

VIRGINIA TELECOMMUNICATIONS  
CUSTOMER SERVICE GUIDE

FOR

NextGen

275 West Street

Annapolis, MD

This CSG contains the descriptions, regulations, and rates applicable to the furnishing of E9-1-1 services by NextGen. This CSG may be inspected during normal business hours at the principal place of business of NextGen, at the above listed address, or online at <http://www.telecomsys.com/about/regulatory.aspx>.

**CHECK SHEET**

The TITLE page and pages 1-21 inclusive of the Customer Service Guide CSG are effective as of the date shown on an individual page. Original and revised pages, as named below, comprise all changes from the original CSG in effect on the date indicated.

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TITLE

REVISION

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**CUSTOMER SERVICE GUIDE FORMAT**

Page Numbering. Page numbers appear in the upper right hand corner of the page. Pages are numbered sequentially. From time to time new pages may be added to the CSG. When a new page is added between existing pages a decimal is added to the preceding page number. For example, a new page added between Pages 3 and 4 would be numbered 3.1.

Explanation of Symbols. When changes are made in any CSG page, a revised page will be issued replacing the affected CSG page. Changes will be identified on the revised page(s) in the right hand margin on each line changed through the use of the following symbols:

- (C) To signify changed regulation
- (D) To signify discontinued material
- (I) To signify rate or charge increase
- (M) To signify material relocated without change in text or rate
- (N) To signify new material
- (O) To signify material relocated without change in text but with an increase in rate
- (R) To signify reduction
- (S) To signify reissued material
- (T) To signify a change in text but no change in rate or regulation
- (Z) To signify a correction

## **I. DEFINITIONS**

### Automatic Location Identification (ALI) Database

See Location Database. Traditionally, the ALI Database maintained the name and address associated with the calling party's telephone number (identified by ANI Feature). In the future, ALI data may only be a portion of the location data available in the Location Database.

### Automatic Number Identification (ANI)

A feature by which the calling party's telephone number is forwarded to the E9-1-1 Serving Control Office and to the PSAPs Display and Transfer Units.

### Calling Party Number (CPN)

The call-back number assigned to a wireless telephone.

### Call Routing Device

The switching office from which a PSAP, either primary or secondary, is served. A Call Routing Device can include a Selective Router, ESRP, or other device for routing 9-1-1 calls to the appropriate PSAP.

### Company

NextGen Communications, Inc., a Virginia corporation.

### NG9-1-1 Database Management System (DBMS)

NG9-1-1 DBMS is the complete next generation solution that replaces legacy ALI. It includes the NENA i3 functional elements: Location Interwork Function (LIF), the Location Information Server (LIS), Call Information Database (CIDB), Location Validation Function (LVF), and a web services portal.

### Default Routing (DR)

A feature activated when an incoming E9-1-1 call cannot be selectively routed due to an ANI failure, garbled digits, or other causes. Such incoming calls are routed from the E9-1-1 Serving Control Office to a default PSAP. Each incoming E9-1-1 facility group to the E9-1-1 Serving Control Office is assigned to a designated default PSAP. This is a standard feature of E9-1-1 Service.

### Display and Transfer Unit

A console and associated common equipment for displaying ANI numbers at the PSAP attendant position and used by the attendant to activate Fixed and/or Selective Transfer functions.

### Emergency Service Number (ESN)

Unique numbers provided by the Company to be associated by the Customer with street

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address ranges or other mutually agreed upon routing criteria for selective routing of calls to unique combinations of police, fire, ambulance, and any other appropriate agencies responsible for providing emergency service in the E9-1-1 serving area.

#### End Office

The central office(s) which receive originating E9-1-1 calls.

#### Enhanced 9-1-1 (E9-1-1) Service Area

The geographic area in which the E9-1-1 authority will respond to all E9-1-1 calls and dispatch appropriate emergency assistance.

#### Location Database

An ALI, Location Information Server, or other database that stores location information for emergency services use.

#### Master Geographic Information System (Master GIS)

A system that acts as the master source for valid locations in a given geographic area. Traditionally, a legacy E9-1-1 DBMS uses the Master Street Address Guide (MSAG) as the source for validation. In NG9-1-1, the source for validation is the Master GIS.

#### Master Street Address Guide (MSAG)

The document or computer file that lists the standard street names, address ranges, political community designations, and routing codes (see ESNs).

#### Pseudo Automatic Number Identification (pANI)

A feature in which a number, assigned to the area served by a wireless communications provider's tower or a sector of the area served by a tower, is forwarded to the E9-1-1 Call Routing Device and to the PSAPs Display and Transfer Units.

