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WASHINGTON TELECOMMUNICATIONS

TARIFF

FOR

TELECOMMUNICATION SYSTEMS, INC.

275 West Street, Suite 200 Annapolis, MD 21401

This tariff contains the descriptions, regulations, and rates applicable to the furnishing of E9-1-1 services by TeleCommunication Systems, Inc. (TSYS). This tariff is on file with the Washington Utilities and Transportation Commission and copies may be inspected during normal business hours at the principal place of business of TSYS, at the above listed address.

Issued by: TeleCommunication Systems, Inc. Effective: Oct. 4, 2019

By: Susan C. Goldhar Ornstein, Senior Director - Legal & Regulatory Affairs

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CHECK SHEET The TITLE page and pages 1-19 inclusiv	e of the Tariff are effective as of the date shown on
the original Tariff in effect on the date inc	pages, as named below, comprise all changes from licated
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TARIFF 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 Tariff. 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 Tariff page, a revised page will be issued replacing the affected Tariff 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
- To signify discontinued material (D)
- (I) To signify rate or charge increase
- (M) To signify material relocated without change in text or rate
- To signify new material (N)
- (O) To signify material relocated without change in text but with an increase in rate
- (R) To signify reduction
- **(S)** To signify reissued material
- To signify a change in text but no change in rate or regulation (T)
- (\mathbf{Z}) To signify a correction

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I. **DEFINITIONS**

9-1-1

A three-digit telephone number to facilitate the reporting of an emergency requiring response by a public safety answering point (PSAP).

Automatic Location Information (ALI)

Records consisting of a caller's telephone number, the address/location of the telephone and supplementary emergency services information of the location from which a 911 call originates that are to be displayed at a PSAP.

Automatic Location Identification (ALI) Database

The automatic display at the PSAP of the caller's telephone number, the address/location of the telephone, and supplementary emergency services information.

Automatic Location Identification (ALI) Database Management System (DBMS)

An ALI database management system, which is a secure file transfer protocol (SFTP) and web-accessible application that supports authorized users in provisioning and maintaining the accuracy of the ALI Database.

<u>Automatic Location Identification (ALI) to Automatic Location Identification (ALI) data</u> transfer

A feature by which Automatic Location Identification (ALI) data is transferred to another provider's Automatic Location Identification (ALI) system.

Automatic Location Identification (ALI) Public Safety Answering Point (PSAP) port

A port on the ALI database system used to deliver Automatic Number Identification (ANI) to the PSAP.

Automatic Number Identification (ANI)

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

Communications Services Providers (CSPs)

This term is used generically to refer 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. CSPs include wireline ILECs and CLECs, Wireless Service Providers, VoIP Service Providers, operators of large PBXs and any other entity providing telecommunications services.

DEFINITIONS (continued)

Company

TeleCommunication Systems, Inc., a Maryland corporation.

Customer

A municipality, state or local governmental unit, or an authorized agent of one or more of these units to whom authority has been lawfully delegated. The Customer must be legally authorized to subscribe to ESInet services and have a lawful, public safety responsibility to respond to emergency calls.

Display and Transfer Unit (DTU)

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 Services Internet Protocol 9-1-1 Network (ESInet)

Managed Internet Protocol (IP) network for emergency services communications, providing the IP transport infrastructure upon which independent application platforms and core services can be deployed, including those necessary for providing Next Generation 9-1-1 services.

Emergency Service Number (ESN)

Unique three to five digit numbers provided and associated by the Customer with street 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.

Enhanced 9-1-1 (E9-1-1)

A telephone system which includes network switching, database, and Public Safety Answering Point (PSAP) premise elements capable of providing automatic location identification (ALI) data, selective routing, selective transfer, fixed transfer, and a call back number.

Enhanced 9-1-1 (E9-1-1) Control Office

The Central Office that provides the tandem switching of 9-1-1 calls. It controls delivery of the voice call with ANI to the PSAP and provides selective routing, speed calling, selective transfer, fixed transfer, and certain maintenance functions for each PSAP. Also known as 9-1-1 Selective Routing Tandem or Selective Router.

Graphical User Interface (GUI)

The Company's web-based tool, which authorized users can utilize to manage records in the ALI DBMS.

