

**State of Connecticut
Regulation of
Department of Emergency Services and Public Protection
Concerning
Establishment and Operation of Public Safety Answering Points and Private Safety
Answering Points**

Section 1. The Regulations of Connecticut State Agencies are amended by adding sections 28-27-1a to 28-27-32a as follows:

(NEW) Sec. 28-27-1a.

As used in sections 28-27-1a to 28-27-32a, inclusive, of the Regulations of Connecticut State Agencies:

(1) “Automatic location identification” shall have the meaning ascribed to it in section 28-25 of the Connecticut General Statutes.

(2) “Automatic number identification” shall have the meaning ascribed to it in section 28-25 of the Connecticut General Statutes.

(3) “Central station alarm company” means a company that provides alarm service monitoring for a home or business.

(4) “Division” means the Division of Statewide Emergency Telecommunications within the Department of Emergency Services and Public Protection.

(5) “Private safety answering point” shall have the meaning ascribed to it in section 28-25 of the Connecticut General Statutes.

(6) “Public safety agency” shall have the meaning ascribed to it in section 28-25 of the Connecticut General Statutes.

(7) “Public safety answering point,” or “PSAP,” shall have the meaning ascribed to it in section 28-25 of the Connecticut General Statutes.

(8) “Next generation 9-1-1” means a 9-1-1 internet protocol-based system with inherent capabilities beyond enhanced 9-1-1 system functions, such as the basic ability to support non-voice multimedia, including text, images and video.

(9) “Rebid” means a repeat request for location information.

(10) “Telecommunicator” means a person employed at the public safety answering point or private safety answering point to receive 9-1-1 calls.

(11) “Telecom provider” means a telephone company, Voice over Internet Protocol (VOIP) service provider or a [rovider of wireless telecommunications service as such terms are defined in section 28-30b of the Connecticut General Statutes.;

(12) “Telephone Company” shall have the meaning ascribed to it in section 28-25 of the Connecticut General Statutes.

(NEW) Sec. 28-27-2a. Designated emergency number

The digits “9-1-1” shall be the only emergency number advertised for use at a company, corporation or institution served by a public safety answering point or a private safety answering point.

(NEW) Sec. 28-27-3a. Answering point contact

Each public safety answering point and private safety answering point providing 9-1-1 service shall designate a person to serve as the contact with the municipality or municipalities in whose area the public safety answering point or privacy safety answering point operates, the Department of Emergency Services and Public Protection Division of Statewide Emergency Telecommunications, and the certified telecommunications providers for all issues regarding 9-1-1 service.

(NEW) Sec. 28-27-4a. Hours of operation

Public safety answering points and private safety answering points shall operate on a twenty-four hour, seven-day per week basis.

(NEW) Sec. 28-27-5a. Ten-digit telephone lines

(a) Each public safety answering point and private safety answering point shall maintain at least one published ten-digit telephone number to be used to communicate with local public safety agencies and for receipt of incoming emergency calls transferred to the public safety answering point or the private safety answering point by a telephone company operator.

(b) Each public safety answering point and private safety answering point shall maintain at least two unlisted and unpublished (generally not available) ten-digit telephone circuits to be used to communicate with local public safety agencies and other public safety answering points and for receipt of incoming emergency calls from central station alarm companies or incoming calls rerouted by the next generation 9-1-1 telecommunication system.

(NEW) Sec. 28-27-6a. Physical and data security

(a) All entrances to public safety answering points and private safety answering points shall be locked to prevent entry by unauthorized persons. Entry shall be gained only by authorized key holders or by lock release initiated by public or private safety answering point personnel.

(b) Nine-one-one workstations and equipment capable of receiving 9-1-1 calls shall not be connected to any device or network not specifically approved by the Division of Statewide Emergency Telecommunications.

(NEW) Sec. 28-27-7a. Security clearance

Each public safety answering point and private safety answering point shall establish personnel security clearance standards that are acceptable to the municipality and local public safety agencies in whose jurisdiction the facility is located.

(NEW) Sec. 28-27-8a. Call handling procedures

(a) Each public safety answering point shall have the ability to respond to all 9-1-1 calls received from its service area by dispatching appropriate private or public safety agencies to the emergency or through transfer of the call to a secondary dispatch point having the required dispatching capability.

(b) Each private safety answering point shall have the ability to transfer 9-1-1 calls to public safety answering points or secondary dispatch points, relay information to a public safety agency or dispatch private safety agency.

