 The Commonwealth of Massachusetts

Executive Office of Public Safety and Security

State 911 Department

151 Campanelli Drive, Suite A

Middleborough, MA 02346



# OPERATION AND MAINTAINENCE OF THE NEXT GENERATION 911 SYSTEM

REQUEST FOR RESPONSE

State 911Department 23-001

**COMMBUYS BID #: BD-23-1044-EPS90-1044E-84666**

Issued: February 17, 2023

Amended: April 24, 2023

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**Summary of Bid Amendments**

Please note changes made under the bid amendment dated 4/24/23 are noted in red throughout this document.  A summary of the changes is noted below.

Footer was updated to include RFR number.

Deadline for questions extended through May 3, 2023.

Answers posted by May 10th.

Bid Amendment deadline extended to May 12th.

4.3.6.4 Language in the RFR has been updated/clarified.

4.3.7.4 The following language has been deleted. “Preferred to have all the possible locations of a caller displayed simultaneously, i.e., if we have non-carrier location information it should be displayed along with the carrier's location.”

4.3.7.4 Language in RFR has been updated/clarified.

4.3.7.10 has been modified in part as noted below:

~~At the request of the State 911 Department, the contractor shall provide, equip, install, and maintain new digital logging recorders that are fully i3 compliant.~~The current vendor is replacing all DLRs in 2023.

4.4.3 ITIL corrected to read “The bidder shall submit a formal process for change management.”

4.3.14.6 Language in RFR has been updated/clarified.

Error in numbering of Appendices has been corrected.

Please Note: This is a single document associated with a complete Bid (also referred to as Solicitation) that may be found on [COMMBUYS](http://www.commbuys.com/) (www.COMMBUYS.com). Bidders are responsible for reviewing and adhering to all information, forms, and requirements for the entire Bid, which are incorporated into the Bid. Bidders also may contact the OSD Help Desk at OSDHelpDesk@mass.gov or by phone at 1-888-MA-STATE (627-8283). The OSD Help Desk is staffed from 8:00 p.m. to 5:00 p.m. Monday through Friday, Eastern Time, except during federal, state, and Suffolk county holidays.

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# 1. Definitions and Acronyms

## 1.1 Definitions

911 Service Provider means any entity that provides one or more of the following 911 elements: network, functional elements (FE), database or PSAP customer premises equipment.

911 Service means a service consisting of communication network, database and equipment features provided for subscribers or end users of communication services enabling such subscribers or end users to reach a PSAP by dialing the digits 911, or by other means approved by the Department, that directs calls to appropriate PSAPs based on selective routing and provides the capability for automatic number identification and automatic location identification. Massachusetts has replaced its legacy Enhanced 911 (E911) Services based system with a Next Generation 911 System (NG911).

Abandoned Call means a call placed to 911 in which the caller disconnects before the call can be answered by the PSAP.

Aggregation Point means a hardware device, software program or application that collects data or information from one or more end points.

Alternate Route means the capability of routing 911 payload to a designated alternate PSAP(s) when predetermined conditions inhibiting the processing of payload are occurring at the PSAP of Jurisdiction.

Americans with Disabilities Act or ADA means the Americans with Disabilities Act of 1990.

Automatic Location Identification (ALI) means an 911 service capability that allows for the automatic display of information relating to the geographical location of the communication device used to place a 911 call.

Automatic Number Identification (ANI) means an 911 service capability that allows for the automatic display of a telephone number used to place or route a 911 call.

Behavioral Health Crisis means any situation in which a person’s behavior puts them at risk of hurting themselves or others and/or prevents them from being able to care for themselves or function effectively in the community.

Call Back means the action of a PSAP to attempt to initiate contact with a subscriber or end user by any means appropriate for rapid 2‐way communications including but not limited to voice calls or text messages.

Certified Emergency Medical Dispatch Resource (CEMDR) means a limited secondary PSAP, primary PSAP, regional PSAP, regional secondary PSAP, secondary PSAP, RECC, wireless state police PSAP, or private safety department that is equipped to provide ANI and ALI displays and that is approved by the Department to provide emergency medical dispatch services for a PSAP or RECC through emergency medical dispatchers.

Civic Address means the location assigned by the Municipal Addressing Authority in accordance with NENA Next Generation 911- (NG911) United States Civic Location Data Exchange Format (CLDXF) Standard NENA-STA-004.1.1-2014, March 23, 2014.

Commission means the State 911 Commission.

Communication Services means and includes any of the following: (a) the transmission, conveyance or routing of real-time, two-way voice communications to a point or between or among points by or through any electronic, radio, satellite, cable, optical, microwave, wireline, wireless or other medium or method, regardless of the protocol used; (b) the ability to provide two-way voice communication on the public switched network; (c) wireless 911 service; (d) wireline 911 service; (e) interconnected VoIP provider service as defined by the regulations of the FCC regulations; (f) IP -enabled service; or (g) prepaid wireless service.

Communication Service Provider (CSP) means an entity that provides communication services to a subscriber or end user.

Computer Aided Dispatch (CAD) means a computer-based system, which aids PSAP telecommunicators by automating selected dispatching and record keeping activities.

Department means the State 911 Department.

Device means a mechanical or electronic device with the capability to initiate a 911 call/payload.

Director means the Executive Director of the State 911 Department.

Dispatchable Location Information means the location delivered to the PSAP with a 911 call that consists of the validated Location Database (LDB) street address of the calling party, plus additional location information such as: building name or number (if more than one building shares the same street address), floor number (if more than one floor), suite name or number, apartment name or number, and room name or number or similar location information necessary to adequately identify the location of the calling device. ERL Identifiers and Unit Identifiers are forms of dispatchable location information. For devices located in sleeping and/or living quarters, dispatchable location information shall include a room name or number.

Dispatchable Location Discrepancy means the form/process used by telecommunicators to report insufficient, erroneous, or lack of dispatchable location information.

Emergency Call Routing Function or ECRF means a functional element in NGCS (Next Generation Core Services) which is a LoST protocol server where location information (either civic address or geo-coordinates) and a Service URN serve as input to a mapping function that returns a URI used to route an emergency call toward the appropriate PSAP for the caller’s location or towards a responder agency.

Emergency Medical Dispatch: means the management of requests for emergency medical assistance by utilizing a system of: (a) tiered response or priority dispatching of emergency medical resources based on the level of medical assistance needed by the victim; and (b) pre-arrival first aid or other medical instructions given by trained personnel responsible for receiving911 calls and directly dispatching emergency response services.

Emergency Response Location or ERL means a location, associated with one or more ANIs, established to provide a specific destination and search area for first responders.

Emergency Response Location or ERL identifier means an additional location identification that provides specific location identification within a building, structure, complex, or campus such as a floor name or number, wing name or number, building name or number, unit name or number, room name or number, or office or cubicle name or number.

Emergency Service Number means a 3 to 5 digit number that represents one or more Emergency Service Zones (ESZs). An ESN is defined as one of two types: Administrative ESN and Routing ESN. ESNs and the MSAG are no longer used in Massachusetts.

Emergency Service Zone (ESZ) means a geographical area that represents a unique combination of Service Boundaries for emergency service agencies (e.g., Law Enforcement, Fire and Emergency Medical Service) that is within a specified 911 governing authority’s jurisdiction as determined by the Department.

Emergency Subscriber Lookup means an action performed by Communication Service Providers, when requested by a PSAP during exigent circumstances, where the subscriber’s contact, billing, or other information is provided to the PSAP.

End User means a person who uses communication services.

ESInet means a managed IP network that is used for emergency services communications, and which can be shared by all public safety agencies. It provides the IP transport infrastructure upon which independent application platforms and core services can be deployed, including, but not restricted to, those necessary for providing NG9‑1‑1 services. The term ESInet designates the network, not the services that ride on the network

Exigent Circumstances means circumstances that would cause a reasonable person to believe that an immediate action is necessary to ensure public safety.

FCC means the Federal Communications Commission.

FCC Order means all orders issued by the FCC under the proceeding entitled “Revision of the Commission’s Rules to Ensure Compatibility with 911 Emergency Calling Systems” (CC Docket No. 94-102; RM 8143), or any successor proceeding, including all other criteria established therein, regarding the delivery of wireless 911 service by a wireless carrier, and all orders issued by the FCC under the proceeding entitled “In the Matter of IP-Enabled Services; 911 Requirements for IP-Enabled Service Providers”(WC Docket No 05-196), or any successor proceeding, including all other criteria established therein, regarding the delivery of 911 service by an IP-enabled service provider.

Final Route means the final route is received at the PSAP of last resort where payload will ring until answered or terminated by the CSP.

Fixed Device means devices (e.g. wired telephones/desktop computers) that cannot be readily moved from one location to another by the user.

Functional Elements (FE) means a set of software features that may be combined with hardware interfaces and operations on those interfaces to accomplish a defined task.

i3 means the Next Generation 911 (NG911) system architecture defined by NENA, which standardizes the structure and design of Functional Elements making up the set of software services, databases, network elements and interfaces needed to process multi-media emergency calls and data for NG911.

Incumbent Local Exchange Carrier (ILEC) means any local exchange carrier that was as of February 8, 1996, deemed to be a member of the Exchange Carrier Association as set forth in 47 C.F.R. §69.601(b) of the FCC's regulations.

Interconnected VoIP service means voice over the internet protocol services as defined by the FCC in 47 CFR 9.3.

IP-enabled service means a service, device or application which makes use of Internet Protocol, or IP, and capable of entering the digits 911, or by other means as approved by the Department, for the purposes of interconnecting users to the 911 system including, but not limited to, voice over IP and other services, devices, or applications provided through or using wireline, cable, wireless, or satellite facilities or any other facility that may be provided in the future.

Interoperability means the capability for disparate systems to communicate with one another.

Internet Protocol (IP) means the method by which data is sent from one computer to another on the Internet or other networks.

Limited secondary PSAP means a PSAP equipped, at a minimum, with automatic number identification and automatic location identification display or printout capability. It receives 911 calls only if transferred from the primary PSAP. Data sent to a limited secondary PSAP cannot be re-routed to another location and may not necessarily be transmitted simultaneously with the voice call.

Location Information Server (LIS) means a functional element that provides locations of endpoints. A LIS can provide Location-by-Reference, or Location-by-Value, and, if the latter, in geodetic or civic forms. A LIS can be queried by an endpoint for its own location, or by another entity for the location of an endpoint. In either case, the LIS receives a unique identifier that represents the endpoint, for example an IP address, circuit-ID, or Media Access Control (MAC) address, and returns the location (value or reference) associated with that identifier. The LIS is also the entity that provides the dereferencing service, exchanging a location reference for a location value.

Local Exchange Service means telephone exchange lines or channels that provide local access from the premises of a subscriber in the Commonwealth to the local telecommunications network to effect the transfer of information.

Location Database (LDB) means a server that retains all the current information, functionality, and interfaces of today’s ALI and can utilize the new protocols required in an NG911 deployment.

Location Validation Function (LVF) means a functional element in a Next Generation Core Services (NGCS) that is a Location to Service Translation (LoST) protocol server where civic location information is pre-validated against the authoritative Geographic Information Services (GIS) database information.

LoST Protocol means a protocol that takes location information and a Service URN and returns a URI. Used generally for location-based call routing. In NG911, used as the protocol for the ECRF and LVF.

Mass GIS means the Massachusetts Bureau of Geographic Information

Master Address Database (MAD) means a database that is used for compiling, standardizing, editing and maintaining addresses for the Next Generation 911 system project. Master Address Database is the definitive address source for 911’s LDB, LIS, or equivalent. Massachusetts has replaced the Master Street Address Guide (MSAG) with the MAD and the LDB.

Master Street Address Guide (MSAG) means a database of street names and house number ranges within their associated communities defining ESZs and their associated ESNs to enable proper routing of 911 calls. ESNs and the MSAG are no longer used in Massachusetts.

