



COMMONWEALTH OF MASSACHUSETTS STANDARD CONTRACT FORM AND INSTRUCTIONS

This form is jointly issued and published by the Executive Office for Administration and Finance (ANF), the Office of the Comptroller (CTR) and the Operational Services Division (OSD) for use by all Commonwealth Departments. Any changes to the official printed language of this form shall be void. This shall not prohibit the addition of non-conflicting Contract terms. By executing this Contract, the Contractor under the pains and penalties of perjury, makes all certifications required by law and certifies that it shall comply with the following requirements: that the Contractor is qualified and shall at all times remain qualified to perform this Contract; that performance shall be timely and meet or exceed industry standards, including obtaining requisite licenses, permits and resources for performance; that the Contractor and its subcontractors are not currently debarred; that the Contractor is responsible for reviewing the Standard Contract Form Instructions available at www.comm-pass.com/comm-pass/forms.asp; that the terms of this Contract shall survive its termination for the purpose of resolving any claim, dispute or other Contract action, or for effectuating any negotiated representations and warranties; and that the Contractor agrees that all terms governing performance of this Contract and doing business in Massachusetts are attached to this Contract or incorporated by reference herein, including the following requirements: all relevant Massachusetts state and federal laws, regulations, Executive Orders, treaties, requirements for access to Contractor records, the terms of the applicable Commonwealth Terms and Conditions; the terms of this Standard Contract Form and Instructions including the Contractor Certifications and Legal References, the Request for Response (RFR) or solicitation (if applicable), the Contractor's response to the RFR or solicitation (if applicable), and any additional negotiated provisions.

[THE CONTRACTOR MUST COMPLETE ONLY THOSE SECTIONS PRECEDED BY AN "→".]

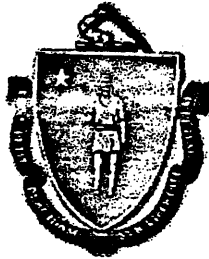
→ VENDOR CODE: VC6000156101	MMARS DOCUMENT ID: _____ CONTRACT ID: _____
→ CONTRACTOR NAME: Verizon New England, Inc.	DEPARTMENT NAME: Statewide Emergency Telecommunications Board
→ CONTRACT MANAGER: Paul Flaherty	CONTRACT MANAGER: Peter Ostroskey
→ PHONE: (617) 743-2412 → FAX: (617) 342-6662 → E-MAIL ADDRESS: www.paul.a.flaherty@verizon.com	PHONE: 781-944-9113 FAX: 781-944-4721 E-MAIL ADDRESS: www.state.ma.us/E911
→ BUSINESS MAILING ADDRESS: 185 Franklin Street, 16th Floor Boston, MA 02110	BUSINESS MAILING ADDRESS: PO Box 156 Reading, MA 01867
THE FOLLOWING COMMONWEALTH TERMS AND CONDITIONS FOR THIS CONTRACT HAS BEEN EXECUTED AND FILED WITH CTR: (Check only one) <input checked="" type="checkbox"/> COMMONWEALTH TERMS AND CONDITIONS <input type="checkbox"/> COMMONWEALTH TERMS AND CONDITIONS FOR HUMAN AND SOCIAL SERVICES	
COMPENSATION: (Check one option only) <input checked="" type="checkbox"/> Maximum Obligation of this Contract: \$ 80,000,000.00 <input type="checkbox"/> No Maximum Obligation has been set for this Contract: (Check one) <input type="checkbox"/> Rate Contract with a Rate of \$ _____ Per _____ <input type="checkbox"/> Rate Contract with Multiple/Negotiated Rates: (Attach listing of multiple rates or description of negotiation process)	PAYMENT TYPE: (Check one option only) <input checked="" type="checkbox"/> Payment Voucher (PV) <input type="checkbox"/> Ready Payment (RP) (Schedule: _____ Initial Base Amt. \$ _____) <input type="checkbox"/> Contractor Payroll (CP) (Required for Contract Employees) <input type="checkbox"/> Recurring Payment (Required for Leases and TELPs)
→ PAYMENT METHOD: The Contractor agrees to be paid by Electronic Funds Transfer (EFT is the Commonwealth's Preferred Payment Method): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
BRIEF DESCRIPTION OF CONTRACT PERFORMANCE: (Reference to attachments without a narrative description of performance is insufficient.) Contractor to equip, install, train, maintain, and monitor a statewide system that provides wire-line enhanced 9-1-1 capability to all Public Safety Answering Points (PSAP's) and training facilities in the Commonwealth up to \$80,000,000.00 at the quoted unit rates.	
PROCUREMENT OR EXCEPTION TYPE: (Check one option only) <input type="checkbox"/> Single Department Procurement/Single Department User Contract; <input checked="" type="checkbox"/> Single Department Procurement/Multiple Department User Contract; <input type="checkbox"/> Multiple Department Procurement/Limited Department User Contract; <input type="checkbox"/> Statewide Contract (Only for use by OSD or an OSD-designated Department); <input type="checkbox"/> Grant (as defined by 815 CMR 2.00); <input type="checkbox"/> Emergency Contract (attach justification); <input type="checkbox"/> Interim Contract (attach justification); <input type="checkbox"/> Contract Employee; <input type="checkbox"/> Collective Purchase (attach OSD approval) <input type="checkbox"/> Legislative/Legal Exemption (attach proof); <input type="checkbox"/> Other (Specify): _____	
RFR REFERENCE NUMBER: (or "N/A" if not applicable) EPS05-001	
ANTICIPATED CONTRACT EFFECTIVE START DATE: Performance shall begin on <u>October 1, 2004</u> , which shall be no earlier than the latest date this Contract is signed by authorized signatories of the Department and Contractor and approved under Section 1 of the applicable Commonwealth Terms and Conditions.	
TERMINATION DATE OF THIS CONTRACT: This Contract shall terminate on <u>June 30, 2007</u> unless terminated or amended by mutual written agreement by the parties prior to this date under Section 4 of the applicable Commonwealth Terms and Conditions.	
→ AUTHORIZING SIGNATURE FOR THE CONTRACTOR: → X: _____ (Signature of Contractor's Authorized Signatory) → DATE: <u>9/30/2004</u> (Date must be handwritten at time of signature) → NAME: _____ → TITLE: _____	AUTHORIZING SIGNATURE FOR THE DEPARTMENT: X: _____ (Signature of Department's Authorized Signatory) DATE: <u>9/30/04</u> (Date must be handwritten at time of signature) NAME: <u>Paul J. Fahey</u> TITLE: <u>Executive Director</u>

