**Section 725.405 9-1-1 System Provider**

A 9-1-1 System Provider:

a) Shall be certified under Section 13-900 of the Public Utilities Act as a 9-1-1 system provider prior to entering into any contract with a 9-1-1 authority to provide 9-1-1 services;

b) Shall file tariffs under Sections 13-900.1 and 9-102 of the Public Utilities Act for 9-1-1 services prior to offering such services;

c) Shall enter into a service contract with each 9-1-1 authority for which it plans to provide 9-1-1 database, call routing and other 9-1-1 duties and services associated with the 9-1-1 system that clearly delineates the responsibilities of the 9-1-1 system provider and 9-1-1 authority;

d) Shall assume the lead role in coordinating the implementation of the 9-1-1 project. The 9-1-1 system provider is responsible for the initial implementation and mutually agreed upon changes/modifications, project timeline, milestone progress report/conference calls with Commission 9-1-1 Program Staff and all involved parties. If there are multiple 9-1-1 system providers, the 9-1-1 authority shall specify the role of each provider pursuant to Section 1325.400(f);

e) Shall comply with any provisions of all applicable federal or State laws regarding the provisioning of 9-1-1 services regarding wireline, wireless and VoIP or any other medium;

f) Shall comply with back-up power requirements for 9-1-1 equipment and facilities as specified in 83 Ill. Adm. Code 730.325 or 737.410;

g) Shall comply with physical security requirements for its facilities as specified in 83 Ill. Adm. Code 785.35;

h) Shall provision "9-1-1 Service" in one of the following types:

1) Basic 9-1-1 service is an emergency telephone system that automatically connects 9-1-1 callers to a designated answering point through either dedicated direct trunking and/or tandem trunking from the central office to the PSAP.  Basic 9-1-1 does not typically support ANI and ALI. The features associated with basic service shall be according to the following format types:

A) Type #1 – This is the most basic configuration available, and provides:

i) no per-call charge;

ii) loop-type ringdown signaling toward PSAP;

iii) ringback tone to caller; and

iv) transmission path for communication between the caller and the PSAP;

B) Type #2 – This configuration provides all the features of the Type #1 circuit with the following options:

i) called party hold;

ii) forced disconnect;

iii) idle circuit tone application; and

iv) originating switchhook status indication contingent on the installation of appropriate terminal equipment at the PSAP;

C) Type #3 – This configuration provides all the features of the Type #1 and Type #2 circuits with the addition of ringback of the calling party on a held line;

D) Type #4 – This configuration provides for optional features beyond those described in the configuration of Type #2 or Type #3.  This type of Basic 9-1-1 also requires trunks capable of carrying ANI.

2) E9-1-1 service is a system that includes a dedicated network, selective routing, and a database that interfaces with a PSAP CPE capable of receiving and providing ANI and ALI. It can be provisioned through either a 9-1-1 telecommunications network that is commonly referred to as "9-1-1 traditional legacy service" or a 9-1-1 IP network which is commonly referred to as "NG9-1-1 service":

A) 9-1-1 traditional legacy service: Provides the capability to serve several PSAPs existing within the 9-1-1 service area with tandem trunking through the E9-1-1 selective router.  The main features of E9-1-1 service is the capability of the E9-1-1 selective router to selectively route an emergency call originating from any station in the 9-1-1 service area to the correct PSAP.  The features associated with tandem trunking in an E9-1-1 system may include the following:

i) Selective routing;

ii) Default routing;

iii) Alternate routing;

iv) Transfer capabilities;

v) Forced disconnect;

vi) No per call charge;

vii) ANI; and

viii) ALI.

B) NG9-1-1 service provides the capability to serve PSAPs through an IP network. The main feature of NG9-1-1 service is the capability to route an emergency call originating from multiple types of technology capable of calling 9-1-1. The capabilities and features associated with NG9-1-1 may include but are not limited to the following:

i) Legacy network gateway;

ii) Geospatial routing;

iii) Default routing;

iv) Alternate routing;

v) Transfer capabilities;

vi) ANI;

vii) ALI;

viii) Transmit data and/or text and/or video with the emergency call when feasible and/or available; and

ix) Emergency Services IP networks (ESInets).

C) Any combination of subsections (h)(2)(A) and (B).

i) The 9-1-1 system provider shall meet the following technical requirements for the provisioning of 9-1-1 service:

1) Utilizing mutually acceptable and agreed upon standards for database record exchange as prescribed, at a minimum, by the National Emergency Number Association in "NENA, Standard Data Formats For ALI Data Exchange, MSAG & GIS Mapping" (NENA 02-010, v9, 3/28/2011; this incorporation includes no later amendments or editions).

2) Obtaining, maintaining and updating end user subscriber information provided by all participating OSPs in order to maintain the 9-1-1 database to meet the requirements set forth in ETSA Section 15.4(d).

3) Creating, maintaining and updating the MSAG and database, GIS database, or functional equivalent in conjunction with the 9-1-1 authority and all OSPs.

4) Updating the ALI database on a daily basis during normal business days.