(NEW) Sec. 28-27-9a. Emergency power source

(a) Each public safety answering point and private safety answering point shall be equipped with an emergency power generator and fuel capable of providing for the essential power requirements of

the facility to ensure continuous operation for seventy-two hours during commercial power outages. The requirements for performance, operation, testing and maintenance of generators shall conform to the applicable provisions of National Fire Protection Association 110, *Standard for Emergency and Standby Power Systems*, Type 10, Level 1, Class 75. The local authority responsible for the public safety answering point or private safety answering point may require a higher class if necessary to comply with the emergency power requirements of the public safety answering point or private safety answering point. The generator shall be tested or “exercised” at least once per month, under load, for a minimum of 30 minutes, using one or both of the following methods:

- (1) Under normal operating temperature conditions and at least thirty per cent of the emergency power supply nameplate kilowatt rating; or
- (2) Loading that maintains the minimum exhaust gas temperatures as recommended by the manufacturer.

(b) Public safety answering points and private safety answering points shall maintain logs of monthly generator testing.

(NEW) Sec. 28-27-10a. Training

(a) The company, corporation or institution managing a private safety answering point shall provide training on all 9-1-1 equipment and systems installed by the company, corporation or institution for all private safety answering point personnel directly involved in the operation of 9-1-1 equipment, systems and functions.

(b) Public safety answering point and private safety answering point telecommunicators shall comply with telecommunicator training requirements provided in section 28-30 of the Connecticut General Statutes.

(NEW) Sec. 28-27-11a. Call answer threshold

Each public safety answering point and private safety answering point shall have sufficient 9-1-1 workstations and personnel to ensure that ninety percent of all 9-1-1 calls are answered in no more than ten seconds during normal peak operating periods.

(NEW) Sec. 28-27-12a. Number of 9-1-1 workstations

There shall be no fewer than two 9-1-1 workstations established at each public safety answering point and private safety answering point. The Division of Statewide Emergency Telecommunications shall determine the proper number of 9-1-1 workstations based on the population served, actual 9-1-1 call volume and operational factors specific to the public or private safety answering point.

(NEW) Sec. 28-27-13a. Grade of service

The grade of service provided by the network utilized for the delivery of 9-1-1 calls to public safety answering points or private safety answering points shall be equal to P.01 or better. A P.01 grade of service means that not more than one 9-1-1 call in 100 will receive a busy signal during the average busiest hour.

(NEW) Sec. 28-27-14a. Call status indicators

All 9-1-1 workstations at a public safety answering point or private safety answering point shall indicate incoming emergency calls by both audible and visual indicators.

(NEW) Sec. 28-27-15a. Requirements of 9-1-1 workstations

Public safety answering points and private safety answering points that connect to the next generation 9-1-1 telecommunication system shall use 9-1-1 equipment approved by the Division of Statewide Emergency Telecommunications. Public safety answering point and private safety

answering point 9-1-1 workstations shall display the automatic number identification and the automatic location identification of the calling party with a map that automatically displays the location of the 9-1-1 calling party.

(NEW) Sec. 28-27-16a. Equipment safeguards

(a) Service entrances for commercial power and telephone service at public safety answering points and private safety answering points shall be installed underground for all such facilities. All commercial power and telephone lines entering the facility shall be encased in protective sheathing.

(b) All facilities and equipment associated with 9-1-1 service shall be provided with protective measures to prevent accidental worker contact. Each protected termination shall be clearly identified.

(NEW) Sec. 28-27-17a. Provision of location information for the 9-1-1 system

(a) Telephone companies and private safety answering points shall transmit updates to the State of Connecticut (“State”) data management system on a daily basis, in a manner to be determined by the Division of Statewide Emergency Telecommunications, unless no updates are necessary.

(b) Providers of wireless telecommunications service and voice over Internet protocol service shall provide a call back number and a geographic information system location for each call as required by the National Emergency Number Association i3 Standard. Wireless 9-1-1 call location data shall be capable of updating with each rebid.

(c) Private safety answering points that use the established State location data management system shall transmit updates to the State location data management system on a daily basis, in a manner to be determined by the Division of Statewide Emergency Telecommunications.

(d) Private safety answering points that use an in-house location database shall make updates daily and ensure all updates are completed within two days of any change. Private safety answering points shall maintain a record of all updates to the in-house location database.

(NEW) Sec. 28-27-18a. Private safety answering point contingency re-route plans

All private safety answering points shall have back-up routing capability that provides for the re-routing of 9-1-1 calls to the local public safety answering point when any 9-1-1 call cannot be delivered or answered at the intended private safety answering point.

(NEW) Sec. 28-27-19a. Public and private safety answering point inspections

The Division of Statewide Emergency Telecommunications may inspect each public safety answering point and private safety answering point to determine if it meets the standards for public and private safety answering points.