Multi-line Telephone System (MLTS) means a system comprised of common control units, telephone sets, control hardware and software and adjunct systems, including network and premises based systems, such as Centrex and VoIP, as well as PBX, Hybrid, and Key Telephone Systems (as classified by the FCC under 47 CFR Part 68), and the full range of networked communications systems that serve enterprises, including circuit-switched and IP-based enterprise systems, as well as cloud-based IP technology and over-the-top applications. Systems owned or leased by governmental agencies and nonprofit entities, as well as for-profit businesses are all included in Multi-line Telephone System.

Municipal Addressing Authority means the required municipal official, body, or delegate that is responsible for addressing within the municipality.

NENA means the National Emergency Number Association.

Network components means any software or hardware for a control switch, other switch modification, trunking or any components of a computer storage system or database used for selective routing of 911 calls, automatic number identification and automatic location identification, including a PSAP.

Next Generation 911 (NG911) means an 911 system that incorporates the handling of all 911 calls and messages, including those using IP-enabled services or other advanced communications technologies in the infrastructure of the 911 system itself.

Non-Fixed Devices means devices (e.g. tablets/laptops/apps on smartphones) that can be readily moved from one location to another by the user. The device does not necessarily need to be unplugged to maintain a connection.

On-premises means within the property’s physical boundaries any devices connected to the network or system and under the operational control of a single administrative authority. If a MLTS services multiple properties all are considered on-premise.

Payload means communication capable of being received by a PSAP via the 911 system.

Prepaid Wireless Telephone Service means wireless service that is activated in advance by payment for a finite dollar amount of service or minutes that terminates either upon use by a customer and delivery by the wireless provider of an agreed-upon amount of service or minutes, unless the customer makes additional payments.

Prepaid Wireless Telephone Service Provider means an entity providing prepaid wireless telephone service at retail or wholesale.

Presence Information Data Format – Location Object (PIDF-LO) means a format that provides a flexible and versatile means to represent location information in a (Session Initiation Protocol (SIP) header using an eXtensible Markup Language (XML) schema.

Primary PSAP means a PSAP equipped with automatic number identification and automatic location identification displays and is the first point of reception of a 911 call. It serves the municipality in which it is located.

Private Branch Exchange (PBX) means a private telephone switch that is connected to the Public Switched Telephone Network.

Private Safety Department means an entity, except for a municipality or a public safety department, that provides emergency police, fire, ambulance or medical services.

Public Safety Answering Point (PSAP) means a facility assigned the responsibility of receiving911 calls and, as appropriate, directly dispatching emergency response services or transferring or relaying emergency 911 calls to other public or private safety agencies or other PSAPs.

PSAP Administration means the activities associated with managing a PSAP, such as personnel matters, the 911 grant process, scheduling work shifts, and training,

PSAP Administrator means a person or persons designated by a municipality (or in the case of a Regional PSAP or RECC, by two or more municipalities or governmental bodies or a combination thereof) to have the authority to function as the primary contact for communication between the PSAP and the Department concerning matters of PSAP Administration (as defined herein).

PSAP Customer Premises Equipment (CPE) means 911 call processing equipment located at a PSAP.

PSAP of Jurisdiction means the Primary, Regional PSAP, or RECC where calls originating from a particular Emergency Service Zone (or combination of ESZs) are routed to.

PSAP Operations means the activities associated with telecommunicators at a PSAP answering and handling911 payload and dispatching public safety resources, if required, per the circumstances relative to the 911 call.

PSAP Supervisor means a person or persons designated by a municipality (or in the case of a Regional PSAP or RECC - by two or more municipalities or governmental bodies or a combination thereof) to have the authority to function as the primary contact for communication between the PSAP and the Department concerning matter of PSAP Operations.

Public Safety Department means a functional division of a municipality or a state that provides firefighting, law enforcement, ambulance, medical or other emergency services.

Regional Emergency Communication Center (RECC) means a facility operated by or on behalf of 2 or more municipalities or governmental bodies, or combination thereof, as approved by the department, that enter into an agreement for the establishment and provision of regional dispatch and coordination of emergency services for all such municipalities or governmental bodies including, but not limited to, a regional PSAP that provides 911 service and police, fire protection, and emergency medical services dispatch, including services provided by a private safety department. The regional PSAP portion of the center shall be equipped with automatic number identification and automatic location identification displays, as approved by the department, and is the first point of reception of a 911 call.

Regional PSAP means a PSAP operated by or on behalf of 2 or more municipalities or governmental bodies, or combination thereof, approved by the department, for the operation of 911 call taking and call transfer activities. A regional PSAP may also be engaged in, by agreement, the dispatching or control of public safety resources serving some or all of the municipalities or governmental bodies that comprise the regional PSAP, including where services are provided by a private safety department. If the regional PSAP serves all such municipalities or governmental bodies for the operation of 911 call taking and call transfer activities and dispatch services including where dispatch services are provided by a private safety department, it shall be considered a regional emergency communication center for the purposes of MGL, c. 6A § 18B. The regional PSAP shall be equipped with automatic number identification and automatic location identification displays, as approved by the department, and is the first point of reception of a 911 call.

Regional Secondary PSAP means a facility operated by or on behalf of 3 or more municipalities or governmental bodies, or a combination thereof, approved by the department, that enter into an agreement for the establishment and provision of regional dispatch and coordination of either police, fire protection or emergency medical services, or any combination thereof. A regional secondary PSAP is equipped with automatic number identification and automatic location identification displays. It receives 911 calls only when transferred from a primary or regional PSAP or on an alternative routing basis when calls cannot be completed to the primary or regional PSAP.

Retail means sales by a prepaid wireless telephone service provider directly to the end user or to a non-prepaid wireless telephone service provider through a voluntary contractual relationship in which the service is sold directly to the end user on behalf of the prepaid wireless telephone service provider.

Ringing PSAP means a PSAP equipped for receipt of voice communications only and may not operate 24 hours each day. It receives 911 calls that are transferred from the primary PSAP.

Secondary PSAP means a PSAP equipped with automatic number identification and automatic location identification displays. It receives 911 calls only when they are transferred from the primary PSAP or on an alternative routing basis when calls cannot be completed to the primary PSAP.

Selective Routing means the method to direct 911 calls to the appropriate PSAP using a call routing database derived from the geographical location from which the call originated.

Service Boundary means a geographic area represented by a polygon in a GIS system, spatial interface, Emergency Call Routing Function (ECRF) or other Emergency Services IP Network (ESInet) element that indicates the area a particular agency serves.

Service URN means a URN with “service” as the first component supplied as an input in a LoST request to an ECRF to indicate which service boundaries to consider when determining a response. A Request URI with the service URN of “urn:service:sos” is used to mark a call as an emergency call.

Subscriber means a person who uses communication services.

Telecommunicator means an emergency response coordination professional trained to receive, answer, assess, and prioritize emergency payload(s) requests for assistance.

Telephone Company means a person, firm, corporation, association or joint stock association or company, as defined in chapter 159, furnishing or rendering local telephone exchange service.

Trunk means, typically, a communication path between central office switches, or between the 911 Control Office and the PSAP.

TDD/TT/TTY means a telecommunications device consisting of modems that permit typed telephone conversations with or between deaf, hard of hearing or speech impaired people.

Uniform Resource Identifier (URI) means a compact sequence of characters that identifies an abstract or physical resource. This specification defines the generic URI syntax and a process for resolving URI references that might be in relative form, along with guidelines and security considerations for the use of URIs on the Internet. The URI syntax defines a grammar that is a superset of all valid URIs, allowing an implementation to parse the common components of a URI reference without knowing the scheme-specific requirements of every possible identifier. This specification does not define a generative grammar for URIs; that task is performed by the individual specifications of each URI scheme. A Location URI (Uniform Resource Identifier) is a URI which, when dereferenced, yields a location value in the form of a PIDF-LO. Location-by-reference in NG9‑1‑1 is represented by a Location URI

Voice over Internet Protocol (VoIP) means a type of IP-enabled service that allows for the two-way real time transmission of voice communications and has access to the public switched network.

Wholesale means sales by the prepaid wireless telephone service provider to a non-prepaid wireless telephone service provider that sells service on behalf of the prepaid wireless telephone service provider.

Wireless Carrier means a commercial mobile radio service, as defined in 47 U S C 332(d), including resellers and prepaid providers of wireless services.

Wireless 911 service means the service required to be provided by wireless carriers under, and governed by, FCC order.

Wireless State Police PSAP means a state police facility assigned the responsibility of primarily or entirely receiving wireless 911 calls and, as appropriate, directly dispatching emergency response services or transferring or relaying emergency 911 calls to other public or private safety departments or other PSAPs.

Wireline Carrier means an incumbent local exchange carrier or local exchange carrier operating in the commonwealth, or a telephone company, or any other person, corporation or entity that provides local exchange service.

Wireline 911 Service means service provided by a wireline carrier that connects a subscriber dialing or entering the digits 911 to a PSAP.

## 1.2 Acronyms

The acronyms used in this RFR shall have the meaning set forth in the following table, unless the context requires otherwise.

| Descriptor/Acronym | Meaning |
| --- | --- |
| ANSI | American National Standards Institute |
| ATIS | Alliance for Telecommunications Industry Solutions |
| ATIS/ESIF | Alliance for Telecommunications Industry Solution/ Emergency Services Interconnection Forum |
| CAD | Computer Aided Dispatch |
| DDOS | Distributed Denial of Service |
| EIA | Electronics Industries Alliance |
| ESIF | Emergency Services Interconnection Forum |
| FCC | Federal Communications Commission |
| GML | Geographic Markup Language |
| ISP | Internet Service Provider |
| ITIL | Information Technology Infrastructure Library |
| LAN | Local Area Network  |
| LIF | Location Interwork Function |
| LIS | Location Information Server |
| LoST | Location to Service Translation  |
| MAC | Move, Add, Change Request |
| MPLS | Multi-Protocol Label Switching |
| MAGIS, MassGIS | MassGIS (Bureau of Geographic Information) |
| MRC | Monthly Recurring Cost |
| NEMA | National Electrical Manufacturers Association |
| NENA | National Emergency Number Association |
| OGC | Open Geospatial Consortium |
| PMO | Project Management Organization |
| QoS | Quality of Service |
| SDO | Standards Development Organization |
| SIO | Service Information Octet |
| SIP | Session Initiation Protocol |
| SNMP | Simple Network Management Protocol |
| TIA | Telecommunications Industry Association |
| VPN | Virtual Private Network |
| WAN | Wide Area Network |

# 2. RFR Introduction and General Description

## 2.1 Procurement Scope and Description

The State 911 Department (Department) is responsible for coordinating, administering, and implementing 911 services and the Next Generation 911 systems throughout the Commonwealth of Massachusetts to ensure a consistent statewide approach for 911 services. The Department seeks to contract with a qualified contractor or contractors to operate its Next Generation 911 system in Massachusetts. The State 911 Department seeks to procure the services of such contractor or contractors to maintain, monitor, and operate the existing Next Generation 911 system as described in this request for response (RFR), integrate new features as requested by the Department and/or per the procurement calendar listed in this RFR, and support the Next Generation 911 system throughout the Commonwealth in a turnkey fashion throughout the term of the contract.

The Commonwealth of Massachusetts, through the State 911 Department, invites vendors of Next Generation 911 services, appliances, products, and software to respond to this RFR.

The Commonwealth does not seek to procure GIS data through this RFR. Bidders shall not bid on the provision of GIS data, and cost proposals shall NOT include pricing for the provision of GIS data.

## 2.2 Background Information

In 2014, the Department contracted for an i3 compliant Next Generation 911 system. The transition to an i3 compliant Next Generation 911 was completed in December 2017. Since that time, the Department has contracted for the maintenance, monitor, and operation of this Next Generation 911 system. This contract for Next Generation 911 Products and Services expires on August 3, 2024. The Department seeks to execute a successor contract prior to August 3, 2024 so as to ensure no disruption in 911 service throughout the Commonwealth.

## 2.3 Applicable Procurement Law

This bid is issued under the following law(s):

MGL c. 7, § 22; c. 30, § 51, § 52; and 801 CMR 21.00 (Goods and Services)

## 2.4 Number of Awards

The Department prefers the award of one (1) contract to a prime contractor who will act as an integrator of services and products. The prime contractor shall assume full responsibility for the aggregate of systems and components for the Next Generation 911 emergency telecommunications system (except the geographic information systems data that will be supplied by the Commonwealth), whether or not the goods and/or services are manufactured or produced by the prime contractor.