5) Providing notification of errors to the appropriate entities within 24 hours for corrective action.

6) Providing the error ratio to the 9-1-1 authority no later than December 31 of each year. 9-1-1 authorities may request the percentage on a more frequent basis, but not more than once a month.

7) Providing a network diagram to the 9-1-1 authority, annually within the 4th quarter of each year, no later than December 31. Additionally, updated diagrams must be provided to the 9-1-1 authority when a modification is required to be filed with the Commission.

8) Coordinating the development and the maintenance of the 9-1-1 database with all participating OSPs and the 9-1-1 authority and ensure that all required information for routing tables, i.e., NPA/NXX, ESN, default ESN, PANIs and any other items that may become necessary for the functionality of maintaining an accurate database and/or routing tables, is obtained.

9) Coordinating the installation of all network components with all participating OSPs and/or third party provider who may connect its network and transport 9-1-1 traffic to the appropriate 9-1-1 system provider on behalf of an OSP. In these cases, the OSP, the 9-1-1 system provider, and the third party telecommunications carrier shall work cooperatively with the 9-1-1 authority to ensure that appropriate default routes are chosen and proper network congestion control measures are maintained. The network design must adhere to the default routing and acceptable engineering practices as specified in subsections (h)(11) and (22).

10) Routing all emergency calls from any OSP without discrimination where technically feasible.

11) Provisioning all 9-1-1 facilities over dedicated redundant facilities. This should be considered to be the standard method of providing all incoming 9-1-1 facilities and, where possible, employ diverse routing. 9-1-1 circuits and facilities shall be sufficient to complete 99% of all emergency calls during the average busy hour of the average busy day. In all cases, the 9-1-1 network shall be provisioned to handle a minimum of two circuits and/or simultaneous calls, and shall use dedicated, diverse and/or redundant equipment, where available, in order to increase the survivability of the 9-1-1 network. Additionally the Commission 9-1-1 Program Staff and or 9-1-1 authority may on an annual basis or in the event of a problem request traffic studies be performed or other documentation be provided to verify that the standard is being met.

12) Provisioning 9-1-1 facilities for one way incoming only service to the PSAP. Origination of outbound dialing on 9-1-1 circuits without a caller or active 9-1-1 call on the circuit is prohibited.

13) Provisioning the transmission grade of service for 9-1-1 facilities using inter-exchange facilities equivalent to those specified in 83 Ill. Adm. Code 730.520 or 737.440.

14) Provisioning the transmission grade of service for the intra-exchange loop portion of any 9-1-1 facilities equivalent to those specified in 83 Ill. Adm. Code 730.525 or 737.630.

15) Notifying the 9-1-1 authority a minimum of 48 hours prior to performing any planned activities that could adversely affect 9-1-1 service.

16) Adopting practices to minimize the possibility of service disruption on all facilities associated with 9-1-1 service to a PSAP prior to 9-1-1 going on line.

17) Maintaining a contact number for notifying the appropriate 9-1-1 authority in the event of an outage or failure of a 9-1-1 system.

18) Notifying a primary point of contact within a 9-1-1 system within 15 minutes after detecting a confirmed outage within the system and advising the primary point of contact as to the magnitude of the outage once fully known. In addition, the 9-1-1 system provider must notify the Commission's 24 hour emergency number (217-558-6166) pursuant to 83 Ill. Adm. Code 730.550 or 737.430.

19) Notifying a primary point of contact of a 9-1-1 system and the Commission's 24 hour emergency number (217-558-6166) pursuant to 83 Ill. Adm. Code 730.550 or 737.734 within 30 minutes after the confirmed restoration of 9‑1-1 services.

20) Delivering 9-1-1 service elements for the provisioning and ongoing maintenance of the 9-1-1 systems as follows:

A) Provide database coordination with all participating OSPs when applicable.

B) Provide network coordination with all participating OSPs when applicable.

C) Provide maintenance and repair procedures, service and repair center contact information, a restoration plan and call trace procedures to the 9-1-1 authority.

21) Adopting practices and implementing procedures to reduce or minimize the conditions that cause default routed calls.

22) Default routing, at a minimum, by county. Where an exchange boundary/rate center crosses county boundaries, the 9-1-1 system provider may establish a single default with the approval of the 9-1-1 authority for those affected 9-1-1 systems.

23) Adopting practices to provide the appropriate services to Private Business Switch and Private Residential Switch subscribers for the purposes of complying with ETSA Sections 15.5 and 15.6 and 83 Ill. Adm. Code 1326.

24) Providing the 9-1-1 authority with the information, reports or other documents required, to enable the 9-1-1 authority to complete its annual filings to the Commission.

25) Cooperating with other 9-1-1 system providers to hand off split exchange subscribers to another 9-1-1 system provider in a mutually acceptable manner and in accordance with good engineering design and standards.

26) Cooperating with other 9-1-1 system providers in the installation of a new 9-1-1 system or migration of a system from another 9-1-1 system provider.

(Source: Amended at 40 Ill. Reg. 8170, effective May 25, 2016)