(NEW) Sec. 28-27-20a. Private safety answering point planning and coordination

(a) Each private safety answering point shall coordinate with the chief executive officer of the municipality in whose area the private safety answering point operates to develop and implement a plan in concert with the respective chief or head of the police, fire or emergency medical service department or provider for the transfer of 9-1-1 calls or to relay information in accordance with criteria established by the municipality.

(b) The plan for transferring or reporting police, fire or emergency medical service incidents shall be submitted as part of the private branch exchange 9-1-1 utilization plan submitted to the Division of Statewide Emergency Telecommunications in accordance with section 28-25b(e) of the Connecticut General Statutes.

(NEW) Sec. 28-27-21a. Private safety answering point decertification

The Division of Statewide Emergency Telecommunications shall rescind its approval of any 9-1-1 private safety answering point that fails to comply with the standards set for such facilities. In the event of such action, the private safety answering point may appeal to the Commissioner of Emergency Services and Public Protection.

(NEW) Sec. 28-27-22a. Compliance with federal requirements for access to emergency 9-1-1 services by telecommunications devices for the deaf (TDD)

Each public and private safety answering point shall be equipped with TDD communication functionality in compliance with 28 CFR 35.162.

REQUIREMENTS RELATING TO TELEPHONE COMPANIES, VOIP SERVICE PROVIDERS AND WIRELESS TELECOMMUNICATIONS CARRIERS**(NEW) Sec. 28-27-23a. Requirement to connect; diversity of connections**

All telecom providers providing service in Connecticut shall connect with the 9-1-1 system at the interconnection points designated by the Division. The interconnections shall be geographically diverse and provide a grade of service of P.01 or better for the delivery of 9-1-1 calls from their respective networks.

(NEW) Sec. 28-27-24a. Emergency call traces

(a) Each telecom provider shall identify how emergency call traces will be initiated by PSAPs when a 9-1-1 call from a subscriber is received and the address cannot be determined. Each telecom provider shall identify call trace contacts with telephone numbers so that call traces may be initiated at the request of the PSAP and completed in a timely manner. Such contact shall be available at all times.

(b) Each telecom provider shall update call trace contacts as changes occur and shall promptly provide such updated contact lists to the Division so that the Division can distribute the information to PSAPs.

(NEW) Sec. 28-27-25a. Subscriber updates

(a) Each telecom provider shall transmit subscriber telephone number and address records to the State of Connecticut (“State”) data management system, in accordance with the National Emergency Number Association (NENA) 02-11, *Recommended Data Standards for Local Exchange Carriers, ALI Service Providers and 9-1-1 Jurisdictions*. Each telecom provider shall cooperate with the 9-1-1 database manager to ensure prompt correction of data management system errors.

(b) Upon receipt of a complaint regarding a database error, the Division may request that the telecom provider responsible for the error provide a written analysis of the circumstances of the error and correction action plan. The analysis and plan shall be submitted to the Division within five days or such other period of time as the Division deems appropriate given the circumstances.

(c) Telephone companies shall transmit updates to the State data management system on a daily basis in a manner to be determined by the Division.

(d) Providers of wireless telecommunications service and VOIP service providers shall provide a call back number and a location in accordance with the NENA i3 standard. For wireless 9-1-1 call locations, such data shall be capable of updating with each rebid.

(NEW) Sec. 28-27-26a. 9-1-1 call routing

Each telecom provider shall connect each of its telecommunications call routing facilities

responsible for delivering 9-1-1 calls to not less than two geographically diverse interconnection points designated by the Division and, as required by section 28-27-12a of the Regulations of Connecticut State Agencies, maintain a grade of service of P.01 for the interconnection pathways.

(NEW) Sec. 28-27-27a. Performance reports

(a) Telecom providers shall submit a written grade of service network performance report and data management system update report to the Division on a quarterly basis. The following information shall be provided:

(1) Grade of service performance of the interconnections between the telecom provider's call routing facilities and the interconnection points designed by the Division; and

(2) For telephone companies and VOIP service providers, the number of subscriber records updated to the State location data management system and the number of days required to perform the updates.

(b) Telecom providers shall submit, on a quarterly basis, network performance reports that measure the number of calls blocked between the telecom provider and the interconnection points designated by the Division as follows:

(1) The report due on January 1 shall cover September, October and November of the previous year;

(2) The report due on April 1 shall cover December of the previous year and January and February of the current year;

(3) The report due on July 1 shall cover March, April and May of the current year; and

(4) The report due on October 1 shall cover June, July and August of the current year.

(NEW) Sec. 28-27-28a. Default routing plans

(a) If the telephone number or location information that is necessary to normally route a 9-1-1 call is unavailable from a telecom provider, then the telecom provider shall forward sufficient information to the 9-1-1 system to allow the call to be routed to a default PSAP.

