

## **COLORADO DEPARTMENT OF REGULATORY AGENCIES**

### **Public Utilities Commission**

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

#### **PART 2**

### **RULES REGULATING TELECOMMUNICATIONS SERVICES AND PROVIDERS OF TELECOMMUNICATIONS SERVICES**

#### **2131. Definitions.**

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

- (a) "9-1-1" means a three-digit abbreviated dialing code used to report an emergency situation requiring a response by a public agency such as a fire department or police department.
- (b) "9-1-1 access connection" means any communications service including wireline, wireless cellular, interconnected voice-over-internet-protocol, or satellite in which connections are enabled, configured, or capable of making 9-1-1 calls. The term does not include facilities-based broadband services. The number of 9-1-1 access connections is determined by the configured capacity for simultaneous outbound calling.
- (c) "9-1-1 Advisory Task Force" means the representative group established in accordance with rule 2145, which provides oversight of the statewide implementation and provision of basic emergency service, and periodically reports to the Commission on matters related to 9-1-1 service delivery in the state of Colorado.
- (d) "9-1-1 call" means a request for emergency assistance from the public by dialing 9-1-1 or addressing the ESInet regardless of the technology used, and may include voice, text, images, and video, whether originated by wireline, wireless, satellite, or other means.
- (e) "9-1-1 service" means the service by which a 9-1-1 call is routed and transported from the end user to the governing body or PSAP serving the caller's location. 9-1-1 service also includes location information routed to the PSAP.
- (f) "9-1-1 surcharge" or "state 9-1-1 surcharge" means the surcharge established pursuant to § 29-11-102.3, C.R.S.
- (g) "Automatic Location Identification" (ALI) means the automatic provision to a PSAP for display, on equipment at the PSAP, of the telephone number and location of the caller. ALI data includes non-listed and non-published numbers and addresses, and other information about the caller's location.

- (h) “Automatic Number Identification” (ANI) means the automatic provision to a PSAP for display of the caller’s telephone number at the PSAP
- (i) “Basic emergency service” (BES) means the aggregation and transportation of a 9-1-1 call directly to an agreed-upon demarcation point ~~with a governing body or for delivery to the primary designated~~ PSAP for that call, regardless of the technology used to provide the service. The aggregation of calls means the collection of 9-1-1 calls from one or more OSPs or IASPs for the purpose of selectively routing and transporting 9-1-1 calls directly to a demarcation point with a governing body or PSAP. The offering or providing of location information or selective routing directly to a governing body or PSAP is also a basic emergency service. Basic emergency service does not include:
- (I) the portion of a 9-1-1 call provided by an OSP;
  - (II) the portion of a 9-1-1 call or services provided by an IASP;
  - (III) the portion of a 9-1-1 call from the OSP or an IASP to a demarcation point with the BESP;
  - (IV) the portion of a 9-1-1 call after the demarcation point between the BESP and the governing body or PSAP; or
  - (V) the delivery of text messages to a governing body or PSAP via networks or connections separate from the basic emergency service network.
- (j) “Basic emergency service facilities” or “BES facilities” means the lines, wires, cables, conduit, ducts, poles, cross-arms, equipment, supporting structures, and other infrastructure used by the BESP to provide basic emergency service. “Facilities” has the same meaning, unless the context requires otherwise.
- (k) “Basic emergency service network” or “BES network” means the portion of the 9-1-1 call path that begins at the demarcation point between an OSP or IASP and a BESP and ends at the demarcation point between a BESP and a governing body or PSAP to provide basic emergency service.
- (l) “Basic emergency service outage” or “BES outage” means a failure of basic emergency service that prevents or would prevent 9-1-1 calls, ANI, or location information from being delivered from the demarcation point between the OSP or IASP and the BESP to the demarcation point between the BESP and the ~~primary designated governing body or~~ PSAP: resulting in an inability to deliver 9-1-1 calls or location information to the demarcation point. A BES outage includes:
- (I) any event or incident on the BESP’s side of the demarcation point that results in or requires the BESP to reroute 9-1-1 calls to the demarcation point for an alternate PSAP rather than the primary designated PSAP; and
  - (II) any situation in which a PSAP is unable to receive 9-1-1 calls or location information as the result of an event or incident on the BESP’s side of the demarcation point, even if the facilities involved in the event or incident also provide OSP connectivity.