The prime contractor’s responsibilities are further defined throughout this document.

However, this RFR is not limited to bidders that propose to act as a prime contractor, and the Department reserves the right to accept bids and award contracts for components of the system as defined within this RFR. Bidders that provide individual components that would comprise portion(s) of a Next Generation 911 emergency telecommunications system are permitted to submit a response.

## 2.5 Eligible Entities

Limited User Contract – Restricted to Use by Defined Entities Only.

This procurement is being issued as a limited user contract procurement primarily for use by the State 911 Department. However, the procurement can also be used by any other public safety department or unit of government within the Commonwealth or quasi-public department or agency or private safety department as the procurement basis for the purposes of maintaining, in whole or in part, a PSAP, Secondary PSAP, or Limited Secondary PSAP that has been approved by the Department.

The contractor(s) under this RFR shall extend all pricing to such eligible entities, and the contractor(s) under this RFR shall report to the Department the name of each and every entity, the dollar value of each and every such procurement, and the goods and services thereby provided. Such reporting shall be submitted quarterly. If there was no activity during the noted quarter, said report shall be submitted indicating such.

## 2.6 Acquisition Method(s)

The acquisition methods to acquire goods and/or services from this Bid are outright purchase, fee for service, tax exempt lease purchase, and license. It is the State 911 Department’s intent to take ownership of all durable commodities furnished under this contract, whether through an outright purchase or a tax-exempt lease purchase.

This contract will be a rate contract.

The contract will not have a maximum obligation amount. The total costs per unit shall be itemized according to Attachment A- Cost Tables.

The State 911 Department reserves the right to procure any goods and services through a procurement vehicle other than this RFR if to do so would result in the best value in fulfilling the contract, or any renewal thereof. The contractor may be required to evaluate such goods and services to ensure compatibility with the system.

## 2.7 Contract Duration

The anticipated duration of the contract is five (5) years beginning on the Contract Effective Start Date. The contract will allow for one (1) option to renew for a period of five (5) years. Therefore, the Total Anticipated Contract Duration, including the renewal options, is ten (10) years from the Contractive Effective Start Date.

## 2.8 Performance and Payment Timeframes which Continue beyond Duration of the Contract

All term leases, rentals, maintenance, or other agreements for services entered into during the duration of this contract and whose performance and payment timeframes extend beyond the duration of this contract shall remain in effect for performance and payment purposes no longer than twelve (12) months after final contract end date. No new leases, rentals, maintenance, or other agreements for services may be executed after the contract has expired. Any contract termination or suspension pursuant to this section shall not automatically terminate any leases, rentals, maintenance, or other agreements for services already in place unless the department also terminates said leases, rentals, maintenance, or other agreements for service, which were executed pursuant to the main contract.

# 3. Estimated procurement calendar

|  |  |
| --- | --- |
| EVENT | DATE |
| Bid Release Date  | February 17, 2023  |
| Virtual Bidders’ Conference  | April 3, and 4th from 9am to 1pm held virtually |
| Deadline for Submission of Questions through COMMBUYS “Bid Q&A”  | May 3rd at 5:00 PM |
| Official Answers for Bid Q&A published (Estimated) | May 10, 2023  |
| Bid Amendment Deadline / Online Quote submission begins. Bid documents will not be amended after this date.  | May 12th |
| Deadline for Quotes/Bid Responses (“Bid Opening Date/Time” in COMMBUYS)  | May 26th at 5:00 PM  |
| Bidder Interviews for Selected Bidder(s) (Estimated)  | Week of August 7th Bidder(s) will be notified individually and be given at least one week’s notice if Bidder Interviews are required. |
| Site Inspections of Selected Bidder(s) (Estimated) | September 2023 Bidder(s) will be notified individually and be given at least one week notice for Site Inspections. |
| Notification of Apparent Successful Bidder(s) (Estimated) | November 1, 2023 |
| Estimated Contract Start  | ~February 1, 2024 |

Times are Eastern Standard/Daylight Savings (US), as displayed on the COMMBUYS system clock displayed to Bidders after logging in. If there is a conflict between the dates in this Procurement Calendar and dates in the Bid’s Header, the dates in the Bid’s Header on COMMBUYS shall prevail. Bidders are responsible for checking the Bid record, including Bid Q&A, on COMMBUYS for Procurement Calendar updates.

## 3.1 Written questions via the Bid Q&A on COMMBUYS

The “Bid Q&A” provides the opportunity for Bidders to ask written questions and receive written answers from the SSST regarding this Bid. Bidders’ questions must be submitted through the Bid Q&A found on COMMBUYS (see below for instructions) and prior to the deadline for submission of questions stated in the Estimated Procurement Calendar. The Department reserves the right not to respond to questions submitted after this date. It is the Bidder’s responsibility to verify receipt of questions.

Please note that questions submitted to the SSST using any other medium (including those that are sent by mail, fax, email, or voicemail, etc.) will not be answered. To reduce the number of redundant or duplicate questions, Bidders are asked to review all questions previously submitted to determine whether the Bidder’s question has already been posted.

Bidders are responsible for entering content suitable for public viewing since all questions are accessible to the public. Bidders must not include information that could be considered personal, security sensitive, inflammatory, incorrect, collusory, or otherwise objectionable, including information about the Bidder’s company or other companies. The SSST reserves the right to edit or delete submitted questions that raise any of these issues or that are not in the best interest of the Commonwealth or this Bid.

All answers are final when posted. Any subsequent revisions to previously provided answers will be dated.

It is the responsibility of the prospective Bidder and awarded Contractor to maintain an active registration in COMMBUYS and to keep current the email address of the Bidder’s contact person and prospective contract manager, if awarded a contract, and to monitor that email inbox for communications from the Department, including requests for clarification. The Department and the Commonwealth assume no responsibility if a prospective Bidder’s/awarded Contractor’s designated email address is not current, or if technical problems, including those with the prospective Bidder’s/awarded Contractor’s computer, network, or internet service provider (ISP), cause email communications sent to/from the prospective Bidder/Awarded contractor and the Purchasing Department to be lost or rejected by any means, including email or spam filtering.

**ALL QUESTIONS SHALL BE SUMBITTED ON OR BEFORE 5:00 PM ON APRIL 18, 2023.**

## 3.2 Locating Bid Q&A

Log into COMMBUYS, locate the Bid, acknowledge receipt of the Bid, and scroll down to the bottom of the Bid Header page. The “Bid Q&A” button allows Bidders access to the Bid Q&A page.

## 3.3 Amendment Deadline

The SSST reserves the right to make amendments to the Bid after initial publication. It is each Bidder’s responsibility to check COMMBUYS for amendments, addenda, or modifications to this Bid, and any Bid Q&A records related to this Bid. The SSST and the Commonwealth accepts no responsibility and will provide no accommodation to Bidders who submit a Quote based on an out-of-date Bid or on information received from a source other than COMMBUYS.

## 3.4 Bidders’ Conference

The Department will host a virtual bidders’ conference for the purpose of providing general information about the bid, bid process and specifications. The bidders’ conference will be held on April 3, 2023, 9 am to 1 pm, and April 4, 2023, 9 am to 1 pm. Bidders shall advise the Department of its intent to participate by e-mailing Karen.robitaille@mass.gov to register. Once registered, bidders will receive the agenda and the needed information to join the bidders conference. It is suggested that bidders have the appropriate representatives for each agenda items, for example a bidder may choose to send an engineer for technical items.

Interested bidders must register by 12:00 PM on Thursday, March 30, 2023.

## 3.5 Bidder Interviews

The State 911 Department reserves the right to interview any and all bidder(s) to further evaluate its response, capabilities, knowledge, experience and expertise.  Further, the Department reserves the right to require any and all bidder(s) to provide proof of competency in the maintenance of the system, applications and appliances being proposed, either by means of site visits to current installations or by means of providing a fully functional demonstration, or otherwise. Bidder(s) will be contacted to schedule a mutually agreed upon date and time should the State 911 Department elect to exercise these options.  All interviews will be held at the State 911 Department’s offices, and all demonstrations will be held at the State 911 Department’s offices, unless otherwise approved by the State 911 Department.

Selected Bidders who are asked to participate in Bidder Interviews will be expected to prioritize this in their schedules. The Department will make every effort to find a mutually convenient time for the Bidder and the Department. However, failure to appear at the scheduled time of the presentation/demonstration may result in disqualification, reduction of points, or other action that the SSST deems appropriate.

## 3.6 Site Inspection

Bidders are advised that the State 911 Department reserves the right to conduct a site visit of the facility from which the bidder proposes to operate its Help Desk. Further, the State 911 Department reserves the right to conduct a site visit of the facility from which the contractor operates its Help Desk at any time during the term of the contract.

## 3.7 Format of Response

Bidders shall follow the same sectional format of this RFR and provide an individual response to each RFR specification in its response. All responses shall be presented using the same numbering sequence and order used in this RFR.

Bidders shall acknowledge that the bidder accepts the terms and conditions of the RFR specification by clearly stating in the affirmative that the bidder shall “comply” with or “agree” to” the specification.  Bidders are advised that a response of “understands” or “understood” may be considered non-responsive. In addition, bidders shall explain in detail how they shall meet the requirements of the RFR, and a failure to do so may be viewed as an incomplete response.

 Bidders shall provide a detailed specification/features of any proposed replacement the Next Generation 911 application software, equipment, etc.

Bidders shall include a product and technology roadmap indicating future features and capabilities that are being added to NG911 system; where possible, bidders shall include release dates for new features.

Bidders shall NOT include any information relative to costs, cost elements, or pricing in the technical response.  All cost and pricing shall be addressed solely in the pricing response.

## 3.7.1 Required Documents

##### Response Requirement:

In order for a response to be considered complete, the following required information and forms shall be completed and submitted:

* RFR Response to Requirements: Response addressing all of the specifications as detailed in this RFR.
* Title and Intellectual Property Rights.
* Separately submitted Pricing Proposal.
* Prompt Payment Discount Form.
* Commonwealth Terms and Conditions.
* Contractor Authorized Signatory Listing Form.
* Supplier Diversity Plan Form.
* Environmental Practices Form.
* Business Reference Form.

# 4. Specifications

## 4.1 Bidder Qualifications

### 4.1.1 Company Experience

The bidder shall clearly display its proven experience with large scale system integration, including examples with multiple sub-contractors, network provisioning, and monitoring. The bidder shall clearly display its proven experience with all aspects of security incident and event management including anti-malware, anti-spyware, penetration testing, patch management, network and infrastructure security. The bidder shall clearly display its proven experience with Next Generation 911 principles, practices, and standards and public safety principles and practices.

The bidder shall clearly display its proven experience or through subcontractors display proven experience with emergency communications systems and practices, IP-based network architecture, principles, integration services, and other applicable technical expertise related to a large-scale Next Generation 911 deployment. The bidder shall clearly display its proven experience or through subcontractors display proven experience with Next Generation 911 standards development organizations and professional organizations, including without limitation, participation in NENA Next Generation 911 committees. The bidder shall clearly display its proven experience or through subcontractors display proven experience with integration of access to Next Generation 911 services for persons with disabilities.

##### Response Requirement:

In addition to addressing the above experience, bidders shall include a profile of its operations, qualifications and the organization capabilities, including but not limited to the following:

* An organizational chart;
* The number of years the bidder has been in business and the number of years the bidder has been in the business identified in the RFR;
* The location of the offices from which the work will be managed and the number of staff employed at each office
* A detailed description of the bidder’s experience and other projects relevant to the RFR performance requirements set forth in this RFR, including a description, dollar value, and the duration of the relevant projects
* A detailed summary of qualifications and skills of the bidder and all key personnel identified by the bidder who will perform services as set forth in this RFR, including the specific knowledge and experience of each individual in the area of public safety communications (distinguishing between administrative staff, management, principal partners or officers, field, technical and customer support), including Help Desk personnel
* An organizational chart for the project listing each individual, or job titles if individuals are not yet identified,  who will be assigned to perform services as set forth in this RFR, and a description or listing of the planned role and work for each individual
* A proposed Project Manager, who shall meet the requirements outlined in Section 4.2
* Describe any relationships with equipment and software vendors and manufacturers.
* Staffing plan for ongoing operation, support, and maintenance of the system, including but not limited to, Help Desk, security team, field service, data center, integration, and administrative staff
* A detailed summary of the qualifications and experience for each of the bidder’s proposed subcontractor(s), including a listing of projects, similar in scope to that defined in this RFR, that each proposed subcontractor has participated in and
* Any other information the bidder considers relevant and supports stated experience and expertise.