#### Private Switch/Automatic Location Identification Customer

The Private Switch or Location Database customer may be a municipality or other state or local governmental unit, or an authorized agent of one or more municipalities or other state or local governmental units to whom authority has been lawfully delegated, or a PBX owner/operator, or Centrex/CENTRON customer who desires to provide station location information to the E9-1-1 system.

#### Public Safety Answering Point (PSAP)

An answering location for 9-1-1 calls originating in a given area. A PSAP may be designated as Primary or Secondary, which refers to the order in which calls are directed for answering. Primary PSAPs respond first; Secondary PSAPs receive calls on a transfer basis only and generally serve as a centralized answering location for a particular type of emergency call. PSAPs are staffed by employees of service agencies such as police, fire or emergency medical or by employees of a common bureau serving a group of such entities.

### Public Safety Answering Point (PSAP) Trunk

A trunk used to deliver ANY information from a Call Routing Device to a PSAP. The PSAP trunk may be set to receive a 9-1-1 call in several different formats. The trunk could be TDM or IP. The PSAP trunk is also used to connect and carry voice transmission, and in the case of IP (VoIP) possibly the location information, from the Call Routing Device.

### Routing Telephone Number (RTN)

A number that when dialed rings to a specific PSAP. This is used for connectivity from the public switched telephone network (PSTN) to the 9-1-1 network of a PSAP.

### Selective Routing (SR)

A form of call routing that may or may not be applicable to NextGen E9-1-1 that routes an E9-1-1 call from a central office to the designated primary PSAP based upon the identified number of the calling party. (See “Call Routing Device”)

### Serving Control Office

The PSTN control office from which a PSAP; either primary or secondary, is served. The Serving Control Office may be irrelevant to the NextGen IP-based solution.

### Valid Location

An MSAG address, USPS address, lat/long, or any other PSAP approved location description.

### National Emergency Number Association (NENA) i3 Acronyms and Terms

#### BCF (Border Control Function)

Located at the ingress of the Emergency Services IP Network (ESInet), the BCF provides IP security of incoming calls and other IP-related traffic. It controls the border between call origination points and the ESInet.

#### CIDB (Call Information Database)

The mandatory set of call information data as specified in NENA standard 71-001 that is beyond location data (address and geospatial coordinates).

#### ECRF (Emergency Call Routing Function)

Protocol for providing initial call-routing instructions to the ESRP; it consults GIS data for point-in-polygon call-routing instructions based upon the caller’s location.

#### ESInet (Emergency Services IP Network)

Privately managed IP network dedicated for routing emergency calls.

ESRP (Emergency Services Routing Proxy)

Responsible for coordinating call routing (via ECRF/LoST; see below) and policy implementation for NG9-1-1.

LNG/LSRG (Legacy Network Gateway/ Legacy Selective Router Gateway)

The LNG NG9-1-1 functional element combined with the LSRG transitional element is a NG9-1-1 Trunking Service which receives Time Division Multiplexing trunks from Communication Service Providers (CSPs).

LIS (Location Information Server)

Functional entity that provides the locations of endpoints. A LIS can provide location-by-reference or location-by-value and, if the latter, in geo or civic forms. A LIS can be queried by an endpoint for its own location, or by another entity for the location of an endpoint. In either case, the LIS receives a unique identifier that represents the endpoint—for example, an IP address, circuit ID or MAC address—and returns the location (whether value or reference) associated with that identifier. LIS is the key used by the ESRPs and ECRFs to implement Next Hop routing.

LoST (Location to Service Translation)

Entity that stores the GIS data and provides call routing and location validation information.

LVF (Location Validation Function)

The LVF stores and receives updates of the data required to provide the Call Routing Device and Location Database Service features and determines whether a location description is valid for the given area. This function was traditionally provided by an E9-1-1 DBMS using the MSAG. For NextGen 9-1-1, the data source will not be only the MSAG (if an MSAG is used at all). In NextGen 9-1-1, the creation of the valid locations is carried out by the Master Geographical Information System (GIS). The LVF provides service on the LoST server that provides GIS information to form the basis for validating location information from the LIS.

PRF (Policy Routing Function)

Used in conjunction with the ESRP, this is where policies are consulted that directly impact call routing. Policies such as “time of day” and “PSAP state” are kept here.

SIP (Session Initiated Protocol)

IETF-defined protocol (RFC3261) that defines a method for establishing multimedia sessions over the Internet. It is used as the call-signaling protocol in VoIP, i2 and i3.

