

## COLORADO DEPARTMENT OF REGULATORY AGENCIES

### Public Utilities Commission

#### 4 CODE OF COLORADO REGULATIONS (CCR) 723-2

#### PART 2 RULES REGULATING TELECOMMUNICATIONS PROVIDERS, SERVICES, AND PRODUCTS

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[indicates omission of unaffected rules]

#### **2008. Incorporations by Reference.**

- (a) The Commission incorporates by reference the following standards issued by the National Emergency Number Association: Standard Data Formats For 9-1-1 Data Exchange & GIS Mapping (NENA 02-010), revised as of March 28, 2011; Wireless (Pre-XML) Static and Dynamic ALI Data Content Technical Information Document (NENA 02-501), as issued October 16, 2016; ALI Query Service Standard (NENA 04-005), as issued November 21, 2006; NG9-1-1 Additional Data (NENA 71-007), as issued September 17, 2009; Next Generation 9-1-1 (NG9-1-1) United States Civic Location Data Exchange Format (CLDXF) Standard (NENA-STA-004.1.1-2014), as issued March 23, 2014; Data Standards For Local Exchange Carriers, ALI Service Providers & 9-1-1 Jurisdictions (NENA 02-011), as revised May 12, 2012; and NENA Recommended Standards for Local Service Provider Interconnection Information Sharing (NENA 06-001), revised as of August 2004. No later amendments to or editions of these standards are incorporated into these rules.

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[indicates omission of unaffected rules]

#### **Basic Emergency Service**

#### **Basis, Purpose, and Statutory Authority**

The basis and purpose of these rules are to ensure safety, reliability, and affordability of the statewide emergency service network by defining basic emergency service, regulated pursuant to § 40-15-201, regardless of technology used to provide service; identifying obligations and requirements of providers offering or providing certain basic emergency service in Colorado; prescribing interconnection rules; prescribing reporting obligations on database information, outages, and interruptions; and, recognizing the potential for multiple providers of basic emergency service in Colorado.

The statutory authority for the promulgation of these rules is found at §§ 29-11-102(2)(b); 29-11-106(3); 40-2-108; 40-3-102; 40-3-103; 40-4-101(1) and (2); 40-15-201; 40-15-301; and 40-15-503(2)(g).

**2130. Applicability.**

- (a) Rules 2130 through 2159 apply to all originating service providers, BESPs, and to all persons offering or providing the services, functions, and processes within the definition of basic emergency service.
- (b) Some of the provisions in these rules apply to MLTS managers whose systems do not have automatic number and automatic location identification capability, or whose systems require the dialing of an additional digit(s) to access the public switched network

**2131. Definitions.**

The following definitions apply only in the context of rules 2130 through 2159:

- (a) "9-1-1" means a three-digit number to facilitate the reporting of an emergency requiring a response by a public agency.
- (b) "9-1-1 call" means any form of communication, regardless of technology and including, but not limited to, voice, data, text, and video, using 9-1-1 or an equivalent designator to communicate an emergency or matter of safety, selectively routed to an appropriate PSAP, via a network designed for this purpose.
- ~~(c) "9-1-1 system and network" means any of the facilities, equipment, databases or any other component, regardless of the technology and ownership, used to provide 9-1-1 service.~~
- ~~(ce)~~ "9-1-1 failure" or "9-1-1 outage" means any of the following conditions:
  - (I) loss of 9-1-1 service that lasts or is anticipated to last at least 30 minutes; and
  - (II) any situation in which 9-1-1 calls cannot be delivered from the service end users to the PSAP responsible for answering the 9-1-1 calls, lasting or anticipated to last at least 30 minutes, and potentially affecting at least 900,000 user minutes in Colorado, as defined in 47 CFR § 4.7 (e) as it existed on Jan 1, 2016.
  - ~~(III) staff shall conduct a periodic review no less than every 3 years of this user minute threshold in 2131 (e) (II) may be adjusted based on a periodic review conducted by Commission staff no less than every three years in order to determine the proper threshold and adjust~~ as necessary and appropriate due to events impacting the public's ability to complete 9-1-1 calls or changes according to federal guidelines.
  - ~~(IV) "9-1-1 failure" or "9-1-1 outage" does not include 9-1-1 calls that the provider does not deliver via the network provided by the Basic Emergency Service Provider.~~
- ~~(d) "9-1-1 service" means the service provided by a Basic Emergency Service Provider or ALI provider.~~
- ~~(ee) "9-1-1 system and network" means any of the facilities, equipment, databases or any other component, regardless of the technology and ownership, used to provide 9-1-1 service.~~
- ~~(fe)~~ "Automatic Location Identification" ("ALI") means the automatic display, on equipment at the PSAP, of the telephone number and other information concerning the location of the caller.

ALI information includes but is not limited to non-listed and non-published numbers and addresses, and other information about the caller's location.

