



STATE OF TENNESSEE
DEPARTMENT OF COMMERCE AND INSURANCE
500 JAMES ROBERTSON PARKWAY
NASHVILLE, TENNESSEE 37243
(615) 741-9730

Thursday, November 7, 2019

Fiscal Review Committee
8th Floor Rachel Jackson Building
Nashville, Tennessee 37243

Re: **Proposed Contract Amendment– Original Contract RFS #33501-155004**

Dear Fiscal Review Committee:

The following information is provided in support of the proposed contract amendment submitted for consideration and approval of the Fiscal Review Committee.

Procurement Purpose

The Department of Commerce and Insurance, Emergency Communications Board (the "TECB"), was created for the purpose of assisting emergency communications district boards of directors in the areas of management, operations, and accountability, and establishing emergency communications for all citizens of the state. In January 2016, the TECB entered into an agreement with TeleCommunication Systems, Inc. to secure services for the management of 911 over NetTN. NetTN utilizes a single, statewide communications infrastructure to provide virtual private networks (VPNs) with broadband connectivity.

Currently, 911 is provided over NetTN service (physical, data link and network layer services). NetTN provides IP connectivity (layers 1, 2 & 3 services) between public safety answering point (PSAP) sites. The State intends to secure services from an expert in 911 operations and technology to act as the TECB's agent with respect to the 911 over NetTN services, administering and monitoring all aspects of interconnection, configuration, security, use, and maintenance of 911 over NetTN by all service providers, by PSAPs, by PSAP vendors, and by any other stakeholders interconnected with 911 over NetTN. The State also intends to secure services to render assistance to any and all stakeholders, to ensure compliance with applicable TECB policies, to establish interconnection, and to ensure the smooth and reliable operation of 911 over NetTN. The TECB plans to move to a fully integrated Next Generation 911 solution in a phased approach while leveraging the NetTN network.

Justification for Proposed Contract Amendment

At its regular meeting on August 7, 2019, the Tennessee Emergency Communications Board voted to cease the procurement of "A LI and S elective R outing D atabase m anagement"

services as detailed by Sections A.2.g, A.2.h, and C.3 by the Contract Between the State of Tennessee, Department of Commerce and Insurance Tennessee Emergency Communications Board and TeleCommunication Systems, Inc. (the “Contract”). Therefore, in accordance with section D.3 of the Contract, the TECB would like to modify and amend the Contract in order to effectively terminate its procurement of the ALI and Selective Routing Database management services, but retain all remaining services for the remainder of the contract period. The TECB’s NG911 service provider, AT&T, notified the TECB in late 2018 that they were moving service away from the current solution, supported by Comtech, to AT&T’s nationwide NG911 solution. The rollout of the current NG911 solution with AT&T and Comtech included three deployment stages: 1) network buildout 2) PSAP interconnection to the network and 3) transitional automatic location identification (ALI) services. Stage three, transitional ALI, was started, but is no longer needed as a result of the shift in NG911 solutions.

The ALI and Selective Routing Database Management Services, through Comtech, were put in place to provide the state of Tennessee with additional support in managing a separate ALI database that utilized the geographic information system (GIS) data being developed and managed as a part of the ALI and GIS services portion of the Contract. The original plan included transition to the ALI managed by Comtech, eventually replacing the AT&T ALI database that is in use today. The Comtech ALI database has not gone live in a production call routing environment, and with the decision to move to the AT&T nationwide NG911 solution, the services for ALI and Selective Routing Database Management services are no longer required. Comtech is a valued partner of the provision of the lifesaving power of 911 in the State of Tennessee and through this amendment, the TECB wishes to modify but maintain that relationship.

Please advise if the Committee requires any additional information.

Respectfully,

A handwritten signature in black ink, appearing to read "Ben Glover", with a long, sweeping flourish extending to the right.

Benjamin Glover
Assistant Director & General Counsel
Tennessee Emergency Communications Board
(615) 770-3849
Benjamin.Glover@tn.gov

Supplemental Documentation Required for
Fiscal Review Committee

*Contact Name:	Cherelle Hooper	*Contact Phone:	(615) 741-9730		
*Presenter's name(s):	Curtis Sutton/Benjamin Glover				
Edison Contract Number: <i>(if applicable)</i>	46733	RFS Number: <i>(if applicable)</i>	33501-155004		
*Original or Proposed Contract Begin Date:	January 17, 2016	*Current or Proposed End Date:	January 16, 2021		
Current Request Amendment Number: <i>(if applicable)</i>	N/A				
Proposed Amendment Effective Date: <i>(if applicable)</i>	N/A				
*Department Submitting:	Department of Commerce and Insurance ("Department")				
*Division:	Emergency Communications Board				
*Date Submitted:	September 25, 2019				
*Submitted Within Sixty (60) days:	Yes				
<i>If not, explain:</i>	N/A				
*Contract Vendor Name:	TeleCommunications Systems, Inc.				
*Current or Proposed Maximum Liability:	\$20,000,000.00				
*Estimated Total Spend for Commodities:	\$16,500,000.00				
*Current or Proposed Contract Allocation by Fiscal Year: (as Shown on Most Current Fully Executed Contract Summary Sheet)					
FY: 2016	FY: 2017	FY: 2018	FY: 2019	FY2020	FY2021
\$2,000,000.00	\$4,000,000.00	\$4,000,000.00	\$4,000,000.00	\$4,000,000.00	\$2,000,000.00
*Current Total Expenditures by Fiscal Year of Contract: (attach backup documentation from Edison)					
FY: 2016	FY: 2017	FY: 2018	FY: 2019	FY: 2020	FY: 2021
\$1,836,223.79	\$3,406,138.90	\$3,845,062.92	\$3,464,611.74	\$ 559,948.12	\$ n/a
<p>IF Contract Allocation has been greater than Contract Expenditures, please give the reasons and explain where surplus funds were spent:</p>			<p>The Contract Allocation has been greater than Contract Expenditures because the TECB is using less of the hourly services because the network is more stable and/or the contractor is more efficient.</p> <p>The surplus funds are provided to the emergency communications districts ("ECDs"). Tenn. Code Ann. § 7-86-130 requires that at least 50% of any 911 surcharge revenue collected in excess of the TECB budget and the ECD base funding payments per Tenn. Code Ann. §7-</p>		

Supplemental Documentation Required for
Fiscal Review Committee

	86-303 shall be distributed to the ECDs. The TECB has a policy of distributing at least 75% of such funds and a history of submitting 100% of those funds for the last several fiscal years. The funds are provided to the ECDs on a pro rata basis in the same proportion as their shares of the base funding amounts.		
IF surplus funds have been carried forward, please give the reasons and provide the authority for the carry forward provision:	N/A		
IF Contract Expenditures exceeded Contract Allocation, please give the reasons and explain how funding was acquired to pay the overage:	N/A		
*Contract Funding Source/Amount:			
State:	100% Funding from 911 Surcharge pursuant to T.C.A. §7-86-128	Federal:	None
<i>Interdepartmental:</i>	None	<i>Other:</i>	N/A
If “ <i>other</i> ” please define:		N/A	
If “ <i>interdepartmental</i> ” please define:		N/A	
Dates of All Previous Amendments or Revisions: <i>(if applicable)</i>		Brief Description of Actions in Previous Amendments or Revisions: <i>(if applicable)</i>	
No Previous Amendments or Revisions		N/A	
Method of Original Award: <i>(if applicable)</i>		N/A	
*What were the projected costs of the service for the entire term of the contract prior to contract award? How was this cost determined?		N/A	
*List number of other potential vendors who could provide this good or service; efforts to identify other competitive procurement alternatives; and the reason(s) a sole-source contract is in the best interest of the State.		N/A	

Amendment Request

This request form is not required for amendments to grant contracts. Route a completed request, as one file in PDF format, via e-mail attachment sent to: Agsprs.Agsprs@tn.gov

APPROVED

CHIEF PROCUREMENT OFFICER

DATE

Agency request tracking #	33501-205002	
1. Procuring Agency	Department of Commerce and Insurance Division: Tennessee Emergency Communications Board	
2. Contractor	TeleCommunication Systems, Inc.	
3. Edison contract ID #	46733	
4. Proposed amendment #	1	
5. Contract's Original Effective Date	January 17, 2016	
6. Current end date	January 16, 2021	
7. Proposed end date	January 16, 2021	
8. Current Maximum Liability or Estimated Liability	\$ 20,000,000.00	
9. Proposed Maximum Liability or Estimated Liability	\$ 16,500,000.00	
10. Strategic Technology Solutions Pre-Approval Endorsement Request <i>– information technology service (N/A to THDA)</i>	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Attached	
11. eHealth Pre-Approval Endorsement Request <i>– health-related professional, pharmaceutical, laboratory, or imaging</i>	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Attached	
12. Human Resources Pre-Approval Endorsement Request <i>– state employee training service</i>	<input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Attached	
13. Explain why the proposed amendment is needed		
<p>The TECB's NG911 service provider, AT&T, notified the TECB in late 2018 that it is moving service away from the current solution, supported by Comtech, to AT&T's nationwide NG911 solution. The rollout of the current NG911 solution with AT&T and Comtech included three deployment stages: 1) network buildout 2) PSAP interconnection to the network and 3) transitional automatic location identification (ALI) services. Stage three, transitional ALI, was started, but is no longer needed as a result of the shift in NG911 solutions.</p> <p>The reduction in estimated liability includes this amendment as well as the additional monies allocated but not spent</p>		

Agency request tracking #	33501-205002
<p>(surplus funds) for the previous years. The surplus funds are provided to the emergency communications districts ("ECDs"). Tenn. Code Ann. §7-86-130 requires that at least 50% of any 911 surcharge revenue collected in excess of the TECB budget and the ECD base funding payments per Tenn. Code Ann. §7-86-303 be distributed to the ECDs. The TECB has a policy of distributing at least 75% of such funds and a history of submitting 100% of those funds for the last several fiscal years. The funds are provided to the ECDs on a pro rata basis in the same proportion as their shares of the base funding amounts.</p>	
<p>14. If the amendment involves a change in Scope, describe efforts to identify reasonable, competitive, procurement alternatives to amending the contract.</p> <p>This amendment is removing services from the Scope, so there were no other identifiable procurement alternatives to amending the contract under these circumstances.</p>	
<p>Signature of Agency head or authorized designee, title of signatory, and date (the authorized designee may sign his or her own name if indicated on the Signature Certification and Authorization document)</p>	