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Telecommunications Carrier

Telecommunications Carrier refers to any and all providers of telecommunications services that may be used to generate a 9-1-1 call and who would interconnect in any fashion to the 9-1-1 network. They include wireline Incumbent Local Exchange Carriers (ILECs) and Competitive Local Exchange Carriers (CLECs), wireless service providers, VoIP service providers, operators of large private branch exchanges (PBXs), and any other entity providing telecommunications services to the general public.

## II. RULES AND REGULATIONS

### A. Description of Services

#### 1. Next Generation 9-1-1 (NG9-1-1)

- a. Next Generation 9-1-1 Service, also referred to as NG9-1-1, is the communication service whereby one or more Public Safety Answering Points (PSAP) designated by the local 9-1-1 authority may receive calls from various devices dialed to the telephone number 9-1-1. The calls may be a voice, text, photo, video, or telematics generated by smart devices, Voice over Internet Protocol (VoIP) telephones or landline telephones. The prior generation of 9-1-1 services is the traditional Legacy Enhanced 9-1-1 (E9-1-1) Service. Legacy E9-1-1 Service has typically included lines and equipment within one telephone company exchange and/or area served by a Mobile Telephone Switching Office, which could be connected to lines and equipment in another telephone company exchange to permit answering, transferring and dispatching of public emergency telephone 9-1-1 calls originated by persons within the same serving area. Legacy E9-1-1 service provided for Selective Routing, Automatic Name, and Automatic Location identification features.

In general, the 9-1-1 industry has become more decentralized insofar that no single company shall provide all of the 9-1-1 hardware, software, or features. The use of twisted pair telephone "lines" is becoming obsolete, replaced by broadband IP connectivity via cable, DSL, or other dedicated IP networks. NextGen anticipates that different companies shall provide the IP network infrastructure, while other companies provide the NG9-1-1 content, features, and functions. This CSG identifies the rules, regulations, and rates that shall govern the Company's offering of the NG9-1-1 content, features, and functions also referenced as an NG9-1-1 Solution or Service. This CSG does not address the provisioning of any IP network infrastructure. The Company's NG9-1-1 solution is forward and backward compatible to support both NG9-1-1 and E9-1-1 content, features, and functions.

- b. NG9-1-1 Service is offered subject to availability of IP broadband facilities; rights-of-way (if necessary), and materials.
- c. The NG9-1-1 Customer may be:

- (1) A municipality or other state or local governmental unit, or an authorized agent of one or more municipalities or other state or local governmental units to whom authority has been lawfully delegated. The Customer must be legally authorized to subscribe to the service and have public safety responsibility by law to respond to telephone calls from the public for

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emergency police, fire or other emergency services within the telephone areas arranged for 9-1-1 calling.

- (2) A private telecommunications service provider of LEC, CLEC, wireless or VoIP service with an obligation to route originating emergency 9-1-1 calls to the appropriate PSAP.
- (3) A private enterprise with a PBX telephone system with a desire to route emergency calls to the appropriate PSAP.

## 2. Private Switch/Automatic Location Identification

Private Branch Exchange (PBX) switch located on a Customer's premises to send Automatic Number Identification information to a Serving Control Office or NG9-1-1 Call Routing Device from individual PBX stations for the purpose of providing site or station location information on an E9-1-1 call, or for selectively routing that call to the appropriate Public Safety Answering Point (PSAP). Location Database Service also is available to Centrex/CENTRON or VoIP enterprise customers who wish to provide the NG9-1-1 system with more specific location and routing information. These are the only intended uses for this service.

## 3. Trunking Services

Telecommunications carriers may terminate time division multiplex (TDM) trunks from their switch to the LNG/LSRG. They may also terminate session initiated protocol (SIP) trunks from their switch to the NG9-1-1 Call Routing Device. All calls routed to the Call Routing Device must be via Internet protocol (IP) in SIP format. The Company recommends that legacy carriers acquire protocol converters to convert traditional wireline protocols into IP. Other formats may be considered at the discretion of the Company.

## 4. NG9-1-1 Call Routing Device Service

The NG9-1-1 Call Routing Device service will route the calls to one or more PSAPs via IP or circuit switched technology as required by the PSAP.

## 5. Location Database Service

The Company Location Database Service is the complete NG9-1-1 DBMS that replaces legacy ALI. It will provide caller's name, location (in the form of address and/or geospatial coordinates), and phone number to the PSAP via IP along with the voice call as it is routed via the IP Call Routing Device. Call information data as specified in NENA Standard 71-001 will also be provided to PSAPs. As other content becomes available, the Company will provide such content.

For legacy PSAPs with traditional ALI requirements but wish interconnect with the Company's NG9-1-1 system, the Company will provide appropriate connectivity to the Company Location Database Service.

The Company will provide access for authorized users to update Location Database data.