- (m) "Basic Emergency Service Provider" (BESP) means any person certificated by the Commission to provide basic emergency service.
- (n) "Concurrent session" means a channel for an inbound simultaneous 9-1-1 call.
- (o) "Demarcation point" means a physical point of interconnection where the responsibility for a portion of 9-1-1 service changes from one party to another. It includes the point of interconnection between the BESP and the OSP, IASP, or other BESP for the purpose of selectively routing and transporting 9-1-1 calls directly to ~~a demarcation point with~~ a governing body or PSAP, ~~and it~~ includes the point of interconnection ~~mutually agreed upon in writing by the BESP and each governing body or PSAP with primary responsibility for dispatching first responders to the callers' locations between the BESP and the primary designated PSAP. The demarcation point between the BESP and the primary designated PSAP may be at a locally provided network or other location physically separated from the PSAP, as agreed upon in writing between the BESP and the governing body.~~
- (p) "Emergency notification service" (ENS) means a public alerting service that, upon activation by a public agency, rapidly distributes notifications within a specified geographic area of hazardous conditions or emergent events that threaten the health or lives of people or threatens damage or destruction of property, including, without limitation, floods, fires, and hazardous materials incidents.
- (q) "Emergency telephone charge" means a charge established by a governing body pursuant to § 29-11-102(2)(a), C.R.S., to pay for the expenses authorized in § 29-11-104, C.R.S.
- (r) "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.
- (s) "Governing body" means the organization responsible for establishing, collecting, and disbursing the emergency telephone charge in a specific geographic area, pursuant to §§ 29-11-102, 103, and 104, C.R.S.
- (t) "Improvement amount" means the amount approved by the Commission as described in subparagraph 2137(e)(II).
- (u) "Improvement plan" means the plan proposed by a BESP or approved by the Commission as described in paragraph 2143(b).
- (v) "Intermediary aggregation service provider" (IASP) means a person that aggregates and transports 9-1-1 calls for one or more OSPs for delivery to a demarcation point with a BESP.
- (w) "Location information" means ALI or its functional equivalent associated with a 9-1-1 call and provided by a BESP pursuant to its BES tariff.
- (x) "Multi-line telephone system" (MLTS) means a system comprised of common control units, telephones, and control hardware and software providing local telephone service to multiple customers in businesses, apartments, townhouses, condominiums, schools, dormitories, hotels,

motels, resorts, extended care facilities, or similar entities, facilities, or structures. Multi-line telephone system includes:

- (I) network and premises-based systems such as Centrex, PBX, and hybrid-key telephone systems; and
  - (II) systems owned or leased by governmental agencies, nonprofit entities, and for-profit businesses.
- (y) "Multiple-line telephone system operator" means the person that operates an MLTS from which an end user may place a 9-1-1 call through the public switched network.
- (z) "Network Operations Center" (NOC) or "Basic Emergency Service Network Operations Center" means a 24x7, 365 days a year single point of contact for Basic Emergency Service (BES). The NOC is responsible for monitoring the BES network, notifying PSAPs of BES outages, initiating repairs, troubleshooting, and resolving BES network issues.
- (aa) "Originating service provider" (OSP) means a local exchange carrier, wireless carrier, Voice-over-Internet-Protocol service provider, or other provider of functionally equivalent services supplying the ability to place 9-1-1 calls.
- (bb) "Primary designated PSAP" means the PSAP designated to the BESP as the primary or first PSAP meant to receive a call for a specific geographic area. This designation is determined by the governing body with jurisdictional authority for the geographic area from which the call originates.
- ~~(ccb)~~ "Public Safety Answering Point" (PSAP) means a facility equipped and staffed to receive and process 9-1-1 calls from a BESP.
- ~~(dde)~~ "Selective routing" means the routing of a 9-1-1 call to the demarcation point with a governing body or PSAP based upon the location information or other factors as agreed upon by the governing body or PSAP.

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[indicates omission of unaffected rules]

**2134. Process for Certification of Basic Emergency Service Providers (BESPs).**

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[indicates omission of unaffected rules]

- (e) Two years from the grant of the application~~By March 30, 2025~~, and each two years thereafter, each BESP actively providing BES shall file with the Commission updates regarding any changes to the following required information in paragraph (c): items (I)-(IV), (XII)-(XVIII), (XX)-(XXV), and (XXIX)(A)-(C). Additionally, the BESP shall include with this filing an attestation that the information provided is true, accurate, and correct, and that the BESP remains financially and administratively sound and capable of providing the BES offered in its current tariff(s).