Contractors are responsible for reviewing the Standard Contract Form Instructions available at www.comm-pass.com/comm-pass/forms.asp.

PROPOSAL

TO

**The Commonwealth of Massachusetts
Office of Public Safety and Statewide
Emergency Telecommunications Board**



FOR

**Wire-Line Enhanced 9-1-1 Project
EPS 05-001**

Submitted by:



Paul Flaherty
Corporate Account Manager
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Boston, MA 02110
617-743-2412

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August 13, 2004

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**The Commonwealth of Massachusetts
Statewide Emergency Telecommunications Board
RFR for Wire-Line Enhanced 9-1-1 Project, EPS05-001
Technical Response**

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SECTION 1 – DESCRIPTION OR PURPOSE OF THIS PROCUREMENT

The Executive Office of Public Safety (EOPS) and the Statewide Emergency Telecommunications Board (SETB) seek to procure the services of a single contractor to equip, install, train, maintain, and monitor a statewide system that provides wire-line enhanced 9-1-1 capability to all primary and secondary Public Safety Answering Points (PSAPs) and training facilities throughout the Commonwealth.

Verizon Response:

Verizon complies. Verizon proposes a single vendor solution to supply the entire E 9-1-1 service, including the network, database, PSAP equipment and associated electrical work, and training. Except as otherwise agreed to herein, Service will be provided as per the Tariff.

SECTION 2 – ACQUISITION METHOD TO BE USED FOR THIS CONTRACT

"Fee for Service" will be the acquisition method for this contract.

Verizon Response:

Verizon agrees.

SECTION 3 – REQUEST FOR SINGLE OR MULTIPLE CONTRACTORS

The contract resulting from this procurement will be awarded to a single contractor. Contractors may be qualified businesses or individuals. Public employees should refer to the State Ethics Commission's Conflict of Interest Law, M.G.L. c. 268A, and their rules and regulations, and/or consult with the State Ethics Commission prior to submitting a response to this RFR.

Verizon Response:

Verizon agrees.