## B. Company Liability and Indemnification

The Company's liability for any loss or damage arising from errors, interruptions, defects, failures, delays, or malfunctions of any service, equipment, or any part thereof provided pursuant to this CSG or ICP, whether caused by the negligence of the Company or otherwise, except gross negligence, shall not exceed the greater of \$50.00 or an amount equivalent to the pro rata charges for the service or equipment affected during the period of time that the service or equipment was fully or partially inoperative.

### 1. Release and Indemnification / Intellectual Property

- a. The Customer agrees to release, indemnify, defend, and hold harmless the Company from any and all loss, claims, demands, suits or other action; or any liability whatsoever, whether suffered, made, instituted or asserted by the Customer or by any other party or person, for any personal injury to or death of any person or persons, or for any loss, damage or destruction of any property, whether owned by the Customer or others, caused in whole or part by the act or omissions of the Company, its agents and its employees. Unless otherwise provided for by an ICP, title to all facilities and intellectual property provided in accordance with this CSG remains in the Company, its partners, agents, contractors, or suppliers.
- b. The Company will not be liable for any direct, indirect, incidental, special, consequential, exemplary or punitive damages to Customer as a result of any Company service, equipment or facilities, or the acts or omissions or negligence of the Company's employees or agents.
- c. The Company shall not be liable for any delay or failure of performance or equipment due to causes beyond its control, including but not limited to: acts of God, fire, flood, explosion or other catastrophes; any law, order, regulation, direction, action, or request of the United States Government or any state and local governments having or claiming jurisdiction over the Company, or of any department, agency, commission, bureau, corporation, or other instrumentality of any one or more of these federal, state, or local governments, or of any civil or military authority; national emergencies; insurrections; riots; wars; or strikes, lock-outs, work stoppages, or other labor difficulties when it does not involve the Company's employees.
- d. THE COMPANY MAKES NO WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, EXCEPT THOSE EXPRESSLY SET FORTH HEREIN.

### 2. Invasions of Privacy

- a. The Customer agrees to release, indemnify, and hold harmless the Company for any infringement or invasion of the right of privacy of any person or persons, caused or claimed to have been caused, directly or indirectly, by the installation, operation, failure to operate, maintenance, removal, presence, condition, occasion or use of any service features and the equipment associated therewith provided pursuant to this CSG, or by any services furnished by the Company in connection therewith, including, but not limited to, the identification of the telephone number, address or name associated with the telephone used by persons accessing 9-1-1 service hereunder, and which arises out of the negligence or other wrongful act of the Company, except gross negligence, or the employees or

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agents of any one of them. Notwithstanding the foregoing, such indemnification does not apply to Company's use of Customer data for any purpose other than the provision of 9-1-1 services, or as required by local, state, or federal law or statute.

- b. The Company shall be indemnified, defended and held harmless by the Customer against any claim, loss or damage arising from Customer's use of services, involving claims for libel, slander, or allegations of infringement of patent or copyright arising from the Customer's own communications or communications services.

### C. NG9-1-1 Service

#### 1. Terms and Conditions

- a. This service is limited to the use of the central office, VoIP, or mobile telephone switching office telephone number 9-1-1 as the universal emergency telephone number. The Company does not provide the telephone number or dial tone. These services will be provided by the telecommunications carrier.
- b. The 9-1-1 emergency telephone number is not intended as a replacement for the telephone service of the various public safety agencies which participate in the use of this number. The public safety agencies will subscribe to other telephone services as provided in other CSGs/price lists of other providers of telephone services.
- c. NG9-1-1 service is furnished to the Customer only for the purpose of receiving reports of emergencies by the public.
- d. NG9-1-1 Service provides a one-way incoming service to the appropriate PSAP. Outgoing calls can only be made on a transfer basis.
- e. NG9-1-1 Service is provided solely for the benefit of the Customer operating the PSAP, or for the carrier providing telecommunications or data communications service to individuals. The provision of the E9-1-1 Service by the Company shall not be interpreted, construed, or regarded, either expressly or implied, as being for the benefit of or creating any Company obligation toward any third person or legal entity other than the Customer(s).
- f. The Company does undertake to provide NG9-1-1 services using facilities obtained by the PSAP to enable the PSAPs personnel to respond to emergency calls on the PSAPs premises. The PSAP is responsible for the provision and maintenance of cable and wire facilities on the PSAPs side of the Demarcation Point.
- g. Temporary suspension of service at reduced rate is not provided for any part of the E9-1-1 Service.
- h. NG9-1-1 information consisting of the names, addresses and telephone numbers of telephone customers of carriers using Company service is confidential. This information will be provided via Location Database data on a call-by-call basis only for the purpose of responding to emergency calls.
- i. The NG9-1-1 calling party forfeits the privacy afforded by non-listed and non-published service to the extent that the telephone number, address and name associated with the originating station location are furnished to the PSAP.