- (gf) "ALI provider" means any person or entity, other than the originating service provider, that provides ALI service to a BESP, a PSAP, or a governing body, directly or indirectly.
- (hg) "ALI service" means all the services, features, and functionalities of elements and components used to provide ALI, including location information services, applications, databases, management processes and services, routing, aggregation, and transport, regardless of the technology used. This does not include services that provide supplemental information regarding a 9-1-1 caller or calling location beyond that necessary for locating the origination point of a 9-1-1 call.
- (ih) "Automatic Number Identification" ("ANI") means the automatic display, on equipment at the PSAP, of the caller's telephone number. The ANI may also be used for ALI retrieval.
- (ji) "Basic emergency service" under § 40-15-201(2) means a 9-1-1, E9-1-1 or NG9-1-1 service regardless of the technology used to provide the following:
  - (I) interconnection for 9-1-1 calls between a BESP and an originating service provider or a provider of intermediary aggregation services;
  - (II) delivery of 9-1-1 calls from an originating service provider or a provider of intermediary aggregation services to a BESP;
  - (III) delivery of 9-1-1 calls by a BESP to a PSAP including, but not limited to, switching, routing, aggregation, transport, protocol conversion, database inquiries, and interconnection to the PSAP;
  - (IV) ALI services; and
  - (V) provisioning by originating service providers or a provider of intermediary aggregation services to BESPs, ALI providers and providers of information required to deliver 9-1-1 calls to a PSAP, including but not limited to, telephone numbers, including non-published and non-listed numbers.
- (kj) "Basic Emergency Service Provider" ("BESP") means any person that transports, aggregates, or routes 9-1-1 calls from originating service providers or from intermediary aggregation service providers to the demarcation point agreed to by the PSAP or the governing body.
- (lk) "Demarcation point" means the physical point where the ownership ~~and or~~ responsibility of a portion of a network changes from one party to another.
- (ml) "Emergency notification service" ~~or ("ENS),"~~ also known as a "mass notification service," means a service that, upon activation by a public safety agency, sends an alert to members of the public, derived from a database maintained for that purpose, via one or more methods of message delivery .

- (~~nm~~) "Emergency telephone charge" means a charge, established by a governing body pursuant to § 29-11-102(2)(a), C.R.S. or established by § 29-11-102.5(2)(a), C.R.S., to pay for the expenses authorized in ~~C.R.S. § 29-11-104, C.R.S.~~
- (~~oa~~) "Enhanced 9-1-1 Service", "Enhanced 9-1-1" (E9-1-1) means ~~the delivery of 9-1-1 calls service that includes via selective routing and to a PSAP. Enhanced 9-1-1 also includes ANI and ALI~~ service, including non-listed and non-published numbers and addresses.
- (~~pe~~) "Geographic area" means the area such as a city, municipality, county, multiple counties or other areas defined by a governing body or other governmental entity for the purpose of providing public agency response to 9-1-1 calls.
- (~~pg~~) "Governing body" means a representative organization responsible for the oversight and allocation of the emergency telephone charge in a specific geographic area. A governing body may be comprised of a board of county commissioners, a board of directors of a special district, a city council or other governing body of a city and/or county, or a separate legal entity established under § 29-1-201, C.R.S., et seq.
- (~~re~~) "Intermediary aggregation service" means the aggregation and transport of 9-1-1 calls for one or more originating service providers for delivery to a BESP's 9-1-1 selective router, or the functional equivalent.
- (~~sf~~) "Multi-line telephone system" (MLTS) means a system comprised of common control unit(s), telephone sets, control hardware and software, and adjunct systems which enables users to make and receive telephone calls using shared resources such as telephone network trunks or data link bandwidth. This term includes, but is not limited to: network-based and premises-based systems such as Centrex service; premises-based, hosted, and cloud-based VoIP; and PBX, Hybrid, and Key Telephone Systems (as classified by the FCC under Part 68 of its current rules as of April 1, 2015).
- (~~st~~) "Multi-line telephone system manager" means any entity that deploys, manages, or operates an MLTS, either through a purchase or lease of an MLTS or by contracting for MLTS services such as Centrex, Hosted MLTS, Hosted VoIP, or similar services.
- (~~ut~~) "National Emergency Number Association" (NENA) means the international not-for-profit organization whose stated purpose is to lead, assist, and provide for the development, availability, implementation and enhancement of a universal emergency telephone number or system common to all jurisdictions through research, planning, publications, training and education.
- (~~vt~~) "Next Generation 9-1-1 Service", "Next Generation 9-1-1," or "NG9-1-1," is an Internet Protocol (IP) based system comprised of managed Emergency Services IP networks (ESInets), functional elements (applications), and databases that replicate traditional E9-1-1 features and functions and provides additional data, video, and interactive capabilities. NG9-1-1 is designed to be capable of providing access to emergency services from all connected communications sources, and provide multimedia data capabilities for Public Safety Answering Points (PSAPs) and other emergency service organizations.
- (~~wv~~) "Originating service provider" means a person offering or providing any form of communication service by which an end user may make a 9-1-1 call.
- (~~xw~~) "Pseudo Automatic Number Identification" (p-ANI) means a non-working phone number, used to facilitate the routing of certain types of 9-1-1 calls.

- (yx) "Public Safety Answering Point" (PSAP) means a facility equipped and staffed to receive and process 9-1-1 calls in the format(s) of its choosing.
- (zy) "Selective routing" means the capability of routing a 9-1-1 call to ~~a designated~~the PSAP with responsibility of receiving and responding to 9-1-1 calls from the caller's location, based upon the service address or physical location of the device being used to call 9-1-1, ~~end user initiating a 9-1-1 call.~~
- (aaz) "Service end user" means a person placing a 9-1-1 call regardless of the technology used.
- (aabb) "Telecommunications device for the deaf emergency access" or "text phone access" mean the provision of 9-1-1 access to individuals that use TTYs or computer modems.
- (ccbb) "Text telephone" (TTY) means 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".
- (eedd) "Telecommunications relay services" (TRS) means a telephone transmission service that enables 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, speech-to-speech services, video relay services, non-English relay services or other non-voice terminal device with an individual who does not use such devices, TRS supersedes the terms "dual party relay system," "message relay services," and "TDD Relay."