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[indicates omission of unaffected rules]

**2136. Obligations of Basic Emergency Service Providers.**

- (a) A BESP certificated by the Commission shall interconnect with all OSPs and IASPs who have customers in areas served by the BESP. BESP.s shall interconnect with all other BESP.s for the purpose of transferring 9-1-1 calls to PSAP.s served by the other BESP.s.
- (b) The BESP shall provide geographically diverse demarcation points for aggregating 9-1-1 calls and location information from OSP.s and IASP.s. At the request of an OSP or IASP, a BESP shall interconnect with the request for the purpose of aggregating and transporting 9-1-1 calls and location information from the requestor to the demarcation point with the governing body or PSAP. Interconnection shall be accomplished in a timely manner, generally not more than 30 days from the time the BESP receives a written order. Interconnection facilities shall generally be engineered as follows:
  - (I) dedicated facilities for connecting OSP.s and IASP.s to a BESP shall be based on the requirements established by the BESP to serve the customers within that local exchange; or
  - (II) if shared or common facility groups are used to transport calls from an OSP or IASP to a BESP, they 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.
- (c) A BESP shall develop and file with the Commission tariffs that comply with the requirements set forth in rule 2137.
- (d) A BESP shall render to each governing body a single monthly bill for its tariffed services. The monthly bill shall be sufficiently detailed to allow the governing body to determine that it is being billed properly based on the billing increments as approved by the Commission.
- (e) BESP.s shall ensure, to the extent possible and in the most efficient manner, that basic emergency service is available for transmitting 9-1-1 calls from deaf, hard of hearing, and persons with speech impairments to the appropriate PSAP.
- (f) A BESP shall ensure that all BES facilities, and interconnections between it and the OSP.s and IASP.s are engineered, installed, maintained, and monitored in order to provide a minimum of two circuits and a minimum P.01 grade of service (one percent or less blocking during the busy hour), or such other minimum grade of service requirements approved by the Commission.
- (g) Where a BESP obtains BES facilities from a basic local exchange carrier, the rates for such facilities shall be reflected in a tariff or agreement filed for approval with the Commission. Such tariffs or agreements shall ensure that such facilities are engineered, installed, maintained, and monitored to provide a minimum of two circuits and a grade of service that has one percent (P.01) or less blocking. The basic local exchange carrier providing such facilities shall not be

considered a BESP. The provisions of this rule shall not apply to routing arrangements implemented pursuant to paragraph 2143(j)(II).

- (h) To expedite the restoration of service following a 9-1-1 outage, each BESP shall designate a telephone number for governing bodies, PSAPs, IASPs, and OSPs to report trouble. Such telephone number shall be staffed seven days a week, 24 hours a day, by personnel capable of processing calls to initiate immediate corrective action.
- (i) A BESP shall keep on file with the Commission its contingency plan as described in paragraph 2143(e).
- (j) BESP's shall identify service providers supplying service within a governing body or PSAP's service area, or statewide, to the extent that the BESP possesses such information, in response to a request from a governing body, PSAP, or the Commission.
- (k) A BESP shall report to the Commission a list of every PSAP serviced by the BESP with the number of concurrent sessions provided to each PSAP. This report shall be updated and filed annually with the Commission by June 1 of each year.

If the BESP is aware of repairs or maintenance being conducted or to be conducted that have the potential to impact BES to a primary designated PSAP, the BESP shall notify that PSAP of the potential of a BES outage at least 24 hours prior to work commencing or as soon as possible. This notification shall be provided by voice call to the PSAP, if possible, and to the contact maintained for the PSAP as described in paragraph 2143(c). When scheduling routine maintenance or repairs, the BESP should schedule such repairs at a time likely to cause the least impact to the affected PSAP(s). Wherever practicable, maintenance of the BES network shall be performed with no scheduled downtime. The BESP shall employ best efforts to ensure that planned events for routine maintenance are scheduled and communicated to avoid impacts to BES customers' 9-1-1 operations. Conduct of emergency or unscheduled repairs in order to restore BES should not be delayed in order to make PSAP notifications.