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- j. Default Routing will be provided in lieu of Selective Routing and ANI/ALI Display for E9-1-1 systems served from central offices or mobile telephone switching offices not equipped to transmit ANI.
  - k. The rates charged for NG9-1-1 Service do not contemplate the inspection or 100 percent constant monitoring of facilities to discover errors, defects and malfunctions in the service, nor does the Company undertake such responsibility. The Customer shall make such operational tests as, in the judgment of the Customer(s), are required to determine whether the system is functioning properly for its use. The Customer(s) shall notify the Company promptly in the event the system is not functioning properly.
  - l. It is the obligation of the 9-1-1 authority to make arrangements to handle all E9-1-1 calls that originate from telephones served by central offices in the local service area, whether or not the calling telephone is situated on property within the geographical boundaries of the E9-1-1 authority's public safety jurisdiction.
  - m. Applications for NG9-1-1 Service must be executed in writing by each PSAP or 9-1-1 authority. If application for service is made by an agent, the Company must be provided in writing with satisfactory proof of appointment of the agent by the Customer.
  - n. The PSAP or 9-1-1 authority is required to furnish the Company its agreement to the following terms and conditions. The 9-1-1 authority will subscribe to or provide telephone equipment with a capacity adequate to handle the number of incoming 9-1-1 calls recommended by the Company. The 9-1-1 authority is to insure that PSAP premises equipment selected to operate E9-1-1 system features is compatible with the service furnished by the Company. The 9-1-1 authority is responsible for the provision and maintenance of cable and wire facilities on the 9-1-1 authority's side of the Demarcation Point.
  - o. When the Selective Routing (or comparable) feature is provided, PSAP is responsible for identifying primary and secondary PSAP locations and the unique combinations of police, fire and ambulance or any other appropriate agencies responsible for providing emergency service. The PSAP is responsible for identifying the 9-1-1 serving area and for associating the Company-provided Emergency Service Numbers (ESN) with the street address ranges or other criteria for selective routing of calls. Legacy ESNs may be used. ESNs will be carried in the Data Management System (DMS) or equivalent to permit routing of 9-1-1 calls to the primary and secondary PSAPs responsible for handling of calls from each telephone in the 9-1-1 serving area. The following terms define the 9-1-1 authority's responsibility in providing this information.
    - (1) Initial and subsequent ESN assignments by street name, address range and area or other mutually agreed upon routing criteria shall be furnished by the 9-1-1 authority to the Company prior to the effective date of service. If the PSAP has legacy ESNs assigned by previous 9-1-1 service providers, these ESNs may be retained if the PSAP prefers.
    - (2) After establishment of service, it is the relevant Virginia ILEC's responsibility to continue to verify the accuracy of routing information contained in the address file and to advise the Company of any changes in street names, establishment of new streets, changes in address

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numbers used on existing streets, closing and abandonment of streets, changes in police, fire, ambulance or other appropriate agencies, jurisdiction over any address, annexations and other changes in municipal and county boundaries, incorporation of new cities or any other matter that will affect the routing of 9-1-1 calls to the proper PSAP.

- (3) The Company will provide; with reasonable frequency to the 9-1-1 authority as required or permitted by law, a complete electronic copy of the address file previously supplied to the Company by the 9-1-1 authority to permit the 9-1-1 authority to verify accuracy of the police, fire, and ambulance PSAP routing designation.
- (4) Changes, deletions and additions which the PSAP desires to have made in the address file should be submitted on an "as occurred" basis.
- (5) The Company will furnish an electronic copy to the 9-1-1 authority for verifications showing each change, deletion, and addition to the address file.

#### D. Private Switch/Location Database Service

##### 1. Terms and Conditions

###### a. Private Switch/ Automatic Location Identification

- (1) In a Private Switch/Location Database Service application, the Private Branch Exchange (PBX) owner/operator (or Centrex/CENTRON customer) must meet the following requirements: Application for Private Switch/Location Database Service must be executed in writing by each PBX Customer. If application for service is made by an agent, the Company must be provided in writing with satisfactory proof of appointment of the agent by the Customer.
- (2) The Customer will coordinate with the 9-1-1 Public Jurisdiction to ensure that area boundaries are identified and that any required additions or modifications to the Master Location Validation System are provided to the Company.
- (3) The Customer will provide full local Automatic Number Identification (ANI) for every station within the PBX. The information must be approved by the Company prior to implementation to ensure that no conflict exists between the PBX's numbering plan and the numbering plans of other PBXs or telecommunications carriers.
- (4) ANI multi-frequency signaling must conform to the specifications established by the Company.
- (5) The Customer must create, maintain and forward to the Company, current telephone number and address data in the format and time intervals negotiated between the Company and the Customer.
- (6) The PBX must be connected to the NG9-1-1 Call Routing Device office via LNG/LSRG Trunking Service. The PBX must route 9-1-1 calls to the IP 9-1-1

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facilities without overflowing to any other access facility. The Company recommends the enterprise Customer order or maintains diverse IP connectivity to provide redundancy to the system.

