

ILLINOIS REGISTER

DEPARTMENT OF STATE POLICE

NOTICE OF ADOPTED RULES

TITLE 83: PUBLIC UTILITIES
CHAPTER IV: DEPARTMENT OF STATE POLICE

PART 1328

STANDARDS OF SERVICE APPLICABLE TO WIRELESS 9-1-1 EMERGENCY SYSTEMS

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AUTHORITY: Implementing and authorized by Section 15 of the Wireless Emergency Telephone Safety Act [50 ILCS 751/15].

SOURCE: Adopted by emergency rulemaking at 40 Ill. Reg. 1181, effective January 1, 2016, for a maximum of 150 days; adopted at 40 Ill. Reg. 8124, effective May 27, 2016.

SUBPART A: GENERAL PROVISIONS

Section 1328.100 Application of Part

- a) This Part shall apply to Emergency Telephone System Boards (ETSB), qualified governmental entities, public safety agencies, and wireless carriers in the State of Illinois, except to the extent of any exemptions conferred by law.

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- b) Public safety agencies and wireless carriers are encouraged to cooperate to provide emergency access to wireless 9-1-1 and wireless E9-1-1 service. Public safety agencies and wireless carriers operating wireless 9-1-1 and wireless E9-1-1 systems require adequate funding to recover the costs of designing, purchasing, installing, testing and operating enhanced facilities, systems and services necessary to comply with the wireless E9-1-1 requirements mandated by the Federal Communications Commission (FCC) and to maximize the availability of wireless E9-1-1 services throughout the State of Illinois.

Section 1328.105 Definitions

"9-1-1 Authority" means the ETSB or qualified governmental entity that provides for the management and operation of a 9-1-1 system within the scope of those duties and powers prescribed by the Emergency Telephone System Act (ETSA) [50 ILCS 750].

"9-1-1 System" means the geographic area that has been granted an order of authority by the Administrator to use "9-1-1" as the primary emergency telephone number.

"9-1-1 System Provider" means any person, corporation, limited liability company, partnership, sole proprietorship, or entity of any description that acts as a 9-1-1 system provider within the meaning of ETSA Section 2 by contracting to provide 9-1-1 network and database services and that has been certified by the Commission pursuant to Section 13-900 of the Public Utilities Act [220 ILCS 5/13-900].

"Act" or "ETSA" means the Emergency Telephone System Act [50 ILCS 750].

"Administrator" means the Statewide 9-1-1 Administrator.

"Advisory Board" means the Statewide 9-1-1 Advisory Board.

"Authorized Wireless 9-1-1 Answering Point" means an ETSB or qualified governmental entity that has been authorized by the Commission or the Department to take wireless 9-1-1 calls.

"Automatic Location Identification" or "ALI" means the automatic display at the PSAP of the caller's telephone number, the address/location of the telephone, and supplementary emergency services information.

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"Automatic Number Identification" or "ANI" means the automatic display of the telephone number associated with the access line from which a call originates on the PSAP monitor.

"Cell Sector" means one face of a cell antenna (typically three sided) that operates independently of the other sectors.

"Central Office" means the site where switching equipment is located. A local central office, also called an end office, is the switching office where individual subscriber's access lines appear. It houses the equipment that receives calls transmitted on the local loop and routes the call over the switched network either directly to the person called, if the call is placed to a location served by the same local central office, or to another central office, if the call is placed to a customer served by a different central office.

"Commission" means the Illinois Commerce Commission.

"Default Routing" means a feature that allows emergency calls to be routed to a designated default PSAP when the incoming 9-1-1 call cannot be selectively routed due to ANI failure, garbled digits, or other causes that prevent selective routing.

"Department" means the Department of State Police.

"Director" means the Director of the Department of State Police.

"Diverse Routing" means the practice of routing circuits along different physical paths in order to prevent total loss of 9-1-1 service in the event of a facility failure.

"Emergency Call" means any type of request for emergency assistance through a 9-1-1 network, not limited to voice. This may include a session established by signaling with two-way, real-time media and involves a human making a request for help.

"Emergency Telephone System Board" or "ETSB" means a board appointed by the corporate authorities of any county or municipality that provides for the management and operation of a 9-1-1 system within the scope of the duties and powers prescribed by ETSA. The corporate authorities shall provide for the manner of appointment, provided that members of the board meet the requirements of the statute.

"Enhanced 9-1-1" or "E9-1-1" means an emergency telephone system that includes dedicated network, selective routing, database, ALI, ANI, selective transfer, fixed transfer, and a call back number.

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"Local Number Portability" means the ability for a customer to change its telephone company while still keeping the same telephone number.

"Mobile Switching Office" or "MSO" means the wireless equivalent of a central office that provides switching functions for wireless calls.