DEFINITIONS (continued)

Master Street Address Guide (MSAG)

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

Multi-Line Telephone System (MLTS)

A system comprised of common control unit(s), telephone sets, control hardware and software and adjunct systems used to support telephone and other capabilities, as more particularly defined in the National Emergency Number Association (NENA) Master Glossary of 9-1-1 Terminology. For greater certainty, this includes network and premises-based systems (e.g., Centrex, VoIP, as well as PBX, Hybrid, and Key Telephone Systems ("Hybrid" and "Key Telephone Systems" as defined in the NENA Master Glossary of 9-1-1 Terminology) and includes, but is not limited to, systems owned or leased by governmental agencies.

NENA Master Glossary of 9-1-1 Terminology

The NENA Master Glossary of 9-1-1 Terminology may be updated and otherwise made available by NENA from time to time. As of the Effective Date of this tariff, the NENA Master Glossary is available at the following website:

 $\frac{https://www.nena.org/page/Glossary?\&hhsearchterms=\%22nena+and+master+and+glossary+and+9-1-1+and+terminology\%22)$

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

NG9-1-1 is an IP-based system comprised of managed IP-based networks (ESInets), functional elements (applications), and databases that replicate traditional E9-1-1 features and functions and provide additional capabilities. NG9-1-1 is designed to provide access to emergency services from all connected communications sources and provide multimedia data capabilities for PSAPs and other emergency service organizations.

Next Generation 9-1-1 (NG9-1-1) Database Management System (DBMS)

NG9-1-1 DBMS is Company's next-generation solution that provides the function of legacy ALI DBMS in a transitional Next Generation 9-1-1 (NG9-1-1) system.

Numbering Plan Area (NPA)

An established three-digit area code for a particular calling area, also known as the Area Code.

NXX

The three digits of a phone number immediately following the Area Code or NPA, which generally identified the central office switching location within a given area code.

DEFINITIONS (continued)

Private Branch Exchange (PBX)

Customer premises equipment installed on a user's premises that functions as a switch, permitting the user to receive incoming calls, to dial any other telephone on the premises, to access a tie trunk leading to another PBX or to access an outside trunk to the public switched telephone network.

Private Switch/Automatic Location Information

A service option which provides Enhanced 9-1-1 features for telephone stations behind private switches (*e.g.* PBXs).

<u>Private Switch/Automatic Location Information (PS/ALI) Database Management System (DBMS) Provider</u>

An entity offering fee-based PS/ALI DBMS service directly to the public, or such classes of users to be effectively available directly to the public, regardless of the facilities used. A PS/ALI DBMS Provider's service enables the moves, adds, changes, and deletes (MACD) for entities requiring PS/ALI.

Private Switch/Automatic Location Information (PS/ALI) Database Management System (DBMS) Customer

The PS/ALI DBMS Customer may be a Private Switch or MLTS owner/operator or a Centrex/CENTRON customer who desires or is required to utilize a PS/ALI DBMS for the purpose of managing station location information in the ALI database.

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.

Selective Routing

A form of call routing that may or may not be applicable to Next Generation 9-1-1 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.

Valid Location

An MSAG address, United States Postal Service (USPS) address, latitude/longitude, or any other PSAP-approved location description.

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DEFINITIONS (continued)

Voice over Internet Protocol (VoIP)

A service that: (1) enables real-time, two-way voice communications; (2) requires a broadband connection from the user's location; (3) requires Internet-protocol-compatible customer premises equipment (CPE); and (4) permits users generally to receive calls that originate on the public switched telephone network and to terminate calls to the public switched telephone network."

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II. RULES AND REGULATIONS

1. Description of Service

NG9-1-1 ALI DBMS Service provides the necessary functionality for authorized users to manage ALI data within their control while still having the data professionally managed by TSYS' Data Integrity Group (DIG). The DIG uses the NG9-1-1 ALI Database Management System (DBMS) to assist in managing the Master Street Address Guide (MSAG) and ALI information with all authorized users. The NG9-1-1 ALI includes a web-based tool which includes searching capabilities that allow "wildcard" searches and USPS equivalents.

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RULES AND REGULATIONS (Continued)

2. Applications for Service

All applications for NG9-1-1 ALI DBMS Service shall be made in writing. Applications for NG9-1-1 ALI DBMS Service must be executed in writing by each Customer, or its agent. 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.

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RULES AND REGULATIONS (Continued)

3. Company Liability and Indemnification

a. <u>Limitations on Company Liability</u>

The Company's total liability for any loss or damage arising from errors, interruptions, defects, failures, or malfunctions of any service, equipment, or any part thereof provided pursuant to this Tariff, 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 any period of time that the service or equipment was fully or partially inoperative.

b. Release and Indemnification

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.

c. <u>Invasions of Privacy</u>

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 Tariff, 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 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.