### 4.1.2 Financial Stability

Bidders are advised that the Department reserves the right to request a copy of the bidder’s current audited annual financial statement, information relative to bankruptcy filings, past/current/pending litigation, default on contracts, information relative to payment of supplier invoices, and/or any other documentation the Department deems necessary to access the financial stability of the bidder. Further, the Department reserves the right to make such requests of the successful bidder throughout the Term of the contract, including any and all renewal options.

### 4.1.3 References

##### Response Requirement

Bidders shall provide a complete list of customers, including name of organization, point of contact name, phone number and e-mail, for whom the bidder has provided similar commodities and/or services or with whom the bidder has contracted with for the provision of similar commodities and/or services as those proposed in the response during the last two (2) years.  The State 911 Department reserves the right to contact any and all customers set forth on the customer list.

## 4.2 Specifications and Performance Requirements

### 4.2.1 Scope

The State 911 Department currently operates a world class i3 compliant Next Generation 911 emergency telecommunications system (System). The System supports the delivery of 911 voice and text to two-hundred thirteen (213) Primary PSAPs, Regional PSAPs, Wireless PSAPs, and RECCs. The System additionally supports 4 Secondary PSAPs, 4 Pseudo PSAPs, 4 Training PSAPs, a mobile PSAP, 13 Limited Secondary PSAPs, and 13 PSAPs operated by Private Safety Departments (privately funded) located throughout the Commonwealth.

The Department’s existing contract for Next Generation 911 products and services expires on August 3, 2024. It is the Department’s intent to maintain as much of its existing network infrastructure, PSAP customer premise equipment, and Data Center equipment, applications, and appliances as possible. Bidders have the option to submit an alternative response with suggested component replacement/upgrades, in addition to responding to the specifications as noted below.

The number and configuration of PSAPs varies from time to time at the discretion of the State 911 Department.  The State 911 Department reserves the right to purchase equipment and services for new, expanded, or additional PSAP sites and answering positions, and reserves the right to change PSAP sites/locations and/or positions during the term of the contract or any renewal thereof.  The State 911 Department reserves the right to purchase equipment and services that offer additional or new functionalities offered by the system, on such pricing, terms and conditions as may be negotiated with the contractor.

We recognize that various components of the system are subject to life-cycle management and subject to upgrade and/or replacement. Such effort shall be on an incremental basis, not a wholesale replacement of the current major platform(s).

It is our objective to implement evolving NENA and other national standards and practices, as practical, throughout the Term of the awarded contract. In addition, the State 911 Department has requirements above and beyond the NENA standards. To meet these goals, incremental improvements, upgrades, and replacements are laid out in more detail later in this RFR.

The functional units needed to operate the NG911 system include Program Administration, Technical Services, Change Management, and Facilitating Transition. Technical Services includes the day-to-day operation of the Help Desk, field teams, etc. Change Management maintains the schedule and operates the Commonwealth’s testing environment. Facilitating Transition includes services related to the enhancing and modifying the NG911 system. All are further defined in detail in this RFR.

### 4.2.2 Overview of Massachusetts 911

Primary PSAPs, Regional PSAPs, Wireless PSAPs, and RECCs are first point of reception of a 911 call.   A secondary PSAP receives a 911 call only when transferred from the primary PSAP or on an alternative routing basis when calls cannot be completed to the primary PSAP.  Secondary PSAPs are equipped in the same manner as Primary PSAPs. Secondary PSAPs and Limited Secondary PSAPs may be operated by Private Safety Departments. The listing of primary PSAPs, Regional PSAPs wireless PSAPs, and RECCs and the number of answering positions at each will be provided.

A list of the PSAP addresses will be provided to bidders upon the receipt by the State 911 Department of an executed Non-Disclosure Agreement in the form attached hereto and made a part hereof as Section 8.6 Non-Disclosure Agreement. PSAP call volume is included.

There are currently approximately 4,000 certified 911 telecommunicators throughout the Commonwealth whose access to the 911 system shall be maintained by the selected bidder. The Department’s mobile PSAP is available 24 x 7 to respond to and temporarily replace and assist PSAPs that are rendered non-operational due to structural failure, equipment failure, infrastructure failure, or other emergency and/or pre-planned events. In addition, the mobile PSAP is deployed for training, public education, PSAP conversion build outs, and the Boston Marathon (reference Section 4.3.11).   The selected bidder shall ensure the 911 system equipment contained within this mobile PSAP is operational for each deployment, whether scheduled or not.

#### 4.2.2.1 Specifications

The specifications set forth in this RFR will form the basis for and be incorporated into the contract that will be executed with the successful bidder, and, therefore, the failure of a bidder to state in its response its inability to meet the specifications set forth in this RFR shall be deemed to constitute the acknowledgment of the ability of the bidder to comply with the specifications set forth in this RFR.

The order of precedence of the contract shall be as follows:

1. Commonwealth Terms and Conditions,
2. Standard Contract Form,
3. the RFR,
4. the bidder’s response to the RFR.

### 4.2.3 Operating a NG911 System

The successful operation of a state of the art 911 system requires a range of experience, skills, procedures, and policies. Use the following scenario based response requirements to demonstrate your organizations philosophy and approach to each scenario.

In addition to the written response requirements below, be prepared during the Bidders Interview to answer additional questions about these scenarios.

##### Response Requirement:

Scenario 1: A PSAP’s UPS is alerting that the battery reserve will be depleted in 90 minutes. The PSAP is called and a dispatcher verbally refuses entry to the 911 equipment. What actions are taken to resolve the issue and why?

Scenario 2: A PSAP calls to report the same number has called multiple times, there is no caller on the line, and a call back to the caller presents “your call can not be completed at this time”. What actions are taken to resolve the issue and why?

Scenario 3: A major winter storm is approaching. What actions are taken to plan for such an event and why?

Scenario 4: A communication service provider has an outage that is out of state but preventing calls from coming into the 911 system. How do you identify the problem and what actions are taken to resolve the issue? If applicable, please provide an example.

Scenario 5: A change was put into the production environment, A PSAP calls the Help Desk to report a new unknown issue. What actions are taken and why?

## 4.3 NG911 System Architecture

### 4.3.1 General Information

The following sections reflect the current configuration of the Massachusetts NG911 system. Bidders shall maintained this current configuration. Any anticipated or desired enhancements are noted and bidders shall have the ability to support such enhancements.

#### Answering Priority

CPE (or another part of the system) prioritizes answering, processing, and delivering calls in the following order:

1. 911
2. Emergency Line
3. Administrative line.

#### Emissions Criteria

The system does not cause interference to existing radio, security, or closed circuit television communications systems, installed communications console equipment, or other data processing equipment present in the operational environment, and, in addition, complies with all applicable FCC standards as applied to data processing equipment.

#### Time Records

The system includes a network time protocol service for time-of-day information. The system has a redundant time source located at each data center. The time server meets time accuracy within 20.0 ms of true time.

### 4.3.2 System Reliability and Availability Requirements

The system, including all subsystems, is available a minimum of 99.999% of the time when measured on a 24 x 7 x365 basis during a calendar year, including system maintenance and upgrades. Availability may be achieved through redundancy or fault tolerance.

The system is sized to handle the current and anticipated volume of payload and activities and the projected anticipated volume of payload, deviation from these metrics shall incur a penalty.

### 4.3.3 Monitoring and Diagnostics

The system has built-in diagnostic software that automatically monitors alarm conditions of the equipment, applications, appliances, and services, and initiates audible and visual alarms and alerts in the event of any failure or disruption of the operations and processes and includes pro-active alerts for predictive failures. Currently all nodes and devices in the system are monitored for availability; when a malfunction is detected a trouble ticket is automatically generated and responded to. Where applicable, SNMP traps are also utilized as a means of proactive maintenance, for example a defective UPS battery. This mechanism is also used to monitor systems and services provided by sub-contractors. This level integration and cooperation amongst all partners shall be maintained.

Any changes to the existing monitoring and alerting must be reviewed and approved by State 911 Department prior to implementation. State 911Department reserves the right to request additional alarms and/or make modifications to all alarms, processes and notifications.

The system includes functionality that provides for automatic notification to the contractor’s diagnostic/repair center in the event of any failure or alert.

The contractor shall maintain a daily report that logs alarms received by the system. The report shall be reviewed on a daily basis by the contractor’s technical support staff as a preventive maintenance and proactive service log.   The State 911 Department shall have on-line access to system report and logs, and the system shall have the ability to notify the State 911 Department via SMS, email, or other means requested by the State 911 Department.

#### 4.3.3.1 Self-Monitoring

The system includes a self-monitoring function of vital processes and sending alarms in the event of an alarm condition. The system notifies the Help Desk, communications supervisor, local system administrator, and/or local maintenance personnel upon detection of an alarm.

The system includes a health monitoring function that monitors the functioning of the system.  The system is able to produce ad hoc reports of system functioning, and the State 911 Department shall have read-only access to such reports.

#### 4.3.3.2 Remote Access

The system allows for secure remote access to any or all components of the system. The State 911 Department’s authorized individuals shall have remote read-only access to all components of the system.

#### 4.3.3.3 Alarm Categories

The system includes categories of alarms for, at a minimum, each of the event types (catastrophic, major, and high priority, standard priority system malfunctions) depending on the criticality of the event.  The system allows the administrator to configure notification thresholds. In addition to these alarm categories, the contractor shall, at the request of the State 911 Department, create new alarm categories.

The system sends notifications of alarm conditions to communication supervisors and maintenance personnel in the manner specified by the State 911 Department and on a distribution list as specified by the State 911 Department. The notification summarizes the SNMP trap that triggered the alarm condition.

### 4.3.4 Network & System Security

General

The contractor shall maintain appropriate best-practice security measures that are compliant with any and all applicable federal, state, and local laws, regulations, and guidelines to ensure that the integrity of the system is not compromised.

In addition to all other requirements set forth herein, the contractor shall comply with current FBI Criminal Justice Information Services (CJIS) Security Policies as set forth on <http://www.fbi.gov/about-us/cjis/cjis-security-policy-resource-center/view>. The contractor shall apply a variety of security measures to ensure that:

* Network operations are not disrupted;
* Unauthorized individuals do not gain access to the network;
* Least access policy is applied;
* Data theft does not occur;
* Monthly vulnerability scans and assessments occur;
* Incidents are logged, reported, and responded to;
* Changes are logged and managed;
* Activity, incidents, events, and changes are maintained to support routine and forensic audits;
* Data is not modified or deleted;
* Intrusion protection/Intrusion detection is implemented;
* Identify theft does not occur; and
* A holistic approach to security utilizing a SIEM and other advanced analytics and technologies is implemented.

These measures shall include physical safeguards, operating system hardening, hardware and software information security best practices, stringent change management processes, security incident response, resources, educational efforts, and organizational policies.

The contractor shall be responsible for all necessary appliances, including firewalls, routers, switches, intrusion protection/detection, and cabling to ensure network security for each PSAP and data center.

The security architecture shall withstand sophisticated attacks, including without limitation, distributed denial of service attacks, while maintaining system functionality.

