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

* * * * *

[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: the Recommended Formats & Protocols For Data Exchange (NENA-02-010), revised as of February 25, 2006; NENA Recommended Data Standards for Local Exchange Carriers, ALI Service Providers & 9-1-1 Jurisdictions (NENA-02-011), revised as of November 9, 2004; NENA Network Quality Assurance (NENA-03-001), original as of June 12, 1995; NENA Recommendation for the implementation of Enhanced MF Signaling, E9-1-1 tandem to PSAP (NENA-03-002), recommended June 21, 1998; 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.

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).

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 2 of 30

2130. Applicability.

- (a) Rules 2130 through 2159 apply to all originating service providers, <u>BESPs,TARPs</u>, 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 <u>operators managers</u> 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 <u>numbercode</u> to <u>facilitateused to the</u> report<u>ing of</u> an emergency <u>situation</u> requiring a response by a public agency. <u>such as a fire department</u>, or <u>police</u> <u>department</u>.
- (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 <u>an equivalent other designatoremergency code, number, or network address</u> to communicate or report 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 the any of the facilities, equipment, databases or any other component, regardless of the technology and ownership, used to provide 9-1-1 service transmit 9-1-1 calls from an originating service provider's switch, or functional next generation (NG) equivalent, to the PSAP's demarcation point, including any intermediary facilities, equipment, databases, or services, including ALI and ANI services, to provide communications and information to PSAPs or to enable emergency notification service.
- (d) "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;
 - (II) any situation in which 9-1-1 calls cannot be delivered transported 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. or in which a service end user is unable to receive emergency notifications.
 - (III) staff shall conduct a periodic review no less than every 3 years of the user minute threshold in 2131 (e) (II) 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 inaccording to federal guidelines.
 - (III) "9-1-1 failure" also includes an inability to deliver ALI or ANI information to the PSAP.

- (IV) "9-1-1 failure" does not include 9-1-1 calls that the provider does not deliver via the network provided by the Basic Emergency Service Provider. from an ALI or ANI database or a loss of the ALI or ANI functionality.
- (e) "9-1-1 tandem" or "9-1-1 tandem switch" means the equipment or functional equivalent, regardless of technology, that aggregates 9-1-1 calls for proper routing to PSAPs.
- "Automatic Location Identification" (<u>"ALI"</u>) 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.
- (fg) "ALI provider" means any person or entity, other than the originating service provider, that provides ALI service to a <u>BESPTARP</u>, a PSAP, or a governing body, directly or indirectly, for a <u>specific geographic area.</u>
- (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.
- (hi) "Automatic Number Identification" (<u>"ANI"</u>) means the <u>automatic display</u>, on equipment at the <u>PSAP</u>, of the caller's telephone number. process used on customer <u>initiated</u>dialed calls to automatically identify the calling station, and the automatic display of the caller's telephone number on telephone answering equipment used by operators at the <u>PSAP</u>. The <u>ANI</u> may also be used for ALI retrieval.
- (ij) "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 <u>BESPTARP</u> 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 BESPTARP;
 - (III) delivery of 9-1-1 calls by a <u>BESPTARP</u> to a PSAP including, but not limited to, switching, routing, aggregation, transport, protocol conversion, database inquiries, and interconnection to the PSAP;
 - (IV) ALI and ANI services; and
 - (V) provisioning by originating service providers or a provider of intermediary aggregation services to <u>BESPsTARPs</u>, ALI providers and providers of <u>ANI of</u> 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.

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 4 of 30

- (jk) "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) <u>"Demarcation point" means the physical point where the ownership and responsibility of a portion</u> of a network changes from one party to another.
- (Im) "Emergency notification service," or "ENS," also known as a "mass notification service," also known as "reverse 9-1-1," 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 deliveryincluding but not limited to voice messages to telephone customers, text messages, and emails, all landline, mobile, and other registered devices within within a specified geographical area of an emergency event.
- (mnl) "Emergency telephone charge" means a charge to pay for the expenses authorized in C.R.S. §29-11-104. the equipment costs, the installation costs, and the directly-related costs of the continued operation of an emergency telephone service
- (nom) "Enhanced 9-1-1 Service", "Enhanced 9-1-1" (E9-1-1) means the delivery of 9-1-1 calls <u>via</u> selective routing to a PSAP. Enhanced 9-1-1 also includes ANI and ALI service, including non-listed and non-published numbers and addresses. with ANI and ALI (including non-listed and non-published numbers and addresses), and (optionally) selective routing, to a PSAP.
- (opn) "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.
- (pqo) "Governing body" means a representative organization responsible for the oversight and allocation of the emergency telephone charge9-1-1 response activities 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.
- (grp) "Intermediary aggregation service" means the aggregation and transport of 9-1-1 calls for one or more originating service providers for delivery to a <u>BESPTARP</u>'s 9-1-1 selective router, or the functional NG9-1-1 equivalent.
- "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).
- (Str) "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.

