered 911 service provider shall certify whether it has, within the past year:

(A) Conducted diversity audits of critical 911 circuits or equivalent data paths to any PSAP served;

(B) Tagged such critical 911 circuits to reduce the probability of inadvertent loss of diversity in the period between audits; and

(C) Eliminated all single points of failure in critical 911 circuits or equivalent data paths serving each PSAP.

(ii) If a Covered 911 Service Provider does not conform with all of the elements in paragraph (c)(1)(i) of this section with respect to the 911 service provided to one or more PSAPs, it must certify with respect to each such PSAP:

(A) Whether it has taken alternative measures to mitigate the risk of critical 911 circuits that are not physically diverse or is taking steps to remediate any issues that it has identified with respect to 911 service to the PSAP, in which case it shall provide a brief explanation of such alternative measures or such remediation steps, the date by which it anticipates such remediation will be completed, and why it believes those measures are reasonably sufficient to mitigate such risk; or

(B) Whether it believes that one or more of the requirements of this paragraph are not applicable to its network, in which case it shall provide a brief explanation of why it believes any such requirement does not apply.

(2) *Backup power*. (i) With respect to any central office it operates that directly serves a PSAP, a covered 911 service provider shall certify whether it:

(A) Provisions backup power through fixed generators, portable generators, batteries, fuel cells, or a combination of these or other such sources to maintain full-service functionality, including network monitoring capabilities, for at least 24 hours at full office load or, if the central office hosts a selective router, at least 72 hours at full office load; provided, however, that any such portable generators shall be readily available within the time it takes the batteries to drain, notwithstanding potential demand for such generators elsewhere in the service provider's network.

(B) Tests and maintains all backup power equipment in such central offices in accordance with the manufacturer's specifications;

(C) Designs backup generators in such central offices for fully automatic operation and for ease of manual operation, when required;

(D) Designs, installs, and maintains each generator in any central office that is served by more than one backup generator as a stand-alone unit that does not depend on the operation of another generator for proper functioning.

(ii) If a covered 911 service provider does not conform with all of the elements in paragraph (c)(2)(i) of this section, it must certify with respect to each such central office:

(A) Whether it has taken alternative measures to mitigate the risk of a loss of service in that office due to a loss of power or is taking steps to remediate any issues that it has identified with respect to backup power in that office, in which case it shall provide a brief explanation of such alternative measures or such remediation steps, the date by which it anticipates such remediation will be completed, and why it believes those measures are reasonably sufficient to mitigate such risk; or

(B) Whether it believes that one or more of the requirements of this paragraph are not applicable to its network, in which case it shall provide a brief explanation of why it believes any such requirement does not apply.

(3) *Network monitoring.* (i) A covered 911 service provider shall certify whether it has, within the past year:

(A) Conducted diversity audits of the aggregation points that it uses to gather network monitoring data in each 911 service area;

(B) Conducted diversity audits of monitoring links between aggregation points and NOCs for each 911 service area in which it operates; and

(C) Implemented physically diverse aggregation points for network monitoring data in each 911 service area and physically diverse monitoring links from such aggregation points to at least one NOC.

(ii) If a Covered 911 Service Provider does not conform with all of the elements in paragraph (c)(3)(i) of this section, it must certify with respect to each such 911 Service Area:

(A) Whether it has taken alternative measures to mitigate the risk of network monitoring facilities that are not physically diverse or is taking steps to remediate any issues that it has identified with respect to diverse network monitoring in that 911 service area, in which case it shall provide a brief explanation of such alternative measures or such remediation steps, the date by which it anticipates such remediation will be completed, and why it believes those measures are reasonably sufficient to mitigate such risk; or

(B) Whether it believes that one or more of the requirements of this paragraph are not applicable to its network, in which case it shall provide a brief explanation of why it believes any such requirement does not apply.

(d) *Other matters*—(1) *Initial reliability certification.* One year after October 15, 2014, a certifying official of every covered 911 service provider shall certify to the Commission that it has made substantial progress toward meeting the standards of the annual reliability certification described in paragraph (c) of this section. Substantial progress in each element of the certification shall be defined as compliance with standards of the full certification in at least 50 percent of the covered 911 service provider's critical 911 circuits, central offices that directly serve PSAPs, and independently monitored 911 service areas.

(2) *Confidential treatment.* (i) The fact of filing or not filing an annual reliability certification or initial reliability certification and the responses on the face of such certification forms shall not be treated as confidential.

(ii) Information submitted with or in addition to such certifications shall be presumed confidential to the extent that it consists of descriptions and documentation of alternative measures to mitigate the risks of nonconformance with certification elements, information detailing specific corrective actions taken with respect to certification elements, or supplemental information requested by the Commission or Bureau with respect to a certification.

(3) *Record retention.* A covered 911 service provider shall retain records supporting the responses in a certification for two years from the date of such certification, and shall make such records available to the Commission upon request. To the extent that a covered 911 service provider maintains records in electronic format, records supporting a certification hereunder shall be maintained and supplied in an electronic format.

(i) With respect to diversity audits of critical 911 circuits, such records shall include, at a minimum, audit records separately addressing each such circuit, any internal report(s) generated as a result of such audits, records of actions taken pursuant to the audit results, and records regarding any alternative measures taken to mitigate the risk of critical 911 circuits that are not physically diverse.

(ii) With respect to backup power at central offices, such records shall include, at a minimum, records regarding the nature and extent of backup power at each central office that directly serves a PSAP, testing and maintenance records for backup power equipment in each such central office, and records regarding any alternative measures taken to mitigate the risk of insufficient backup power.