SECTION 4 – USE OF THIS PROCUREMENT BY SINGLE OR MULTIPLE DEPARTMENTS

This procurement is being conducted primarily for use by the SETB. Any other public safety agency or unit of government within the Commonwealth may procure from the contract resulting from this Request for Response (RFR) for the purposes of outfitting, in whole or in part, a secondary PSAP within its jurisdiction.

Verizon Response:

Verizon agrees.

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SECTION 5 – TOTAL ANTICIPATED DURATION OF CONTRACT AND RENEWAL OPTIONS

The initial duration of this contract will be thirty-three (33) months, beginning on October 1, 2004, with the option to extend the contract for two periods not to exceed one year each.

Verizon Response:

Verizon agrees.

SECTION 6 – TOTAL ANTICIPATED EXPENDITURES FOR DURATION OF THIS CONTRACT

This contract will have an estimated Total Maximum Obligation of \$80,000,000.00. This contract is a "Fee for Service" contract. Total costs will be itemized according to the Cost Table described in Section 7.1.8. This contract will not be funded with federal funds.

Periodic payments will be made upon satisfactory completion of the contract requirements according to the anticipated installation schedule agreed upon by the SETB and the successful contractor. This installation schedule may be modified at any time to accommodate unanticipated or extraordinary circumstances that may arise. The SETB will provide ongoing guidance to the successful contractor throughout the installation to ensure that any changes to the project timeline will be addressed to the mutual satisfaction of both the SETB and the contractor.

Verizon Response:

Verizon agrees.

SECTION 7 – CONTRACT AND PERFORMANCE SPECIFICATIONS

7.1 DETAILED SCOPE OF SERVICE

7.1.1 PROJECT OVERVIEW

The SETB administers the existing statewide 9-1-1 network and equipment for 264 primary PSAPs, and some related services and equipment for 9 full secondary PSAPs and 137 limited secondary PSAPs that serve the 351 communities of the Commonwealth of Massachusetts. There are also 3 wireless PSAPs funded by SETB and 3 full secondary PSAPs attached to the system that are privately funded. The municipalities hosting primary PSAPs and number of call taking positions and 9-1-1 trunks at each PSAP on the system are listed in Attachment A. This document describes the equipment and services necessary to provide wire-line enhanced 9-1-1 answering capability statewide. The number of PSAPs listed above or otherwise in this RFR reflects the system as configured at the time of issue but may vary at the discretion of the SETB. The SETB reserves the right to purchase goods and services provided in this contract for additional PSAP sites as approved during the contract period.

Verizon Response:

Verizon agrees.

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The SETB seeks to procure the services of a single contractor to equip, install, train, maintain, and monitor a statewide system that provides enhanced 9-1-1 capability to all primary Public Safety Answering Points (PSAPs) and training facilities throughout the Commonwealth. The successful bidder shall perform a full replacement of existing customer premises equipment (CPE), seamlessly integrating wire-line capability, wireless capability, data circuits, a mapping product and voice & automatic location information (ALI) data transfer capability to each primary PSAP and limited secondary location. Proposed solutions shall incorporate wireless 9-1-1 voice and data circuits and connect with and utilize mapping equipment provided at each primary PSAP location.

Verizon Response:

Verizon agrees.

The design submitted by bidders should include innovative configurations that can easily and seamlessly integrate newer technologies such as voice over internet protocol (VoIP).

Verizon Response:

Verizon will integrate VoIP industry standards into their service offering as they become available. There are currently no industry accepted standards available that provides the types of information the Commonwealth is used to seeing, such as Automatic Location Information (ALI), Automatic Number Identification (ANI), and Master Street Address Guide (MSAG).

All network equipment, trunking, installation, maintenance and performance reports shall meet the requirements set forth in Section 560 of the Code of Massachusetts Regulations (CMR), Standards for Enhanced 9-1-1. 560 CMR 2.00 is reproduced as a separate document of this RFR electronic posting on Comm-PASS. The requested systems must generally adhere to standards and specifications as established by the National Emergency Number Association (NENA) and referenced throughout this specification. All work and materials will comply with all applicable State and Federal laws, municipal ordinances, regulations and direction of inspectors appointed by proper authorities having jurisdiction. If code violations occur, the vendor will correct deficiencies or situations at no cost to the Commonwealth.

Verizon Response:

Verizon complies. Please see the service descriptions that follow in sections 7.1.2 through 7.1.5.