- (tus) "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.
- (<u>uvt</u>) "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 provide 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.
- (<u>vwu</u>) "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.
- (wxv) "Pseudo Automatic Number Identification" (p-ANI) means a non-workingdialable phone number, used to facilitate the routing of certain types of 9-1-1 calls.consisting of the same number of digits as ANI, that is not a North American Numbering Plan telephone directory number, and that is used to support routing of originating service providers' 9-1-1 calls to a PSAP. p-ANI numbers may be used to convey special meaning to systems that are used to switch or route 9-1-1 calls to the various PSAPs, such as the identity of a wireless cell, cell sector or other geographic area used to associate a 9-1-1 call with the destination PSAP.
- (yxw) "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.
- (yzx) "Selective routing" means the capability of routing a 9-1-1 call to a designated PSAP based upon the seven digit or ten-digit telephone number of the service end user initiating a dialing 9-1-1 call.
- (<u>zbby</u>) "Service end user" means a person placing a 9-1-1 call <u>regardless of the technology used.using</u> any form of communication service.
- (<u>aaeez</u>) "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.
- (<u>bbddaa</u>) "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".
- (cceebb) "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

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 6 of 30

individual who does not use such devices, TRS supersedes the terms "dual party relay system," "message relay services," and "TDD Relay."

(cc) "Transport, aggregation, or routing provider" or "TARP" means any person that transports, aggregates, or routes 9-1-1 calls from originating service providers, or from intermediary aggregation service providers to a demarcation point agreed to by the governing body of a PSAP.a PSAP.

2132. Process for Certification.

- (a) The Commission finds and declares that basic emergency service is vital to the-public health, safety, and safety-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) <u>Basic Emergency Service Providers Transport, aggregation, or routing providers, or TARPs.</u>
 - (II) Providers of ALI or ANI services offered or provided to a PSAP.
 - (III) Providers of any basic emergency service that is 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, <u>BESPTARP</u>, 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 <u>9-1-1</u> interconnection agreements between a <u>BESPTARP</u> 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;
- 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 providingsion of 9-1-1 service to any PSAP or governing body as of June 1, 2014, then-that person or BESP must file an application for, and obtain prior-authorization from the Commission. The authorization may be subject to

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 8 of 30

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 BESPs 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, BESPs, 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 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 <u>approved prescribed</u> by the Commission.

2134. Obligations of BESPsTARPs.

- A BESP shall deliver to the appropriate PSAP or to another BESP that services the PSAP any 91-1 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 rule 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.

- A <u>BESP TARP</u>-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 <u>BESP TARP</u>-shall interconnect at physically and geographically diverse aggregation points with all originating service providers, intermediary aggregation service providers, ALI providers, providers of ANI services, and other <u>BESPsTARPs</u>-with facilities in the serving area. A <u>BESPTARP</u>-shall make its 9-1-1 facilities available to originating service providers, intermediary aggregation service providers, ALI providers, providers of ANI services, and all other <u>BESPsTARPs</u>-to facilitate 9-1-1 call transfer and routing between the appropriate PSAPs. A <u>BESP TARP</u>-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.
- (db) At the request of an originating service provider, within and for an area under the responsibility of a single governing body, a BESP_TARP-shall provide and arrange for the necessary facilities to interconnect, switch, and transport 9-1-1 calls from the originating service provider and other BESPs_TARPs-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_TARP-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 <u>BESP TARP</u> shall be based on the requirements established by the responsible <u>BESP TARP</u> 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 BESPTARP, 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 TARP facilities to originating service providers that employ switching systems in the geographic areas served by the responsible BESP TARP 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 TARP shall be at or near the locations of each of the BESP TARP selective routers, or functional equivalent, or at a mutually agreed point of interconnection within the area served by the BESP TARP ins 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 TARP.
- (de) A <u>BESP TARP</u>-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 <u>BESP TARP</u>-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 <u>BESP TARP</u> shall file those interconnection agreements with the Commission within 30 days of the effective date of the Commission's adoption of this paragraph.

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 10 of 30

- (ed) A BESP TARP or any person interconnecting with a BESP TARP 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 TARP.
- (fe) A <u>BESP TARP</u>-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 <u>BESP TARP</u> 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 <u>BESP's TARP's-9-1-1</u> system and network associated with working telephone numbers or any other <u>number designator</u> utilized in place of ANI to route <u>9-1-1</u> 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. <u>Alternative bases for cost-base rates may be considered by the Commission on a case-by-case basis</u>.
- (gf) A <u>BESP TARP</u>-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 includeing, 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 <u>BESP TARP</u> charges the governing body for <u>BESP TARP</u> services.
- (hg) 9-1-1 calls from wireless providers or providers of interconnected VoIP using a number in place of an ANI to direct calls to a particular PSAP, and record counts associated with private switched ALI services, may be billed to the PSAP or governing body only if the PSAP or governing body has ordered those services. 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.
- (<u>ih</u>) <u>BESPs TARPs</u>-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
- (ji) A <u>BESP TARP</u> shall ensure that all 9-1-1 facilities, including interconnections between the <u>BESP TARP</u> and, originating service providers, intermediary aggregation service providers, -ALI providers, providers of ANI services, other BESPsTARPs, or the demarcation point of a governing body or PSAPs, are engineered, installed, maintained, and monitored in order to provide a minimum of two geographically diverse routes 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.
- (kj) Each <u>BESP TARP</u>-shall designate a telephone number that originating service providers, intermediary aggregation service providers, ALI providers, PSAPs, <u>BESPsTARPs</u>, and any other provider of basic emergency service can use to communicate <u>concerning suspected potential and actual</u> 9-1-1 failures or outages <u>orand</u> restoration of service. Such telephone number shall be