RULES AND REGULATIONS (Continued)

4. Individual Case Basis (ICB) Rates and Charges.

Certain rates and charges set forth in this Tariff are denoted as "ICB." Individual Case Basis (ICB) rates and charges may be established by any of the following methods:

- a. By being set forth in this Tariff; or
- b. By written instrument signed on behalf of both the Company and the Customer.

Where an ICB rate applies and has been established by a written instrument signed on behalf of both the Company and the Customer, and the written instrument does not specify a mechanism for changing the rate prior to termination of the written instrument, the ICB rate may be changed by the Company upon 60 days prior written notice to the Customer, unless such written instrument expressly includes alternative requirements.

5. Termination or Suspension of Service

Customers may cancel service in writing, unless specified differently within an ICB. The Company shall hold the Customer responsible for payment of all charges, including fixed fees, surcharges, etc., that accrue through the end of the Customer's billing cycle, unless otherwise noted in the description of the affected service.

6. Conditions

a. The conditions set forth in this Tariff shall be consistent with any standard rules that may be adopted by the Emergency Management Division of the Washington Military Department and the Washington Utilities and Transportation Commission. The Company reserves the right to revise rates if a change is caused by the rules or standards that affects the cost of providing service. The Customer must furnish the Company its agreement to the following terms and conditions.

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SERVICES OFFERINGS AND FEATURES III.

1. NG9-1-1 ALI DBMS Service Features

NG9-1-1 ALI DBMS capabilities allow:

- Search of the ALI database for a telephone number record;
- On-demand downloads of ALI or MSAG data; ii.
- iii. Authorized users to search for ALI or MSAG data records;
- iv. ALI discrepancy management and MSAG change management via web-based workflow processes;
- Search for ALI data that matches NPA/NXX; and v.
- Search the MSAG database for MSAG data records that match a street vi. address.

a. Database Standards Compliance

The Company acts as the facilitator with the addressing authority in the maintenance of the MSAG utilizing NENA recommended standards.

b. Subscriber Record Management

The collection of service order records from Originating Service Providers (OSPs), validation of those records against the MSAG, and storage of the records for the generating of the ALI database.

c. ALI Database Updates

After processing and validating subscriber record updates, the Company processes ALI records to enable call routing and for retrieval and display by the PSAP during NG9-1-1 calls. Service Order Input (SOI) files, sent for processing in bulk, can contain a maximum of 500,000 records. Results are available within 24 hours from time of SOI submission.

d. ANI/ALI Discrepancy Resolution

An ANI/ALI discrepancy occurs when an ALI record being delivered to a PSAP does not match the information of the caller. The Company will investigate ANI/ALI discrepancy reports and refer each discrepancy to the respective OSP for resolution.

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SERVICE OFFERINGS AND FEATURES (continued)

e. Misroute Resolution

An ANI/ALI misroute occurs when a 9-1-1 call is delivered to the incorrect PSAP. The Company investigates ANI/ALI misroute reports and refers each misroute report to the OSP for resolution.

f. No Record Found (NRF) Resolution

An NRF occurs when the ANI provided does not exist in the ALI database and/or when the NRF is displayed at the PSAP. The Company will resolve or refer each NRF to the respective OSP for resolution. Resolution is performed within one (1) Business Day from the time of the report's submission. At their discretion, PSAPs may escalate directly to the NOC for discrepancies deemed to have a significant impact.

g. ALI Delivery

ALI Delivery provides location information to a PSAP during a 9-1-1 call. Legacy PSAP Gateway (LPG) and serial converter for ALI will be provided, if needed at the PSAP.

h. Data Support of Wireless and VoIP 9-1-1 Call Processing

The Company's DBMS support 9-1-1 call processing for both wireless and VoIP. This includes the E2 interface used by wireless service providers to communicate 9-1-1 caller location information to the ALI database.

i. ALI Metrics Reporting

The Company provides Customer with access to NENA 02-011 standard reports that provide details on data transactions, the number of records processed, and the number of errors.

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IV. RATES AND CHARGES

Feature	Non-Recurring Fee	Recurring Fee
NG9-1-1 ALI DBMS	ICB	ICB
Customer-Specific NG9-1-1 ALI DBMS	ICB	ICB
NG9-1-1 ALI DBMS Initial Load	ICB	ICB

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