CONTRACT AMENDMENT COVER SHEET

Agency Tracking # 33501-205002	Edison ID 46733	Contract # 46733	Amendment # 1		
Contractor Legal Entity Name TeleCommunication Systems, Inc.			Edison Vendor ID 37866		
Amendment Purpose & Effect(s) Cease procurement of ALI and Selective Routing Database Management Services					
Amendment Changes Contract End Date: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		End Date: January 16, 2021			
TOTAL Contract Amount INCREASE or DECREASE per this Amendment (zero if N/A):			(\$1,944,000)		
Funding —					
FY	State	Federal	Interdepartmental	Other	TOTAL Contract Amount
2020	(\$1,008,000)				(\$1,008,000)
2021	(\$936,000)				(\$936,000)
TOTAL:	(\$1,944,000)				(\$1,944,000)
Budget Officer Confirmation: There is a balance in the appropriation from which obligations hereunder are required to be paid that is not already encumbered to pay other obligations.			<i>CPO USE</i>		
Speed Chart (optional) 3350800911		Account Code (optional)			

**AMENDMENT ONE
OF CONTRACT 46733**

This Amendment is made and entered into by and between the State of Tennessee, Department of Commerce and Insurance, Tennessee Emergency Communications Board, hereinafter referred to as the "State" and TeleCommunication Systems, Inc., hereinafter referred to as the "Contractor." For good and valuable consideration, the sufficiency of which is hereby acknowledged, it is mutually understood and agreed by and between said, undersigned contracting parties that the subject contract is hereby amended as follows:

1. The following preamble is added to the Contract:

PREAMBLE

As a result of the decision to move to the AT&T nationwide NG911 solution, the services for ALI and Selective Routing Database Management services are no longer required. Therefore, in accordance with section D.3 of the Contract, this amendment effectively terminates the procurement of the ALI and Selective Routing Database management services.

2. Contract Section A.2. is deleted in its entirety and replaced with the following:

A.2. Database Maintenance, Change Management Process, and Management Procedures.

A.2.a. The Contractor shall maintain a database of service providers to include the following:

- i. Contact information;
- ii. Type of connection;
- iii. Network interconnection points;
- iv. Technical specifications and configurations such as trunk counts, types, and signaling formats;
- v. Other data as specified by the Tennessee Emergency Communications Board ("TECB").

A.2.b. The Contractor shall maintain a database of public safety answering points ("PSAPs") that includes:

- i. Contact information;
- ii. Equipment type, brand, model, and configuration;
- iii. PSAP vendors used and equipment and services provided by vendor
- iv. 9-1-1 over NetTN IP addresses;
- v. Technical specifications of equipment, such as number of ports and signaling formats
- vi. For SIP capable PSAPs:
 - a) the SIP URI for 9-1-1 calls;
 - b) SIP location conveyance capabilities;
 - c) media capabilities (voice, video, text);
 - d) available codecs;
 - e) SIP conferencing and transfer capabilities.
- vii. Other traditional, or NG 9-1-1 data, as standards emerge, and as needed to perform the functions of the Contractor, or as specified by the TECB.

A.2.c. The Contractor shall maintain a database of PSAP vendors that includes:

- i. Contact information;
 - ii. Emergency problem resolution procedures.
- A.2.d. The Contractor shall develop and regularly update a statewide 9-1-1 over the NetTN deployment plan, including:
- i. PSAP identification;
 - ii. PSAP jurisdiction;
 - iii. Service provider identification;
 - iv. Service provider operating area;
 - v. PSAP and service provider deployment schedules.
- A.2.e. The Contractor shall develop and implement a Change Management Process subject to approval by the TECB or its designee. It should be noted that some changes may be relatively simple to review, plan, and implement (such as changing a destination in an existing call overflow plan) while other changes may be very complex and potentially disruptive (such as a PSAP relocation.) The Change Management Process developed must be able to accommodate both simple and complex changes with required cost and effort in scale with the complexity of the change, even while protecting the integrity of the service and fidelity to the policies of the TECB. The Change Management Process shall include, but is not limited to, the following:
- i. A process for making a change or reconfiguration request. The Contractor is responsible for communicating the requirements for the change request to the requestor. All change requests will be recorded and their disposition documented;
 - ii. The Contractor's review of a change or reconfiguration request must include consideration of these items:
 - a) Authorization – is the requestor authorized to make requested change;
 - b) Clarity – is the purpose or goal of the change sufficiently clear to implement;
 - c) Compliance – is the change compatible with the policies and goals of the TECB;
 - d) Feasibility – is the change technically sound and can it be safely implemented without danger to the 9-1-1 service;
 - e) Identification – All parties that will be affected by the change, or who require knowledge of the change, must be identified;
 - f) Procedure – is there a standard method of implementation (MOP);
 - g) Recovery – if the change causes an unexpected problem is there a safe back-out/restoration procedure;
 - h) Resources – what resources are required to implement the change;
 - i) Security – are there security implications;
 - j) Side effects – what impacts will the change have on apparently unrelated functions;
 - k) Test plan – what post change functions need to be verified.
 - iii. The Contractor shall develop a review process which is recorded and documented.
 - iv. Implementation shall be subject to review and approval by the TECB or its designee.
 - v. The Contractor shall schedule implementation of a change that completes the review process. A schedule shall be set up and all identified entities will be notified. Log entries shall be made to record the actual work performed, time and date of the work, and the

results of the test plan. If unexpected problems or issues are encountered the recovery procedure is invoked and documented, and the change is returned for additional review.

- vi. At the completion of a change the Contractor shall update all documents and records in the management system as required by the change.
- vii. The Contractor must publish its change management procedures and make this information available to the TECB.

A.2.f. Service provider business relation management:

- i. The Contractor shall be the primary contact for all service providers. All connections (data/voice) into the 9-1-1 over NetTN will be coordinated through the Contractor;
- ii. The Contractor shall document all data from service providers;
- iii. The Contractor shall write all 9-1-1 over NetTN service provider orders;
- iv. Due to the potential for conflicts of interest inherent in the oversight responsibilities of the Contractor, the Contractor must be able to operate as an independent entity, separate from any 9-1-1 service provider, 9-1-1 vendor, or person, corporation, or company associated with Tennessee's 9-1-1 over NetTN system.

A.2.g. Alternate and overflow routing:

- i. The Contractor shall develop a call overflow scheme with each PSAP in the state;
- ii. The Contractor shall document and test all call overflow / alternate routing configurations.

A.2.h. Call logging / stats reporting:

- i. The Contractor shall receive on-line access to call traffic logs from the 9-1-1 over NetTN service provider;
- ii. The Contractor shall provide monthly reports and findings to the TECB, or upon request by the TECB, including, but not limited to: call traffic, time to answer, call duration, call overflow, call transfer, unanswered calls, errors and anomalies;
- iii. The Contractor shall have secure web based tracking and reporting tools and must include trouble ticket initiation, trouble history tracking, resolution status and NOC response time.

A.2.i. IP to CAMA gateways (traditional PSAP). The Contractor shall:

- i. Identify types of PSAP equipment, PSAP signaling format requirements and capabilities;
- ii. Place orders with this data to 9-1-1 over NetTN service provider;
- iii. Track orders and verify installation of the IP to CAMA gateway at the PSAP;
- iv. Provide a test and backup plan to 9-1-1 over NetTN service provide;
- v. Verify test plan and report to the TECB.

A.2.j. Technical problem resolution - Performance Standards.

The Contractor must have a 24x7 Network Operations Center (NOC). The NOC shall provide constant monitoring and dedicated network management services required by the TECB in this Contract. The NOC is to be located in the U.S. and all call centers must be handled by the NOC located in the U.S. The Contractor's NOC help desk shall be available 24-hours per day and 365 days per year. The Contractor's Level 1 will initiate a trouble ticket and determine the level of support and action necessary to accommodate the end users needs. The Contractor shall furnish to all PSAP's a toll free number, and email address to access the Contractor's NOC Staff.

- i. The Contractor shall place orders and initiate trouble tickets using the established customary and reasonable order and trouble ticket processes established by the 9-1-1 over NetTN service provider;
- ii. The Contractor will require an IP connection to the 9-1-1 over NetTN network for monitoring, access to databases and logs, and for initiating test calls;
- iii. The Contractor shall accept calls from PSAPs, the 9-1-1 over NetTN service provider, other service providers, and stakeholders reporting all problems, including but not limited to misrouted calls, incorrect / missing ALI data, or voice quality problems;
- iv. The Contractor shall triage problems and determine the cause, e.g., 9-1-1 over NetTN service provider issue, other service provider issue, PSAP issue, etc.;
- v. The Contractor shall:
 - a) Initiate trouble tickets with appropriate provider(s);
 - b) Track all trouble tickets, and provide updates on trouble tickets to the TECB;
 - c) Maintain service escalation data for all service providers;
 - d) Record history and resolution of all trouble tickets;
 - e) Analyze trouble tickets for trends, and chronic problems;
 - f) Produce quarterly reports of findings to the TECB.
- vi. The Contractor will be responsible for establishing Service Level Agreements that meet or exceed the following requirements.
 - a) Average speed to answer – 60 seconds of all calls (The average time it takes a user to speak to an agent);

Time is measured once the caller has made a final selection from the telephone prompt and is placed in queue until the caller is working with an agent.

Measurement Calculation: This Service Level is averaged monthly and calculated by dividing the number of calls answered in a specified time by the total number of calls to the Service Desk in the measurement window and expressed as a percentage.

Numerically: $(\text{Calls answered in a specified time}) / (\text{All calls answered}) * 100 = \text{Level of Service percent}$
 - b) Abandon rate of all global inbound calls – 10% (The percentage of users that call in to the Help Desk and hang up before being connected with a live agent.)

Service Level Description: “Call Abandon Rate” measures those calls that are disengaged by a caller after being placed in a call queue, but before being handled by an agent as reported through telephone switch metrics.

Measurement Calculation: This key metric is averaged monthly and calculated by dividing the number of calls placed in a call queue, but were disengaged by a caller, by the total number of calls placed in a call queue to the Service Desk during the measurement window and expressed as a percentage.