staffed seven days a week, 24 hours a day., by personnel capable of processing calls to <u>initiate</u> take appropriate immediate corrective action.

- (Ik) A <u>BESP TARP</u> shall keep on file with the Commission its contingency plan in accordance with paragraph 2139(be).
- (Im) BESPs TARPs-shall treat as confidential all customer telephone number information, customer location information, and line counts obtained, and customer counts by geographic area that the TARP obtains from originating service providers as confidential and iNeither the intermediary aggregation service providers nor, and the BESP TARP shall not disclose such confidential information to any person or entity other than the PSAPs, governing bodies, or the Commission, and only for the billing purposes of billing the governing body for services, providing information necessary for governing bodies to verify appropriate revenues are being received from 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 TARP 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 or use such information for any purpose other than to verify TARP billing to the PSAP, verify the accuracy of the emergency telephone charge billing by carriers to their end users, toor respond to emergencies, or to build an ENS database.

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 <u>BESPTARP</u>, it shall provide to <u>BESPsTARPs</u>, for the geographic areas served, all information required by the <u>BESPs TARPs</u> to ensure that calls are routed from the end users to the correct PSAP.
- (c) No <u>BESPTARP</u>, 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 <u>BESPsPSAPs</u> 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.

All originating service providers and intermediary aggregation service providers shall deliver 9-1-1 calls, at an agreed upon point of interconnection within the geographic area of a certificated BESP-TARP. All agreements and the associated charges for interconnection between originating service providers and BESPSTARPS, or between intermediary aggregation service providers and BESPSTARPS, must shall be filed by the BESP with the Commission within 30 days of execution. An originating service provider, intermediary aggregation service provider, or BESPTARP may apply to the Commission for resolution of any dispute relating to interconnection of facilities delivering 9-1-1 calls. The BESP TARP 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 BESPTARP is not required to construct 9-1-1 network facilities or compensate an originating service provider or intermediary

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 12 of 30

aggregation service provider for such facilities located outside of the <u>BESP's TARP's</u> service area.

- (b) All originating service providers and intermediary aggregation service providers shall furnish name, address, supplemental location information, and telephone number and p-ANI, if applicable, or any other number used in place of the ANI for 9-1-1 call routing and ALI information for all customers, including non-published or non-listed numbers, to all BESPs and ALI providers TARPs-requiring such information and to all ALI providers for the provision of 9-1-1 services, orand_emergency notification services. Such initial or updated information shall be provided to such BESPs TARPs 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 rule 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'sTARP's_facilities shall be separately identified to the BESPTARP, ALI providers, and PSAPs. All costs for providing this customer information and updates to this information shall be the responsibility of the originating service provider.
- (c) All originating service providers shall collect and remit the emergency telephone charge as required by § 29-11-100.5, C.R.S., et seq., to the appropriate governing body. Such remittances shall be accompanied by a count of the lines the OSP serves in the governing body's service area, differentiated between lines which are exempt from the surcharge by C.R.S. 29 11 102 (3) and those which are not. This information shall be treated as confidential pursuant to 2134 (n).
- (cel) <u>Under normal conditions</u>, <u>Oo</u>riginating 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 <u>BESPTARP</u>'s 9-1-1 system and network. <u>This rule does not prohibit the delivery of 9-1-1 calls to an alternate number during conditional rerouting due to an outage or to prohibit the implementation of interim solutions to provide Next Generation 9-1-1 services.</u>
- (de) Each originating service provider and intermediary aggregation service provider shall designate a telephone number that PSAPs, 9-1-1 governing bodies, the Commission and BESPTARPs can inquire about us suspected potential and actual 9-1-1 failures or outages and/or restoration of service. Such telephone number shall be staffed seven days a week, 24 hours a day by personnel capable of processing the call to initiate appropriate immediate corrective action.
- (ef) 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.
- (g) Payphone providers must provide access to dialtone, emergency calls, and telecommunications relay service at no charge to the caller.Interconnections with payphone providers.
 - (I) An originating service provider shall not interconnect with a payphone provider unless the payphone provider:

- (A) allows customers to place a 9-1-1 call without requiring a coin deposit or other charges; and
- (B) furnishes the ALI provider(s), the originating service provider that provides the dial tone connection, the PSAP, the governing body, and the TARP the Commission-required name and location information.
- (II) The prohibition in this paragraph shall not apply to payphones provided to inmates in penal institutions where access to 9-1-1 is not required.
- (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.
- (gh) All originating service providers and intermediary aggregation service provider shall comply with rule 2140.