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[indicates omission of unaffected rules]

**2143. Basic Emergency Service Reliability and Outage Response.**

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[indicates omission of unaffected rules]

- (c) Each BESP shall maintain contact information for each PSAP ~~as specified by the governing body or PSAP~~ served by the BESP for notification of actual or potential BES outages. No less than annually, the BESP shall contact each governing body or PSAP that is served by the BESP to verify the notification information on file.

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[indicates omission of unaffected rules]

- (j) In the event of a confirmed or potential BES outage, the following shall occur.
- (I) The BESP shall notify each affected governing body or PSAP via the contacts previously provided in accordance with paragraph (c) of this rule. Such notifications shall be made as soon as is practical, and shall include a trouble ticket number, the nature and extent of the BES outage, if known, and the actions being taken to correct the outage. If applicable, the notice shall include interim measures being taken to route 9-1-1 calls to alternate PSAPs or other locations. If known, the notification shall also include an estimated time of repair.
  - (II) If the BES outage exceeds or is anticipated to exceed 15 minutes from the time a BESP becomes aware of the outage, the BESP shall implement the appropriate contingency plan as established in paragraph (e) or provide temporary solutions so that 9-1-1 calls can be answered until BES is restored. The BESP shall coordinate any alternate solutions with the contact(s) provided in accordance with paragraph (c) for the affected governing body or PSAP. All 9-1-1 calls shall be delivered to the primary designated PSAP, if possible, or to an alternate PSAP if the delivery to the primary designated PSAP is not possible.
  - (III) If a ~~disruption of~~ BES outage exceeds 30 minutes in duration, the responsible BESP shall inform the Commission within two hours of the time that the BESP becomes aware of the outage. Such notification shall be made ~~in a manner prescribed by the Commission~~ through an outage reporting form, available on the Commission's website. The BESP shall report BES outages as required by this rule even if 9-1-1 calls have been rerouted to an alternate PSAP or other destination, with or without location information.
  - ~~(IV) , outlining the nature and extent of the outage and actions taken to restore service and any interim measures taken to mitigate the outage prior to resolution. The BESP shall notify the Commission through the outage reporting form of restoration of service-BES by the beginning of the next business day following the restoration of service.~~
  - ~~(V) This notification shall be followed within 30 days of such outage by a~~ For all BES outages, the BESP shall submit a final report to the Commission through the outage reporting form within 30 days of the restoration of service. The report shall follow Commission reporting format and guidelines and shall include a statement of whether call back numbers for 9-1-1 calls, which could not be connected due to the BES outage, were provided to the PSAP pursuant to subparagraph 2143(j)(VI) of this rule. Commission staff may request an update regarding an ongoing outage at any time.
  - ~~(IV) All 9-1-1 calls received by the BESP shall be routed to the PSAP with primary responsibility for dispatching first responders to the caller's location, or in accordance with the alternate solutions described in paragraph (j)(II) of this rule, or, if unavailable, to another PSAP if possible.~~
  - (VI) Following the restoration of BES, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the outage. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information.

- (VI) In the event of a BES outage of more than four hours duration, or 12 hours in duration if the outage is due to a fiber cut, the BESP shall provide a credit equal to the ratio of hours of the duration of the outage in hours to the total number of hours in the billing cycle. The credit shall be provided within no more than two billing cycles. to the governing body or PSAP that normally receives the bill. If, as the result of a formal complaint proceeding or other proceeding, the Commission finds that a BESP has failed to provide a credit required under this paragraph, the Commission may order the amount of the credit to be doubled. Additionally, civil penalties may be assessed as described in rules 2009 through 2011.

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[indicates omission of unaffected rules]

**2335. The Provision of Service During Maintenance or Emergencies.**

The following paragraphs describe minimum standards for maintaining service.

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[indicates omission of unaffected rules]

- (d) Service interruptions for an extended time due to maintenance requirements shall be performed at a time that causes minimal inconvenience to impacted customers. Each provider of services identified in rule 2330 shall take reasonable steps to notify the customer in advance of extended maintenance requirements. Such providers shall also make emergency service available when the provider knows that the service interruption affects 1,000 or more access lines and when the provider knows, based upon the prior experience of the provider, that the interruption may last more than four hours during the hours of 8 a.m. to 10 p.m. If ~~the~~ a basic emergency service provider ~~cannot provide~~ experiences a basic emergency service outage as defined in paragraph 2131(l), it shall file a report of the occurrence as required by ~~sub~~paragraph 2143(j)(III).