Numerically: $\text{Metric Calculation} (\text{Calls disengaged by caller}) / (\text{Total calls placed in call queue}) = \text{Call Abandon Rate}$.

- c) Call Duration – 20 minutes or less

The duration of time a user is on the telephone with an agent resolving an issue and time used to the call once the call has ended (time agent enters comments or notes pertaining to the call.)

- d) Alarm notification – 10 minutes

'Catastrophic' or 'Critical' and 'Major' alarms will be reported to the TECB within 10 minutes from the inception of the alarm.

A.2.k. 9-1-1 over NetTN change and reconfiguration procedures:

- i. The Contractor shall establish the process for such requests. The process must be in accordance with policy established by the TECB and with TECB contractual arrangements;
 - a. Some types of changes (e.g., call overflow scheme) may have different change processes than other types of changes (e.g., pANI initial routing).
 - b. The Contractor shall determine and verify the authority of the persons or entities initiating requests for change;
 - c. The Contractor shall devise a plan for accomplishing the requested change. This plan must include but is not limited to:
 - 1. Obtaining approvals from the TECB and other stakeholders as required;
 - 2. Establishing a timeline for the change that is satisfactory to the impacted parties and in accordance with policy;
 - 3. Assessing the impact of the change or the reconfiguration, and the impact of the change process itself on 9-1-1 operations;
 - 4. Providing for the mitigation of identified impacts as required;
 - 5. Ensuring that all stakeholders in the change process have been properly notified.
- ii. The Contractor shall perform project management, including implementation and testing, for the change or reconfiguration process;
- iii. The Contractor shall update all documents and records in the management system as required by the change.

A.2.l. The Contractor shall develop and present to the TECB for approval a disaster recovery plan. This plan shall be invoked in the event of a catastrophic failure of all, or of a significant portion of, the 9-1-1 over NetTN service, which will require substantial time to repair or to mitigate, and adversely impact public safety.

At a minimum, this disaster recovery plan shall address:

- i. Persons or entities to be notified (e.g., officials, stakeholders);
- ii. Authorized messages to be conveyed in such a circumstance;
- iii. Authorized actions to be or that may be undertaken by the Contractor in an attempt to mitigate the catastrophic failure;

- iv. Roles, responsibilities, and chain of command for Contractor mitigation actions;
- v. Recovery and restart procedures, involving stakeholders, if needed, after the cause of the failure has been resolved;
- vi. Alternative methods of monitoring or determining the status of the 9-1-1 over NetTN service should the failure limit the Contractor's normal methods of IP or service monitoring.

A.2.m. The Contractor shall develop a classification system for alarms and failure events. This system shall include the alarm levels as defined by Bellcore TR-NWT-000474, or their equivalents:

- i. 'Catastrophic' (color unlit) or 'Critical' (color = red): An alarm used to indicate a severe, service affecting condition has occurred and that immediate corrective action is imperative, regardless of the time of day or day of the week. Escalation to top level personnel is immediate, and required;
- ii. 'Major' (color = orange): An alarm used for conditions that indicate a serious disruption of service or the malfunctioning or failure of important hardware. These conditions require the immediate attention and response of a technician to restore or maintain system capability. The urgency is less than in critical situations because of a lesser immediate or impending effect on service or system performance;
- iii. 'Minor' (color = yellow): An alarm used for conditions that do not have a serious effect on the service, or for troubles in hardware that are not essential to the operation of the system;
- iv. 'Info' (color = blue): An indication used to raise attention to a condition that could possibly be an impending problem, or to notify the network operations center of an event that improves the overall operation.

A.2.n. The Contractor shall develop, test and publish its internal and external escalation procedures, including contact information and the chain of command.

A.2.o. The Contractor shall develop and implement a plan and provide services for integrating the Office for Information Resources, Geographic Information Systems (GIS) and ECD GIS databases into 9-1-1 over NetTN.

3. Contract Section C.3. is deleted in its entirety and replaced with the following:

C.3. Payment Methodology. The Contractor shall be compensated based on the payment methodology for goods or services authorized by the State in a total amount as set forth in Section C.1.

- a. The Contractor's compensation shall be contingent upon the satisfactory provision of goods and services set forth in Section A.
- b. The Contractor shall be compensated based upon the following payment methodology:

Goods or Services Description	Amount* (per compensable increment)
On-site technical and professional services provided by individuals other than the Project Manager at the Tennessee Emergency Communications Board, 9-1-1 over NetTN facilities, local emergency communications districts, public safety answering points or other locations as approved by the TECB.	\$118.00/per hour
Other technical and professional services provided by Individuals other than the Project Manager, excluding services involved in the operation of the NOC.	\$128.00/hour
Administrative and support services.	\$87.00/hour
Project Manager services.	\$19,240.00/month
Operation of the Network Operations Center (NOC), including all services related to the operation of the NOC.	\$50,149.00/month
GIS Services.	\$49,950.00/month

*All amounts due Contractor are subject to the performance standards set forth in Section A.2.I. with regard to technical problem resolution. The amount paid Contractor for services provided during any month this Contract is in effect in which Contractor failed to meet such standards will be reduced by one percent (1%) of the total aggregate billing for such month. Failure by Contractor to meet such standards in a second consecutive month will result in a reduction of two percent (2%) of the total aggregate monthly billing for such month.

- c. The Contractor shall not bill more than eight (8) hours per calendar day, even if the Contractor works more than eight (8) hours in a calendar day.
- d. For Contractor's personnel working under a Service Description category that is billed in hourly compensable increments, Contractor may bill for travel time to and from the primary site of service under such particular Service Description category provided that such billing, combined with billing for work performed, does not exceed eight (8) hours per calendar day.

Required Approvals. The State is not bound by this Amendment until it is signed by the contract parties and approved by appropriate officials in accordance with applicable Tennessee laws and regulations (depending upon the specifics of this contract, said officials may include, but are not limited to, the Commissioner of Finance and Administration, the Commissioner of Human Resources, and the Comptroller of the Treasury).

Amendment Effective Date. The revisions set forth herein shall be effective once all required approvals are obtained. All other terms and conditions of this Contract not expressly amended herein shall remain in full force and effect.

IN WITNESS WHEREOF,

TeleCommunication Systems, Inc.:

SIGNATURE

DATE

PRINTED NAME AND TITLE OF SIGNATORY (above)

DEPARTMENT OF COMMERCE AND INSURANCE:

HODGEN MAINDA, COMMISSIONER

DATE



CONTRACT

(fee-for-goods or services contract with an individual, business, non-profit, or governmental entity of another state)

Begin Date January 17, 2016	End Date January 16, 2021	Agency Tracking # 33501-155004	Edison Record ID 46733
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Contractor Legal Entity Name Telecommunication Systems, Inc.	Edison Vendor ID 000037866
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Goods or Services Caption (one line only)
Technical and management services for the Emergency Communications Board

Subrecipient or Contractor <input type="checkbox"/> Subrecipient <input checked="" type="checkbox"/> Contractor	CFDA #
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Funding —					
FY	State	Federal	Interdepartmental	Other	TOTAL Contract Amount
2016	\$2,000,000				\$2,000,000
2017	\$4,000,000				\$4,000,000
2018	\$4,000,000				\$4,000,000
2019	\$4,000,000				\$4,000,000
2020	\$4,000,000				\$4,000,000
2021	\$2,000,000				\$2,000,000
TOTAL:	\$20,000,000				\$20,000,000

Contractor Ownership Characteristics:

Minority Business Enterprise (MBE): African American, Asian American, Hispanic American, Native American

Woman Business Enterprise (WBE)

Tennessee Service Disabled Veteran Enterprise (SDVBE)

Tennessee Small Business Enterprise (SBE): \$10,000,000.00 averaged over a three (3) year period or employs no more than ninety-nine (99) employees.

Other:

Selection Method & Process Summary (mark the correct response to confirm the associated summary)

Competitive Selection This Contract resulted from a Request for Proposals pursuant to Tenn. Comp. R. & Regs. 0690-03-01-.05(2).

Other

Budget Officer Confirmation: There is a balance in the appropriation from which obligations hereunder are required to be paid that is not already encumbered to pay other obligations.

Robert Lee Wright

Speed Chart (optional)	Account Code (optional)
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**CONTRACT
BETWEEN THE STATE OF TENNESSEE,
DEPARTMENT OF COMMERCE AND INSURANCE
TENNESSEE EMERGENCY COMMUNICATIONS BOARD
AND
TELECOMMUNICATION SYSTEMS, INC.**

This Contract, by and between the State of Tennessee, Department of Commerce and Insurance, Tennessee Emergency Communications Board ("State") and TeleCommunication Systems, Inc. ("Contractor"), is for the provision of technical and management services for the Emergency Communications Board, as further defined in the "SCOPE." State and Contractor may be referred to individually as a "Party" or collectively as the "Parties" to this Contract.

The Contractor is a For-Profit Corporation
Contractor Place of Incorporation or Organization: Maryland
Contractor Edison Registration ID # 000037866

A. SCOPE:

- A.1. The Contractor shall provide all goods or services and deliverables as required, described, and detailed below and shall meet all service and delivery timelines as specified by this Contract.
- A.2. Database Maintenance, Change Management Process, and Management Procedures.
- A.2.a. The Contractor shall maintain a database of service providers to include the following:
- i. Contact Information;
 - ii. Type of connection;
 - iii. Network interconnection points;
 - iv. Technical specifications and configurations such as trunk counts, types, and signaling formats;
 - v. Other data as specified by the Tennessee Emergency Communications Board ("TECB").
- A.2.b. The Contractor shall maintain a database of public safety answering points ("PSAPs") that includes:
- i. Contact information;
 - ii. Equipment type, brand, model, and configuration;
 - iii. PSAP vendors used and equipment and services provided by vendor
 - iv. 9-1-1 over NetTN IP addresses;
 - v. Technical specifications of equipment, such as number of ports and signaling formats
 - vi. For SIP capable PSAPs:
 - a) the SIP URI for 9-1-1 calls;
 - b) SIP location conveyance capabilities;
 - c) media capabilities (voice, video, text);
 - d) available codecs;
 - e) SIP conferencing and transfer capabilities.



- vii. Other traditional, or NG 9-1-1 data, as standards emerge, and as needed to perform the functions of the Contractor, or as specified by the TECB.