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

- (a) For purposes of this rule:
 - (I) "Emergency telephone service" (ETS) means a telephone system using 9-1-1 to report police, fire, medical, or other emergency situations.
 - (II) "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.
 - (III) "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.
 - (IIIV) "Written information" means information provided by electronic mail, facsimile, letter, memorandum, postcard, or other forms of printed communication.
- (b) <u>If an MLTS is capable of allowing access to 9-1-1 service without the dialing of an additional digit, it shall be configured to allow direct access to 9-1-1 service.</u>
- (eb) A MLTS manager responsible for an MLTS that is not <u>capable of providinginstalled</u>, <u>configured or maintained to provide</u> direct access to 9-1-1 shall give written notice to all end users or potential users of <u>the each MLTS</u> describing the proper method of accessing <u>9-1-1 serviceemergency</u> telephone service (ETS), or 9 1 1, in an emergency.

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 14 of 30

- (I) Such written information shall be provided to each end user by placing stickers or cards including the appropriate method to access <u>9-1-1 serviceETS</u> 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].
- (dce) When calls to access 9-1-1 service ETS 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 ETS 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.
- (edd) 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 91-1 service ETS-is not required.

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

- (a) ALI providers, governing bodies, and PSAPs shall sign non-disclosure agreements consistent with this rule. Originating service providers and providers certified pursuant to rule 2132 shall provide telephone numbers or location data, including non-published and non-listed telephone numbers, only to an ALI provider, governing body, or PSAP that executes a non-disclosure agreement.
- (b) Pursuant to rules 1105, 1104, and 2360 through 2399, in order to receive personal information from an originating service provider, an intermediary aggregation service provider, governing body, PSAP, or provider certified pursuant to rule 2132, shall state formally in writing to the

originating service provider that it has agreed to non-disclosure of personal information consistent with this rule.

- (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.
- (eb) ALI information shall not be used or disclosed for purposes other than for responding to requests for 9-1-1 emergency assistance, initiating delivery of emergency warnings using an emergency notification service, or periodic testing of these services. However, a query, or reverse search of the ALI information, initiated at the PSAP to electronically obtain the ALI information associated with a known telephone for purposes of handling a 9-1-1 emergency call is permitted.
- (cd) 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, because the originating service provider or intermediary aggregation service provider did not properly inform the intermediary aggregation service provider or provider certified pursuant to rule 2132 that the personal information should not have been disclosed, the responsible originating service 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) All facilities, equipment and databases used by TARPs, ALI, and intermediary aggregation service providers to provide basic emergency service shall be appropriately monitored and configured with the necessary redundancy, power and geographic diversity to ensure the availability of basic emergency service at all times. Basic emergency service shall be accorded the highest priority restoration in the event of a failure or outage.
- (b) TARPs and ALI providers shall develop cost-based tariff rates for deploying the necessary redundancy, power, and geographic diversity for their provision of basic emergency service.
- (c) An TARP and ALI provider may file a pleading requesting Commission waiver of the deployment of the necessary redundancy, power, and geographic diversity upon a showing of economic or technological infeasibility or that such deployment is not in the public interest.

(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 1, 2016, or as deemed necessary by the Commission, each BESP and ALI provider (if offering service separately from a BESP) shall develop and file confidentially, in an application proceeding with the Commission, a 9-1-1 Diversity Plan 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 Diversity Plan 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 (a) (II) (B) of this rule the provider proposes to improve, how they provider propose to improve it item, and a proposed timetable for deploying these improvements;
 - (D) a description of which items from section (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 (a) (II) (C) and (D) of this rule.
- (III) Following Commission approval of the Diversity Plan, the provider shall file a new tariff or modify an existing tariff for implementation of the Plan.
- (IV) Each service provider pursuant to section (a) (II) of this rule shall file, on a quarterly basis, updates on their 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 BESPs, ALI providers, intermediary aggregation service providers, originating service providers, governing bodies, and PSAPs, to be confidentially filed annually with the Commission annually byno later than April 30-each year. 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 points with BESPs, ALI providers, and PSAPs;