7.1.2 NETWORK SERVICES

Verizon Network Service Description:

Verizon is proposing the continued use of the existing 9-1-1 network infrastructure that is used today to support the SETB's 9-1-1 PSAPs. Since the first E 9-1-1 PSAP implementations in the Commonwealth of Massachusetts in

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1994, to present day, the architectural design and routing options deployed within the SETB's 9-1-1 network have proven time and again to be the finest in the nation.

The Verizon Network design begins with the use of four (4) Nortel DMS-100 switches providing 9-1-1 tandem functionality. These tandem switches are paired to provide geographic diversity for the 9-1-1 network. The east tandem pair switches are located in Wakefield and Medfield, MA. The west pair are located in Westboro and Northampton, MA. These tandem locations are also used to provide service for the SETB's Enhanced 9-1-1 Wireless Network.

There are dedicated 9-1-1 inter-office trunks from all Verizon stand-alone and host central offices to its designated tandem pair. Furthermore, there are PSAP trunks from each 9-1-1 tandem to each PSAP in its tandem pairing. These dedicated inter-office and PSAP trunks provide both diversity and complete redundancy. Signaling on the inter-office network is SS7 and provides the best call set-up times to the 9-1-1 tandems that are available in the industry today. The Verizon 9-1-1 tandems support both standard MF and Enhanced MF signaling on PSAP trunks.

In addition to the aforementioned network components, Verizon provides the following routing options for its network:

- Stand-alone or Host End-office to 9-1-1 Tandem Routing:
 - First Option – Primary Tandem via SS7 signaling
 - Second Option – Secondary Tandem via SS7 signaling
 - Third Option – TOPS via MF signaling
 - Fourth Option – to local 10 digit emergency number provided by SETB
- 9-1-1 Tandem to PSAP Routing:
 - Primary Tandem to PSAP
 - First Option – to Primary PSAP
 - Second Option – to Alternate PSAP
 - Third Option – hand-off to Secondary tandem
 - Secondary Tandem to PSAP
 - First Option – to Primary PSAP
 - Second Option – to Alternate PSAP
 - Third Option – to TOPS (VZ Operator)

In addition to delivering a 9-1-1 call to a Primary PSAP, the existing network provided by Verizon provides the ability to transfer 9-1-1 calls to Secondary Public Safety locations. Call transfers to Full and Limited Secondary PSAPs are

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done over a dedicated and secure network. This option significantly increases the success rate of transfer to these PSAP locations during periods of high network usage.

In summary the Verizon E 9-1-1 Network, as proposed, exceeds recommended industry standards and will continue to be the cornerstone of the most robust and reliable 9-1-1 network available in the nation.

This Enhanced 9-1-1 project requires a network that will interface with multiple voice and data communication providers and their systems.

Verizon Response:

Verizon understands and will comply. Verizon currently provides access to its network to common carrier Competitive Local Exchange Carriers (CLECs).

The network is required to selectively route voice and data for 9-1-1 calls to the appropriate Massachusetts PSAP identified by the SETB via a dedicated trunk network.

Verizon Response:

Verizon understands and will comply. Verizon currently provides this feature to the SETB and will continue to provide it if awarded the bid.

Selective routers must be redundant and fault tolerant.

Verizon Response:

Verizon understands and will comply. All Verizon DMS Selective Router Tandem Switches are redundant and fault tolerant.

Each PSAP shall be connected to two separate routers.

Verizon Response:

Verizon understands and will comply. All Massachusetts PSAPs currently have separate trunk groups, and they will continue to have them if Verizon is awarded the bid.

Provisions shall be made to deliver calls to a designated default PSAP when the incoming 9-1-1 call cannot be selectively routed due to an automatic number identification (ANI) failure, garbled digits, or other unanticipated cause.

Verizon Response:

Verizon understands and will comply.

Selective transfer capability shall be required to allow the transfer of voice and data through the network between PSAPs.

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Verizon Response:

Verizon understands and will comply. As a point of clarification there is a limit of six selective transfers per Emergency Service Number (ESN).

The selective routers shall be capable of rerouting calls from a PSAP site, trunk or trunk group to an identified alternate PSAP in the event of an "all trunk busy" or "out of service" condition.