- (7) The enterprise Customer must develop and implement procedures to prevent the unauthorized or illegal use of Private Switch/Location Database trunks. These dedicated trunks may not be used for any purpose other than 9-1-1.
- (8) The Customer must use personal computer hardware and software (or PC equivalent hardware and software) for ongoing Customer record update programs and processes that conform to specifications established by the Company.

b. Diversification, Redundancy, and Security

The Company will maintain redundant and diverse hardware and software data centers that will operate all NG9-1-1 functions. The Company will also maintain a secured system by providing a redundant BCF at every entry points into the system. Customers can request diversification and redundancy of any or all IP facility routes. These IP facilities shall be provided by the appropriate ISP selected by the Customer(s). Additional charges for such service utilizing the facilities, or the construction and provisioning thereof, will be the responsibility of the Customer and will be assessed by the ISP.

E. SIP 9-1-1 Trunks

- 1. SIP 9-1-1 Trunks are high speed broadband IP or equivalent data circuits which,
  - a. Originate from the Company Call Routing Device and terminate at PSAP premises demarcation; or
  - b. Originate from the local exchange carrier end office (LEC or CLEC) and terminate at the Company E9-1-1 Call Routing Device; or
  - c. Originate from the mobile telephone switching office and terminate at the Company E9-1-1 Call Routing Device; or
  - d. Originate from any VoIP Service Provider softswitch and terminate at the Company E9-1-1 Call Routing Device; or
  - e. Originate from any enterprise VoIP PBX softswitch and terminate at the Company E9-1-1 Call Routing Device; or
  - f. Originate from any Emergency Services Gateway and terminate at the Company E9-1-1 Call Routing Device
- 2. The 9-1-1 Trunks are provided only for the purpose of transporting 9-1-1 traffic.
- 3. 9-1-1 traffic from various enterprises, LECs, CLECs, mobile switching centers and/or ESGWs may be combined on a single IP circuit with the permission of the 9-1-1 authority.

## F. NG9-1-1 Solution

The complete NG9-1-1 Solution will be able to provide three primary services that replace legacy ALI and SR functions. Modules of the Solution may also be purchased individually.

### 1. Aggregation

The LNG/LSRG can aggregate 9-1-1 calls originating from multiple sources in multiple 9-1-1 jurisdictions into IP circuits that terminate at the appropriate PSAPs demarcation point. The PSAP does not need to designate or arrange for the connectivity between the local telecommunications carrier(s) to the LNG/LSRGs, or from the ESInet to the customer premises demarcation point. The PSAP or 9-1-1 authority is obligated to acquire connectivity to the IP network.

### 2. NG9-1-1 Call Routing Device

Using NG9-1-1 geospatial routing capabilities and LoST, the device shall deliver the 9-1-1 call and location data to the PSAPs. It is the Customer's responsibility to designate the alternate location if traffic is to be routed to a secondary PSAP. The Customer may designate routing requirements in the Policy Routing Function.

### 3. NG9-1-1 Location Database Service

The complete NG9-1-1 DBMS for ALI replacement that includes the delivery of the caller's location data and the call data to PSAPs. The call data provides the PSAP for example the class of service and the disability indicator.

### 4. NG9-1-1 Modules

Interoperable components of the NG9-1-1 Solution may be purchased as modules. For example, the Customer may wish to purchase the Trunking Service but retain the ALI and SR as part of its transitional plan. Therefore, the Customer may initially procure the LNG/LSRG Trunking Service. Refer to the NG9-1-1 Feature or Module Pricing Table in Section IV for a list of individual modules.

## G. General Terms and Conditions

### 1. Term of Service; Termination.

The Company and each Customer may enter into a separate agreement specifying the term during which the Company shall provide Services.

### 2. Payments; Late Fees

Payment for Services provided by the Company shall be due in accordance with the terms and conditions of each Customer's contract. Customer agrees to pay a late fee in accordance with the terms and conditions of each Customer's contract, but in no event to exceed the late fees which may be charged to Customer under the laws of the state of Virginia.