- (III) all contingency processes and information from BESPs, 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 (b) shall notify affected PSAP(s) of any known changes in the network-that may require an update -change to the 9-1-1 Reliability and Contingency Plan.
- (d) Originating service providers, intermediary aggregation service providers, ALI providers and BESPs and ALI Providers shall ensure that an inventory management process exists for properly identifying 9-1-1 circuits <a href="https://example.com/pursuant-to-47-CFR-\frac{\text{\t
- (e) Each provider certified pursuant to rule 2132 that provides facilities, equipment, or databases used to provision basic emergency service to a PSAP shall develop a 9-1-1 Reliability and Contingency Plan in conjunction with all impacted PSAPs and 9-1-1 governing bodies. The plan shall detail the actions to be taken in the anticipation of, or event of, a 9-1-1 failure or outage. Each certified provider shall:
 - (I) maintain a copy of its plan;
 - (II) file a copy of its current plan with the Commission by April 30 of each year; and
 - (III) All providers required to file a 9-1-1 Reliability and Contingency Plan pursuant to section
 (a) (IV) shall notify affected the PSAP(s) of any changes in the network that may require a change to the 9-1-1 Reliability and Contingency Plan.
- (f) All originating service providers and intermediary aggregation service providers providing a basic emergency service shall:
 - (I) furnish providers certified pursuant to section (a) (II) of this rule rule 2132 any necessary information to develop a 9-1 1 Reliability and Contingency Plan; and
 - (II) notify the PSAPs of any changes in the network that may require a change to the 9-1-1 Reliability and Contingency Plans.
- (g) A 9-1-1 Reliability and Contingency Plan shall contain:
 - an identification and location of all primary and back-up facilities, equipment and databases or any and all other components to provide basic emergency service;
 - (II) maps depicting the basic emergency service architecture;
 - (III) an identification and description of all interconnection points with TARPs, ALI providers, and PSAPs;

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 18 of 30

- (IV) all processes and information from TARPs, ALI providers, intermediary aggregation service providers, originating service providers, PSAPs and governing bodies necessary so that 9.1.1 calls can be answered until 9.1.1 service is restored;
- (V) all processes and information regarding 9-1-1 service degradation and outage notification in order to:
 - (A) arrange to temporarily re-route 9-1-1 calls to another PSAP;
 - (B) arrange, with the cooperation of the originating service provider, to route 9-1-1 calls to a local telephone number;
 - (C) provide another mutually agreed upon temporary solution so that 9 1 1 calls can be answered until 9-1-1 service is restored; and
 - (D) any other details as determined by the TARP, ALI provider, governing bodies, PSAPs, and Commission staff.
- (feh) 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. Originating service providers, intermediary aggregation service providers and providers certified pursuant to rule 2132 shall work cooperatively with the PSAPs to manage and monitor the report of a 9-1-1 failure or outage (e.g., issuance of a trouble ticket number in order to track such a failure or outage).
- (hi) Originating service providers, intermediary aggregation service providers and providers certified pursuant to rule 2132 shall notify a person, agency, or responsible party designated by the governing body regarding a planned or unplanned 9.1.1 failure or outage, by notifying the designee of the governing body immediately of the nature and extent of the 9.1.1 outage or failure and actions being taken to correct the planned or unplanned 9.1.1 failure or outage. The provider shall work cooperatively with the PSAPs to manage and monitor the report of a 9.1-1 failure or outage (e.g., issuance of a trouble ticket number in order to track such a failure or outage). PSAPs shall notify the responsible TARP before invoking the emergency notification system to allow the TARP coordinate with ENS providers to avoid or mitigate an outage due to the volume of calling. In the event the PSAP detects a failure in the 9-1-1 system, the PSAP shall immediately notify the BESP TARP in that geographic area of the failure.
- (ij) If a 9-1-1 failure or outage exceeds or is anticipated to exceed 15 minutes from the time a <u>BESP or ALI provider</u> originating service provider or provider certified pursuant to rule 2132 becomes aware of the outage and after notification to the PSAP and the Commission, the <u>BESPTARP</u> or ALI provider shall implement the contingency plan and shall perform the following actions, if applicable:
 - (I) notify the affected PSAP(s):
 - (II) enact contingency plans developed pursuant to section (a) (IV) of this rule; arrange to temporarily re-route 9-1-1 calls to another PSAP;
 - (II) arrange with the cooperation of the originating service provider to route 9-1-1 calls to a local telephone number;

- (III) use facilities obtained for alternative routing of E9-1-1 calls for temporary use during service interruptions, such as private network facilities and governmental facilities; or
- (I<u>II</u>V) provide other mutually agreed upon temporary solutions so that 9 1 1 calls can be answered until 9-1-1 service is <u>fully restored</u>.
- (jk) In the event that the anticipated failure or outage in the provision of 9-1-1 service is in the facilities of the originating service provider, intermediary aggregation service provider, or provider certified pursuant to rule 2132, such provider shall notify the <u>BESPTARPs</u> that is responsible for delivering 9-1-1 calls to the PSAP for its customers and the affected PSAP. In the event that the anticipated failure or outage in the provision of 9-1-1 service is in the facilities of the <u>BESPTARPs</u>, that <u>BESPTARPs</u> must notify of all originating service providers, intermediary aggregation service providers, and PSAPs that are affected by the failure or outage.
- (fgl) Intermediary aggregation service providers, originating service providers, and providers certified pursuant to rule 2132 shall have qualified service technician(s) trained and qualified to resolve 91-1 failures or outages on site, when necessary, as soon as safely possible within two hours or as soon as safely possible their best effort, after becoming aware being notified by the PSAP of a 9-11 failure or outage of the 9-1-1 system. For the purpose of this rule, "on site" means at a location where corrective action can be taken to resolve the failure or outage.
- (ghm) In the event of a 9-1-1 failure or outage, or five percent (whichever is less) of the lines in a wireline exchange or equivalent VoIP wireline or wireless serving area, the responsible BESPTARP, ALI provider, provider of intermediary aggregation service providers, the or originating service providers, or and any provider certified pursuant to rule 2132 shall notify the designated representatives of the affected governing bodiesy and/or PSAP(s), the Commission, and the Colorado State Emergency Operations Center Office of Emergency Management, if activated for a related event, as soon as the provider becomes aware of the failure or outage, of the following, if knownbased 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) date and time of end of outage or failure;
 - (IV) number of service end users affected;
 - (VI) affected geographic area;
 - (VII) description of outage or failure, including causes:
 - (VIII) description of services affected;
 - (VII) expected duration of the outage;
 - (VIII) whether other providers may be affected:

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 20 of 30

- (IX) whether the failure or outage may also affect the operation of Emergency Notification Services;
- (X) A contact telephone number for more information, if necessary; and-
- (IX) name and type of equipment causing the outage, if applicable;
- (X) corrective action;
- (XI) whether the outage or failure affects ALI only;
- (XII) whether lack of diverse routing contributed to the outage;
- (XIII) whether backup power contributed to the outage;
- (XIV) whether network monitoring links transmitted data about the failed or degraded network equipment and facilities;
- (XIV) other agencies or entities notified, including PSAP(s), Sheriff/Police, the media, etc.; and
- (XVI) specification of elements of the 9-1-1 Reliability and Contingency Plan that have been implemented.
- (hi) Following notification efto the PSAP, the BESP and responsible provider shall enact any applicable contingency plan developed pursuant to this rule or developed separately, and provide other mutually agreed upon temporary solutions so that 9-1-1 calls can be answered public safety communications can be maintained until 9-1-1 service is fully restored. The provider shall work cooperatively with the PSAPs to manage-and-, 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).
- (ijn) Following the enactment of applicable contingency plans, the responsible provider shall make notifyication to the Commission within 120 minutes of the beginning of the outage. The implementation or non-implementation of any contingency plan does not remove the obligation to provide notification. Notification shall be made via by a method to be established by the Commission, and it shall consist of the information provided to the governing bodies and/or PSAPs pursuant to 2139 (gh). Additionally, the notification to the Commission will include the following information, if known, 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;
 - (II) suspected causes of the failure or outage;
 - (III) action currently being taken to investigate or resolve the outage or failure;

(IV) agencies or entities notified, including PSAP(s), Sheriff/Police, theand-media outlets., etc.agencies notified, including PSAP(s), governing boards, law enforcement agencies, fire departments, etc.

Following the restoration of 9-1-1 service the responsible provider shall complete the following

Notification must be provided pursuant to paragraph (m) the earlier of: 30 minutes from the time an outage exceeds 15 minutes; or 30 minutes from the time the provider knows an outage is anticipated to exceed 15 minutes.

- (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 they are technically capable of doing so. This information shall be provided within two hours of the restoration of 9-1-1 service or best effortas soon as possible under the circumstances. If When possible, this
 - (II) notify the Commission of the date and time of the restoration of service. This should be completed within two hours of the restoration of service.
- (kle) For any outage or failure resulting in an initial notification to the Commission pursuant to rule 2139 (j), the responsible provider Intermediary aggregation service providers, originating service providers, and providers certified pursuant to rule 2132 shall file a final written report with the Commission viaby a method to be established by the Commission within thirtyten days of a failure or outage with the Commission containing updated the information identified in paragraph (ghm) and (ii) of this rule. Additionally, tThe final report shall include the following information:
 - (I) the root cause of the outage;

(jk)

actions:

(II) if caused by an accidental fiber cut, whether a locate was performed;

information should also include associated ALI information;

- (III) if caused by a system failure, the name and type of equipment that failed:
- (IV) whether network monitoring links transmitted data about the failed or degraded network equipment and facilities;
- (V) final corrective action that was taken to resolve the outage or failure;
- (VI) whether lack of diverse routing contributed to the outage or failure:
- (VII) whether a lack of sufficient backup power contributed to the outage or failure;
- (VIII) any action the provider plansmay plan to take to reduce the likelihood of a similar outage occurring in the future.
- (In) As an alternative or in addition to the final written 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.

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 22 of 30

2140. Reports.

- _(a) Each intermediary aggregation service provider, originating service provider, and provider certified pursuant to rule 2132 shall furnish to the Commission at such time and in such form as the Commission may require, a report answering all questions propounded regarding the implementation, usage, availability, 9-1-1 failures or outages, cost of providing, and such other information relevant to the provision of this service. These reports shall be provided at regular intervals, to be determined by the Commission, and on a form approved by the Commission.
- (ab) 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.
- (be) 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. These reports shall be filed confidenentially in a proceeding.
- (cd) 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.
- (ed) Each BESPTARP shall provide to the Commission staff monthly ALI retrieval data for the twelve-month period from August 1 of previous year through July 31 of current year for each governing body's service area. If the BESPTARP 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 future-recommendations and report to the Commission concerning, the continued improvement and advancement implementation 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 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 BESPs. 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 following National Emergency Number Association (NENA) standards are incorporated by reference. References to these recommended NENA standards do not include later amendments to or editions of these standards. A certified copy of these standards is maintained at the Public Utilities Commission, 1560 Broadway Street, Suite 250, Denver, Colorado 80202 and available for inspection during normal business hours. Certified copies of the incorporated standards shall be provided at cost upon request. The Director or the Director's designee will provide information regarding how the incorporated standards may be obtained or examined. These incorporated standards may be examined at any state publications depository library.

