

Emergency Services

Product Terms

These Emergency Service Product Terms (the “**Product Terms**”) supplement the Communications Services Agreement, or any other separate written agreement entered into between the Parties in which Customer is expressly authorized to use the Services solely for its own internal business purposes, as applicable (the “**Services Agreement**”). Capitalized terms not elsewhere defined in these Product Terms will have the meaning ascribed to them in the Services Agreement, applicable Supplemental Legal Terms, or any applicable Order Form.

In the event of any conflict between the following Service descriptions and terms of Service, these Service descriptions shall control.

1. **Service Descriptions.** Bandwidth provides the following Emergency Services:
 - a. **Basic 911 Service.** With Basic 911 Service (“**911**”), the emergency call center or operator may not have the capability to receive the call back number and/or the exact location of the caller. This means the caller must be prepared to provide to the operator the telephone number and address. Without the required address and callback number, the emergency operator will not be able to dispatch help or return the call especially if the call is not completed or forwarded, is disconnected or dropped or the caller is unable to speak.
 - b. **E911 Service.** Enhanced 911 Service (“**E911**”) simultaneously delivers the assigned telephone number and address assigned to the device placing the call to the emergency center and allows emergency center operators to dispatch the appropriate help and, if necessary, call back the caller.
 - c. **Dynamic Location Routing 911 (“DLR”).** When a request is placed for Emergency Services, Dynamic Location Routing pairs the 911 caller’s information with their current location using standardized protocols and defined network elements such as subnets, WiFi access points, and Ethernet switches/ports. These data elements may then be utilized to deliver an E911 or Basic 911 call to the appropriate public safety answering point (“**PSAP**”).
 - d. **Emergency Call Center Services.** Examples include, emergency calls received by Bandwidth’s service platform for which no emergency calling number record can be found in Bandwidth’s database will be routed to an emergency call center for handling. Call center personnel will attempt to query the 911 caller for location information and manually route the call to the PSAP nearest caller’s reported location. Customers may not have access to either E911 or Basic 911 Services. If a Customer does not have access to either E911 or Basic 911 Services, the emergency communication may be sent to an emergency call center as a back-up emergency calling method during such period. In such instances, the agent will ask the caller for their name, telephone number and location and contact the appropriate local emergency dispatchers. Examples when there may not be full 911 access available may include when there is a problem validating the Customer’s address, the Customer is identified with an international location or the customer is located in an area that is not covered by a 911 network. Calls routed to call centers pursuant to this Section will incur charges as specified in the Rate Sheet.

- e. **Emergency Calling API.** Allows application users to dynamically initiate a distress or “SOS” communication to public safety. Emergency Services API enables calling functionality that interacts with your software or application and can provide location information from either a predetermined location such as a home address or current handset-based X,Y (latitude/longitude) location or may enable emergency call routing to Emergency Call Center Services. **Bandwidth’s Emergency Calling API is not to be used for any calling initiated by dialing 911, 112, 999 or any other lawfully established emergency short codes.**

- f. **MLTS Emergency Notifications.** MLTS Emergency Notifications alert the Customer when its End User(s) call 911 on or from the Customer’s premises with 911 Services provided by Bandwidth. MLTS Emergency Notifications will permit Customer to (i) select or designate the endpoints which it seeks to be notified when Customer’s End Users call 911, and (ii) receive MLTS Emergency Notification messages that include time of call, endpoint, subscriber name, and address on file for the End User’s dialing 911, and (iii) select the format and method for receiving MLTS Emergency Notifications. Available formats and methods may include: email, SMS, voice recording, and HTTP callback. **Bandwidth’s MLTS Emergency Notification cannot be combined with any other service provider’s 911 offering.**

- g. **PSTN Emergency Call Routing Option.** As an optional feature, Customer can request a PSTN number to be used with Bandwidth’s 911 service. Bandwidth assigns Customer a private PSTN number to load into Customer’s switch and Customer can use such number to send emergency calls to Bandwidth if the Customer is unable to reach Bandwidth via the internet. Bandwidth treats calls made to these PSTN numbers as emergency calls. Customer acknowledges, understands and agrees that if Customer chooses the PSTN emergency call routing option, Customer is solely responsible for all call charges, even if erroneous calls are placed by unknown persons or companies that accidentally or purposely dial Customer’s private emergency number assigned to it by Bandwidth. Customer will not be responsible for any charges that are due to error, fault or failure of Bandwidth’s system.