#### 4.3.4.1 Network Security Standards

At a minimum, the contractor shall ensure that the system complies with all applicable network security standards, including but not limited to, the following network security standards:

* NENA Security for Next-Generation 911 Standard (NG-SEC, document 75-001 dated February 6, 2010),
* Next Generation 911 Security (NG-SEC)Audit Checklist NENA 75-502 V1 (Dated Dec 14, 2011),
* NENA NG911 Security Information Document (NENA-INF-015.1-2016 dated Dec. 8, 2016),
* NENA Call Blocking Information (NENA-INF-023.1.1-2020 dated Feb 25, 2020), and
* FBI Criminal Justice Information Services (CJIS) Security Policies as set forth on  <http://www.fbi.gov/about-us/cjis/cjis-security-policy-resource-center/view> and FBI Criminal Justice Information Services (CJIS) Security Policies as may be issued in the future.

All third party Cloud services must be FedRAMP authorized. FedRAMP standardizes security requirements for the authorization and ongoing cybersecurity of cloud services in accordance with FISMA , OMB Circular A-130 , and FedRAMP policy. The Department reserves the right to obtain FedRAMP authorization of the NG911 system.

Bidders are advised that NENA i3 Version 3 and a replacement to 75-501/502 is expected to be released in 2023. The Department will conduct a review of all the security recommendations in i3 version three in the first year of this agreement. The successful bidder shall be required to implement any and all other systems changes needed for compliance with the i3 version, as directed by the Department.

#### 4.3.4.2 Anti-Virus, Patch Management and Security

The system utilizes a robust enterprise-grade Endpoint Detection & Response (EDR) platform that is not limited to threat signatures. The bidder shall ensure continued operation and maintenance of the EDR.

The selected bidder shall submit a plan of action to correct any deficiencies they find. Reference Section 4.5.1 Transition Period for details.

The mobile PSAP is inactive between deployments, and, therefore, the parties shall schedule the Anti-Virus updates for the mobile PSAP at a mutually agreeable date and time.

The contractor shall identify, test, validate and install updates no less than once per quarter. The contractor shall monitor industry and manufacturer specific notifications for security vulnerabilities and other software and firmware anomalies and apply appropriate measures to eliminate or mitigate such issues in a timely manner following established change management procedures.

The contractor shall implement commercially reasonable safeguards necessary to:

* Prevent unauthorized access to Commonwealth Data from any public or private network;
* Prevent unauthorized physical access to any information technology resources involved in the development effort;
* Prevent interception and manipulation of Commonwealth data during transmission to and from any servers;
* Deploy a centralized reporting and monitoring tool;
* Provide daily definition updates to the Anti-Virus, Anti-Spam and Anti-Malware solution; and
* Deploy a network and CPE auditing tool.

The contractor shall represent and warrant as follows:

* All media on which contractor provides any software shall be free from defects;
* All software delivered by contractor shall be free of Trojan horses, back doors, and other malicious code; and
* The contractor has obtained all rights, grants, assignments, conveyances, licenses, permissions and authorizations necessary or incidental to any materials owned by third parties supplied or specified by the contractor for incorporation in the deliverables to be developed.

The awarded vendor shall submit a plan that addresses the manner in which the contractor’s security, Anti-Virus, and patch management processes shall be applied to the Next Generation 911 system. The contractor shall test, validate, install, and manage an anti-virus application in accordance with procedures to be mutually agreed upon by the parties.  The plan shall describe the proposed Anti-Virus application and shall describe the proposed processes and procedures for the installation and management of the Anti-Virus application. Reference Section 4.5.1 Transition Plan for details.

##### Response Requirement:

Bidders shall describe (1) their own and their proposed subcontractors’ respective internal security procedures and policies applicable to work performed by them for customers and (2) the particulars of any circumstances over the past five (5) years in which the bidder or its proposed subcontractor(s) has caused a breach of the security, confidentiality or integrity of a customer’s data.

#### 4.3.4.3 Confidentiality

Section 6 of the Commonwealth Terms and Conditions states:

“Confidentiality.  The contractor shall comply with M.G.L. c. 66A if the Contractor becomes a “holder” of “personal data.”  The contractor shall also protect the physical security and restrict any access to personal or other State 911 Department data in the contractor’s possession, or used by the contractor in the performance of a contract, which shall include, but is not limited to the State 911 Department’s public records, documents, files, software, equipment or systems.”

In addition to the foregoing requirements, the bidder must agree that as part of its work effort under the agreement entered pursuant to this RFR, the bidder may be required to use the Commonwealth personal data under Massachusetts General Laws c. 66A and/or personal information under Massachusetts General Laws c. 93H, or to work on or with information technology systems that contain such data in order to fulfill part of its specified tasks.  For purposes of this work effort, electronic personal data and personal information includes data provided by the State 911 Department to the successful bidder which may physically reside at a location owned and/or controlled by the Commonwealth or the State 911 Department or successful bidder.  In connection with such data, the winning bidder shall implement the maximum feasible safeguards reasonably needed to:

Ensure the security, confidentiality and integrity of electronic personal data and personal information;

* Prevent unauthorized access to electronic personal data or personal information or any other Commonwealth data from any public or private network;
* Prevent unauthorized physical access to any information technology resources involved in the winning bidder’s performance of a contract entered under this RFR;
* Prevent interception and manipulation of data during transmission to and from any servers; and
* Notify the State 911 Department immediately if any breach of such system or of the security, confidentiality, or integrity of electronic personal data or personal information

#### 4.3.4.4 Software Integrity Controls

The contractor shall implement the following software integrity controls for the purpose of maintaining software/system integrity and traceability throughout the software/system develop, including during development, testing, and production.

The contractor shall configure at least two software environments including a development/quality assurance (QA) environment and a production environment.  The contractor shall implement a change management procedure to ensure that activities in the development/QA environment remain separate and distinct from the production environment.  In particular the change management procedure shall incorporate at least the following:

Segregates duties between development and testing of software changes and migration of changes to the production environment;

Implements security controls to restrict individuals who have development or testing responsibilities from migrating changes to the production environment; and

Includes a process to log and review all source control activities.

The contractor shall implement a source control tool to ensure that all changes made to the production system are authorized, tested, and approved before migration to the production environment.

The contractor shall not make any development or code changes in a production environment outside of the established change management process.

#### 4.3.4.5 Encryption

The contractor shall apply encryption on all communications to ensure that data cannot be viewed or modified by anyone other than the intended recipient, that data can be validated to confirm its source, and to protect the integrity of a message, ensuring that data is complete and unaltered after being transported over the network. The contractor shall describe the method, version, and practical use of the data encryption standard being offered. The contractor shall supply, monitor, and maintain the encryption services.

#### 4.3.4.6 Authentication, Authorization and Accounting

The contractor shall ensure that the system employs authentication, authorization, and accounting for controlling [access](http://whatis.techtarget.com/definition/access) to computer resources and networks, enforcing policies, and auditing usage.  The successful bidder shall maintain the authentication, authorization, and accounting functions. The authentication services shall verify the identity of a user before granting access to the network or to any shared resource on the network. The user authentication shall be through a digital certificate, digital signature or password.

The contractor shall ensure that the system employs authorization services that define what users can do once authenticated and that ensures that, after users have been successfully authenticated, they are granted access to only those resources and can perform only those functions that their security credential provides.

The system shall employ accounting services that measure the resources a user consumes during access to include, but not be limited to, the amount of system time or the amount of data a user has sent and/or received during a session.

#### 4.3.4.7 Intrusion Prevention and Detection

The contractor shall provide active intrusion detection services to inspect general network traffic. The system shall, if a pattern of communications associated with network intrusion is detected, create a log and an alert shall be issued to the network service provider and to the State 911 Department. The intrusion detection system shall initiate specific responses to certain perceived threats such as blocking traffic or disabling an account after repeated attempts to log in using an incorrect password.  In addition, the contractor shall work cooperatively with the State 911 Department and an independent third party, to be selected by the State 911 Department, for intrusion testing throughout the term of the contract and any renewal thereof.

#### 4.3.4.8 Third Party Security Assessment

The Department may choose, at its sole discretion, to have a neutral third party perform a security assessment of the NG911 system. Additionally, the Department may choose to have the system become FedRAMP certified.

### 4.3.5 Intentionally Left Blank

### **4.3.6 Next Generation 911 Core**

#### 4.3.6.1 Data Centers

The system is supported by two (2) data centers at geo-diverse locations within the Commonwealth and a third data center located outside of Massachusetts. These three (3) data centers are extremely redundant and have high availability. The current location of the three (3) data centers will be provided in the bidder’s conference.

#### 4.3.6.1.1 Requirements

Each data center is capable of supporting a full call load for all PSAPs throughout the Commonwealth.  The call load is split between the three (3) data centers as directed by the State 911 Department.  Each component of the system, including without limitation, the applications and appliances at each data center, meets a 99.999% standard of availability in the system architectural design.  If two (2) data centers become unavailable, all PSAP operations throughout the Commonwealth shall function off the third data center.

The data centers are digitally cross-connected as mirror images and are be able to operate on hot standby and/or load sharing.

#### 4.3.6.1.2 Outside Connectivity

Before any changes are made, the successful bidder shall identify the required bandwidth to handle anticipated traffic (reference Section 4.3.8), including the following:

1. connections to the public internet;
2. connections to communications service providers (reference Section 4.2.6.2);
3. connections to legacy PSAPs (All Legacy PSAPs are privately owned and are financially responsible for connectivity, reference Section 4.3.6.12);
4. connections to the PTSN; and
5. any other connections that may be required.  This shall include provisions for redundancy and anticipated growth as new payload types are introduced to the system. The successful bidder shall include, as part of this documentation, how they arrived at these bandwidth requirements.

#### 4.3.6.2 Aggregation Points

Contractor must maintain and operate aggregation points. The aggregation point is where communication service providers connect to the Massachusetts NG911 system. There must be at least two in Massachusetts and one outside of Massachusetts.

#### 4.3.6.3 Payload Routing

The system provides for a mix of payload routing including, rules-based, geospatial routing, Alternate, Final, and Default. The system has a rules-based routing proxy functionality.

Each PSAP has an assigned Alternate PSAP and Final PSAP. An alternate route shall occur if the capacity of the PSAP is met, the call goes unanswered for a pre-determined amount of timer, or the in cases where the PSAP is unreachable.

The system is able to keep payloads with particular classes of service and/or position sources in queue until a configurable timer has been expired at which time an updated location will be used to route the call. This must be available on a PSAP by PSAP basis.

#### 4.3.6.4 Emergency Call Routing Function

The system includes an Emergency Call Routing Function (ECRF) that utilizes location information to route emergency calls to the appropriate PSAP.  The ECRF is able to ingest both civic locations and geodetic locations.  The civic location data is provided by the Commonwealth’s MassGIS department.  ECRF is capable of utilizing both address points as well as road centerline to determine location. The ECRF must be able to make the necessary data available for the PRF to select a route using rules involving the class of service, position source, and/or NENA company ID.

The system includes the following optional ECRF function: in addition to the service type “sos”, the ECRF fully supports a LoST that finds service messages for fire, police, state police, and emergency medical services service types, and supports additional service types (e.g., poison control, etc.) depending on the service area boundaries provided to the ECRF.

#### 4.3.6.5 Emergency Services Routing Proxy

The system utilizes an emergency service routing proxy for call delivery to the appropriate PSAP based upon location and routing rules.

Data elements available within the LoST protocol/response are used for rules based routing.

#### 4.3.6.6 Rules-Based Routing Proxy

The system has a rules-based routing proxy functionality.

#### 4.3.6.7 Alternate Routing Requirements

The number of simultaneous calls delivered to the PSAPs are be two per position, unless otherwise directed by the State 911 Department.

If a PSAP becomes unavailable due to network, power, or physical damage the PSAPs payload automatically reroutes to an alternate PSAP. Should the Alternate be unavailable, the payload is routed to a third and final PSAP as determined by the State 911 Department.

The length of time allotted to answer a call is predetermined. After that length of time, the payload is automatically rerouted to an alternate PSAP.

At all times Alternate PSAPs must be equally capable as the primary PSAP. Limited Secondary PSAPs are prohibited from acting as an alternate or final PSAP.