## 2132. Process for Certification.

- (a) The Commission finds and declares that basic emergency service is vital to the public health, safety, and welfare. Further, it finds that the public convenience and necessity requires the availability and, when requested, the provision of basic emergency service to all geographic areas in Colorado. The following entities offering or providing basic emergency services not previously approved by the Commission to be offered or provided in an existing provider's basic emergency services certification must obtain a certificate of public convenience and necessity:
  - (I) Basic Emergency Service Providers; and
  - (II) ~~P~~providers of ALI services offered or provided to a PSAP.
- (b) The Commission may certify multiple providers of basic emergency services if such certification is found by the Commission to be in the public interest. Each application for certification shall be considered on a case-by-case basis.
- (c) An application for certification under this rule shall include, in the following order and specifically identified, the following information, either in the application or in appropriately identified attachments:
  - (I) the information required by paragraph 2103(a);

- (II) an attestation that the applicant will offer its basic emergency services statewide;
- (III) if the applicant has previously filed with the Commission current reports or material that include the information required in subparagraph (I) and (II), it may confirm this by filing an attestation of completeness and accuracy with proper citation of title and date of the other filed material; and
- (IV) a detailed statement describing the means by which the applicant will provide the basic emergency service. This statement shall include, but is not limited to:
  - (A) the technical specifications including specific standards for the system and network that will be used to provide the basic emergency services
  - (B) detailed information on emergency restoration of the system, and redundancy and diversity of circuits;
  - (C) all agreements between the applicant and any ALI provider, BESP, or a sub-contractor providing a service that would require certification under paragraph 2132(a) if provided to a PSAP directly;
  - (D) all inter-governmental agreements regarding governing bodies or PSAPs;
  - (E) all 9-1-1 interconnection agreements between a BESP and originating service providers, providers of intermediary aggregation services, ALI providers, or any provider certified pursuant to rule 2132;
  - (F) proposed tariffs including cost-based rates, service offerings and detailed terms and conditions, which must demonstrate the accuracy, reliability, non-discriminatory nature, statewide availability and affordability of the basic emergency service, and compliance with rules 2133, 2134, 2135, and 2145.
  - (G) all documentation, including but not limited to cost methodologies, used to determine tariff rates;
  - (H) a description of the processes and mechanisms for the gathering and management of the names, addresses, telephone numbers, and other necessary information for all customers;
  - (I) a description of all information and supporting processes that will be exchanged with the PSAP or governing body;
  - (J) a description of the process and information exchanged for any testing with originating service providers, intermediary aggregation service providers and any basic emergency service provider certified pursuant to rule 2132 used to ensure the accuracy and reliability of the basic emergency service;
  - (K) a description of the process and information exchanged for the testing and delivery of the basic emergency service to PSAPs used to ensure the accuracy and reliability of the basic emergency service; and
  - (L) any other matter affecting public safety and the public interest.

- (V) A current audited financial statement showing that the applicant's assets, liabilities, and net worth are sufficient to provide basic emergency services; and
  - (VI) an acknowledgment that the applicant will provide basic emergency service in accordance with these rules and all applicable quality of service rules.
- (d) If any person provides an ALI service to a PSAP or governing body as a separate service or in combination with other components or functionalities of a 9-1-1 service, or if any BESP transitions to or uses an ALI database system or ALI service, including self-provisioning, different from any ALI database system or ALI service used by the BESP in the provision of 9-1-1 service to any PSAP or governing body as of June 1, 2014, that person or BESP must file an application for, and obtain authorization from the Commission. The authorization may be subject to terms and conditions as the Commission may prescribe to promote the public interest and will be based upon the following criteria:
- (I) accuracy of the ALI database during the provisioning of the ALI service;
  - (II) reliability of the ALI service, including, without limitation, compliance with the obligations placed upon BESP in rule 2139;
  - (III) non-discriminatory, statewide averaged, and affordable pricing of 9-1-1 services;
  - (IV) processes and mechanisms required by originating service providers for the furnishing and management of the names, addresses, telephone numbers, and other necessary information for all customers for the ALI database;
  - (V) adequacy of information exchanged with the PSAP or governing body;
  - (VI) adequacy of information exchanged and sufficient testing with originating service providers, BESP, and any service providers certified to offer service pursuant to rule 2132 to ensure the accuracy and reliability of the ALI service;
  - (VII) adequacy of the testing of the ALI service, including testing of the delivery of ALI service to each subscribing BESP; and
  - (VIII) any other matter affecting public safety, reliability, pricing, and the public interest.
- (e) Commission authorization under this rule is not required for a BESP to continue providing a PSAP or governing body the same 9-1-1 service, ALI service, database, database management service, connectivity, and functionality, and using the same subcontractors as part of an integrated E9-1-1 service as of June 1, 2014, or for the updating of the ALI database in the normal course of business.

**2133. Uniform System of Accounts, Cost Segregation and Collection.**

All persons certified under rule 2132 shall maintain their books and records and perform separation of costs as prescribed by rules 2400 through 2459, or as otherwise approved by the Commission.

**2134. Obligations of BESP.**

- (a) A BESP shall deliver to the appropriate PSAP or to another BESP that services the PSAP any 9-1-1 call that it receives, provided the PSAP has requested to receive 9-1-1 calls of the format in question, or as otherwise required by federal law or regulation. If a PSAP is served by a basic local exchange service provider, as defined in paragraph 2001(g), that is not the BESP, the BESP may partner with the basic local exchange service provider to complete the delivery of 9-1-1 calls to PSAPs.
- (b) The demarcation point between the BESP and the governing body or PSAP is physically located at the PSAP facility unless the governing body or PSAP and the BESP agree upon an alternate location.
- (c) A BESP shall obtain facilities from or interconnect with the facilities of all originating service providers that have customers in geographic areas designated by governing bodies. A BESP shall interconnect at physically and geographically diverse aggregation points with all originating service providers, intermediary aggregation service providers, ALI providers, and other BESP with facilities in the serving area. A BESP shall make its 9-1-1 facilities available to originating service providers, intermediary aggregation service providers, ALI providers, and all other BESP to facilitate 9-1-1 call transfer and routing between the appropriate PSAPs. A BESP shall create, or amend as necessary, provisions in its interconnection agreements with all providers of basic emergency service in compliance with rules 2130 through 2159.
- (d) At the request of an originating service provider, within and for an area under the responsibility of a single governing body, a BESP shall provide and arrange for the necessary facilities to interconnect, switch, and transport 9-1-1 calls from the originating service provider and other BESP to the demarcation point of the PSAP that is responsible for answering the 9-1-1 calls. Interconnection shall be accomplished in a timely manner, generally not more than 30 days from the time the BESP receives a written request. Interconnection facilities shall generally be engineered as follows.
  - (I) Dedicated facilities for connecting each originating service provider's switch, router or other agreed upon point-of-presence to the BESP shall be based on the requirements established by the responsible BESP to serve the service end users within that local exchange or geographic area.
  - (II) If shared or common facility groups are used to transport calls from the originating service provider switch, router or point-of-presence to the BESP, facilities shall be sized to carry the additional call volume requirements. Additionally, common or shared groups shall be arranged to provide 9-1-1 calls on a priority basis where economically and technically feasible.
  - (III) The point of interconnection of the BESP facilities to originating service providers that employ switching systems in the geographic areas served by the responsible BESP shall be at the location of the originating service provider's switch or at a mutually agreed point of interconnection. The point of interconnection for originating service providers that may employ switching systems located outside of the geographic area served by the BESP shall be at or near the locations of each of the BESP selective routers or at a mutually agreed point of interconnection within the area served by the BESP. The BESP is not obligated to compensate an originating service provider for the cost of transport facilities from the point of interconnection to switch locations outside of the geographic area of service provided by the BESP.