Verizon Response:

Verizon understands and will comply. A standard feature component enjoyed by the Commonwealth's PSAPs is the ability to call forward calls to an alternate PSAP during "all trunks busy" and "out of service" conditions. As an additional feature Verizon forwards calls to an alternate PSAP based on "ring no answer" conditions. This feature provides added security that all 9-1-1 calls will be routed to and answered by a Public Safety location.

Responses must describe how the system will support VoIP or other protocols or technologies including selective routing for calls delivered using such technology.

Verizon Response:

Verizon is actively participating in 9-1-1 VoIP studies at ESIF, NENA and Telcordia. These committees are developing VoIP standards that will be recommended for 9-1-1 over VoIP. There are some innovative methods currently being trialed in the marketplace, but they follow no established standards. Verizon will connect VoIP calls to the 9-1-1 Network using recognized and proven standards. Verizon may participate in some industry trials if industry consensus warrants the test.

Verizon is currently supporting NENA Immediate-1. Verizon anticipates that, when the NENA Intermediate-2 standards are finalized, the interconnection will be similar to what is in place today for CLECs and other telecom providers.

Redundancy will be provided in each component of the Enhanced 9-1-1 System to ensure that the routing of 9-1-1 calls, automatic location information (ALI) and data shall be diversified as much as possible.

Verizon Response:

Verizon understands and will comply.

The successful bidder shall ensure that all network voice and data facilities shall be diversified as much as possible.

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Verizon Response:

Verizon has a very diversified network. Where geography and capacity permit, the routes for 9-1-1 voice and data will be diverse. The local loop is generally the only network element that is not diversified. Verizon can develop costing for local loop diversity for particular sites, if requested. Due to the design of the network, emergency calls can be routed to a back-up PSAP in the unlikely event of total local loop failure.

Proposals shall include administrative lines provided by the SETB as required in 560 CMR 2.00. This requirement is generally met through two 10 digit telephone lines using local public switched telephone circuits per site.

Verizon Response:

Verizon understands and will comply.

Additional lines may be installed as approved by the SETB. These lines must include "caller ID", "busy call forward" and "conference" features.

Verizon Response:

Verizon understands and will comply. Local Centrex Service provides these features under the Commonwealth's CNS contract.

All lines and trunks associated provided under this project shall be registered for Telecommunications Services Priority under the TSP program administered by the Department of Homeland Security National Communications System.

Verizon Response:

Verizon will register these services as directed by Department of Homeland Security. Please refer to Verizon's Service Agreement in Appendix D for the terms, conditions, and pricing.

All network equipment, trunking, installation, maintenance and performance reports shall meet the requirements set forth in Section 560 of the Code of Massachusetts Regulations (CMR) 2.00, Standards for Enhanced 9-1-1.

Verizon Response:

Verizon understands and will comply.

7.1.3 DATABASE SERVICES

Verizon Database Service Description:

Verizon offers a technologically advanced and industry leading database management offering which focuses on four key objectives:

- Performance and Availability
- Call Processing
- Redundancy
- Security

All of the database systems that support Massachusetts are in hardened data centers to ensure the utmost in security and availability. Our database systems are fully redundant and are available 24 x 7, 365 days per year with staff available to provide advanced surveillance and monitoring capabilities. Verizon considers our database system to be one of our highest level mission critical systems across our entire company and puts the necessary resources in place to ensure its accuracy and reliability. Verizon makes every effort to keep current with all the latest technologies and industry advances exemplified by 83 Million calls processed in 2003. Verizon provides for 24 x 7 access for our CLEC partners to update their customer TN information up to 10 times per day. Additionally, Verizon maintains some of the highest levels of corporate security requirements in the industry.

The complexity and importance of developing and maintaining an accurate E 9-1-1 database warrants critical attention. In Public Safety where "every second counts" in saving lives, the integrity and accuracy of the database is paramount and Verizon takes pride in the performance it has provided to Massachusetts.

Database Architecture:

The Verizon DBMS performs the overhead functions of creating, maintaining, and updating the ALISA database, the Master Street Address Guide (MSAG), Emergency Service Number (ESN) translations, and the 9-1-1 tandem selective routing database (SRDB) tables. The DBMS is used as the secure interface to the Verizon service order process and for all other telephone services providers for purposes of loading and managing records in the ALISA database.