Doc Number	Doc Name	Committee	Approved Date
	ACCESSIBILITY DOCUMENTS		
	DATA STRUCTURES & MANAGEMENT DOCUMENTS (including NG9-1-1)		
02-010	Standard Legacy Data Formats For 9 1 1 Data Exchange GIS Mapping	Core Services	2011/03/28
02-011	Data Standards For Local Exchange Carriers, ALI Service Providers & 9-1-1 Jurisdictions	Core Services	2012/05/12
02 013	Data Standards for the Provisioning	Core Services	2008/06/07

	and Maintenance of MSAG Files to VDBs and ERDBs		Reviewed 9/12/2014
02-014	GIS Data Collection and Maintenance Standards	Core Services	2007/06/17
02-015	Standard for Reporting and Resolving ANI/ALI Discrepancies and No Records Found for Wireline, Wireless and VoIP Technologies	Core Services	2009/06/06
02 501	Wireless (Pre-XML) Static and Dynamic ALI Data Content Information Document	Core Services	2006/10/16
02 502	NENA Company ID Registration Service Information Document	Core Services	2008/11/12
02 503	XML Namespaces Information Document	Core Services	2007/02/23
04-005	ALI Query Service Standard	Core Services	2006/11/21
06 001	Standards for Local Service Provider Interconnection Information Sharing	Core Services	2004/08/01
NENA STA- 008.2-2014 (originally 70- 001)	NENA Registry System (NRS) Standard	Core Services	2014/10/06
71-001	NG9-1-1 Additional Data Standard	Core Services	2009/09/17
71 501	Synchronizing Geographic Information System Databases with MSAG & ALI Information Document	Core Services	2009/09/08
71 502	An Overview of Policy Rules for Call Routing and Handling in NG9-1-1 Information Document	Core Services	2010/08/24
NENA INF 011.1 2014	NENA NG9 1 1 Policy Routing Rules Operations Guide	Core Services	2014/10/06 -
NENA-STA- 003.1.1-2014	NENA Standard for NG9 1 1 Policy Routing Rules	Core Services	2014/12/01
NENA-STA- 004.1-2014	NENA Next Generation United States Civic Location Data Exchange Format (CLDXF)	Core Services	2014/03/23

	MULTI LINE TELEPHONE SYSTEM (MLTS) and PRIVATE BRANCH EXCHANGE (PBX) DOCUMENTS		
03-502	Trunking for Private Switch 9-1-1 Service Information Document	Interconnection - & Security	2003/04/11
06-003	Private Switch (PS) E 9 1 1 Database Standard	Core Services	2004/08/01
06-502	Industry Common Mechanisms for MLTS E9-1-1 Caller Location Discovery and Reporting Information Document	Core Services	2008/10/25
	NETWORK DOCUMENTS		
03-003	Implementation of Inter Networking, E9 1 1 Tandem to Tandem Reference	Interconnection - & Security	2000/02/01
03-004	E9 1 1 Functional Entity Model Standard	Interconnection - & Security	2008/01/19
03-006	E9 1 1 Call Congestion Management Standards	Interconnection & Security	2003/03/06
03-008	E9 1 1 Default Assignment and Call Routing Functions Standard	Interconnection & Security	2008/01/19
03-501	Network Quality Assurance Information Document	Interconnection & Security	2005/10/03
	SS7 Guidelines for Wireline and VoIP Emergency Services Gateway Interconnection to 9-1-1 Selective Routers Information Document	Interconnection — & Security	2005/10/2
03-503			Reviewed 9/12/2014
03-506	E9 1 1 Voice Circuit Requirements, Providing a P.01 Grade of Service Information Document	Interconnection —& Security	2007/04/13
03-507	ESQK Guidelines for VoIP to E9-1-1 Connectivity Information Document	Interconnection & Security	2009/03/09
03-508	Impacts of Using a Common Trunk Group to Carry Calls of Multiple Service Types into a Legacy Selective Router Information Document	Interconnection —& Security	2010/03/15