"NG9-1-1" or "Next Generation 9-1-1 Service" means a system comprised of managed IP-based networks, gateways, functional elements and databases that augment or replicate present day E9-1-1 features and functions and provide new capabilities. NG9-1-1 is designed to provide access to emergency services from all sources, and to provide multimedia data capabilities for PSAPs and other emergency service organizations.

"NPA" means numbering plan area or area code.

"NXX" means the first three digits of a local seven digit telephone number that identify the specific telephone company's central office serving that number.

"Number Pooling" means distributing numbers in one NXX code to more than one carrier and other strategies for optimizing the use of telephone numbers in the North American Numbering Plan (NANP) in the United States.

"Order of Authority" means a formal order of the Administrator that authorizes public agencies or public safety agencies to provide 9-1-1 service in a geographical area.

"Public Safety Answering Point" or "PSAP" means the initial answering location of an emergency call.

"Pseudo Automatic Number Identification" or "pANI" means a telephone number used to support routing of wireless 9-1-1 calls. It may identify a wireless cell, cell sector or PSAP to which the call should be routed, also known as routing number.

"Qualified Governmental Entity" means a unit of local government authorized to provide 9-1-1 services pursuant to ETSA when no ETSB exists.

"Secondary Answering Point" or "SAP" means a location, other than a PSAP, that is able to receive the voice, data and call back number of an E9-1-1 or NG9-1-1 emergency call transferred from a PSAP and completes the call taking process by dispatching police, medical, fire or other emergency responders.

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"Selective Routing" means a switching system that automatically routes calls to predetermined PSAPs, based on the location of the calling telephone number.

"Trunk" means a transmission path between switching units, switching centers and/or toll centers.

"Wireless Carrier" means a provider of two-way cellular, broadband personal communications service (PCS), geographic area 800 MHz and 900 MHz Commercial Mobile Radio Service (CMRS), Wireless Communications Service (WCS), or other Commercial Mobile Radio Service (CMRS), as defined by the Federal Communications Commission, offering radio communications that may provide fixed, mobile, radio location, or satellite communication services to individuals or businesses within its assigned spectrum block and geographical area or that offers real-time, two-way voice service that is interconnected with the public switched network, including a reseller of the service.

SUBPART B: AUTHORIZATION TO OPERATE

Section 1328.200 General Requirements

- a) All wireless 9-1-1 calls shall only be directed to an authorized wireless PSAP.
- b) The Administrator shall notify the Advisory Board upon receipt of a request from a qualified governmental entity or an ETSB when the entity requests to provide wireless 9-1-1 service in areas for which the Department has accepted wireless 9-1-1 responsibility.
- c) The Administrator shall further confer with the Advisory Board only in those instances when the requesting entity does not comply with Section 1328.300.

Section 1328.205 Implementation of Wireless 9-1-1 Service

ETSBs or qualified governmental entities applying to take wireless 9-1-1 calls shall begin providing the service within 6 months after receiving written notice from the Department's Office of the Statewide 9-1-1 Administrator to function as an authorized wireless 9-1-1 answering point.

Section 1328.210 Authorization to Operate

- a) ETSBs and qualified governmental entities that possess an order of authority to

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operate a 9-1-1 system in the State of Illinois are the only entities that shall handle wireless 9-1-1 calls. These entities shall be known as authorized wireless 9-1-1 answering points.

- b) The Department shall be the default 9-1-1 wireless answering point in areas where no authorized wireless 9-1-1 answering point exists.
- c) To become an authorized wireless 9-1-1 answering point, an ETSB or qualified governmental entity shall provide the Department's Office of the Statewide 9-1-1 Administrator with a plan that sets forth, at a minimum, the items contained in this subsection (c). Nothing in this Section requires the Department to follow the filing requirements in this subsection (c).
 - 1) A narrative statement setting forth:
 - A) The name of the ETSB or qualified governmental entity or combination of such, requesting to be a 9-1-1 wireless answering point, and the name, address and telephone number of a contact person for the ETSB or qualified governmental entity or combination;
 - B) A detailed explanation of the jurisdictional boundaries that will be covered, specifying whether those jurisdictional boundaries differ from the wireline 9-1-1 jurisdictional boundaries;
 - C) If the jurisdictional boundaries differ, an explanation of whether additional public safety agencies (fire, law enforcement, EMS) will be dispatched in response to wireless 9-1-1 calls, and how those additional public safety agencies will be dispatched, together with a list of the agencies;
 - D) The name of the 9-1-1 system provider and list of wireless carriers providing service in the specified jurisdiction;
 - E) The name, address and phone number of the project coordinator designated by 9-1-1 Authority; and
 - F) Phase of wireless 9-1-1 service being provided and wireless solutions (NCAS, CAS, etc.) with a timeline for implementation;