A.2.c. The Contractor shall maintain a database of PSAP vendors that includes:

- i. Contact Information;
- ii. Emergency problem resolution procedures.

A.2.d. The Contractor shall develop and regularly update a statewide 9-1-1 over the NetTN deployment plan, including:

- i. PSAP Identification;
- ii. PSAP Jurisdiction;
- iii. Service provider identification;
- iv. Service provider operating area;
- v. PSAP and service provider deployment schedules.

A.2.e. The Contractor shall develop and implement a Change Management Process subject to approval by the TECB or its designee. It should be noted that some changes may be relatively simple to review, plan, and implement (such as changing a destination in an existing call overflow plan) while other changes may be very complex and potentially disruptive (such as a PSAP relocation.) The Change Management Process developed must be able to accommodate both simple and complex changes with required cost and effort in scale with the complexity of the change, even while protecting the integrity of the service and fidelity to the policies of the TECB. The Change Management Process shall include, but is not limited to, the following:

- i. A process for making a change or reconfiguration request. The Contractor is responsible for communicating the requirements for the change request to the requestor. All change requests will be recorded and their disposition documented;
- ii. The Contractor's review of a change or reconfiguration request must include consideration of these items:
 - a) Authorization – is the requestor authorized to make requested change;
 - b) Clarity – is the purpose or goal of the change sufficiently clear to implement;
 - c) Compliance – is the change compatible with the policies and goals of the TECB;
 - d) Feasibility – is the change technically sound and can it be safely implemented without danger to the 9-1-1 service;
 - e) Identification – All parties that will be affected by the change, or who require knowledge of the change, must be identified;
 - f) Procedure – is there a standard method of implementation (MOP);
 - g) Recovery – if the change causes an unexpected problem is there a safe back-out/restoration procedure;
 - h) Resources – what resources are required to implement the change;
 - i) Security – are there security implications;
 - j) Side effects – what impacts will the change have on apparently unrelated functions;
 - k) Test plan – what post change functions need to be verified.
- iii. The Contractor shall develop a review process which is recorded and documented.
- iv. Implementation shall be subject to review and approval by the TECB or its designee.



- v. The Contractor shall schedule implementation of a change that completes the review process. A schedule shall be set up and all identified entities will be notified. Log entries shall be made to record the actual work performed, time and date of the work, and the results of the test plan. If unexpected problems or issues are encountered the recovery procedure is invoked and documented, and the change is returned for additional review.
- vi. At the completion of a change the Contractor shall update all documents and records in the management system as required by the change.
- vii. The Contractor must publish its change management procedures and make this information available to the TECB.

A.2.f. Service provider business relation management:

- i. The Contractor shall be the primary contact for all service providers. All connections (data/voice) into the 9-1-1 over NetTN will be coordinated through the Contractor;
- ii. The Contractor shall document all data from service providers;
- iii. The Contractor shall write all 9-1-1 over NetTN service provider orders;
- iv. Due to the potential for conflicts of interest inherent in the oversight responsibilities of the Contractor, the Contractor must be able to operate as an independent entity, separate from any 9-1-1 service provider, 9-1-1 vendor, or person, corporation, or company associated with Tennessee's 9-1-1 over NetTN system.

A.2.g. The Contractor will develop and implement a process for wireless and VoIP ALI and Selective Routing Database Management, and will maintain its own version of these databases. The database management process must observe and implement NENA technical and operational standards. The process for wireline ALI and Selective Routing Database Management will be developed and implemented upon the request of the TECB or its designee.

A.2.h. In the event the TECB or its designee requests ALI and Selective Routing databases, such databases must include all information required to selectively route all traffic, based on ANI or pANI information, and using the 9-1-1 over NetTN service, including wireless, VoIP, and telematics traffic, all traffic originating from any connected service provider. The ALI information must include the actual ALI records, or, for pANI records, the ALI service provider NENA code which could be used to steer an ALI request to the appropriate ALI service provider.

The Contractor shall provide Selective Router database updates to the 9-1-1 over NetTN service provider in a timely fashion and in accordance with NENA recommendations.

The Contractor shall be responsible for maintaining the ALI and/or Selective Router databases subsequent to the TECB securing ownership of such databases and make requested portions of the databases available to ECDs by some form of secure download.

A.2.i. Alternate and overflow routing:

- i. The Contractor shall develop a call overflow scheme with each PSAP in the state;
- ii. The Contractor shall document and test all call overflow / alternate routing configurations.

A.2.j. Call logging / stats reporting:

- i. The Contractor shall receive on-line access to call traffic logs from the 9-1-1 over NetTN service provider;
- ii. The Contractor shall provide monthly reports and findings to the TECB, or upon request by the TECB, including, but not limited to: call traffic, time to answer, call duration, call overflow, call transfer, unanswered calls, errors and anomalies;



- iii. The Contractor shall have secure web based tracking and reporting tools and must include trouble ticket initiation, trouble history tracking, resolution status and NOC response time.

A.2.k. IP to CAMA gateways (traditional PSAP). The Contractor shall:

- i. Identify types of PSAP equipment, PSAP signaling format requirements and capabilities;
- ii. Place orders with this data to 9-1-1 over NetTN service provider;
- iii. Track orders and verify installation of the IP to CAMA gateway at the PSAP;
- iv. Provide a test and backup plan to 9-1-1 over NetTN service provide;
- v. Verify test plan and report to the TECB.

A.2.l. Technical problem resolution - Performance Standards.

The Contractor must have a 24x7 Network Operations Center (NOC). The NOC shall provide constant monitoring and dedicated network management services required by the TECB in this Contract. The NOC is to be located in the U.S. and all call centers must be handled by the NOC located in the U.S. The Contractor's NOC help desk shall be available 24-hours per day and 365 days per year. The Contractor's Level 1 will initiate a trouble ticket and determine the level of support and action necessary to accommodate the end users needs. The Contractor shall furnish to all PSAP's a toll free number, and email address to access the Contractor's NOC Staff.

- i. The Contractor shall place orders and initiate trouble tickets using the established customary and reasonable order and trouble ticket processes established by the 9-1-1 over NetTN service provider;
- ii. The Contractor will require an IP connection to the 9-1-1 over NetTN network for monitoring, access to databases and logs, and for initiating test calls;
- iii. The Contractor shall accept calls from PSAPs, the 9-1-1 over NetTN service provider, other service providers, and stakeholders reporting all problems, including but not limited to misrouted calls, incorrect / missing ALI data, or voice quality problems;
- iv. The Contractor shall triage problems and determine the cause, e.g., 9-1-1 over NetTN service provider issue, other service provider issue, PSAP issue, etc.;
- v. The Contractor shall:
 - a) Initiate trouble tickets with appropriate provider(s);
 - b) Track all trouble tickets, and provide updates on trouble tickets to the TECB;
 - c) Maintain service escalation data for all service providers;
 - d) Record history and resolution of all trouble tickets;
 - e) Analyze trouble tickets for trends, and chronic problems;
 - f) Produce quarterly reports of findings to the TECB.
- vi. The Contractor will be responsible for establishing Service Level Agreements that meet or exceed the following requirements.
 - a) Average speed to answer – 60 seconds of all calls (The average time it takes a user to speak to an agent);

Time is measured once the caller has made a final selection from the telephone prompt and is placed in queue until the caller is working with an agent.



Measurement Calculation: This Service Level is averaged monthly and calculated by dividing the number of calls answered in a specified time by the total number of calls to the Service Desk in the measurement window and expressed as a percentage.

Numerically: (Calls answered in a specified time) / (All calls answered) * 100 = Level of Service percent

- b) Abandon rate of all global inbound calls – 10% (The percentage of users that call in to the Help Desk and hang up before being connected with a live agent.)

Service Level Description: "Call Abandon Rate" measures those calls that are disengaged by a caller after being placed in a call queue, but before being handled by an agent as reported through telephone switch metrics.

Measurement Calculation: This key metric is averaged monthly and calculated by dividing the number of calls placed in a call queue, but were disengaged by a caller, by the total number of calls placed in a call queue to the Service Desk during the measurement window and expressed as a percentage.

Numerically: Metric Calculation (Calls disengaged by caller) / (Total calls placed in call queue) = Call Abandon Rate.

- c) Call Duration – 20 minutes or less

The duration of time a user is on the telephone with an agent resolving an issue and time used to the call once the call has ended (time agent enters comments or notes pertaining to the call.)

- d) Alarm notification – 10 minutes

'Catastrophic' or 'Critical' and 'Major' alarms will be reported to the TECB within 10 minutes from the inception of the alarm.

A.2.m. 9-1-1 over NetTN change and reconfiguration procedures:

- i. The Contractor shall establish the process for such requests. The process must be in accordance with policy established by the TECB and with TECB contractual arrangements;
- a. Some types of changes (e.g., call overflow scheme) may have different change processes than other types of changes (e.g., pANI initial routing).
- b. The Contractor shall determine and verify the authority of the persons or entities initiating requests for change;
- c. The Contractor shall devise a plan for accomplishing the requested change. This plan must include but is not limited to:
1. Obtaining approvals from the TECB and other stakeholders as required;
 2. Establishing a timeline for the change that is satisfactory to the impacted parties and in accordance with policy;
 3. Assessing the impact of the change or the reconfiguration, and the impact of the change process itself on 9-1-1 operations;
 4. Providing for the mitigation of identified impacts as required;



5. Ensuring that all stakeholders in the change process have been properly notified.
 - ii. The Contractor shall perform project management, including implementation and testing, for the change or reconfiguration process;
 - iii. The Contractor shall update all documents and records in the management system as required by the change.
- A.2.n. The Contractor shall develop and present to the TECB for approval a Disaster recovery plan. This plan shall be invoked in the event of a catastrophic failure of all, or of a significant portion of, the 9-1-1 over NetTN service, which will require substantial time to repair or to mitigate, and adversely impact public safety.