Data Maintenance:

An E 9-1-1 database is only as good as the actual data contained within the physical architecture. Verizon has provided Data Maintenance to the SETB for more than 10 years. The ingredients to success are validation, purification, conversion and ongoing data maintenance.

Verizon personnel review the database for service order record fall-out and research and resolve all issues. They also work to resolve any ALI discrepancies received from PSAPs on a day to day basis. Many times this requires interaction with a municipality, a PSAP, or other telephone companies. The Verizon Data Maintenance group also provides important performance reports to the SETB.

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The Verizon E 9-1-1 Database Network and Support Teams have provided excellent service and extreme reliability to the SETB since 1994. Verizon is committed to working with Massachusetts to continue to improve the level of service, reliability and support to the SETB to ensure that Massachusetts has one of the most advanced E 9-1-1 solutions in the country.

The proposed database system must have the ability to be queried by the new CPE, and existing CPE in full secondary PSAP locations, and return automatic location identification (ALI) data information via diverse network facilities and monitored at all times.

Verizon Response:
Verizon complies.

The successful bidder shall be responsible for housing, installing, activating, operating, and maintaining the ALI database system proposed for the duration of the contract. Database services include prompt resolution of situations which may interfere with delivery of data to the PSAP. The ALI system shall support multiple re-bid capability (manual or automatic) from every PSAP on the system. ALI system support shall be available on a 24 hour / 7 day per week basis.

Verizon Response:
Verizon complies.

The service provider shall identify the carrier responsible for No Record Found or ALI discrepancy conditions; notify said carrier; electronically record the response from this carrier; verify correction; and provide SETB with regular reports on all activities related to this process. This does not require any enforcement or compliance action by the service provider for any violations of the applicable standards of the Commonwealth of Massachusetts, the FCC, or other regulatory bodies.

Verizon Response:
Verizon complies; however, it is important to note that these activities will only be performed for wire-line.

System should meet or exceed specification in NENA 06-001, "NENA Recommended Standards for Local Service Provider Interconnect Information Sharing". Vendor will be required to coordinate efforts with local exchange carriers, competitive local exchange carriers and other service providers to assist with network and interoperability issues should they arise.

Verizon Response:
NENA Standard 06-001: Requirement Met. Verizon meets the database requirements listed in this NENA standard for the display of COMPANY ID and the ability to distribute MSAG data to the Local Service Providers.

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Management of PBX accounts is handled in a similar manner, but PBX account requirements are somewhat different from CLECs. Verizon has standard methods and procedures for all Private Switch ALI customers for data entry and maintenance. In Massachusetts, PS-ALI is a tarified offering.

The database provider shall have the ability to process ALI records for carriers and voice service providers regardless of technology selected for data delivery to the Enhanced 9-1-1 system.

Verizon Response:

Verizon can provide Data Processing for Carriers/Voice Service providers, with exceptions. There is currently a single method of data delivery that can be used by other carriers and voice service providers to deliver their customer record updates to the Verizon E 9-1-1 system. Files must be delivered via dial-up "Secure-ID" card access using Kermit file transfer protocol. This process meets current Verizon IT Security standards.

Database system must support all NENA ALI interfaces as detailed in NENA document 02-010, "Standards for Recommended Formats & Protocols for Data Exchange", 04-001, "Generic Standards for E9-1-1 PSAP Equipment" and 05-001, "Implementation of the Wireless Emergency Service Protocol E2 Interface".

Verizon Response:

Compliance with NENA Standards: Exception with explanation.

Replies have been broken down into separate responses that address each standard cited.

1. NENA Standard 02-010, "Standards for Recommended Formats & Protocols for Data Exchange": Met with Exceptions.

Comments: The Verizon E 9-1-1 Database System supports modified versions of the NENA 2, 2.1, and 3.0 data format protocols listed in this standards document. These modifications have been documented under separate cover (Please refer to "Modified NENA 2 Format" document) as Appendix A.

PLEASE NOTE:

Verizon has submitted a request for pricing to the vendor for the database work required to split out all customer records and MSAG data for the Commonwealth of Massachusetts to a separate database area on the system and to convert the database structure and corresponding records to a "Pure" NENA 2 format. This request was submitted in case the Commonwealth of Massachusetts finds the "Modified NENA 2 format" response unacceptable.