(iii) With respect to network monitoring, such records shall include, at a minimum, records of diversity audits of monitoring links, any internal report(s) generated as a result of such audits, records of actions taken pursuant

to the audit results, and records regarding any alternative measures taken to mitigate the risk of aggregation points and/or monitoring links that are not physically diverse.

§ 9.20 Backup power obligations.

(a) *Covered service.* For purposes of this section, a Covered Service is any facilities-based, fixed voice service offered as residential service, including fixed applications of wireless service offered as a residential service, that is not line powered.

(b) *Obligations of providers of a Covered Service to offer backup power.* Providers of a Covered Service shall, at the point of sale for a Covered Service, offer subscribers the option to purchase backup power for the Covered Service as follows:

(1) *Eight hours.* Providers shall offer for sale at least one option with a minimum of eight hours of standby backup power.

(2) *Twenty-four hours.* By February 13, 2019, providers of a Covered Service shall offer for sale also at least one option that provides a minimum of twenty-four hours of standby backup power.

(3) *Options.* At the provider's discretion, the options in paragraphs (b)(1) and (2) of this section may be either:

(i) A complete solution including battery or other power source; or

(ii) Installation by the provider of a component that accepts or enables the use of a battery or other backup power source that the subscriber obtains separately. If the provider does not offer a complete solution, the provider shall install a compatible battery or other power source if the subscriber makes it available at the time of installation and so requests. After service has been initiated, the provider may, but is not required to, offer to sell any such options directly to subscribers.

(c) *Backup power required.* The backup power offered for purchase under paragraph (b) of this section must include power for all provider-furnished equipment and devices installed and operated on the customer premises that must remain powered in order for the service to provide 911 access.

(d) *Subscriber disclosure.* (1) The provider of a Covered Service shall disclose to each new subscriber at the point of sale and to all subscribers to a Covered Service annually thereafter:

(i) Capability of the service to accept backup power, and if so, the availability of at least one backup power solution available directly from the provider, or after the initiation of service, available from either the provider or a third party. After the obligation to offer for purchase a solution for twenty-four hours of standby backup power becomes effective, providers must disclose this information also for the twenty-four-hour solution;

(ii) Service limitations with and without backup power;

(iii) Purchase and replacement information, including cost;

(iv) Expected backup power duration;

(v) Proper usage and storage conditions, including the impact on duration of failing to adhere to proper usage and storage;

(vi) Subscriber backup power self-testing and -monitoring instructions; and

(vii) Backup power warranty details, if any.

(2) Disclosure reasonably calculated to reach each subscriber. A provider of a Covered Service shall make disclosures required by this rule in a manner reasonably calculated to reach individual subscribers, with due consideration for subscriber preferences. Information posted on a provider's public website and/or within a subscriber portal accessed by logging through the provider's website are not sufficient to comply with these requirements.

(3) The disclosures required under this paragraph are in addition to, but may be combined with, any disclosures required under § 9.11(a)(5) and (b)(5).

(e) *Obligation with respect to existing subscribers.* Providers are not obligated to offer for sale backup power options to or retrofit equipment for those who are subscribers as of the effective date listed in paragraph (f) of this section for the obligations in paragraph (b)(1) of this section, but shall provide such subscribers with the annual disclosures required by paragraph (d) of this section.

(f) *Dates of obligations.* (1) Except as noted in paragraphs (b)(2) and (f)(2) of this section, the obligations under

paragraph (b) of this section are in effect February 16, 2016, and the obligations under paragraph (d) of this section are in effect August 5, 2016.

(2) For a provider of a Covered Service that (together with any entities under common control with such provider) has fewer than 100,000 domestic retail subscriber lines, the obligations in paragraph (b)(1) of this section are in effect August 11, 2016, the obligations in paragraph (b)(2) of this section are in effect as prescribed therein, and the obligations under paragraph (d) of this section are in effect February 1, 2017.

(g) *Sunset date.* The requirements of this section shall no longer be in effect as of September 1, 2025.

PART 10—WIRELESS EMERGENCY ALERTS

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AUTHORITY: 47 U.S.C. 151, 154(i) and (o), 201, 303(r), 403, and 606; sections 602(a), (b), (c), (f), 603, 604 and 606 of Pub. L. 109–347, 120 Stat. 1884.

SOURCE: 73 FR 43117, July 24, 2008, unless otherwise noted.

Subpart A—General Information

§ 10.1 Basis.

The rules in this part are issued pursuant to the authority contained in the Warning, Alert, and Response Network Act, Title VI of the Security and Accountability for Every Port Act of 2006, Public Law 109–347, Titles I through III of the Communications Act of 1934, as amended, and Executive Order 13407 of June 26, 2006, Public Alert and Warning System, 71 FR 36975, June 26, 2006.

§ 10.2 Purpose.

The rules in this part establish the requirements for participation in the voluntary Wireless Emergency Alerts system.

[78 FR 16807, Mar. 19, 2013]

§ 10.10 Definitions.

(a) *Alert Message.* An Alert Message is a message that is intended to provide the recipient information regarding an emergency, and that meets the requirements for transmission by a Participating Commercial Mobile Service Provider under this part.

(b) *Common Alerting Protocol.* The Common Alerting Protocol (CAP) refers to Organization for the Advancement of Structured Information Standards (OASIS) Standard CAP–V1.1, October 2005 (available at *http://www.oasis-open.org/specs/index.php#capv1.1*), or any