#### 4.3.6.8 Location Validation Function

The system includes a Location Validation Function (LVF) that is available to validate location information in order to ensure proper routing to the appropriate PSAP in at least the following instances/interfaces:

* At the equivalent of service order input (SOI)
* On a scheduled basis for stored records
* At the time of a 911 call

 The NG911 system provides an externally available LVF for Communication Service Providers to be able to validate locations prior to the 911 payload being connected.

Communication service providers who choose not to use the LIS, shall at the time that service is ordered for a fixed location device process the location information through the LVF. The system shall extend an i3 standard interface using the LoST protocol to service providers that enter new customers into their databases prior to a 911 call taking place.

At the time that payload from a fixed location device (e.g., land line phone) is connected to an aggregation point. The system shall extend an i3 standard interface using the LoST protocol to service providers that enter new customers into their databases such as an i3 compliant Location Information Server (LIS).

At the time payload from a nomadic device (e.g., VoIP phone) is connected to the network the system shall extend an i3 standard interface using the LoST protocol to service providers that provide nomadic device services. The system shall provide a real time interface to their proposed LVF that can be used to validate a nomadic device’s location at the time that service becomes initially available to nomadic devices and subsequently any time the location of the nomadic device changes.

#### 4.3.6.9 Location Information Server (LIS)

The system provides an i3 compliant Location Information Server (LIS) to receive SOI files from Communication Service Providers.

The contractor shall maintain Location Information Server, formerly an ALI database, and related services to include, but not be limited to, establishing, housing, installing, activating, operating, and maintaining an ALI database system for the duration of the contract and any renewals thereof; providing access for input, removal and/or update of records by carriers; validation of telephone number ownership via a third party, interface with and steering of ALI requests to/from external database systems; acceptance of inquiries from PSAPs; providing reports as prescribed and detailed by the State 911 Department; and coordinating efforts with EOPSS/OTIS and/or with carriers to assist with network and interoperability issues should they arise. The LIS acts as the central point for ALI retrieval for the other components of the system.

The contractor shall provide file extracts (daily, weekly, or full file) to the State 911 Department upon request of the State 911 Department at no additional charge to the State 911 Department.

The contractor shall make available, through a no charge subscription-based service, subscriber list information data to eligible entities that are providers of emergency services and providers of emergency support services for the purposes of delivering or assisting in the delivery of emergency services. The form of the proposed agreement with eligible entities shall be approved by the State 911 Department.  All requests for this subscription-based service shall be approved by the State 911 Department. Subscription service shall allow for automatic downloading, via electronic means, of subscriber list information records by geographic region with a frequency of daily or weekly updates. Subscriber list information and data shall be used solely for public safety purposes.

If awarded, bidder shall sign agreements with communication service providers relating to the transmission, receipt, rejection, and record correction.

LIS and LVF must be compliant with NENA’s CLXDF standard.

#### 4.3.6.10 Additional Phone Numbers and Lines

The system shall support the following for each PSAP using the existing telephone numbers. The vendor is responsible for maintaining/transitioning ownership over all ten digit emergency numbers for PSAPs, numbers for the pseudo PSAPs, numbers for the training centers, overflow/default numbers for CSPs, and the 855/866 numbers for accessing the Help Desk.

Emergency Line - A ten (10) digit telephone number primarily used for outbound dialing. Additionally, Communications Service Providers (carriers) may use this number as a backup call delivery mechanism.  All PSAPs have at least one such telephone number.  Regional PSAPs, RECCs, may have individual numbers for each community they serve.

Administrative Line - A special purpose ten (10) digit telephone number used by largest PSAPs, typically ACD, for inbound calling, e.g. tip line.  All such uses must be approved by State 911 Department.

#### 4.3.6.11 Suspected Malicious Caller Mitigation

Massachusetts has an explicit list of functions to mitigate telephone denial of service attacks. Mitigation strategies are different for inbound 911 versus inbound from the PSTN. Details will be provided at the bidders' conference. The successful bidder will be required to maintain said functionality and enhance where possible.

#### 4.3.6.12 Legacy Gateways

The State 911 Department expects that legacy network gateways (LNG) (both PSAP and network) will exist outside of an ESInet, and legacy gateway services may be required by the State 911 Department to support the Next Generation 911 system.

The LNG shall provide connection to the legacy system components utilizing pieces of the legacy system infrastructure, including the existing ALI data management system and the two (2) in-state redundant selective routers.

The LNG shall attach sufficient information to the call, such as location and callback number, for handling within the ESInet.

The Legacy Public Gateway (LPG) shall support an IP interface towards the ESInet on one side, and a traditional multi-frequency (MF) or enhanced MF interface (comparable to the interface between a traditional selective router and a legacy PSAP) on the other.   The LPG shall include an ALI interface (as defined in NENA 04-001 or NENA 04-005) that can accept an ALI query from the legacy PSAP, and respond with location information that is formatted according to the ALI interface supported by the PSAP.  If an emergency call routed via the ESInet contains a location reference, the LPG shall support a de-referencing interface to a LIS or LNG or ingress Legacy Selective Router Gateway (LSRG) to obtain the location information that will be returned to the legacy PSAP in the ALI response, if required.  To populate non-location information in the ALI response, the LPG may need to support an interface to a call information database.  The LPG may also support an interface to an ECRF which it can use to determine the transfer-to party under certain selective transfer scenarios.

The LPG shall provide special processing of the information received in incoming call setup signaling to facilitate call delivery to the legacy PSAP, to assist legacy PSAPs in obtaining callback and location information, and to support feature functionality that is currently available to legacy PSAPs, such as call transfer and requests for alternate routing.

### **4.3.7 PSAP Equipment**

#### 4.3.7.1 Call Handling Software/Equipment

Primary, Regional PSAPs, Wireless PSAPs, RECCs, and Secondary PSAPs use two different Call Handling equipment ‘types’. “Ring All” have all the phone rings when an incoming call is received. Automatic Call Delivery PSAPs assign a call to a particular user

Call handling software/equipment meets, at a minimum, the following standards.

* Call Transfer that shall include payload transfer
* Consultation Hold
* Recording shall continue during hold period
* an audible tone for the Caller which indicates they are on hold
* Any telecommunicator is able to take a call off hold
* Minimum of four Party Conference (both on-net and off-net)
* System-wide and Local Instrument Speed Dial for transfer
* Some speed dials will be provided by the PSAP
* a PSAP directory that contains a list of all the PSAPs by municipality name
* A list of directory entries will be controlled by the State.
* The process to transfer calls manually is simple and straightforward.
* Any telecommunicators is able to silent monitor any call within the PSAP.
* The telecommunicator that is being monitored has a visual indication as such.
* Supervisor Barge-In and override (take the call away) functions are available.
* Preference to have this permission based
* The system records all users that interact with a call/text.
* Caller ID for equipped administrative and emergency lines
* Preference to be able to dip to LDB or local ALI database for emergency calls other than 911
* Direct-Outward Dialing
* Caller ID to Telephone Sets
* Capability for dispatchers to be able to utilize the Massachusetts’ Abandoned Call Back procedure
* Capability for dispatchers to be able to utilize the Massachusetts’ Silent Call Procedure
* TTY call processing
* Users are able to record a greeting to be played upon answering. The greeting should be different for the different caller queues (911, emergency, administrative)
* A caller’s call/text history is easily accessible to users.
* Situational Awareness – Large PSAPs have situational awareness of what is going on within the PSAP,including options for displaying on a large TV or at a call handling position. At a minimum the following two options are available
* The count, name, and status of logged in users. Example John Smith – Available – Idle for 3 minutes
* Queue status including the number of ringing calls and total queue time
* The system shows an event log, or promote/prompt the dispatcher when DTMF is received for use in the abandoned call procedure.

#### 4.3.7.2 Automatic Call Distribution

ACD Call Handling software meets the above standards in addition to the following ACD specific requirements.

* The ACD function uses a formula/metric to assign calls to an available user. The function is not be easily bypassed by users, ie making an outgoing call does not reset their location in the queue.
* The ACD supports having multiple ‘gates/skill sets/buckets’ that allow for call flow control within the PSAP. For example: All calls should initially be assigned to a call taker ‘gate’, if all call takers are unavailable, the call will be assigned to a dispatcher ‘gate’
* “Auto answer” is required for some ACD PSAPs. This function automatically answers the call without dispatcher intervention. PSAPs that have auto answer have headsets. The auto answer function provides a ring/tone to the user, so they are aware they are receiving a call.
* A ready status indicates that the telecommunicator is ready to receive payload, a not ready status indicates the telecommunicator is unavailable
* There is a wrap-up timer during the transition from on call, to ready. Wrap up allows a dispatcher to complete actions prior to being assigned another call.
* A ready status indicates that the telecommunciator is ready to receive payload, a not ready status indicates that the telecommunicator is unavailable.
* Abandoned calls are assigned to a telecommunicator for call back, during the call back, the telecommunicator does not receive additional calls.
* text message not to be routed thru the ACD function.
* The graphic interface shows the users current status.

#### 4.3.7.3 Abandoned Calls

The system provides the following functions:

* Abandoned Call Indicator that provides a visual and audio alarm that alerts that an  Abandoned Call has been received;
* Detection of DTMF Tones that displays corresponding digits on the screen (Silent Call  Procedure); and
* The ability to identify and answer TDD/TT/TTY and abandoned and silent calls  including complete and accurate ANI and ALI of the TDD/TT/TTY calls.
* An option to provide automatic outbound texting to any abandoned call

#### 4.3.7.4 Mapping

The system’s mapping display functionalities and requirements for ALI/Dispatachable Location are as follows.

The map shall show the callers location with visual representations of call type/status and/or class of service. If uncertainty and/or probability is included within the ALI/Location data that should be visually represented.

Elements of the dispatachable location, including the disability indicator, should be promoted and/or acutely displayed.

The mapping solution and/or call handling solution shall provide a reverse geocode capability. This should be automatic for all geodetically routed calls.

The base map should display the address points, road center lines, and appropriate labeling.

Dispatchable locations should be displayed in the same way the carrier providers them, i.e., a civic location or geodetic location.

The map should zoom to the caller’s dispatchable location automatically.

All payload locations that come with an uncertainty shall be directly displayed, i.e., a circle/sphere not a point.

The emergency service boundaries and other applicable municipal boundaries shall be displayed on the map. Preference for this to be toggled on/off by user

A base map that displays all address points and road center lines should be available.  In addition, imagery (pictography) should be available, including ‘street view’.

It is preferable that imagery be as close to real-time as is practical.

The ability to review the ‘street view’ is preferred.

The map display shall allow for simple point and click functionality to obtain geodetic values of any location in the map, to be displayed in both degrees, minute, seconds and decimal degree formats.

Users should be able to search for civic address, geodetic addresses, and landmarks

The mapping display shall have the ability to allow end users to create temporary features and annotation on the map, such as marathon routes, street closures, special events zones, with the ability for these to have predetermined expiration times.

The mapping systems shall comply with NENA 71-501 v1, NENA 02-010 v9, NENA 02-014 v1.

The mapping display utilizes the same geospatial data provisioned to the ECRF and LIS. Mechanisms exist in i3 to replicate the data to the CPE and to its map display. The system includes a centralized map management function for mapping updates so that mapping shall be managed and distributed from a centralized location. The mapping system is able to interface with and utilize various interfaces, including free mapping services such as Google as well as other applications such as Pictometry. The system is compatible with the most current version of ESRI software, and the response shall describe the process for staying current with new releases. The map display allows for simple point and click functionality to obtain geodetic values of any location in the map, to be displayed in both degrees, minute, seconds and decimal degree formats.

#### 4.3.7.4.1 Orthophoto Interface

The system has a web services or other interface to tiled, cached, orthoimages and base-mapping using either OGC or ESRI compatible request formats.  It is in the best interests of public safety to offer as close to near real time imagery.

#### 4.3.7.5 PSAP Operational Status Display

Larger PSAPs require a large display that shows the readiness and status of the PSAP.

#### 4.3.7.6 RapidSOS

The system connects to the RapidSOS clearing house. Supplemental location data available from RapidSOS is easily accessible to dispatchers via both the CPE and mapping solution. The caller’s location from both the communication service provider (carrier) and RapidSOS is shown on the map. As alternatives and supplements to RapidSOS become available, the Department may add them to the System Lifecycle Calendar.