2. NENA Standard 04-001, "Generic Standards for E9-1-1 PSAP Equipment":
Verizon complies.

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Services must include but not be limited to providing access for input, removal and/or update of records by carriers and voice service providers, updating of selective router databases, interface with and steering of ALI requests to external database systems, and acceptance of inquiries from multiple PSAPs using multiple CPE products or vendors. Responses must detail methods for telecommunications and/or voice service providers to deliver ALI records to the proposed database system, make updates, corrections and perform maintenance of ALI records in the system.

Verizon Response:

Verizon makes available on its Website all the methods and procedures required for adding, editing, or deleting ALI records for telecommunications and/or voice service providers, at the following URL:

<http://www22.verizon.com/wholesale/local/E911/1,21070,,00.html>

Bidder shall make readily available Master Street Address Guide (MSAG) data for verification purposes by telecommunications and/or voice service providers.

Verizon Response:

MSAG Data Requirement: Exception with explanation.

The mechanism provided to all carriers for verification of MSAG data is the Electronic Interface (PS/ALI) into the DBMS system. This interface provides each carrier that purchases the PS/ALI service with a "real-time" view of the MSAG. Verizon will provide one MSAG extract per month by state, containing data for all communities. Additional extracts are available for an additional recurring charge.

The system must be designed to remain available/in service with redundancy/fault tolerance features wherever possible.

Verizon Response:

Verizon complies.

The ALI system shall have the ability to identify carrier and contact information for any call where steering capability is interrupted or unavailable at the time of the query.

Verizon Response:

Verizon complies; however, please note that steering is only performed for wireless queries.

Responses must also provide detailed information about interface of private branch exchange (PBX) systems with the 9-1-1 system to provide station location information to the PSAP.

Verizon Response:

The Verizon PS/ALI service allows PBX subscribers, also known as Private Switch (PS) subscribers, to send their number when dialing 9-1-1, so their exact location and call-back number can be determined at the PSAP position. PS/ALI service provides the PS customer access to the Verizon E 9-1-1 ALI Database to update station information resulting from the normal churn of additions, deletions and moves. The specific location information, when uploaded to the Verizon E 9-1-1 ALI database, assists the PSAP call taker in a timely and accurate dispatch of appropriate emergency services equipment, especially in cases where PBX stations are in multiple buildings. The call-back number can be used to reach the calling party in the event the connection is lost. PS/ALI service allows the connection of dedicated trunks, if required, to the E 9-1-1 Tandem to signal the ANI.

The service has two distinct parts:

1. Entry/maintenance of the ALI database: This feature is centered on the establishment of TN (Telephone Number) ranges for each PS site, subsequent approval (rejection) or modification of those ranges, and finally, uploading of the individual TN records from the PS site. The uploading of the TN records is done through the use of a User ID and Password, which permits the designated PS/SA (System Administrator) to sign on and access the Verizon E 9-1-1 Database. The Verizon E 9-1-1 ALI database management system checks information uploaded for validity against the MSAG. Records that are valid according to the MSAG will be added to the ALI database, and will become available for lookup within 24 hours. Any discrepancies are placed in a separate "Error File" and returned to the customer. The SA is responsible for correcting all errors and making the TN record fit the MSAG criterion, so that it can become part of the ALI database.
2. Trunking and translations: The PS/ALI service will also include trunking and translations to allow transmission of the ANI (or the pseudo-ANI) to look up the ALI, as well as provide a dialable call back number for the PSAP to use if needed. The PBX must use DID trunking.

This portion of the service can be implemented using one of the following two configurations:

- (1) In all PSs that do not use ISDN-PRI, the PS would require an adjunct system. This supplemental CPE, normally located at the customer site, will take the 2, 3, 4 digit station number that has dialed 9-1-1 and translate it to a 10 digit dialable phone number that can be used as the ANI, sometimes called the pseudo-ANI.

In addition, the PS will require dedicated PS/ALI trunks from the PS to the E 9-1-1 Tandem switch. The PS/ALI trunks use Multifrequency CAMA signaling to carry the "pseudo-ANI" and provide the voice path. The pseudo-ANI is used to determine PSAP routing as well as perform the ALI lookup once the call is switched to the PSAP.

- (2) For PS systems that use ISDN-PRI with the Calling Line Identification (CLID) feature, the above equipment is not needed, as the real ANI is passed.

The ALI service shall provide reports as prescribed and detailed by the SETB. Such reports shall include, but not be limited to, reports on No Record Found, ALI system update failure by carrier, and number of queries made.