2. **Charges and Rates.** All charges and rates will be provided pursuant to the Rate Sheet.

3. **Validation Requirements.** End User initiated Emergency Service communications to Bandwidth’s network must include validation using HTTP protocol using industry standard SIP protocols and by means of an exchange of IP addresses between Customer and Bandwidth’s respective call routers.

4. **Technical Support Information**

- a. Bandwidth will deliver Emergency Services to the appropriate public safety answering point or designated statewide default answering point that serves the caller’s location. Bandwidth will determine the incoming caller’s appropriate PSAP based upon the incoming telephone number or Alternate End User Identifier (“**AEUI**”) and corresponding location information registered in the Bandwidth ALI database. The Services permit Customer to:
 - i. provision its End Users and their respective location data for accurate routing of 911 calls to the most geographically appropriate PSAP by means of the existing 911 infrastructure, including Next Generation 911 where enabled, and
 - ii. deliver Customer’s End User Call Back Number and valid address to the PSAP during an emergency call using existing 911 infrastructure, including Next Generation 911 where enabled.

- b. **Database Access.** Bandwidth will provide to Customer reasonable access solely to: (i) load and update Customer's End User E911 records to permit Bandwidth to manage the location delivery process for each PSAP (or E911 Authority or their supplier) serving Customer's End Users, and, as applicable, (ii) select and update Customer's End User MLTS Emergency Notification records to permit Bandwidth to manage the MLTS Emergency Notifications delivery process for each Customer designated end-point.
- c. **End User Records.** End User Records will be deemed successfully uploaded when the End User name, valid street address (not postal address), and ten-digit TN or AEUI from which the End User may initiate a 911 call are all resident in Bandwidth's database. For purposes of using Bandwidth's MLTS Emergency Notification offering, such records must also include the designated MLTS Emergency Notification method(s) (i.e. e-mail, SMS, voice recording or HTTP callback). Bandwidth will provide alternate valid location information choices when any attempt by Bandwidth fails to validate and upload an address. For Customer's End Users who are unable to upload a valid address from their initial attempt or from the alternate choices provided by Bandwidth, but who still wish to certify their address is accurate and complete, Bandwidth will use commercially reasonable efforts in conjunction with Customer to validate the address given.

End Users must not block their TN number on their handsets when calling 911.

- d. **Delivery Methods.** 911 Service is available via (1) traditional switched-circuit service, or (2) VoIP 911 Service. The method chosen per location depends on availability of VoIP 911 Service and Customer's capabilities. Bandwidth retains the right to change the method of deployment at any time. Once Bandwidth has identified the appropriate PSAP, Bandwidth automatically selects a pretested call path that uses one of the following technologies:
 - i. TDM to standard ESGW or PRI 911 trunks which are connected to the PSAP designated selective router,
 - ii. SIP internet gateway to standard ESGW or PRI 911 trunks which are connected to the PSAP designated selective router,
 - iii. SIP internet connected to the internet-capable PSAP, or
 - iv. ten-digit outbound dialing to the PSAP.

Routing methods i, ii, and iii are used for PSAPs within Bandwidth's E911 footprint, while routing method iv is reserved for all other PSAPs, including those that only use Basic 911, or, as backup for the other methods in the event of a major network failure in any link in the call path.

- e. **Provisioning Interface.** Bandwidth will provide a web application interface between the ALI management service and Customer's web-based service order system(s) for normal user additions and changes. Bandwidth will return alternate addresses for the End User to choose from (or for Customer's service representatives to present to the End User to choose from) in real time, if the first address submission is invalid or is ambiguous with multiple valid matches.

If Customer makes a request to Bandwidth, Bandwidth's database personnel will perform bulk uploads from flat files Customer provides to Bandwidth via email, upload via web portal or by placing onto Bandwidth's FTP server. If applicable, Customer will coordinate the exchange of alternate address information with Customer's End Users and Bandwidth.