- (ed) A BESP shall file with the Commission all interconnection agreements with originating service providers, intermediary aggregation service providers, or any provider certified to offer basic emergency service pursuant to rule 2132 within 30 days of execution. If a BESP has an interconnection agreement with an originating service provider, a provider of 9-1-1 aggregation services, or an ALI provider effective as of the adoption of this paragraph, the BESP shall file those interconnection agreements with the Commission within 30 days of the effective date of the Commission's adoption of this paragraph.
- (fe) A BESP or any person interconnecting with a BESP may file a pleading requesting the Commission ~~to determine reasonable, just, and non-discriminatory rates, terms, and conditions of an agreement to interconnect with a BESP.~~ resolve any dispute relating to interconnection of facilities delivering 9-1-1 calls.
- (gf) A BESP shall develop and file with the Commission tariffs that establish cost-based rates for basic emergency services. These rates shall be averaged statewide. The costs shall include an aggregation of 9-1-1 system and network costs and interconnection costs. The BESP shall develop and file with the Commission tariffs that establish cost-based rates that will apply to governing bodies or PSAPs for establishing and maintaining records in the BESP's 9-1-1 system and network associated with working telephone numbers or any other designator utilized in place of ANI to route 9-1-1 calls to PSAPs. Any non-working telephone numbers or any other numbers that are not actively used for routing calls to the PSAP shall not be included in the record count for billing purposes. Alternative bases for cost-based d rates may be considered by the Commission on a case-by-case basis.
- (hg) A BESP shall render a single monthly bill for its tariff services to governing bodies. The monthly bill shall provide the detail necessary to enable the governing body to validate the charges. If the number of database records for that governing body is the basis for cost-based rates, then the detail provided shall include, but not be limited to, the total number of 9-1-1 records for originating service provider's numbers and the quantity of any other number utilized in place of ANI records, if applicable, or other information as approved by the Commission. Any number not actively capable of calling 9-1-1 shall not be included in the record count or assessed a charge. Upon an annual request, the governing body will be provided at no charge a copy of the records, ALI database, or both, upon which the BESP charges the governing body for BESP services.
- (ih) Record counts associated with services that have not been requested by the PSAP and which the BESP has no other obligation to deliver shall not be billed to the PSAP or governing body.
- (ji) BESP shall ensure that TRS based 9-1-1 calls are routed to the correct PSAP in order to respond to the emergency at the location of the person experiencing the emergency.
- (kj) A BESP shall ensure that all 9-1-1 facilities, including interconnections between the BESP and originating service providers, intermediary aggregation service providers, ALI providers, other BESP, or the demarcation point of a governing body or PSAP, are engineered, installed, maintained, and monitored in order to provide a minimum of two geographically diverse routes, as described in paragraph 2139(a), and a minimum grade of service that has one percent (P.01) or less blocking during the busy hour or other grade of service approved by the Commission.
- (lk) Each BESP shall designate a telephone number that originating service providers, intermediary aggregation service providers, ALI providers, PSAPs, BESP, and any other provider of basic emergency service can use to communicate concerning 9-1-1 failures or outages or restoration of service. Such telephone number shall be staffed seven days a week, 24 hours a day.

- (m) A BESP shall keep on file with the Commission its contingency plan in accordance with paragraph 2139(b).
- (n) BESP shall treat as confidential all customer telephone number information, customer location information, and line counts obtained from originating service providers. Neither the intermediary aggregation service providers nor the BESP shall disclose such confidential information to any person or entity ~~other than except~~ the PSAPs, governing bodies, or the Commission, ~~and only~~ for the purposes of billing the governing body for services, providing information necessary for governing bodies to verify appropriate ~~revenues are being received remittance~~ from the emergency telephone charge ~~billing~~, providing necessary information for public safety agencies to respond to 9-1-1 calls, or for the building and maintenance an ENS database. The BESP shall obtain agreements from governing bodies or PSAPs that, as a condition of receiving this information, the governing bodies and PSAPs shall not disclose the information except for the purposes listed above.

### 2135. Obligations of ALI Providers

- (a) An ALI provider shall provide sufficient facilities to interconnect to the PSAPs to meet the requirements of the PSAPs or the governing body.
- (b) If the ALI provider is not also the BESP, it shall provide to BESP all information required by the BESP to ensure that calls are routed from the end users to the correct PSAP.
- (c) No BESP, intermediary aggregation service provider, or originating service provider shall interconnect with an ALI provider unless the ALI provider provides sufficient facilities to interconnect to the BESP so that it can meet the requirements of the governing body or PSAP and comply with paragraphs 2136(a) and (b) and other relevant provisions of these rules.