At a minimum, this Disaster recovery plan shall address:

 - i. Persons or entities to be notified (e.g., officials, stakeholders);
 - ii. Authorized messages to be conveyed in such a circumstance;
 - iii. Authorized actions to be or that may be undertaken by the Contractor in an attempt to mitigate the catastrophic failure;
 - iv. Roles, responsibilities, and chain of command for Contractor mitigation actions;
 - v. Recovery and restart procedures, involving stakeholders, if needed, after the cause of the failure has been resolved;
 - vi. Alternative methods of monitoring or determining the status of the 9-1-1 over NetTN service should the failure limit the Contractor's normal methods of IP or service monitoring.
- A.2.o. The Contractor shall develop a classification system for alarms and failure events. This system shall include the alarm levels as defined by Bellcore TR-NWT-000474, or their equivalents:
 - i. 'Catastrophic' (color unlit) or 'Critical' (color = red): An alarm used to indicate a severe, service affecting condition has occurred and that immediate corrective action is imperative, regardless of the time of day or day of the week. Escalation to top level personnel is immediate, and required;
 - ii. 'Major' (color = orange): An alarm used for conditions that indicate a serious disruption of service or the malfunctioning or failure of important hardware. These conditions require the immediate attention and response of a technician to restore or maintain system capability. The urgency is less than in critical situations because of a lesser immediate or impending effect on service or system performance;
 - iii. 'Minor' (color = yellow): An alarm used for conditions that do not have a serious effect on the service, or for troubles in hardware that are not essential to the operation of the system;
 - iv. 'Info' (color = blue): An indication used to raise attention to a condition that could possibly be an impending problem, or to notify the network operations center of an event that improves the overall operation.
- A.2.p. The Contractor shall develop, test and publish its internal and external escalation procedures, including contact information and the chain of command.



A.2.q. The Contractor shall develop and implement a plan and provide services for integrating the Office for Information Resources, Geographic Information Systems (GIS) and ECD GIS databases into 9-1-1 over NetTN.

A.3. IP Network functions, including both WAN and LAN IP connectivity

A.3.a. Construction / Installation:

- i. The Contractor shall define bandwidth requirements, IPv4 address block size, and other requirements for each installation site. If IPv6 is implemented during this contract the same parameters shall apply;
- ii. The Contractor shall initiate orders to the 9-1-1 over NetTN service provider for each installation site;
- iii. The Contractor shall perform IP network acceptance testing when notified by the 9-1-1 over NetTN service provider that the order is complete;
- iv. The Contractor shall work with the PSAP or agency to verify the adequacy of their IP infrastructure.

A.3.b. IP address space administration:

The Contractor shall administer and record the use of unassigned host addresses at each PSAP, agency, or site. It is the intention of this requirement that the Contractor will at all times have a complete list of all IP addresses in use on the 9-1-1 Over NetTN network. This information will identify the type and location of the equipment that is using each IP address.

A.3.c. IP routing:

The Contractor shall have unrestricted IP routing from any IP address to any other IP address within the TECB network, except as dictated by security policies established by the TECB and the NetTN Program Office.

A.3.d. Quality of Service (QoS) packet priority, queuing, and latency:

- i. The Contractor shall perform Diffserv QoS verification on completion of order;
- ii. The Contractor shall annually, or as requested by the TECB, test to validate QoS policy;
- iii. If QoS problems are detected, Contractor shall identify the cause of the problem, and notify appropriate entity (such as service provider or PSAP vendor) of the discrepancy via trouble tickets or other appropriate process. Once initiated, the trouble tickets must be tracked and recorded with resolution documentation.
- iv. The NetTN network is configured to support Diffserv markings and queuing as defined in the PSAP switch and transport these across the NetTN MPLS core network using MPLS EXP markings and queues in the core, allowing DiffServ marked packets to exit, unaltered toward their final destination.

A.3.e. IP network real-time connectivity monitoring and status reporting:

- i. The Contractor shall implement an IP connectivity monitoring system (e.g., end-to-end ping testing). To the extent possible, this system shall also monitor processes and applications (for example, using SNMP to monitor the status of PSAP 9-1-1 systems);
- ii. The Contractor shall maintain a real-time status display or map that shows IP connectivity "at a glance." Changes in network status shall update automatically when a change is



detected, but in no case longer than 5 minutes after the occurrence. Detected failures shall generate alarms appropriate to the type of failure as described in Appendix B;

- iii. For "critical" or "catastrophic" alarms, the Contractor shall first verify the failure, then invoke the Disaster Recovery plan;
- iv. For "major" alarms, the Contractor shall verify the problem, then invoke mitigation procedures with PSAPs and service providers, such as planned alternative call routing schemes. The Contractor shall also initiate trouble tickets to the 9-1-1 over NetTN service provider, to the PSAP, or PSAP vendors, as required;
- v. For "minor" alarms, the Contractor shall determine which stakeholder should address problem, initiate appropriate trouble tickets, and track that the ticket is resolved in a timely fashion;
- vi. The Contractor shall track and document performance complaints from stakeholders / IP network users.

A.3.f. IP network trouble tickets: (from PSAPs / stakeholders). The Contractor shall:

- i. Represent the TECB and stakeholders' interests with respect to trouble tickets;
- ii. Receive trouble tickets from authorized stakeholders and, if possible, verify the issue using the monitoring system or other available tools;
- iii. Initiate trouble tickets with the 9-1-1 over NetTN service provider;
- iv. Track all trouble tickets and update stakeholders.

A.3.g. IP network change procedures:

- i. The Contractor shall establish the process for initiating requests for activities impacting the IP network including, but not limited to, location change, bandwidth change, facility migration, CPE replacement. The process must be in accordance with policy established by the TECB and TECB contractual arrangements with the NetTN Program Office;
- ii. The Contractor shall devise a plan for accomplishing the requested change. This plan includes but is not limited to:
 - a) Obtaining approvals from the TECB and other stakeholders as required;
 - b) Establishing a timeline for the change that is satisfactory to the impacted parties and in accordance with stated policies;
 - c) Assessing the impact of the change and the change process on network operations, and providing for the mitigation of identified impacts as required;
 - d) Insuring that all stakeholders in the change process have been properly notified.

A.3.h. pANI administration. The Contractor shall:

- i. Request pANI range assignments from the 9-1-1 over NetTN service provider, other service providers, or make appropriate assignments itself, as requested and as required;
- ii. Maintain a database of pANI ranges and initial destinations;
- iii. Manage requests for pANI ranges from service providers;



- iv. Contact service providers or the 9-1-1 over NetTN service provider, as appropriate, to make changes.
- A.4. Security Requirements and Assumptions:
- i. PSAP firewall services are the responsibility of the Contractor if required by the TECB;
 - ii. The Contractor shall propose security requirements subject to approval by the TECB.
 - iii. The Contractor shall notify the 9-1-1 over NetTN service provider of changes to the security requirements;
 - iv. The Contractor shall test and monitor the security requirements;
 - v. The Contractor shall verify security requirements compliance when the 9-1-1 over NetTN service provider completes changes and report deficiencies to the TECB.
- A.5. Risk Management/Constraints:
- i. The Contractor shall propose a risk management process. The principal goal of a risk management process will be to protect the 9-1-1 over NetTN network. Therefore, the risk management process should not be treated primarily as a technical function, but as an essential management function:
 - a) The TECB views the risk management process as a two-fold function. The first function shall include but not be limited to: review of products proposed for viability and technology applicability, service records, end of life replacement capabilities, response times to resolve issues, and past general performance status;
 - b) The second function shall be to review and document change requests to the systems. This review shall cover but not be limited to potential conflicts with existing systems, applicability, and functionality.
 - ii. Activities by the Contractor must support the goal of timely delivery of every 9-1-1 call at all times;
 - iii. The Contractor, in conjunction with individual PSAPs, shall define any alternate call flow scenarios;
 - iv. The Contractor shall comply with the Change Management Processes to ensure PSAPs' calls can be delivered at all times, regardless of scheduled or non-scheduled network maintenance.
- A.6. Evolving and Emerging Technologies
- i. Contractor shall develop a Technology Plan and incorporate evolving and emerging technologies at no additional cost to the State
 - ii. As other services become available through technological developments and released as a NENA standard, the Contractor will be required to make these services available to the TECB. The Contractor and the TECB will mutually decide if the service is beneficial to the PSAPs and should be added to the contract. Services added will require agreement regarding the service level factors and the cost.
 - a) Native VoIP Delivery to 9-1-1 Over NetTN – If a VOIP carrier begins delivering Native VOIP calls, the contractor and the NetTN Program Office will work with the TECB to develop the architectural and operational interface agreements that would need to exist in order to support this future product offering and price the solution accordingly.



- b) Text messaging via SMS, MMS, etc. As NENA standards are defined, the Contractor and NetTN Program Office will work with TECB to develop the architectural and operational interface agreements that would need to exist in order to support this future product offering and price the solution accordingly.
 - c) Video relay - As NENA standards are defined, the Contractor and NetTN Program Office will work with TECB to develop the architectural and operational interface agreements that would need to exist in order to support this future product offering and price the solution accordingly
- iii. Contractor shall provide information regarding its participation, if any, with NENA's NG 9-1-1 ICE Steering Committee for testing of NG 9-1-1 elements that locate, route, and answer IP calls, including the level of participation and testing results. (The NENA 13 standard will be used to interface with all PSAPs supporting an IP connection on the network. Participation in NENA's NG 9-1-1 ICE testing will be critical as the standard evolves.)
- A.7. The Contractor shall submit in writing a list of all personnel that will perform work on any billable services under this Contract, including information on personnel's formal qualifications. This list shall be updated as Contractor's personnel changes and as existing personnel's duties may change.
- A.8. The Contractor shall submit in writing monthly reports in a format approved by the State.
- A.9. The Contractor shall provide a managerial-level liaison that shall be available via telephone twenty-four (24) hours per day.
- A.10. The Contractor's principal Project Manager shall be local to the Middle Tennessee area. The Project Manager shall provide planning, implementation and deployment services for the Next Generation 911 project and act as a liaison to various service providers, carriers, emergency communications districts and others as necessary for the successful deployment and continuing operation of NG 9-1-1. The Project Manager shall manage various support teams in multiple project areas and shall accomplish other duties as directed by the state.
- A.11. Warranty. Contractor represents and warrants that throughout the Term of this Contract ("Warranty Period"), the goods or services provided under this Contract shall conform to the terms and conditions of this Contract. Any nonconformance of the goods or services to the terms and conditions of this Contract shall constitute a "Defect" and shall be considered "Defective." If Contractor receives notice of a Defect during the Warranty Period, then Contractor shall correct the Defect, at no additional charge.
- Contractor represents and warrants that all goods or services provided under this Contract shall be provided in a timely and professional manner, by qualified and skilled individuals, in conformity with standards generally accepted in Contractor's industry.
- If Contractor fails to provide the goods or services as warranted, then Contractor will re-provide the goods or services at no additional charge. If Contractor is unable or unwilling to re-provide the goods or services as warranted, then the State shall be entitled to recover the fees paid to Contractor for the Defective goods or services.
- A.12. Inspection and Acceptance. The State shall have the right to inspect all goods or services provided by Contractor under this Contract. If, upon inspection, the State determines that the goods or services are Defective, the State shall notify Contractor, and Contractor shall re-deliver the goods or provide the services at no additional cost to the State. If after a period of thirty (30) days following delivery of goods or performance of services the State does not provide a notice of any Defects, the goods or services shall be deemed to have been accepted by the State.