Customer may elect to program Customer's own web user interface to Bandwidth. Bandwidth provides a secure portal, sample clients in various formats, and a development server for Customer's programmers to test the application.

f. **Training.** Bandwidth will provide up to four (4) hours of training to Customer on the use of the web services, which include uploads through Bandwidth portal (web client) or training on the Bandwidth API interface.

g. **Country Specific Terms and Disclosures**

i. The following disclosures are applicable to Emergency Services provided within the indicated country:

1. **Canada.** Emergency Services are handled in a different manner in Canada. Calls are routed to a national call center that has the caller's information. Based on the location of the caller, the call is routed to the correct Public Switched Answering Point ("**PSAP**") with location information provided verbally.

ii. **United States.** The Federal Communications Commission requires all service providers utilizing VoIP notify subscribers of the differences between 911 and E911 access capability using traditional telephone service. Additional details of those requirements can be found at www.fcc.gov/cbg/consumerfacts/voip911.pdf.

5. **Definitions**

a. "**Alternate End User Identifier**" or "**AEUI**" means a unique alpha-numeric string which may be used as an alternative to a unique TN to identify the applicable 911 end-user record in Bandwidth's database, as well as optional data including End User name and valid street address (not postal address) resident in Bandwidth's database.

b. "**Automatic Location Identification**" or "**ALI**" means the automatic display at the PSAP of the caller's TN, the address/location of the telephone and, in some cases, supplementary emergency services information.

c. "**Call Back Number**" means the 10 digit TN which may be used by the PSAP to call back the End User making an E911 call if the caller is disconnected. The Call Back Number must be (i) ten-digits in the NPA-NXX-xxxx format, and (ii) follow the North American Numbering Plan Administrator (NANPA) numbering guidelines.

d. "**E911 Authority**" means a municipality or other state or local government unit, or an authorized agent of one or more municipalities or other state or local government units to whom authority has been lawfully delegated to respond to public emergency telephone calls, at a minimum, for emergency police and fire services using one TN, 911. For clarity, an E911 Authority may be an individual PSAP, or an entity responsible for the management and operation of multiple PSAPs within a given geographic area.

e. "**ESGW**" facility means an Emergency Services Gateway which is the signaling and media interworking point between the Customer's PBX, switch or IP domain and conventional trunks to the E9-1-1 Selective Router.

f. "**Next Generation 911**" means an initiative to update the 911 service infrastructure to improve public emergency communications services and may be comprised of hardware, software, data, policies and procedures to: (i) provide standardized interfaces from call and messaging

services; (ii) process all types of emergency calls and messages, including non-voice messages; (iii) acquire and integrate additional data useful to call and message routing and handling; (iv) deliver calls, messages and other data to appropriate PSAPs or E911 Authority; (v) support data and communication needs for coordinated incident response and management; and (vi) provide a secure environment for emergency communications.

- g. **“PSTN”** means the Public Switched Telephone Network.
- h. **“Short Message Service”** or **“SMS”** means the text communication service component of mobile communication systems that allows the exchange of short text messages between fixed line or mobile phone devices.
- i. **“SIP”** means **“Session Initiation Protocol”** which is the signaling protocol established in RFC 3261 used between networks (such as VoIP networks) to establish, control and terminate signaling for SIP-based services such as voice calls and SMS messages.
- j. **“End User Record”** means a record associated with an End User resident in Bandwidth’s database, including such End User’s name, valid street address (not postal address), and ten-digit TN from which the End User may initiate a 911 call.
- k. **“TDM”** or **“Time Division Multiplexing”** means a technology in which multiple calls may be carried simultaneously over the same physical path, each call requiring a dedicated “slot” on the path for the duration of the call, and, also, requiring a master signaling protocol to differentiate and route each call individually (i.e. SS7).
- l. **“TFN”** means a Toll Free number that is assigned by Bandwidth to Customer (or that Customer ports to Bandwidth) for use with the Bandwidth Toll Free Service.
- m. **“TN”** means a telephone number assigned by Bandwidth to Customer (or that Customer ports to Bandwidth) (other than a TFN) and is used by Customer in connection with any applicable Service.
- n. **“Toll Free Service”** means an IP termination service for PSTN originated calls to terminate to TFNs provided by Bandwidth.
- o. **“VoIP”** means Voice over Internet Protocol.

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