### 2136. Obligations of Originating Service Providers and Intermediary Aggregation Service Providers.

- (a) ~~All~~ Originating service providers and intermediary aggregation service providers shall deliver 9-1-1 calls to the BESP at an agreed upon demarcation point of interconnection within the geographic area of a certificated BESP agreed upon by the originating service provider and BESP. This demarcation point may be outside the service area of the BESP provided that no additional cost incurred from such an arrangement is included in costs charged to the governing bodies or PSAPs. A BESP is not required to construct 9-1-1 network facilities or compensate an originating service provider or intermediary aggregation service provider for such facilities located outside of the BESP's service area. ~~All agreements and the associated charges for interconnection between originating service providers and BESP, or between intermediary aggregation service providers and BESP, must be filed by the BESP with the Commission within 30 days of execution. An originating service provider, intermediary aggregation service provider, or BESP may apply to the Commission for resolution of any dispute relating to interconnection of facilities delivering 9-1-1 calls.~~ The BESP and the originating service provider or provider of intermediary aggregation service may agree to dedicated, common or joint 9-1-1 network elements to be used to transport calls to the BESP. ~~A BESP is not required to construct 9-1-1 network facilities or compensate an originating service provider or intermediary aggregation service provider for such facilities located outside of the BESP's service area.~~
- (b) ~~All~~ Originating service providers shall furnish ~~name, address, supplemental location information, telephone number and p-ANI, if applicable, including non-published or non-listed numbers,~~ to all BESP and ALI providers requiring such all information required for the provision of ALI and 9-1-1 services. Such initial or updated information shall be provided to such BESP and ALI providers

within 24 hours of initial service or a change in service in which the telephone number corresponds to a changed location. All originating service providers shall furnish such information in accordance with rules 2138 and 2142 ~~only after each recipient has stated formally in writing that the recipient has complied with rule 2138.~~ Non-working numbers or any other numbers without 9-1-1 capabilities that the originating service provider desires to have loaded or retained in the BESP's facilities shall be separately identified to the BESP, ~~and~~ ALI providers. All costs for providing this customer information and updates to this information shall be the responsibility of the originating service provider.

- (c) Under normal conditions, originating service providers and intermediary aggregation service providers are prohibited from routing 9-1-1 calls directly to a PSAP over administrative lines or in any other manner than through a BESP's 9-1-1 system and network. This rule does not prohibit the delivery of 9-1-1 calls to an alternate number during conditional rerouting due to an outage, pursuant to a contingency plan developed paragraph 2139(b) or as otherwise approved by the PSAP or governing body to allow for continued operations during a 9-1-1 failure or outage. ~~Nor to prohibit does this rule prohibit~~ the implementation of interim solutions to provide Next Generation 9-1-1 services pending deployment of Next Generation 9-1-1 and related ESI-nets, such as text-to-9-1-1.
- (d) Each originating service provider and intermediary aggregation service provider shall designate a telephone number that PSAPs, 9-1-1 governing bodies, the Commission and BESP's can inquire about 9-1-1 failures or outages restoration of service. Such telephone number shall be staffed seven days a week, 24 hours a day.
- (e) All originating service providers shall give formal written notice of intent to provide 9-1-1 service within a geographic area to the governing body responsible for the PSAP within that geographic area prior to activating service in order to establish necessary contact information and arrangements for the collection and remittance of the 9-1-1 emergency telephone charge.
- (f) At the request of the governing body, originating service providers shall coordinate with governing bodies, PSAPs, and ENS providers to allow for proper operation of ENS systems during an ENS activation. Originating service providers will also notify affected governing bodies or PSAPs of any changes to the originating service provider's network which may affect the ability to successfully perform an ENS activation.
- ~~(g) All payphone providers shall provide access to dialtone, emergency calls, and telecommunications relay service calls for the hearing disabled at no charge to the caller, pursuant to 47 CFR 64.1330 (b).~~

**2137. Obligations of Multi-line Telephone Systems (MLTS).**

- (a) For purposes of this rule:
  - (I) "End user" means the person making telephone calls, including 9-1-1 calls, from the MLTS that provides telephone service to the person's place of employment, school, or to the person's permanent or temporary residence.
  - (II) "Residence" or "residence facility" shall be interpreted broadly to mean single family and multi-family facilities including apartments, townhouses, condominiums, dormitories, hotels, motels, resorts, extended care facilities, or similar entities, facilities, or structures.

- (III) "Written information" means information provided by electronic mail, facsimile, letter, memorandum, postcard, or other forms of printed communication.
- (b) A MLTS manager responsible for a MLTS that ~~is not capable of~~ does not providing provide direct access to 9-1-1 shall give written notice to all end users or potential users of the MLTS describing the proper method of accessing 9-1-1 service.
  - (I) Such written information shall be provided to each end user by placing stickers or cards including the appropriate method to access 9-1-1 service on each MLTS telephone. Additionally, such written information shall be provided to each individual end user annually and at the time of hiring in the case of an employer, at the time of registration in the case of a school, and at the time of occupancy in the case of a residence facility.
  - (II) At a minimum, such written information that is attached to the telephone and provided annually shall include the following words: "To dial 9-1-1 in an emergency, you must dial #-9-1-1." [# = Insert proper dialing sequence].
- (c) When calls to access 9-1-1 service from an MLTS do not give one distinctive ANI and one distinctive ALI, or both, for each end user, the MLTS operator shall instruct, in writing, that the end user must stay on the telephone and tell the 9-1-1 service operator the telephone number and exact location.
  - (I) Such written information shall be provided to each individual end user annually and at the time of hiring in the case of an employer, at the time of registration in the case of a school, and at the time of occupancy in the case of a residence facility. Whenever possible, such information also shall be placed on cards or stickers on or next to the MLTS telephone.
  - (II) At a minimum, such written information shall include the following words: "When calling 9-1-1 from this telephone in an emergency, you must stay on the telephone and tell the 9-1-1 operator your phone number and exact location. This telephone does not automatically give the 9-1-1 operator your phone number and exact location. This information is critical for a quick response by police, fire, or ambulance."
  - (III) If an MLTS operator provides telephones that are not assigned to a particular end user, but that may be used by members of the public, the MLTS operator shall place a sticker or card on or next to the pertinent telephone either identifying the method for dialing 9-1-1 from that telephone or stating there is no 9-1-1 access from that telephone.
- (d) Exemption from rules. The disclosure requirements of this rule shall not apply to MLTS provided to inmates in penal institutions, jails, or correctional facilities, to residents of mental health facilities, or to residents of privately contracted community correctional facilities, including substance abuse and mental health treatment facilities, or other such facilities where access to 9-1-1 service is not required.