B. TERM OF CONTRACT:



B.1. This Contract shall be effective on January 17, 2016 ("Effective Date"), and extend for a period of sixty (60) months after the Effective Date ("Term"). The State shall have no obligation for goods or services provided by the Contractor prior to the Effective Date.

C. PAYMENT TERMS AND CONDITIONS:

C.1. Maximum Liability. In no event shall the maximum liability of the State under this Contract exceed twenty million dollars (\$20,000,000.00) ("Maximum Liability"). This Contract does not grant the Contractor any exclusive rights. The State does not guarantee that it will buy any minimum quantity of goods or services under this Contract. Subject to the terms and conditions of this Contract, the Contractor will only be paid for goods or services provided under this Contract after a purchase order is issued to Contractor by the State or as otherwise specified by this Contract.

C.2. Compensation Firm. The payment methodology in Section C.3. of this Contract shall constitute the entire compensation due the Contractor for all goods or services provided under this Contract regardless of the difficulty, materials or equipment required. The payment methodology includes all applicable taxes, fees, overhead, and all other direct and indirect costs incurred or to be incurred by the Contractor.

C.3. Payment Methodology. The Contractor shall be compensated based on the payment methodology for goods or services authorized by the State in a total amount as set forth in Section C.1.

a. The Contractor's compensation shall be contingent upon the satisfactory provision of goods or services as set forth in Section A.

b. The Contractor shall be compensated based upon the following payment methodology:

Goods or Services Description	Amount* (per compensable increment)
On-site technical and professional services provided by individuals other than the Project Manager at the Tennessee Emergency Communications Board, 9-1-1 over NetTN facilities, local emergency communications districts, public safety answering points or other locations as approved by the TECB.	\$118.00 / hour
Other technical and professional services provided by Individuals other than the Project Manager, excluding services involved in the operation of the NOC.	\$128.00 / hour
Administrative and support services.	\$87.00 / hour
Project Manager services.	\$19,240.00 / month
Operation of the Network Operations Center (NOC), including all services related to operation of the NOC.	\$50,149.00 / month

ALI and Selective Routing Database management.	\$144,000.00 / month
GIS Services.	\$49,950.00 / month

* All amounts due Contractor are subject to the performance standards set forth in Section A.2.1. with regard to technical problem resolution. The amount paid Contractor for services provided during any month this Contract is in effect in which Contractor failed to meet such standards will be reduced by one percent (1%) of the total aggregate billing for such month. Failure by Contractor to meet such standards in a second consecutive month will result in a reduction of two percent (2%) of the total aggregate monthly billing for such month.

- c. The Contractor shall not bill more than (8) hours per calendar day, even if the Contractor works more than eight (8) hours in a calendar day.
- d. For Contractor's personnel working under a Service Description category that is billed in hourly compensable increments, Contractor may bill for travel time to and from the primary site of service under such particular Service Description category provided that such billing, combined with billing for work performed, does not exceed eight (8) hours per calendar day.

C.4. Travel Compensation. The Contractor shall not be compensated or reimbursed for ~~travel time,~~ travel expenses, meals, or lodging.

C.5. Invoice Requirements. The Contractor shall invoice the State only for goods delivered and accepted by the State or services satisfactorily provided at the amounts stipulated in Section C.3., above. Contractor shall submit invoices and necessary supporting documentation, no more frequently than once a month, and no later than thirty (30) days after goods or services have been provided to the following address:

Tennessee Department of Commerce and Insurance
 Attention: Accounts Payable
 500 James Robertson Parkway
 Nashville, TN 37243

a. Each invoice, on Contractor's letterhead, shall clearly and accurately detail all of the following information (calculations must be extended and totaled correctly):

- (1) Invoice number (assigned by the Contractor);
- (2) Invoice date;
- (3) Contract number (assigned by the State);
- (4) Customer account name: Department of Commerce and Insurance, Tennessee Emergency Communications Board;
- (5) Customer account number (assigned by the Contractor to the above-referenced Customer);
- (6) Contractor name;
- (7) Contractor Tennessee Edison registration ID number;
- (8) Contractor contact for invoice questions (name, phone, or email);
- (9) Contractor remittance address;
- (10) Description of delivered goods or services provided and invoiced, including identifying information as applicable;
- (11) Number of delivered or completed units, increments, hours, or days as applicable, of each good or service invoiced;
- (12) Applicable payment methodology (as stipulated in Section C.3.) of each good or service invoiced;
- (13) Amount due for each compensable unit of good or service; and
- (14) Total amount due for the invoice period.

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b. Contractor's invoices shall:

- (1) Only include charges for goods delivered or services provided as described in Section A and in accordance with payment terms and conditions set forth in Section C;
- (2) Only be submitted for goods delivered or services completed and shall not include any charge for future goods to be delivered or services to be performed;
- (3) Not include Contractor's taxes, which includes without limitation Contractor's sales and use tax, excise taxes, franchise taxes, real or personal property taxes, or income taxes; and
- (4) Include shipping or delivery charges only as authorized in this Contract.

c. The timeframe for payment (or any discounts) begins only when the State is in receipt of an invoice that meets the minimum requirements of this Section C.5.

C.6. Payment of Invoice. A payment by the State shall not prejudice the State's right to object to or question any payment, invoice, or other matter. A payment by the State shall not be construed as acceptance of goods delivered, any part of the services provided, or as approval of any amount invoiced.

C.7. Invoice Reductions. The Contractor's invoice shall be subject to reduction for amounts included in any invoice or payment that is determined by the State, on the basis of audits conducted in accordance with the terms of this Contract, to not constitute proper compensation for goods delivered or services provided.

C.8. Deductions. The State reserves the right to deduct from amounts, which are or shall become due and payable to the Contractor under this or any contract between the Contractor and the State of Tennessee, any amounts that are or shall become due and payable to the State of Tennessee by the Contractor.

C.9. Prerequisite Documentation. The Contractor shall not invoice the State under this Contract until the State has received the following, properly completed documentation.

- a. The Contractor shall complete, sign, and present to the State an "Authorization Agreement for Automatic Deposit Form" provided by the State. By doing so, the Contractor acknowledges and agrees that, once this form is received by the State, all payments to the Contractor, under this or any other contract the Contractor has with the State of Tennessee, shall be made by automated clearing house.
- b. The Contractor shall complete, sign, and present to the State a "Substitute W-9 Form" provided by the State. The taxpayer identification number in the Substitute W-9 Form must be the same as the Contractor's Federal Employer Identification Number or Tennessee Edison Registration ID.

D. MANDATORY TERMS AND CONDITIONS:

D.1. Required Approvals. The State is not bound by this Contract until it is duly approved by the Parties and all appropriate State officials in accordance with applicable Tennessee laws and regulations. Depending upon the specifics of this Contract, this may include approvals by the Commissioner of Finance and Administration, the Commissioner of Human Resources, the Comptroller of the Treasury, and the Chief Procurement Officer. Approvals shall be evidenced by a signature or electronic approval.

D.2. Communications and Contacts. All instructions, notices, consents, demands, or other communications required or contemplated by this Contract shall be in writing and shall be made by certified, first class mail, return receipt requested and postage prepaid, by overnight courier service with an asset tracking system, or by email or facsimile transmission with recipient confirmation. All communications, regardless of method of transmission, shall be addressed to the respective Party at the appropriate mailing address, facsimile number, or email address as



stated below or any other address provided in writing by a Party.

The State:

Curtis Sutton, Executive Director
Tennessee Emergency Communications Board
500 James Robertson Parkway
Nashville, Tennessee 37243
Curtis.Sutton@tn.gov
Telephone: (615) 253-2164
FAX: (615) 401-7642

The Contractor:

Danny McGinnis, Senior Director, VOIP Programs and Data Management
2401 Elliot Ave., 2nd Floor
Seattle, Washington 98121
dmcginnis@telecomsys.com
Telephone: (206) 792-2672
Fax: (206) 792-2001

All instructions, notices, consents, demands, or other communications shall be considered effective upon receipt or recipient confirmation as may be required.

- D.3. Modification and Amendment. This Contract may be modified only by a written amendment signed by all Parties and approved by all applicable State officials.
- D.4. Subject to Funds Availability. The Contract is subject to the appropriation and availability of State or federal funds. In the event that the funds are not appropriated or are otherwise unavailable, the State reserves the right to terminate this Contract upon written notice to the Contractor. The State's exercise of its right to terminate this Contract shall not constitute a breach of Contract by the State. Upon receipt of the written notice, the Contractor shall cease all work associated with the Contract. If the State terminates this Contract due to lack of funds availability, the Contractor shall be entitled to compensation for all conforming goods requested and accepted by the State and for all satisfactory and authorized services completed as of the termination date. Should the State exercise its right to terminate this Contract due to unavailability of funds, the Contractor shall have no right to recover from the State any actual, general, special, incidental, consequential, or any other damages of any description or amount.
- D.5. Termination for Convenience. The State may terminate this Contract for convenience without cause and for any reason. The State shall give the Contractor at least thirty (30) days written notice before the termination date. The Contractor shall be entitled to compensation for all conforming goods delivered and accepted by the State or for satisfactory, authorized services completed as of the termination date. In no event shall the State be liable to the Contractor for compensation for any goods neither requested nor accepted by the State or for any services neither requested by the State nor satisfactorily performed by the Contractor. In no event shall the State's exercise of its right to terminate this Contract for convenience relieve the Contractor of any liability to the State for any damages or claims arising under this Contract.
- D.6. Termination for Cause. If the Contractor fails to properly perform its obligations under this Contract in a timely or proper manner, or if the Contractor materially violates any terms of this Contract ("Breach Condition"), the State shall have the right to immediately terminate the Contract and withhold payments in excess of compensation for completed services or provided goods. Notwithstanding the above, the Contractor shall not be relieved of liability to the State for damages sustained by virtue of any Breach Condition and the State may seek other remedies allowed at law or in equity for breach of this Contract.
- D.7. Assignment and Subcontracting. The Contractor shall not assign this Contract or enter into a subcontract for any of the goods or services provided under this Contract without the prior written



approval of the State. Notwithstanding any use of the approved subcontractors, the Contractor shall be the prime contractor and responsible for compliance with all terms and conditions of this Contract. The State reserves the right to request additional information or impose additional terms and conditions before approving an assignment of this Contract in whole or in part or the use of subcontractors in fulfilling the Contractor's obligations under this Contract.