T			1
03-509	Femtocell and Universal Mobile Access (UMA) Information Document and UMA Appendix	Interconnection —& Security	2011/01/27
05-501	SS7 Guidelines for MSC to Selective Router Connectivity Information Document	Interconnection —& Security	2002/10/16 Reviewed 9/12/2014
NENA INF- 002.1-2012	The Effect of Mass Calling Events on Legacy SR to PSAP Trunking Information Document	Interconnection - & Security	2012/08/28
	NG9-1-1 TRANSITION PLANNING DOCUMENTS		
NENA-INF- 008.2 2014 (originally 77- 501)	NG9 1 1 Transition Plan Considerations Information Document	NG Transition Planning	2013/11/20
	SECURITY DOCUMENTS		
04 503	Network/System Access Security Information Document	Interconnection - & Security	2005/12/01
75 001	Security for Next Generation 9 1 1 Standard	Interconnection —& Security	2010/02/06
75-502	Next Generation 9 1 1 Security Audit Checklist Information Document	Interconnection —& Security	2011/12/14
	VOICE OVER INTERNET PROTOCOL (VoIP) DOCUMENTS		
08 001	Interim VoIP Architecture for Enhanced 9-1-1 Services (i2) Standard	Interconnection - & Security	201008/11
08-503	VoIP Characteristics Information Document	Interconnection & Security	2004/06/10
08 504	VoIP Standards Development Organization Information Document	Interconnection - & Security	2004/06/08

	NEXT GENERATION 9-1-1 (NG9-1-1) DOCUMENTS		
08-002	Functional and Interface Standards for Next Generation 9 1 1 Version	Interconnection —& Security	2007/12/18
08-003	Detailed Functional and Interface Standards for the NENA i3 Solution	Interconnection - & Security	2011/06/14
08-501	Interface between the E9 1 1 Service Provider Network and the Internet Protocol (IP) PSAP Information Document	Interconnection —& Security	2004/06/15
08-502	E9 1 1 Requirements Information Document	Interconnection —& Security	2004/07/23
08-505	Methods for Location Determination to Support IP Based Emergency Services Information Document	Interconnection —& Security	2006/12/21
08 506	Emergency Services IP Network Design for NG9-1- 1-Information Document	Interconnection - & Security	2011/12/14
08-751	NENA i3 Requirements Document	Interconnection —& Security	2006/09/28
08-752	Location Information to Support IP- Based Emergency Services Requirements Document	Interconnection - & Security	2006/12/21
73-501	Use Cases & Suggested Requirements for Non- Voice-Centric Emergency Services Information Document	Interconnection —& Security	2011/01/11
NENA-INF- 003.1-2013	Potential Points of Demarcation in NG9-1-1 Networks Information Document	Interconnection —& Security	2013/03/21
NENA INF 006.1 2014	NG9-1-1 Planning Guidelines Information Document	NG Project Lead Team	2014/01/08 -
NENA-INF- 009.1-2014	Requirements for a National Forest Guide Information Document	Interconnection & Security	2014/08/14 -

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 28 of 30

	NON-TRADITIONAL DOCUMENTS		
07-501	Future 9 1 1 Models Information Document	Interconnection - & Security	2004/06/01
07-502	Non Traditional Communications for E9 1 1 Information Document	Interconnection - & Security	2001/03/20
07-503	Network Interfaces for E9-1-1 and Emerging Technologies Information Document	Interconnection & Security	2002/09/11
07-504	Automatic Collision Notification & Vehicle Telematics Information Document	Interconnection - & Security	2007/06/01

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 cents per month shall file an application with this Commission pursuant to rule 2002_(a) (c) and (e), or -Commission staff may provide an alternative 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) 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), and that the applicant agrees to comply with C.R.S. 29-11-104 (5), notwithstanding any exemption received pursuant to C.R.S. 29-1-604. If the governing body does not have a website, the audit otherwise required pursuant to C.R.S. 29-11-104 (5) shall be posted on the website of the Colorado 9-1-1 Resource Center.
- (cb) For applications ferto increase ef-the 9-1-1 surcharge in excess of \$1.50.70 in 20161990 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 lincluded 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-above \$1.500.70 per month.
- (bde) Notice. -Notwithstanding rule 2002 (d), this section shall establish the notice procedure for governing bodies applying for approval of a 9-1-1 charge above seventy 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. For at least two weeks. Concurrently, tThe notice shall also be made available online for at least a period

of 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 newspaper 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 utility 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 an intervention to participate as a party, and an explanation that a mere objection without an intervention shall not be adequate to permit participation as a party;
- (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
- (IX) 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.
- (edc) 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. ALI Services

- (a) 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 TARP 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 TARP in the providing of 9-1-1 services to any PSAP or governing body as of June 1, 2014, then that person or TARP must file an application for and obtain prior 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;

Attachment A, amended proposed rules Decision No. R16-0038-I PROCEEDING NO. 15R-0318T Page 30 of 30

- (II) reliability of the ALI service, including, without limitation, compliance with the obligations placed upon TARPs 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, TARPs, 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 PSAP; and
- (VIII) any other matter affecting public safety, reliability, pricing, and the public interest.
- (b) Commission authorization under this rule is not required for a TARP to continue providing a PSAP or governing body the same 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.

214<u>54</u>. – 2159. [Reserved].

* * * * *

[indicates omission of unaffected rules]