**2138. Nondisclosure of Name, Number, and Address Information.**

- (a) All BESPs, ALI providers, intermediary aggregation service providers, originating service providers, and providers certified pursuant to rule 2132 shall comply with the requirements of 47 U.S.C. § 222 as well as rules 1104, 1105, 2360, 2361, and 2362, as applicable.

- (b) All information shall not be used or disclosed for purposes other than for responding to requests for emergency assistance, initiating delivery of emergency warnings using an emergency notification service, or testing of these services.
- (c) If personal information is improperly disclosed by an originating service provider, intermediary aggregation service provider, basic emergency service provider, or provider certified pursuant to rule 2132, the responsible provider shall pay the applicable rates of the originating service provider for changing a customer's telephone number, unless the customer declines such number change.

**2139. 9-1-1 Reliability, Resiliency and Contingency Planning and Service Restoration**

- (a) Diversity of 9-1-1 Circuits.
  - (I) All BESPs providing 9-1-1 service to a governing body or PSAP's demarcation point shall take reasonable measures to provide reliable basic emergency service with respect to circuit diversity, central-office backup power, and diverse network monitoring. Where feasible, 9-1-1 circuits shall be physically and geographically diverse.
    - (A) 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 or circuit board are not physically diverse even if they are logically diverse for purposes of transmitting data.
    - (B) Circuits or equivalent data paths are geographically diverse if they take different paths from end point to end point, not following the same geographic route ~~or occupying the same conduit.~~
  - (II) On or before ~~Oct 4~~ Nov 15, 2016, or as deemed necessary by the Commission, each BESP and ALLI provider (if offering service separately from a BESP) shall develop and file confidentially, in an application proceeding with the Commission, a 9-1-1 ~~D~~iversity ~~P~~lan for deploying, monitoring, backup power, and physically and geographically diverse redundancy for the provider's portion of the 9-1-1 system and network where such measures of reliability are lacking. Information confidentially filed with this ~~D~~iversity ~~P~~lan shall include:
    - (A) maps depicting the provider's basic emergency service architecture;
    - (B) a list and description, including geographic location, of every point within the provider's portion of the 9-1-1 system and network ~~network~~ where monitoring, backup power, and/or physical and geographically diverse redundancy are not present;
    - (C) a description of which items from ~~section-subparagraph~~ (a)-(II)-(B) of this rule the provider proposes to improve, how the provider propose to improve the item, and a proposed timetable for deploying these improvements;

- (D) a description of which items from ~~section-subparagraph~~ (a)-(II)-(B) of this rule the provider proposes not to improve, and an explanation of why they propose not to improve them;
  - (E) the costs, averaged statewide, associated with each deployment listed in ~~sections-subparagraph~~ (a)-(II)-(C) and (D) of this rule.
  - (III) Following Commission approval of the ~~D~~iversity ~~P~~lan, the provider shall file a new tariff or modify an existing tariff for implementation of the ~~P~~lan.
  - (IV) Each service provider pursuant to section (a) (II) of this rule shall file, on a quarterly basis, updates on the ~~the~~ service provider's efforts to meet the deployment schedule developed as described in sections (a) (II) of this rule after the effective date of the tariff. These updates shall be filed confidentially.
- (b) Beginning in 2017, each BESP and ALI provider (if offering service separately from a BESP) shall develop a 9-1-1 Reliability and Contingency Plan in collaboration with all affected BESP, ALI providers, intermediary aggregation service providers, originating service providers, governing bodies, and PSAPs, to be confidentially filed annually with the Commission no later than April 30. A 9-1-1 Reliability and Contingency Plan shall include:
- (I) an identification and location of all primary and back-up facilities, equipment and databases or any and all other components related to 9-1-1 service;
  - (II) an identification and description of all ~~interconnection-demarcation~~ points with BESP, ALI providers, and PSAPs;
  - (III) all contingency processes and information from BESP, ALI providers, intermediary aggregation service providers, originating service providers, PSAPs and governing bodies necessary for public safety operations until 9-1-1 service is restored;
  - (IV) contact information for designated representatives for each PSAP and/or governing body;
  - (IV) any other details deemed relevant as determined by the BESP, ALI provider, governing bodies, PSAPs, and Commission staff.
- (c) All providers required to file a 9-1-1 Reliability and Contingency Plan pursuant to ~~section~~ ~~paragraph~~ (b) shall notify affected PSAP(s) of any known changes that may require an update to the 9-1-1 Reliability and Contingency Plan.
- (d) BESP and ALI Providers shall ensure that an inventory management process exists for properly identifying 9-1-1 circuits.
- (e) In the event the PSAP detects a failure in the 9-1-1 system, the PSAP shall notify the BESP in that geographic area of the failure.
- (f) Intermediary aggregation service providers, originating service providers, and providers certified pursuant to rule 2132 shall have technician(s) trained and qualified to resolve 9-1-1 failures or outages on site, when necessary, within two hours or as soon as safely possible, after becoming aware of a 9-1-1 failure or outage. For the purpose of this rule, "on site" means at a location where corrective action can be taken to resolve the failure or outage.