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**III. SERVICE OFFERINGS AND FEATURES****A. NG9-1-1 Service Features**

1. NG9-1-1 Service is available with the following Service Feature Offerings: Automatic Location Identification and default routing and Call Routing Device. ANI is contingent upon transmission of ANI by the telephone service provider and receipt by the company. Location Database Service is contingent upon the ALI service providers providing the ALI databases.
2. The service feature offerings include provision of NG9-1-1 service to all primary PSAPs and to secondary PSAPs that are equipped to display ANI information on compatible customer-provided terminal equipment. The amount of bandwidth to a PSAP will be determined by the Company based upon anticipated call traffic volumes. The Customer is responsible for the provision and maintenance of cable and wire facilities on the Customer's side of the Demarcation Point. Secondary PSAPs not equipped to display ANI will receive calls on a transfer basis over the exchange network or the Customer may subscribe to IP access.
3. The following standard features are included with each of the service offerings:
  - a. Default Routing;
  - b. Alternate Routing;
  - c. Call Transfer

**B. Private Switch/Location Database Service Features**

Private Switch/Location Database Service is available with the Service Feature Offerings described for NG9-1-1 Service, above.

**C. Trunk Features**

Trunks and/or IP circuits may be obtained from either the local exchange carrier, or other facilities provider. The Company provides the points of ingress (POIs) where the TDM and/or SIP trunks may terminate.

**D. NG9-1-1 Call Routing Device Features include:**

1. Emergency Service Routing Proxy and Policy Routing Function (ESRP/PRF)
2. Emergency Call Routing Function and Location Validation Function (ECRF/LVF)
3. Delivery of 9-1-1 voice call
4. Delivery of location data
5. Delivery of additional data content relative to each 9-1-1 call

[Page Reserved for Future Services]

#### IV. RATES, CHARGES, AND CONDITIONS OF SERVICE

##### A. NG9-1-1 Feature or Module Pricing

The NG9-1-1 features or modules listed in the following table are compliant to leading industry standards specifications including the National Emergency Number Association (NENA) i3 and IETF (Internet Engineering Task Force). Customers may wish to purchase all listed modules as a complete NG9-1-1 Solution for ALI and SR replacement.

	Price List	Price List
NG9-1-1 Feature or Module	Non-Recurring Fee	Recurring Fee
Legacy Network Gateway/Legacy Selective Router Gateway (LNG/LSRG) Trunking Service	ICP	ICP
ESInet and i3 Functional Elements for Call Routing and Call Delivery	ICP	ICP
Location Database Service and Location Data Delivery	ICP	ICP
Additional Data System Management and Delivery. Additional Data reflects subscriber submitted data beyond ALI.	ICP	ICP
Emergency Call Routing Function (ECRF)/Location Validation Function (LVF). Included are GIS Data Synchronization between Emergency Call Routing Function/Location Validation Function (ECRF/LVF) and Public Safety Provided Master GIS.	ICP	ICP
Database Management Services. The Initial Load and Reconciliation of Communication Service Providers' subscriber ALI data to Location Database. The administration of Pseudo ANI.	ICP	ICP
Legacy PSAP Gateway (LPG) Transitional Functional Element for Legacy PSAP CPE for ESInet Interoperation	ICP	ICP

Recurring and non-recurring charges for all services provided pursuant to this CSG may be individualized for a particular Customer based on the need to respond to a unique service application and/or market condition. All services will be offered on the same basis to any other Customer, which has the same service specifications and market conditions.

##### B. Rates by Individual Contract Pricing (ICP)

In lieu of the rates otherwise set forth in this CSG, rates and charges, including minimum usage, installation, and recurring charges for the Company's services may be established at negotiated rates on an individual contract pricing (ICP), taking into account the nature of the facilities and services, the costs of construction and operation, the volume of traffic, the length of service commitment by the Customer,

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and use of facilities by other customers. Such arrangements shall be considered Special Pricing Arrangements, the terms of which will be set forth in individual Customer contracts. However, unless otherwise specified, the terms, conditions, obligation and regulation set forth in this CSG shall be incorporated into, and become a part of, said contract, and shall be binding on the Company and the Customer. The Company reserves the right to protection from public disclosure of proprietary information contained in such contracts as allowed under law or regulation.

In addition to the charges specifically for the Customer's services, there may be additional gross receipts taxes, utility taxes, and/or other surcharges as mandated by the Virginia Corporation Commission, other Virginia state authorities, and / or the Federal Communications Commission. The Customer is hereby notified that these fees, as applicable, will be itemized and added to the Customer's bill and that the rates may change periodically. No prior notice of any change will be provided to the Customer. The then-current surcharge rate will be applied to the Customer's bill even if this CSG has not been updated.