#### 4.3.7.7 Administrative Positions

The system provides and the contractor shall support and maintain an administrative position at each PSAP, if requested by the Department. The administrative position is used to access reporting functions and other administrative or maintenance functions. The administrative position shall be equipped with a CDRW drive.

#### 4.3.7.8 Audio/Video Recording

The system provides the capability to optionally generate an outward “beep” tone on selected audio call sources or payloads at fifteen (15) second intervals.

#### 4.3.7.9 Instant Recall Recorders

The system includes the ability for individual call taker workstations to instantly replay audio from prior payloads or payload in progress, regardless of the payload type or size.  The instant recall recorder (IRR) allows, at a minimum, replay time of sixty (60) minutes for voice calls and the equivalent of sixty (60) minutes, in size, for other payload types.

The audio is able to be played back through the same headset being used to answer the call.

The IRR is able to be played to a conferenced party. This is currently done within the CPE software. The device shall not require proprietary licensing, it is a commercial off the shelf device.

#### 4.3.7.10 Local Audio Recording

The system has two (2) interfaces to the Next Generation 911-capable Digital Logging Recorders (DLRs) furnished to PSAPs by the State 911 Department and currently in use at PSAPs.  The system integrates the existing DLRs into the LAN through an IP connection (and not through an analog connection).

The current vendor is replacing all DLRs in 2023.

The system provides a local recorder interface for 911 audio on a per position basis.  The system provides the ability to interface with IP digital logging recorders.

The system provides the capability to optionally generate an outward “beep” tone on selected audio call sources at fifteen (15) second intervals. The beep is a legal indication of the caller being recorded.

#### 4.3.7.11 Interface to CAD

The CAD output shall conform to the State 911 Department’s standard for ASCII output and shall be in format equivalent to legacy ALI data spills. Vendors shall quote CAD interface ports as both serial and Ethernet connections.

#### 4.3.7.12 Remote Ringer

The contractor shall supply, where needed, remote ringers at PSAPs to extend the audible ringing capability of the CPE to rooms outside of the communications area.

Remote audio monitoring is required at some PSAPs. The system is capable of providing this feature. We have a preference for SIP speakers over analog.

#### 4.3.7.13 Clock

There shall be a clock display at each PSAP. The location of the display is at the discretion of PSAP personnel.

### 4.3.8 ESInet and Network

The contractor shall provide, monitor, manage, and operate the network, including the all network equipment and all network services and connection required to create a fully functional and compliant Next Generation 911 system.

The network links include a mix of private (Commonwealth-provided) and public (commercial carrier) facilities.  While the network facilities may be obtained from more than one source, the contractor shall operate and manage the network as a single network from the perspective of the State 911 Department.

The public (commercial carrier) facilities are the primary path, and the private (Commonwealth-provided) facilities where available shall be the secondary path for failover where practical.  The private network facilities shall include the Massachusetts Broadband Initiative (MBI) deployment currently installed in western Massachusetts and other network assets to be identified by the State 911 Department.  The State 911 Department requires that the contractor shall make use of the private network assets identified by the State 911 Department.  The contractor may be required to coordinate with third parties, including without limitation, network operators and contractors associated with the MBI project.  As the Commonwealth deploys more private network facilities, the State 911 Department may require that the contractor migrate carrier-based services to these private facilities, and the contractor shall do all things and take all action necessary to migrate such services at the direction of the State 911 Department.

Reference Section 4.4.2.3.3 Circuit ID Management

Bidders are advised, throughout the Term of this agreement, the circuit rates shall not exceed those available to Commonwealth entities under Statewide Contract (currently ITT72) for said services plus the bidder's noted mark-up.

#### 4.3.8.1 Network Design

The awarded vendor may submit for consideration, a Plan of Action (Reference Section 4.5.1 Transition Period for details) which describes an alternate network configuration including overall architecture, bandwidth requirements, QoS requirements, and any required protocols, for the Next Generation 911 system. The network diagram and narrative shall provide sufficient detail so that technical reviewers can identify how the design would enhance the reliability of the network, and shall clearly display, at a minimum, the following:

* Physical topology;
* Diversity in topology;
* Non-diverse network segments;
* All known entities and all known connection types;
* Secondary and tertiary technologies with  interfaces to master topology;
* Rings;
* Circuits;
* Interconnection and aggregation points;
* Load balancing capability;
* Approach to meeting availability requirements; and
* Data Center connections.

The detailed network design shall incorporate all entities and all connection types, including but not limited to, connections to PSAPs, connections between data centers, connections to the public internet, connections to communications service providers, via traditional trunks and private IP circuits, connections to legacy PSAPs, connections to existing selective routers; and any other connections that may be required.  The final network design shall be subject to the approval of the State 911 Department.

The network shall be a high performance network based on current industry and NENA i3 standards, protocols and technologies. The primary network technology shall be a mix of MPLS, carrier Ethernet, or other i3 transport standards.  QoS features shall be provided, and PSAPs shall have dedicated bandwidth to eliminate contention.

The network shall be designed and configured to support many payloads, including voice, data, and multi-media.  The network shall be able to identify, prioritize and route/re-route traffic based on data type, application, origination point, destination point, and other parameters.  In particular, the network shall be able to identify and prioritize voice calls and maintain a mean opinion score of 4.0 or above. QoS features shall be deployed for this purpose.

#### 4.3.8.2 Back to Back User Agent Usage

If SIP or RTP traffic needs to cross boundaries, it shall be handled with back-to-back user agent, or B2BUA, type of session border controllers rather than via NAT. B2BUAs shall also be used to transport SIP and RTP between IPv6 and IPv4 networks, if required.

#### 4.3.8.3 Network Failover

The system shall have a network failover scheme that is widely used in the industry and that complies with open standards and that provides for maximum availability. The system shall meet a 99.999% standard of availability. There shall be redundant, dual Ethernet switches (and, if required, routers) at PSAPs to be identified by the State 911 Department and, if required, equipment to accommodate diverse communication service providers at PSAPs to be identified by the State 911 Department. The contractor shall assess the use of technologies such as WAN

Virtualization, microwave, satellite, and wireless technology to improve ESInet resiliency, redundancy, and availability, and shall include the assessment in the network design document.

#### 4.3.8.4 Second and Third Physical Connections

In addition to the State 911 Department’s requirement of alternate wireline carriers for certain PSAPs, As per the lifecycle calendar (reference Section 4.5) the successful bidder shall assess the use of microwave and satellite and wireless as tertiary paths. To the extent that the bidder concludes that the use of these means is viable as a tertiary path, such means shall be incorporated in the detailed network design and technical design documents, as directed by the State 911 Department.  In certain cases, where it is not feasible to connect by diverse wireline carriers, the PSAP may be connected with microwave or satellite or wireless links, in order to provide these redundant connections.  The State 911 Department expects that a switchover from a failed or degraded network to a secondary or tertiary network shall result in minimal or no data loss.

The network shall be maintained so that it shall provide for 100% of all 911 payloads to be delivered to a PSAP.  The network architecture design shall address network upgrades and maintenance, down time disclosures, service level agreements (that address, at a minimum, packet latency, packet loss, jitter, and quality of service), and other necessary elements.

#### 4.3.8.5 Network Performance and Service Levels

The contractor shall ensure the network continues to perform at or exceeds current service specifications.   The current network was designed and implemented with the following guiding principles:

* Automatically reroute all data types around broken or failed links without manual intervention.
* Treats content through prioritization and bandwidth management to provide guaranteed Quality of Service (QoS).
* The network always maintains a toll quality MOS 4.0 or better.

The network uses traffic shaping and traffic policing to ensure that the network meets or exceeds its performance contract requirements.

The contractor shall, submit to the State 911 Department for approval a chart or list of “Outage Escalation Procedures” that shall be adhered to. Reference Section 4.5.1 Transition Plan for details.

#### 4.3.8.6 Network Performance Metrics

The following are minimum network performance levels that shall be maintained.

* Packet Latency (20 milliseconds)
* Packet Latency to an average round trip time of forty (40) milliseconds which equates to a one (1) way transmission time of twenty (20) milliseconds. Packet Latency is measured between the demarcation points, typically between a data center demarcation point and a PSAP demarcation point.
* Packet Loss (0.5%)
* Monthly average packet loss between demarcation points not to exceed 0.5%.
* Jitter (20 ms)
* Jitter shall not exceed twenty (20) milliseconds.

#### 4.3.8.7 Network Service Level Agreements

The contractor shall ensure that all network service providers shall execute a service level agreement (“SLA”) that shall meet the SLA’s and performance KPI’s defined in this RFR, at a minimum, address the following:

* Adherence to Network performance metrics and QoS requirements
* Response requirements to various types of service disruptions
* Response times and requirements for new installation or changes
* Network management, monitoring and reporting times and requirements
* Penalties and other consequences for non-compliance.

The contractor shall submit to the State 911 Department all SLA(s) executed with network service providers within thirty (30) days following execution of such SLA(s) and shall promptly notify the State 911 Department of all changes in network service provider.

#### 4.3.8.8 Performance Degradation and Circuit Failures

The contractor shall monitor circuit performance at each PSAP and shall report to the State 911 Department the following performance issues:

* Two (2) or more identical or similar circuit failure or performance degradation within (30) days of the first reported incident
* Five (5) or more identical or dissimilar circuit failures or performance degradation within (30) days of the first reported incident

Circuit performance requirements are defined in section 4.3.8.5.

 For all such events, the contractor shall submit a remediation plan to the Department within 30 calendar days of the last reported incident.  Failure to do so, may incur a penalty in the form of a credit for the MRC for the month(s) with the failures in addition to those described under Catastrophic and Major system malfunctions in section 5.1.

#### 4.3.8.9 Timely Installation Intervals for New Service Requests

From time-to-time PSAPs construct new facilities requiring relocation thus necessitating new circuits.  The contractor shall complete new service installation within ninety (90) days of a request.

#### 4.3.8.10 Network Monitoring

The contractor shall use a network monitoring tool to detect and report end point viability.  It is expected that all devices and circuits within call delivery path are monitored on 24x7x365 basis and according to industry norms for individual devices. Reference Section 4.4.2,2 Help Desk.

### **4.3.9 Training**

The contractor shall provide the State 911 Department with training materials that detail the functionality of any new component(s) of the system for the end user, administrator and State 911 Department staff.  The State 911 Department shall have the option of customizing all of the training materials as their own, to develop and customize training materials, and to determine the curriculum content for all training, including without limitation, end user, administrator, and State 911 Department staff.   The contractor upon request, shall review all such training materials for accuracy and consistency with the system/software.

#### 4.3.9.1 CPE Availability and Training Curriculum

Any new CPE shall be made available at the earliest possible time for the development of the curriculum and training materials. The vendor (or its subcontractor) shall provide existing training material and screen shots for use in the training material as requested/required by the Training Department.  The contractor is responsible for training/educating State 911 Department staff on any new or upgraded CPE.  The Department will develop a training curriculum that uses resources provided by the vendor. The contractor upon request, shall review all such training materials for accuracy and consistency with the system/software.    Only the Department’s curriculum shall be used to train telecommunicators.

#### 4.3.9.2 Training Materials

The Department shall provide training materials to the contractor in an electronic format that will permit the printing of materials.  As requested, the contractor shall procure/print all software manuals, and audio/visual aids (such as a “job aid”) necessary for training on the system.  Any manuals, software programs and audio/visual training materials created and developed by the Department shall become the sole and exclusive property of the Department with rights to copyright and sublicense and shall be subject to the sole and exclusive use, alteration or revision by the Department.  As requested, the contractor shall print and distribute all training materials approved by the Department, including without limitation, the materials that shall be distributed at training classes hosted by the contractor, as directed by the Department.

Selected bidder agrees to provide a quote for said training materials within three (3) business days of receipt of request. Training materials shall be available to the State 911 Department or be distributed to the training centers ten (10) business days prior to the first class.