- (g) In the event of a 9-1-1 failure or outage, the responsible BESP, ALI provider, provider of intermediary aggregation service, or the originating service provider shall notify the designated representatives of the affected governing bodies and/or PSAPs) and the Colorado State Emergency Operations Center, if activated for a related event. The notification(s) shall be made as soon as possible, but no later than 30 minutes after discovering the outage, as soon as the provider becomes aware of the failure or outage. The notification(s) shall include, of the following, based on the best information available at the time of the notification:
- (I) name of entity reporting;
  - (II) contact name, phone number, e-mail address;
  - (III) date and time of beginning of outage or failure;
  - (IV) number of service end users affected;
  - (V) affected geographic area;
  - (VI) description of services affected;
  - (VII) expected duration of the outage;
  - (VIII) whether other providers may be affected;
  - (IX) whether the failure or outage may also affect the operation of Emergency Notification Services;
  - (X) Aa contact telephone number for more information, if necessary; and
  - (XI) other agencies or entities notified, including PSAP(s), Sheriff/Police, the media, etc.
- (h) Following notification to the PSAP, the BESP and responsible provider shall enact- implement any applicable contingency plan developed pursuant to this rule or developed separately, and provide other mutually agreed upon temporary solutions so that public safety communications can be maintained end service users can communicate with public safety authorities until 9-1-1 service is fully restored. The provider shall work cooperatively with the PSAPs to manage, monitor, and exchange information regarding an ongoing 9-1-1 failure or outage (e.g., issuance of a trouble ticket number in order to track such a failure or outage).
- (i) Following the enactment of applicable contingency plans, the responsible provider shall notify to the Commission within 120 minutes of the beginning of the outage no later than 120 minutes after discovering any 9-1-1 failure or outage. The implementation or non-implementation of any contingency plan does not remove the obligation to provide notification. Notification shall be made by a method (s) to be established by established by the Commission, and it shall consist of the information provided to the governing bodies and/or PSAPs pursuant to paragraph 2139-(fg). Additionally, the notification to the Commission will- shall include the following information, based on the best information available at the time of the notification:
- (I) date and time of the end of the failure or outage, if it has ended;

- (II) expected duration of the failure or outage, if it is ongoing;
  - (III) suspected causes of the failure or outage;
  - ~~(III)~~ (IV) action currently being taken to investigate or resolve the outage or failure; and
  - ~~(IV)~~ (V) agencies or entities notified, including PSAP(s), Sheriff/Police, and media outlets.
- (j) Following the restoration of 9-1-1 service the responsible provider shall complete the following actions:
- (I) at the request of a PSAP or governing body, the responsible provider shall provide to the affected PSAP(s) the call-back numbers of any calls that were made to 9-1-1 but unable to be delivered due to the failure or outage, if technically capable of doing so. This information shall be provided within two hours of the restoration of 9-1-1 service or as soon as possible under the circumstances. When possible, this information should also include associated ALI information;
  - (II) notify the Commission of the date and time of the restoration of service within two hours of the restoration of service.
- (k) For any outage or failure resulting in an initial notification to the Commission pursuant to ~~rule~~ paragraph 2139-(j), the responsible provider shall file a final report with the Commission by a method to be established by the Commission within thirty days of a failure or outage containing updated information identified in paragraphs (g) and (i) of this rule. The final report shall include the following information, as applicable:
- (I) the root cause of the outage;
  - (II) if caused by an accidental fiber cut, whether a locate was performed;
  - (III) if caused by a system failure, the ~~name and~~ type and a description of equipment that failed;
  - (IV) whether a network monitoring links transmitted data alarm or alert in the 9-1-1 system and network notified the provider about the failed or degraded network equipment and/or facilities;
  - (V) final corrective action that was taken to resolve the outage or failure;
  - (VI) whether lack of diverse routing in the 9-1-1 system or network contributed to the outage or failure;
  - (VII) whether a lack of sufficient backup power in the 9-1-1 system or network contributed to the outage or failure; and
  - (VIII) any action the provider may plan to take to reduce the likelihood of a similar outage occurring in the future.



- (l) As an alternative or in addition to the final report, the Director or the Director's designee may request, on a case-by-case basis, a written report within five days from the date of the request, outlining the nature, cause, extent, ~~and corrective action taken,~~ and other information as required by the Commission regarding the outage and details surrounding the outage.

**2140. Reports.**

- (a) Periodic or special reports concerning any matter about which the Commission is concerned relative to the provision of basic emergency service shall be provided in a manner determined by the Commission, ~~and on a form approved by the Commission.~~
- (b) Each intermediary aggregation service provider, originating service provider, and provider certified pursuant to rule 2132 shall furnish to the Commission all 9-1-1 outage reports filed in the FCC's Network Outage Reporting System and Disaster Information Reporting System, provided that the outages the reports concern impacted lines in Colorado. These reports shall be filed confidentially.
- (c) ~~All FCC defined covered 9-1-1 service provider serving Colorado shall file with the Commission all filings made with the FCC including the Initial and Annual Reliability Certification or any other information required by Part 12 of 47 C.F.R. Any provider subject to the FCC's filing requirements in Part 12 of 47 C.F.R. shall file confidentially with the Commission all filings made with the FCC pursuant to such part, including the Initial and Annual Reliability Certification.~~
- (d) Each BESP shall provide to the Commission staff monthly ALI retrieval data for the ~~twelve~~<sup>12</sup>-month period from August 1 of previous year through July 31 of current year for each governing body's service area. If the BESP cannot provide this information for a governing body's service area, Commission staff may request this information from a 9-1-1 governing body. This information will be due no later than September 30 of each year.