(1) The telecom provider shall submit for approval to the Division written default routing plans.

(2) Approved default routing plans shall be in place prior to the provision of revenue service by a telecom provider.

(3) The default PSAP selected by the telecom provider for each numbering plan area (area code) shall be the PSAP serving the largest concentration of their subscribers within that numbering plan area once approval is received from the Division.

(b) Default routing plans shall include the following:

(1) Telecom provider name and address;

(2) Telecom provider service area;

(3) Default PSAP selected for the telecom provider service area; and

(4) Telecom provider contact responsible for the default routing plan.

(NEW) Sec. 28-27-29a. Outage notification

If 9-1-1 service is unavailable to a telecom provider's subscribers for a period exceeding two hours, the telecom provider shall notify the Division of the outage, employing notification procedures provided by the Division.

(NEW) Sec. 28-27-30a. Municipalities; responsibility to provide address data

(a) Each municipality shall provide to the Division the street name and address data necessary for the call routing and mapping capability of the 9-1-1 emergency telecommunications system. Within

sixty days of receipt of the appropriate map from the Division, each municipality shall:

- (1) Correct or verify the accuracy of the street and address information for its local area;
 - (2) Where necessary, supplement the street and address information; and
 - (3) Label the map to indicate political boundaries, fire service zones, emergency medical service zones and police service zones.
- (b) Following submission of the initial information pursuant to subsection (a) of this section, each municipality shall update the map when there are changes in or the addition of streets and addresses in the municipality.
- (c) The municipality shall designate a primary local contact who is responsible for the assignment of street names and number ranges for the municipality. The municipality shall also notify the Division of that designation.

(NEW) Sec. 28-27-31a. Wireless 9-1-1 call routing assignment

The Division shall make wireless 9-1-1 call routing PSAP assignments. Until the capability of delivering latitude and longitude information with sufficient accuracy for call routing is reached, PSAP assignment shall be based upon the cell site sector orientation and radius and cell tower sector coverage maps, which shall be provided by the providers of wireless telecommunications service.

(NEW) Sec. 28-27-32a. VOIP telecom service providers and Connecticut 9-1-1 telecommunications fund surcharge

As provided by section 28-30d of the Connecticut General Statutes, all VOIP service providers shall pay the monthly Connecticut 9-1-1 telecommunications fund surcharge for each of their subscribers. The fee shall be assessed as required by statute and remitted to the E9-1-1 Telecommunications Fund.

Sec. 2. Sections 28-27-1 to 28-27-29, inclusive, of the Regulations of Connecticut State Agencies are repealed.

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Statement of Purpose

These regulations are being revised in order to bring them into line with state of the current technology that we use in Connecticut to deliver 9-1-1 calls. Telecommunications and 9-1-1 are a very different landscape than the years when the current regulations were written and modified, created as they were during the time when the local telephone company (SNET) provided the 9-1-1 system and recovered its costs directly from the ratepayers, and before the overwhelming majority of 9-1-1 calls were made from mobile devices. 9-1-1 service is now delivered by contract, and not as a packaged tariffed service. Regulatory provisions need to be modified or added in order to ensure the reliable delivery off emergency calls from the public in this new environment. This submittal is part of a package of submittals affecting different sections of the 9-1-1 regulations.

More specifically, the submittal does the following:

1. Increases the emergency power requirement for PSAPs from 24 hours to 72 hours. Aligns our requirement with the National Electrical Code (NEC) Critical Operations Power (COP) requirements, and will improve the resiliency of PSAPs during long-duration power events. The single largest cause of PSAP failure during tropical storms Irene and Sandy was generator failure.
2. Clarifies the requirement for unlisted telephone circuits to allow delivery of 9-1-1 calls in case of Public Safety Data Network failure, and to ensure that central stations (alarm companies) can reach PSAPs with their emergency calls, since alarm companies cannot use 9-1-1 to reach our PSAPs.
3. Revises language to use terms associated with Next Generation 9-1-1 (NG911).
4. Requires municipalities to cooperate with the Division of Statewide Emergency Telecommunications to keep the NG911 maps up-to-date. Previously, with legacy 9-1-1, municipalities dealt with the phone company to update street address files used by the 9-1-1 system when changes occurred. The map used for routing NG911 calls is owned and managed by the state in the new system, and the new provision clarifies the requirements of the new arrangement.
5. References the statutory requirement for VoIP providers to pay the monthly Connecticut 9-1-1 Telecommunications Fund surcharge for each of their subscribers.
6. Clarifies telephone company interconnections with the NG911 system.
7. Makes editorial changes as both the department and division have changed names.