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- 2) A list of PSAPs within the 9-1-1 system that will be answering 9-1-1 wireless calls and their addresses;
 - 3) A list of additional public safety agencies that will need to be dispatched in response to wireless 9-1-1 calls and the associated call handling agreements prescribed in 83 Ill. Adm. Code 1325.205(b)(10)(F). These agreements are subject to the annual recertification requirements in 83 Ill. Adm. Code 1325.505;
 - 4) A network diagram provided by the 9-1-1 system provider showing the overall system configuration. Changes made to a system that affect the ability of the system to route wireless 9-1-1 calls shall be reflected in annual filings required by 83 Ill. Adm. Code 1325.205(b)(10)(E);
 - 5) Copies of any intergovernmental agreements entered into between ETSBs or qualified units of local governments for providing wireless 9-1-1 service; and
 - 6) The Test Plan required by Section 1328.305(c).
- d) The Department's Office of the Statewide 9-1-1 Administrator shall review the plan and notify the entity in writing, stating whether it has the authorization to operate as an authorized wireless 9-1-1 answering point for the jurisdiction indicated in the plan.
 - e) In the event that an authorized wireless 9-1-1 answering point seeks to modify its existing plan on file with the Administrator, it shall file a description of the modification a minimum of 10 days in advance of any changes being made.

SUBPART C: OPERATIONS

Section 1328.300 Wireless Service Provisioning

- a) Wireless 9-1-1 service connects a person who has dialed 9-1-1 to the appropriate 9-1-1 system provider. Wireless 9-1-1 service shall be provided by wireless carriers in a manner that allows the 9-1-1 system provider to comply with 83 Ill. Adm. Code 725.
- b) Diverse routing shall be provided for all wireline trunking facilities used to transport and terminate the wireless 9-1-1 call where facilities are available.

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- c) Default routing shall be provided in the event that a wireless 9-1-1 call cannot be selectively routed. The level of default routing shall be negotiated among the 9-1-1 system provider, the wireless carrier, and the 9-1-1 authority.
- d) Wireless carriers shall provide information to the appropriate 9-1-1 authority of changes that affect the identification and location information needed by an authorized wireless 9-1-1 answering point at least 10 business days prior to changes being made. The media used in providing this information shall be mutually agreed upon by the carrier and the 9-1-1 authority.
- e) Prior to an authorized wireless 9-1-1 answering point going on-line, wireless carriers shall identify a primary point of contact and telephone number for each 9-1-1 authority. Wireless carriers shall adopt practices to notify this primary point of contact within 15 minutes:
 - 1) after a confirmed outage with the system, as well as the magnitude of the outage; and
 - 2) after the confirmed restoration of 9-1-1 services.
- f) When all 9-1-1 circuits are busy in the originating mobile switching office, the switching facility, if equipped to provide the function, shall route the caller to an announcement, busy tone or reorder tone. When an all-trunks busy condition occurs in an intermediate switching facility, that machine shall, if equipped, route the caller to an appropriate backup answering location, announcement, busy tone or reorder tone.
- g) Wireless carriers shall provide each 9-1-1 authority with an emergency phone number or numbers that are available 24 hours per day, 7 days per week for network and security support.

Section 1328.305 Wireless Carrier Testing

- a) No circuits associated with an authorized wireless 9-1-1 answering point shall be opened, grounded, short circuited or tested in any manner until maintenance personnel have obtained release of the affected circuits from the appropriate 9-1-1 authority. Wireless carrier maintenance personnel shall advise the 9-1-1 authority regarding the length of time that will be required to perform any work involving circuits associated with an authorized wireless 9-1-1 answering point. Wireless

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carrier personnel shall notify the 9-1-1 authority and the 9-1-1 system provider a minimum of 48 hours prior to performing mobile office switching installations, NPA additions, NXX additions, or any other scheduled event that affects 9-1-1.

- b) Each wireless carrier shall adopt mutually agreed upon testing practices, in conjunction with the 9-1-1 authority, to perform, at a minimum, mobile office to PSAP 9-1-1 test calls when any of the following changes occur:
 - 1) New mobile switching office installations;
 - 2) NPA and NXX pANI additions;
 - 3) Local number portability implementations;
 - 4) Number pooling implementations; and
 - 5) Any other event that affects 9-1-1.
- c) Each wireless carrier shall develop a testing plan in conjunction with the 9-1-1 system provider and the 9-1-1 authority for inclusion in the 9-1-1 systems' wireless plan that must be submitted to the Administrator.

Section 1328.310 Authorized Wireless 9-1-1 Answering Point Testing

Ongoing testing after the authorized wireless 9-1-1 answering point is on-line shall include the following:

- a) Testing with all wireless carriers, including, but not limited to, the 9-1-1 database, network trunking, system overflow, system backup, default routing, and call transfers, on an annual basis. The mutually agreed upon testing shall be coordinated in advance by the 9-1-1 authority and the participating wireless carriers.
- b) Coordinated testing with the participating wireless carriers when any of the following occurs:
 - 1) New mobile switching office installations;
 - 2) NPA and NXX pANI additions;

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- 3) Local number portability implementations;
- 4) Number pooling implementations; and
- 5) Any other event that affects 9-1-1.