- D.8. Conflicts of Interest. The Contractor warrants that no part of the Contractor's compensation shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Contractor in connection with any work contemplated or performed under this Contract.

The Contractor acknowledges, understands, and agrees that this Contract shall be null and void if the Contractor is, or within the past six (6) months has been, an employee of the State of Tennessee or if the Contractor is an entity in which a controlling interest is held by an individual who is, or within the past six (6) months has been, an employee of the State of Tennessee.

- D.9. Nondiscrimination. The Contractor hereby agrees, warrants, and assures that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of this Contract or in the employment practices of the Contractor on the grounds of handicap or disability, age, race, creed, color, religion, sex, national origin, or any other classification protected by federal or state law. The Contractor shall, upon request, show proof of nondiscrimination and shall post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.

- D.10. Prohibition of Illegal Immigrants. The requirements of Tenn. Code Ann. § 12-3-309 addressing the use of illegal immigrants in the performance of any contract to supply goods or services to the state of Tennessee, shall be a material provision of this Contract, a breach of which shall be grounds for monetary and other penalties, up to and including termination of this Contract.

- a. The Contractor agrees that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract. The Contractor shall reaffirm this attestation, in writing, by submitting to the State a completed and signed copy of the document at Attachment A, semi-annually during the Term. If the Contractor is a party to more than one contract with the State, the Contractor may submit one attestation that applies to all contracts with the State. All Contractor attestations shall be maintained by the Contractor and made available to State officials upon request.
- b. Prior to the use of any subcontractor in the performance of this Contract, and semi-annually thereafter, during the Term, the Contractor shall obtain and retain a current, written attestation that the subcontractor shall not knowingly utilize the services of an illegal immigrant to perform work under this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant to perform work under this Contract. Attestations obtained from subcontractors shall be maintained by the Contractor and made available to State officials upon request.
- c. The Contractor shall maintain records for all personnel used in the performance of this Contract. Contractor's records shall be subject to review and random inspection at any reasonable time upon reasonable notice by the State.
- d. The Contractor understands and agrees that failure to comply with this section will be subject to the sanctions of Tenn. Code Ann. § 12-3-309 for acts or omissions occurring after its effective date.
- e. For purposes of this Contract, "illegal immigrant" shall be defined as any person who is not: (i) a United States citizen; (ii) a Lawful Permanent Resident; (iii) a person whose physical presence in the United States is authorized; (iv) allowed by the federal



Department of Homeland Security and who, under federal immigration laws or regulations, is authorized to be employed in the U.S.; or (v) is otherwise authorized to provide services under the Contract.

- D.11. Records. The Contractor shall maintain documentation for all charges under this Contract. The books, records, and documents of the Contractor, for work performed or money received under this Contract, shall be maintained for a period of five (5) full years from the date of the final payment and shall be subject to audit at any reasonable time and upon reasonable notice by the State, the Comptroller of the Treasury, or their duly appointed representatives. The financial statements shall be prepared in accordance with generally accepted accounting principles.
- D.12. Monitoring. The Contractor's activities conducted and records maintained pursuant to this Contract shall be subject to monitoring and evaluation by the State, the Comptroller of the Treasury, or their duly appointed representatives.
- D.13. Progress Reports. The Contractor shall submit brief, periodic, progress reports to the State as requested.
- D.14. Strict Performance. Failure by any Party to this Contract to require, in any one or more cases, the strict performance of any of the terms, covenants, conditions, or provisions of this Contract shall not be construed as a waiver or relinquishment of any term, covenant, condition, or provision. No term or condition of this Contract shall be held to be waived, modified, or deleted except by a written amendment signed by the Parties.
- D.15. Independent Contractor. The Parties shall not act as employees, partners, joint venturers, or associates of one another. The Parties are independent contracting entities. Nothing in this Contract shall be construed to create an employer/employee relationship or to allow either Party to exercise control or direction over the manner or method by which the other transacts its business affairs or provides its usual services. The employees or agents of one Party are not employees or agents of the other Party.
- D.16. Patient Protection and Affordable Care Act. The Contractor agrees that it will be responsible for compliance with the Patient Protection and Affordable Care Act ("PPACA") with respect to itself and its employees, including any obligation to report health insurance coverage, provide health insurance coverage, or pay any financial assessment, tax, or penalty for not providing health insurance. The Contractor shall indemnify the State and hold it harmless for any costs to the State arising from Contractor's failure to fulfill its PPACA responsibilities for itself or its employees.
- D.17. Limitation of State's Liability. The State shall have no liability except as specifically provided in this Contract. In no event will the State be liable to the Contractor or any other party for any lost revenues, lost profits, loss of business, decrease in the value of any securities or cash position, time, money, goodwill, or any indirect, special, incidental, punitive, exemplary or consequential damages of any nature, whether based on warranty, contract, statute, regulation, tort (including but not limited to negligence), or any other legal theory that may arise under this Contract or otherwise. The State's total liability under this Contract (including any exhibits, schedules, amendments or other attachments to the Contract) or otherwise shall under no circumstances exceed the Maximum Liability. This limitation of liability is cumulative and not per incident.
- D.18. Limitation of Contractor's Liability. In accordance with Tenn. Code Ann. § 12-3-701, the Contractor's liability for all claims arising under this Contract shall be limited to an amount equal to two (2) times the Maximum Liability amount detailed in Section C.1. and as may be amended, PROVIDED THAT in no event shall this Section limit the liability of the Contractor for intentional torts, criminal acts, fraudulent conduct, or omissions that result in personal injuries or death.
- D.19. Hold Harmless. The Contractor agrees to indemnify and hold harmless the State of Tennessee as well as its officers, agents, and employees from and against any and all claims, liabilities, losses, and causes of action which may arise, accrue, or result to any person, firm, corporation, or other entity which may be injured or damaged as a result of acts, omissions, or negligence on



the part of the Contractor, its employees, or any person acting for or on its or their behalf relating to this Contract. The Contractor further agrees it shall be liable for the reasonable cost of attorneys for the State to enforce the terms of this Contract.

In the event of any suit or claim, the Parties shall give each other immediate notice and provide all necessary assistance to respond. The failure of the State to give notice shall only relieve the Contractor of its obligations under this Section to the extent that the Contractor can demonstrate actual prejudice arising from the failure to give notice. This Section shall not grant the Contractor, through its attorneys, the right to represent the State in any legal matter, as the right to represent the State is governed by Tenn. Code Ann. § 8-6-106.

- D.20. HIPAA Compliance. The State and Contractor shall comply with obligations under the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), Health Information Technology for Economic and Clinical Health ("HITECH") Act and any other relevant laws and regulations regarding privacy (collectively the "Privacy Rules"). The obligations set forth in this Section shall survive the termination of this Contract.
- a. Contractor warrants to the State that it is familiar with the requirements of the Privacy Rules, and will comply with all applicable requirements in the course of this Contract.
 - b. Contractor warrants that it will cooperate with the State, including cooperation and coordination with State privacy officials and other compliance officers required by the Privacy Rules, in the course of performance of the Contract so that both parties will be in compliance with the Privacy Rules.
 - c. The State and the Contractor will sign documents, including but not limited to business associate agreements, as required by the Privacy Rules and that are reasonably necessary to keep the State and Contractor in compliance with the Privacy Rules. This provision shall not apply if information received or delivered by the parties under this Contract is NOT "protected health information" as defined by the Privacy Rules, or if the Privacy Rules permit the parties to receive or deliver the information without entering into a business associate agreement or signing another document.
 - d. The Contractor will indemnify the State and hold it harmless for any violation by the Contractor or its subcontractors of the Privacy Rules. This includes the costs of responding to a breach of protected health information, the costs of responding to a government enforcement action related to the breach, and any fines, penalties, or damages paid by the State because of the violation.
- D.21. Tennessee Consolidated Retirement System. Subject to statutory exceptions contained in Tenn. Code Ann. §§ 8-36-801, *et seq.*, the law governing the Tennessee Consolidated Retirement System ("TCRS"), provides that if a retired member of TCRS, or of any superseded system administered by TCRS, or of any local retirement fund established under Tenn. Code Ann. §§ 8-35-101, *et seq.*, accepts State employment, the member's retirement allowance is suspended during the period of the employment. Accordingly and notwithstanding any provision of this Contract to the contrary, the Contractor agrees that if it is later determined that the true nature of the working relationship between the Contractor and the State under this Contract is that of "employee/employer" and not that of an independent contractor, the Contractor, if a retired member of TCRS, may be required to repay to TCRS the amount of retirement benefits the Contractor received from TCRS during the Term.
- D.22. Tennessee Department of Revenue Registration. The Contractor shall comply with all applicable registration requirements contained in Tenn. Code Ann. §§ 67-6-601 – 608. Compliance with applicable registration requirements is a material requirement of this Contract.
- D.23. Debarment and Suspension. The Contractor certifies, to the best of its knowledge and belief, that it, its current and future principals, its current and future subcontractors and their principals:



- a. are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal or state department or agency;
- b. have not within a three (3) year period preceding this Contract been convicted of, or had a civil judgment rendered against them from commission of fraud, or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or grant under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;
- c. are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses detailed in section b. of this certification; and
- d. have not within a three (3) year period preceding this Contract had one or more public transactions (federal, state, or local) terminated for cause or default.

The Contractor shall provide immediate written notice to the State if at any time it learns that there was an earlier failure to disclose information or that due to changed circumstances, its principals or the principals of its subcontractors are excluded or disqualified.