Verizon Response:

E 9-1-1 Reports: Exception with explanation.

If awarded this business, Verizon will continue to provide the reports the Commonwealth currently receives. Verizon will also provide timelines and pricing for additional reports upon receipt of detailed specifications from the Commonwealth.

The ALI database system shall allow for future feature enhancements such as location updates as they become available through the carriers or the CPE manufacturer.

Verizon Response:

Verizon understands and will comply with explanation. If additional feature enhancements are free upgrades to Verizon then such features will be made free of charge to the SETB otherwise Verizon will provide new pricing to SETB for their approval.

7.1.4 CUSTOMER PREMISES EQUIPMENT (CPE)

Verizon CPE Service Description:

Verizon is proposing a VESTA Pallas solution for the non-ACD sites and a VESTA M1 solution for the ACD sites listed on Attachment A in order to meet the requirements of this RFR. In addition, Verizon is proposing Plant Equipment, Inc.'s (PEI's) MagIC and MagIC Enterprise MIS products and PEI's AudioRegister Digital Logger. Verizon is also proposing an alternative product, Dictaphone's digital Freedom Recorder.

<u>EPS 05-001</u> <u>WIRELINE ENHANCED</u> <u>9-1-1 PROJECT</u> <u>COST TABLE</u> <u>Element</u>	<i>Lease Agreement</i>		<i>Purchase Agreement</i>	
	<i>Unit cost per month</i> (Note 10)	<i>Total</i>	<i>Unit cost</i>	<i>Total</i>
Selective Routing (Section 7.1.2) (Note 1)				
Set-up/activation		\$0.00		
Administration/operation		\$0.00		
Network (Section 7.1.2) (Note 2)				
<i>Primary/Full Secondary PSAP voice</i>				
Installation	\$0.00	\$0.00		
Recurring cost	\$94.03	\$188,767		
<i>Primary/Full Secondary PSAP data</i>				
Installation		\$0.00		
Recurring cost		\$22,199		
<i>10 digit voice lines</i>				
Installation	\$40.00	\$50,720		
Recurring cost	\$12.00	\$15,216		
Database (Section 7.1.3) (Note 3)				
Set-up/activation		\$191,986		
Administration/operation		\$262,338		
Customer Premises Equipment (Section 7.1.4) (Note 4)				
Automatic Call Distributor (ACD)	See leasing table		\$1,031,924	\$1 buy out
Back room equipment	See leasing table		\$18,207,397	\$1 buy out
Answering position equipment	See leasing table		\$11,952,716	\$1 buy out
Management Information System	See leasing table		\$6,615,734	\$1 buy out
Installation (including network cabling costs)	See leasing table		\$4,016,631	
Removal/disposal - old equipment	Included		Included	
Master Logging Recorder (Section 7.1.4.1.5) (Note 5)				
System hardware/software			(see attached for options)	\$1 buy out
Installation/activation			(see attached for options)	
Recurring costs	See leasing table			
Clock Synchronization (Section 7.1.4.1.6)				
Hardware	See leasing table		\$10,322	\$1 buy out
Installation/activation	See leasing table		\$771	

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	<i>Unit cost Per month</i>	<i>Total</i>	<i>Unit Cost Per month</i>	<i>Total</i>
Electrical (Section 7.1.4.1.7) (Note 6)				
Electrical distribution system	Included		Included	
Uninterruptible Power Supply (UPS)	Included		Included	
Installation/activation	See leasing table		Included	
Maintenance/recurring cost	See leasing table		\$8,421,273	
			\$374,579	
Limited Secondary PSAP (Section 7.1.4.2) (Note 7)				
Data circuit installation		\$0.00		\$312,835.00
Data circuit recurring cost		\$0.00		
Voice circuit installation		\$0.00		
Voice circuit recurring cost		\$0.00		
On-site equipment		\$0.00		
Maintenance & Monitoring (Section 7.1.5) (Note 8)				
Set-up/activation		\$27,187		
Administration/operation including preventive and software maintenance		\$372,143		
Relocation services		(See Note 8)		
Training (Section 7.1.6) (Note 9)				
Curriculum development/training materials	Included		Included	
Training equipment	See leasing table		\$1,407,365	
Operations training			See training schedule	
Train the trainer			See training schedule	