### C. Application for Service

#### 1. Requests for this service:

- a. must be provided to the Company in writing, and
- b. must identify service locations and arrangements.

#### 2. Customer Obligations

- a. The Customer is responsible for making proper application for service; placing any necessary order; complying with CSG regulations; and payment of charges for services provided.
- b. Specific Customer responsibilities include, but are not limited to the following:
  - (1) timely payment of all applicable charges pursuant to this CSG or an ICP;
  - (2) compensation for damage to or loss of Company facilities or equipment caused by the acts or omissions of the Customer; or the noncompliance by the Customer, with these regulations; or by fire or theft or other casualty on the Customer Premises, unless caused by the negligence or willful misconduct of the employees or agents of the Company;
  - (3) providing at no charge, as specified from time to time by the Company, any needed personnel, equipment space and power to operate Company facilities and equipment installed on the premises of the Customer, and the level of heating and air conditioning necessary to maintain the proper operating environment on such premises;

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- (4) obtaining, maintaining, and otherwise having full responsibility for all rights-of-way and conduits necessary for installation of communications cable and associated equipment used to provide services to the Customer from the cable building entrance or property line to the location of the equipment space described herein;
- (5) any and all costs associated with obtaining and maintaining the rights-of-way described herein, including the costs of altering the structure to permit installation of the Company-provided facilities, shall be borne entirely by, or may be charged by the Company to, the Customer (the Company may require the Customer to demonstrate its compliance with this section prior to accepting an order for service);
- (6) providing a safe place to work and complying with all laws and regulations regarding the working conditions on the premises at which Company employees and agents shall be installing or maintaining Company facilities and equipment. The Customer may be required to install and maintain Company facilities and equipment within a hazardous area if, in the Company opinion, injury or damage to Company employees or property might result from installation or maintenance by the Company. The Customer shall be responsible for identifying, monitoring, removing and disposing of any hazardous material (e.g. asbestos) prior to any construction or installation work;
- (7) complying with all laws and regulations applicable to, and obtaining all consents, approvals, licenses and permits as may be required with respect to, the location of Company facilities and equipment in any Customer premises or the rights-of-way for which Customer is responsible under this CSG, and granting or obtaining permission for Company agents or employees to enter the premises of the Customer at any time for the purpose of installing, inspecting, maintaining, repairing, or upon termination of service as stated herein, removing the facilities or equipment of the Company; and
- (8) not creating, or allowing to be placed, any liens or other encumbrances on Company equipment or facilities.
- c. Customer will comply with all applicable provisions of this CSG and/or an ICP.
- d. Cancellation of the service in whole or in part by the Customer prior to establishment thereof, will require payment to the Company of an amount equal to the cost of engineering, manufacturers' billings resulting from equipment orders, installation, assembly, labor, cost of removal and any other costs incurred by the Company up to the time of cancellation resulting from the Customer's order for service. This requirement may be superseded by an explicit Cancellation Clause in the ICP contract with the Customer.

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- e. Temporary suspension of service at the request of the Customer, either partial or complete, is not applicable.

D. Contracts

Due to the special and limited nature of the services offered by the Company, all services not defined in this CSG and/or as required by the Customer will be provided for in an ICP between the Company and the Customer.

E. Notices in ICP

Due to the special and limited nature of the services offered by the Company, all notice requirements between the Customer and the Company may also be provided for in an ICP between the Company and the Customer.

F. Issuance and Payment of Bills

Due to the special and limited nature of the services offered by the Company, all billing procedures between the Customer and the Company will be provided for in an ICP between the Company and the Customer.

G. Service Interruption, Discontinuance, and Restoration of Service

Due to the special and limited nature of the services offered by the Company, all terms and conditions for service interruptions, and the discontinuance and/or restoration of service will be provided for in an ICP between the Company and the Customer.

H. Information on Services and Promotional Offerings

Due to the special and limited nature of the services offered by the Company, the Company does not anticipate that it will offer any promotional offerings.

I. Temporary Service / Special Construction

Due to the special and limited nature of the services offered by the Company, all temporary service / special construction needs between the Customer and the Company will be provided for In an ICP between the Company and the Customer.

J. Continuity of Service

Due to the special and limited nature of the services offered by the Company, all determinations of interruptions of service, notice to the Customer, and apportionment of available services between the Customer and the Company will be provided for in an ICP between the Company and the Customer.

K. Returned Check Charge

Due to the special and limited nature of the services offered by the Company, returned check charges will be provided for in an ICP between the Company and the Customer.