- D.24. Force Majeure. "Force Majeure Event" means fire, flood, earthquake, elements of nature or acts of God, wars, riots, civil disorders, rebellions or revolutions, acts of terrorism or any other similar cause beyond the reasonable control of the Party except to the extent that the non-performing Party is at fault in failing to prevent or causing the default or delay, and provided that the default or delay cannot reasonably be circumvented by the non-performing Party through the use of alternate sources, workarounds or other means. A strike, lockout or labor dispute shall not excuse either Party from its obligations under this Contract. Except as set forth in this Section, any failure or delay by a Party in the performance of its obligations under this Contract arising from a Force Majeure Event is not a default under this Contract or grounds for termination. The non-performing Party will be excused from performing those obligations directly affected by the Force Majeure Event, and only for as long as the Force Majeure Event continues, provided that the Party continues to use diligent, good faith efforts to resume performance without delay. The occurrence of a Force Majeure Event affecting Contractor's representatives, suppliers, subcontractors, customers or business apart from this Contract is not a Force Majeure Event under this Contract. Contractor will promptly notify the State of any delay caused by a Force Majeure Event (to be confirmed in a written notice to the State within one (1) day of the inception of the delay) that a Force Majeure Event has occurred, and will describe in reasonable detail the nature of the Force Majeure Event. If any Force Majeure Event results in a delay in Contractor's performance longer than forty-eight (48) hours, the State may, upon notice to Contractor: (a) cease payment of the fees until Contractor resumes performance of the affected obligations; or (b) immediately terminate this Contract or any purchase order, in whole or in part, without further payment except for fees then due and payable. Contractor will not increase its charges under this Contract or charge the State any fees other than those provided for in this Contract as the result of a Force Majeure Event.
- D.25. State and Federal Compliance. The Contractor shall comply with all applicable state and federal laws and regulations in the performance of this Contract.
- D.26. Governing Law. This Contract shall be governed by and construed in accordance with the laws of the State of Tennessee. The Tennessee Claims Commission or the state or federal courts in Tennessee shall be the venue for all claims, disputes, or disagreements arising under this Contract. The Contractor acknowledges and agrees that any rights, claims, or remedies against the State of Tennessee or its employees arising under this Contract shall be subject to and limited to those rights and remedies available under Tenn. Code Ann. §§ 9-8-101 - 407.
- D.27. Entire Agreement. This Contract is complete and contains the entire understanding between the Parties relating to its subject matter, including all the terms and conditions of the Parties'



agreement. This Contract supersedes any and all prior understandings, representations, negotiations, and agreements between the Parties, whether written or oral.

- D.28. Severability. If any terms and conditions of this Contract are held to be invalid or unenforceable as a matter of law, the other terms and conditions of this Contract shall not be affected and shall remain in full force and effect. The terms and conditions of this Contract are severable.
- D.29. Headings. Section headings of this Contract are for reference purposes only and shall not be construed as part of this Contract.
- D.30. Incorporation of Additional Documents. Each of the following documents is included as a part of this Contract by reference. In the event of a discrepancy or ambiguity regarding the Contractor's duties, responsibilities, and performance under this Contract, these items shall govern in order of precedence below:
 - a. any amendment to this Contract, with the latter in time controlling over any earlier amendments;
 - b. this Contract with any attachments or exhibits (excluding the items listed at subsections c. through f., below);
 - c. any clarifications of or addenda to the Contractor's proposal seeking this Contract;
 - d. the State solicitation, as may be amended, requesting responses in competition for this Contract;
 - e. any technical specifications provided to proposers during the procurement process to award this Contract; and,
 - f. the Contractor's response seeking this Contract.

E. SPECIAL TERMS AND CONDITIONS:

- E.1. Conflicting Terms and Conditions. Should any of these special terms and conditions conflict with any other terms and conditions of this Contract, the special terms and conditions shall be subordinate to the Contract's other terms and conditions.
- E.2. Confidentiality of Records. Strict standards of confidentiality of records and information shall be maintained in accordance with applicable state and federal law. All material and information, regardless of form, medium or method of communication, provided to the Contractor by the State or acquired by the Contractor on behalf of the State that is regarded as confidential under state or federal law shall be regarded as "Confidential Information." Nothing in this Section shall permit Contractor to disclose any Confidential Information, regardless of whether it has been disclosed or made available to the Contractor due to intentional or negligent actions or inactions of agents of the State or third parties. Confidential Information shall not be disclosed except as required or permitted under state or federal law. Contractor shall take all necessary steps to safeguard the confidentiality of such material or information in conformance with applicable state and federal law.

The obligations set forth in this Section shall survive the termination of this Contract.

- E.3. State Furnished Property. The Contractor shall be responsible for the correct use, maintenance, and protection of all articles of nonexpendable, tangible personal property furnished by the State for the Contractor's use under this Contract. Upon termination of this Contract, all property furnished by the State shall be returned to the State in the same condition as when received, less reasonable wear and tear. Should the property be destroyed, lost, or stolen, the Contractor shall be responsible to the State for the fair market value of the property at the time of loss.
- E.4. Prohibited Advertising or Marketing. The Contractor shall not suggest or imply in advertising or marketing materials that Contractor's goods or services are endorsed by the State. The restrictions on Contractor advertising or marketing materials under this Section shall survive the termination of this Contract.
- E.5. Lobbying. The Contractor certifies, to the best of its knowledge and belief, that:



- a. No federally appropriated funds have been paid or will be paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of an agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with any contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- c. The Contractor shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into and is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352.

- E.6. Contractor Commitment to Diversity. The Contractor shall comply with and make reasonable business efforts to exceed the commitment to diversity represented by the Contractor's Response to RFP # 33501-155001 (Attachment 6.2 – Section B) and resulting in this Contract.

The Contractor shall assist the State in monitoring the Contractor's performance of this commitment by providing, as requested, a quarterly report of participation in the performance of this Contract by small business enterprises and businesses owned by minorities, women, and Tennessee service-disabled veterans. Such reports shall be provided to the State of Tennessee Governor's Office of Diversity Business Enterprise in the required form and substance.

- E.7. Unencumbered Personnel. The Contractor shall not restrict its employees, agents, subcontractors or principals who perform services for the State under this Contract from performing the same or similar services for the State after the termination of this Contract, either as a State employee, an independent contractor, or an employee, agent, subcontractor or principal of another contractor with the State.

- E.8. Personally Identifiable Information. While performing its obligations under this Contract, Contractor may have access to Personally Identifiable Information held by the State ("PII"). For the purposes of this Contract, "PII" includes "Nonpublic Personal Information" as that term is defined in Title V of the Gramm-Leach-Bliley Act of 1999 or any successor federal statute, and the rules and regulations thereunder, all as may be amended or supplemented from time to time ("GLBA") and personally identifiable information and other data protected under any other applicable laws, rule or regulation of any jurisdiction relating to disclosure or use of personal information ("Privacy Laws"). Contractor agrees it shall not do or omit to do anything which would cause the State to be in breach of any Privacy Laws. Contractor shall, and shall cause its employees, agents and representatives to: (i) keep PII confidential and may use and disclose PII only as necessary to carry out those specific aspects of the purpose for which the PII was disclosed to Contractor and in accordance with this Contract, GLBA and Privacy Laws; and (ii) implement and maintain appropriate technical and organizational measures regarding information security to: (A) ensure the security and confidentiality of PII; (B) protect against any threats or hazards to the security or integrity of PII; and (C) prevent unauthorized access to or use of PII. Contractor shall immediately notify State: (1) of any disclosure or use of any PII by Contractor or any of its employees, agents and representatives in breach of this Contract; and (2) of any disclosure of any PII to Contractor or its employees, agents and representatives where the



purpose of such disclosure is not known to Contractor or its employees, agents and representatives. The State reserves the right to review Contractor's policies and procedures used to maintain the security and confidentiality of PII and Contractor shall, and cause its employees, agents and representatives to, comply with all reasonable requests or directions from the State to enable the State to verify and/or procure that Contractor is in full compliance with its obligations under this Contract in relation to PII. Upon termination or expiration of the Contract or at the State's direction at any time in its sole discretion, whichever is earlier, Contractor shall immediately return to the State any and all PII which it has received under this Contract and shall destroy all records of such PII.

The Contractor shall report to the State any instances of unauthorized access to or potential disclosure of PII in the custody or control of Contractor ("Unauthorized Disclosure") that come to the Contractor's attention. Any such report shall be made by the Contractor within twenty-four (24) hours after the Unauthorized Disclosure has come to the attention of the Contractor. Contractor shall take all necessary measures to halt any further Unauthorized Disclosures. The Contractor, at the sole discretion of the State, shall provide no cost credit monitoring services for individuals whose PII was affected by the Unauthorized Disclosure. The Contractor shall bear the cost of notification to all individuals affected by the Unauthorized Disclosure, including individual letters and public notice. The remedies set forth in this Section are not exclusive and are in addition to any claims or remedies available to this State under this Contract or otherwise available at law.

IN WITNESS WHEREOF,

TELECOMMUNICATION SYSTEMS, INC:

Richard A. Young 06/12/15
 CONTRACTOR SIGNATURE DATE
Richard A. Young Executive Vice President # C00
 PRINTED NAME AND TITLE OF CONTRACTOR SIGNATORY (above)

DEPARTMENT OF COMMERCE AND INSURANCE:

Julie Mix McPeak 6/30/15
 JULIE MIX MCPEAK, COMMISSIONER DATE



ATTACHMENT A

ATTESTATION RE PERSONNEL USED IN CONTRACT PERFORMANCE

SUBJECT CONTRACT NUMBER:	33501-155004
CONTRACTOR LEGAL ENTITY NAME:	Tele ^{SEC} communication Systems, Inc
FEDERAL EMPLOYER IDENTIFICATION NUMBER: (or Social Security Number)	[REDACTED]

The Contractor, identified above, does hereby attest, certify, warrant, and assure that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract.

Richard A. Young

CONTRACTOR SIGNATURE

NOTICE: This attestation MUST be signed by an individual empowered to contractually bind the Contractor. Attach evidence documenting the individual's authority to contractually bind the Contractor, unless the signatory is the Contractor's chief executive or president.

Richard A. Young Executive Vice President & COO

PRINTED NAME AND TITLE OF SIGNATORY

06/12/15

DATE OF ATTESTATION