**2141. 9-1-1 Advisory Task Force.**

- (a) The Commission shall establish a 9-1-1 Advisory Task Force. The purpose of the Advisory Task Force is to provide oversight of the statewide implementation of basic emergency service. The Advisory Task Force shall include, but is not limited to, the following representative parties directly interested in 9-1-1 services: governing bodies, originating service providers, service end users including those with disabilities, providers of basic emergency service, 9-1-1 vendors, and any associations or groups representing 9-1-1 stakeholders. The Commission staff shall be responsible for administering the 9-1-1 Advisory Task Force and facilitating its meetings and agenda. The 9-1-1 Advisory Task Force shall evaluate alternate technologies, and service and pricing issues related to implementing statewide 9-1-1 services in a cost effective fashion. Commission staff shall provide periodic reports to the Commission on the implementation of 9-1-1 services statewide.
- (b) The Advisory Task Force shall:
- (I) make recommendations and report to the Commission concerning the continued improvement and advancement of 9-1-1 service in Colorado;
  - (II) consider 9-1-1 service quality and the cost of statewide 9-1-1 service to the PSAPs and to end-use customers of 9-1-1 service in developing reports and recommendations;

- (III) investigate, analyze, and recommend resolution of existing or anticipated statewide 9-1-1 issues;
- (IV) investigate and report to the Commission on the development, implementation and transition to any new 9-1-1 technologies and capabilities, including any impacts to the consumer, originating service provider, service end user or PSAP; and
- (V) monitor and report to the Commission on FCC proceedings or other national organizations or agencies on matters that may affect 9-1-1 services in Colorado.

**2142. ~~National Emergency Number Association (NENA) Data~~9-1-1 Data and Technical Standards.**

The NENA standards incorporated by reference as identified in rule 2008 shall be used for the purpose of defining standard formats for ALI data exchange between originating service providers, ALI service providers, governing bodies, PSAPs, and BESP. The Commission may refer to additional standards, recommendations, or best practices on a case-by-case basis, promulgated by NENA, the Alliance for Telecommunications Industry Solutions (ATIS), or other organizations for general reference and guidance on issues concerning basic emergency service. The 9-1-1 Advisory Task Force shall annually evaluate and recommend changes to the applicable incorporations by reference in rule 2008.

**2143. Applications by the Governing Body for Approval of a 9-1-1 Charge in Excess of Seventy Cents per Month.**

- (a) A governing body requesting approval pursuant to § 29-11-102 (2) (b), C.R.S., for a charge in excess of ~~seventy \$0.70 cents~~ per month shall file an application with this Commission pursuant to rule 2002, paragraphs (a) - (c) and (e), or on a form provided by the Commission ~~staff may provide a form for governing bodies to use when filing applications for surcharge approval.~~
- (b) All applications shall include an attestation that the applicant has not used 9-1-1 surcharge funds for purposes not authorized by C.R.S. § 29-11-104(2), C.R.S. within the last 18 months, that the planned use of all future revenues raised from 9-1-1 surcharges are authorized by C.R.S. § 29-11-104(2), C.R.S. and that the applicant agrees to comply with C.R.S. § 29-11-104(5), C.R.S., notwithstanding any exemption received pursuant to C.R.S. § 29-1-604, C.R.S. If the governing body does not have a website, the audit otherwise required pursuant to C.R.S. § 29-11-104(5), C.R.S. shall be posted on the website of the Colorado 9-1-1 Resource Center.
- (c) For applications to increase the 9-1-1 surcharge in excess of \$0.70 in 1990 dollars and adjusted for inflation to the current year, based on the consumer price index for all urban consumers published by the Federal Bureau of Labor Statistics, additional documentation shall be required. Additional documentation to be included in the application shall be supporting attachments or exhibits of budget information, cost information and such other information the Commission may rely upon for justification of the proposed increase in surcharge. The attached information should include present and proposed surcharge remittance estimates, all other revenue sources and amounts, and any other information such as audit reports that may be used to justify the proposed increase in the 9-1-1 charge.
- (d) Notice. Notwithstanding rule paragraph 2002-(d), this section rule shall establish the notice procedure for governing bodies applying for approval of a 9-1-1 charge above seventy \$0.70 cents per month. Within three days after filing the application, the applicant shall publish a notice of the application in at least one newspaper of general circulation in the area of applicability in at least one edition. The notice shall also be made available for a period no less than two weeks on the governing body's website, if one exists, and the website of the Colorado 9-1-1 Resource Center. The notice shall contain:

- (I) the name, address and telephone number of the requesting governing body and the Colorado Public Utilities Commission;
  - (II) a statement that the governing body has filed with the Colorado Public Utilities Commission an application to change its currently effective surcharge to a charge in excess of \$0.70 per month;
  - (III) the date the application was filed with the Commission and the assigned proceeding number;
  - (IV) the proposed effective date of the new charge;
  - (V) a statement of the purpose of the application, including an explanation of the proposed changes;
  - (VI) a statement that the application is available for inspection at the office of the governing body and at the Colorado Public Utilities Commission;
  - (VII) a statement that any person may file with the Commission a written objection to the application or a motion to intervene by permission~~intervention to participate as a party,~~ within 30 days of the date the application was noticed by the Commission, and an explanation that a mere objection without an intervention shall not be adequate to permit participation as a party; and
  - ~~(VIII) a statement that any person filing a written objection within 60 days of the date the application was filed or a person may file an intervention within 30 days of the date the application was filed; and~~
  - ~~(VIII)~~ a statement that any person may attend the hearing, if any, and may make a statement under oath about the application, even if such person has not filed a written objection or intervention.
- (e) The applicant shall, within 15 days of providing notice, file an affidavit with the Commission stating the date notice was completed, and the method(s) used to provide it. This affidavit shall be accompanied by a copy of the notice or notices provided.

**2144. – 2159. [Reserved].**

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[indicates omission of unaffected rules]