#### 4.3.9.3 Supplemental Training Staff

The Department may request the successful bidder to provide supplemental training staff. The Department will notify the successful bidder in advance of any anticipated need for training staff to allow for the successful bidder to find and allocate staff. The Department will provide a train the trainer program to ensure that the curriculum is trained as intended. It is anticipated that this would only be required for large projects (reference Section 4.4.4.1) when PSAP Equipment (reference Section 4.3.7) is replaced (reference Section 4.5 System Lifecycle and Program Calendar).

#### 4.3.9.4 Accessibility of Training

The contractor shall coordinate with the State 911 Department in the identification of all prospective attendees at its training who require accommodation and shall cooperate with the State 911 Department in its provision of such accommodation.

All technical and user documentation and any additional training material delivered by the contractor under the contract, and any renewal thereof, shall include alternative keyboard commands that may be substituted for mouse commands, and shall, at the request of the State 911 Department, be provided in electronic format and/or printed in Braille.

#### 4.3.9.5 State 911 Department Training Centers

The contractor shall provide equipment/services to all State 911 Department training centers (currently 4). The Department considers the training centers to be fully functional PSAPs, accordingly the training centers must meet all the requirements laid out in Section 4.3.7. The locations current State 911 Department training centers will be provided.  The contractor shall install and maintain all NG911 equipment in each of the training centers for the duration of the contract and any renewals thereof.

All of the training centers shall have the capability to be a live working ten (10) position-training center capable of being used as a back-up location for PSAPs.

The training centers must have the ability to simulate calls/payload for training purposes. Simulated calls should present to the training center in the same manner as a real 911 will. Multiple examples of types of calls should be available, including different classes of service.

The training center must be able to simulate TTY.

The State 911 Department reserves the right to move or add additional training centers.

The training center shall be designed and installed to allow State 911 Department trainers to train and certify newly hired 911 telecommunicators on the Next Generation 911 system and/or the replaced system during the transition phase for large projects (reference Section 4.4.4.1 Large Projects) or at any time throughout the Term of this contract.

The contractor shall be responsible for training the State 911 Department Training and Systems staff on the operations of each training center including call simulation

### 4.3.10 Intentionally Left Blank

### **4.3.11 Mobile PSAP**

The contractor shall, monitor and maintain the Mobile PSAP. The contractor shall be required to respond to and/or provide services at any location identified by the State 911 Department throughout the Commonwealth. Mechanical repairs and service of the vehicle are procured through a separate procurement mechanism.

The Mobile PSAP is a PSAP, accordingly it must meet all the requirements of Section 4.3.7. Due to the nature of the mobile PSAP, some equipment may be chosen/needed to reduce failures such has solid state hard drives.

The Mobile PSAP is a 41-foot fully self-contained emergency response vehicle.  Incorporated in the unit are all systems necessary to replace any dispatch center with 911 capabilities.  On board equipment includes:

* 6 Answering Positions;
* Programmable Motorola radio equipment for all radio bands;
* Two Motorola MIP 5000 radio dispatch consoles;
* Bearcat scanner;
* Netclock synchronized time displays;
* Conference room;
* DirecTV satellite;
* 802.11 wireless access point
* Administrative workstation;
* Two color security cameras with IR and a 1 TB DVR;
* Dual halogen light tower;
* 2 telephones for simulation/demonstration of 911 call handling; and
* 7 Administrative telephones.

#### 4.3.11.1 Mobile PSAP Use Cases

There are two main uses of the Mobile PSAP:

Provide temporary facility for a PSAP that is going thru construction or renovation.  During such deployments, the unit is connected via a tether to the routers within the PSAP.

Public education/outreach - during these deployments, the unit operates in standalone mode.  State 911 staff use the simulation phones to demonstrate how 911 calls are presented.  Since during any given year the unit participates in large number of such events, this configuration is the “default” mode.

#### 4.3.11.2 Operational Requirements

#### 4.3.11.2.1 Administrative Telephones

 The Mobile PSAP equipment includes six (6) administrative IP phone sets, acting independently from the 911 function. These lines are used to receive remote call forwarded numbers from the PSAP, these are normally outside of the ‘911 system’

#### 4.3.11.2.2 UPS Maintenance

The contractor shall perform a preventative maintenance including recommend firmware updates. UPS shall be monitored using SNMP traps via the existing Ethernet network interface card installed in the UPS. As with all PSAPs, the contractor is responsible for proper maintenance and operation of the Mobile PSAP UPS unit and all batteries.

#### 4.3.11.2.3 Spare Parts

The contractor shall manage a spare parts inventory for the mobile PSAP. Purchasing and stocking of spare parts shall remain the sole responsibility of the contractor and at no additional line item cost to the Commonwealth. The spare parts shall be located on the mobile PSAP or at a mutually agreed upon location within Massachusetts. The inventory process shall be mutually agreed to by the parties.

#### 4.3.11.2.4 Deployment Configuration

At the request of the State 911 Department, the contractor shall reconfigure the mobile PSAP CPE and/or software for deployment to a PSAP.  Upon conclusion of any deployment the contractor shall reconfigure the mobile PSAP and return it to its default mode of public outreach.

#### 4.3.11.2.5 Mobile PSAP CPE Monitoring

During deployments the contractor shall provide the same monitoring capabilities as a standalone PSAP.

#### 4.3.11.2.6 Public Ed Simulated Environment

The contractor shall provide a simulated environment for simulated call answering. The simulators shall simulate the transmission and answering of 911 payloads and shall provide ALI and mapping.

#### 4.3.11.2.7 Additional Mobile PSAP Services

At the request of the State 911 Department, the contractor may be required to provide additional services to support the mobile PSAP. Said cost of the additional services to be quote upon request of the State 911 Department.

### **4.3.12 Electrical, Wiring and Cable**

The contractor shall provide and maintain all electrical, wiring, and cable services for the system.  The State 911 Department prefers the reuse of existing wiring, cabling, and HBCU, if compatible with the system.

#### 4.3.12.1 Electrical

The contractor shall provide and maintain all electrical services for the system and shall provide such electrical services as follows:

* Supply and install where needed and otherwise maintain existing complete electrical power distribution system for all equipment supplied;
* Provide adequate surge protection, grounding and lightning suppression devices to protect equipment from unnecessary interruption; and
* Provide and maintain a thirty (30) minute uninterruptible power supply for all equipment supplied at the PSAPs and for data centers and for all DLRs. A hard bypass unit for maintenance/equipment failure is required.  Following contract award, the parties shall, by mutual agreement, determine the means and manner of installing the uninterruptible power supply so as to ensure that there is no interruption for the PSAP or data center.

The contractor shall ensure that all electrical services performed by the contractor or its subcontractors under the contract, and any renewal thereof, shall be performed by appropriately licensed electricians.  The contractor shall ensure that the contractor or its subcontractors shall obtain all necessary permits for electrical services performed by the contractor or its subcontractors under the contract, and any renewal thereof, and shall provide copies of such permits to the State 911 Department upon request. The State 911 Department reserves the right to contract with its own electrician for such work if to do so would result in the best value in fulfilling the contract, or any renewal thereof.

#### 4.3.12.1.1 Electrical Standards

Please note some PSAPs may require COPS compliance and the bidders should be familiar with those specifications.

#### 4.3.12.1.2 Surge Protection/Surge Suppression

The system shall correctly specify surge and lightning protection for all connections to AC power as well as to communications facilities such as plain old telephone service, 911 trunks/circuits, T1/DS1, wireless antennas, etc.

#### 4.3.12.2 Wiring and Cabling

The contractor shall provide all necessary embedded and visible interconnect cabling necessary for system operation, including all peripheral devices located within the data centers and PSAPs, connecting remote workstations with the central servers.

All interface connections between communications and peripheral device cabling and visible cables shall use standard EIA connectors secured by wall plates where exposed.

Care shall be exercised in wiring to avoid damage to existing wiring and new and existing equipment. All wiring and connectors shall be installed in strict adherence to standard communication installation practices and all applicable federal, state, and local codes.

All cables, regardless of length, shall be clearly marked and/or numbered in a manner that reflects a unique identifier of the cable at both ends. Marking codes shall correspond to recognized standards and specifications and be consistent throughout the project. Such markings shall become integral to the overall as-built detail. All cabling shall be neatly laced, dressed, and/or adequately supported. Cable shall be plenum rated where required by local building or fire codes.

No splices will be allowed in system wiring other than at approved designated locations, and with approved devices.

Use of power strips at PSAPs is prohibited unless expressly authorized by a Department representative.  In such instances, the power strip shall be clearly marked with “911 use ONLY” and all unused receptacles be covered with a plug with a plastic insert labeled “911”.

The equipment installation that may be required under this RFR includes the following described items as well as other hardware, software, and procedures as may be needed to ensure a completed installation which is in accordance with the standards of good engineering practice and all building codes and ordinances in effect at the sites delineated in this RFR.

Wiring of 120-volt AC circuits normally associated with conventional buildings shall be provided by the State 911 Department at the data centers and PSAPs and other Commonwealth facilities as required. Wiring required for connecting the equipment to the power outlets or any special wiring shall be the responsibility of the contractor.

The contractor shall install the equipment and connect the units to commercial/emergency AC power and uninterruptible power sources. The contractor shall connect Commonwealth-furnished equipment to the contractor-supplied equipment and install bonding and grounding conductors where needed.

The contractor shall adhere to FCC and all local codes and ordinances in all matters pertaining to the work.

Cabling, communications outlets, power wiring, system grounding, conduit facilities, and equipment rooms shall be installed in accordance with national standards and national and local codes. Minimum standards used in the installations shall include, but are not limited to, the following:

* ANSI/TIA/EIA-568 Commercial Building Telecommunications Wiring Standard;
* ANSI/TIA/EIA-569 Commercial Building Standard for Telecommunications Pathways and Spaces;
* ANSI/TIA/EIA-606 Administration Standard for the Telecommunications Infrastructure of Commercial Buildings;
* ANSI/TIA/EIA-607 Commercial Building Grounding and Bonding Requirements for Telecommunications;
* Building Industry Consulting Service International, Telecommunications Distribution Methods Manual;
* National Electrical Code (NFPA-70);
* FCC Rules and Regulations, Parts 68 and 15; and
* Applicable grounding standards.

All equipment and component parts installed shall be new, shall meet the requirements of this specification, and shall be in operable condition at the time of delivery.

The installation work shall be approved by the State 911 Department prior to commencement of a particular phase of work on a site-by-site basis. The contractor shall provide descriptions and layout drawings showing the proposed installations at each site at least fourteen (14) days prior to beginning work at that site. No work shall commence without written approval from the Department.

The contractor shall maintain all cabinets in the data centers. If expansion is needed the contractor is responsible for supplying them.  Mounting for equipment or any other data communications equipment (i.e., modems, routers, etc.) requiring assisted installation shall be accomplished by cabinet mounting.  The cabinets may be free-standing, or wall mounted depending upon space requirements.  The State 911 Department shall select the preferred method of cabinet mounting following contract award. Cabinets shall in no event exceed eighty-four (84) inches in height.  The response shall describe in detail the space requirements and dimensions of all equipment, including without limitation, the size of cabinets, tables, stands, and consoles, for the system.

The successful vendor shall provide all necessary cabinets, tables, stands, or other required mounting facilities for the system, consoles, and communications and/or network equipment consistent with their proposed configuration(s).

The successful vendor shall inform themselves fully as to all facilities for delivering, storing, placing, handling, and disposing of materials. All aspects of the installation shall be planned and executed in a professional manner.  The contractor shall coordinate access to the sites with the State 911 Department.

The costs for wiring and cabling shall be on a time and materials basis.

#### 4.3.12.4 Grounding

All hardware and peripheral devices shall be mechanically and electrically grounded to prevent both user hazard and loss of data or hardware integrity due to external electrical impulse. The contractor shall demonstrate knowledge of local storm and lightning phenomena and show such methods of protection in selection of local data transmission mode (i.e., shielded cable, fiber optics, etc.).  The contractor shall ground all equipment in compliance with manufacturer recommendations and applicable standards. This shall include, but is not limited to, all servers, network equipment, appliances, metal conduit trays, cabinets, chassis, shelves, and transmission lines provided under this RFR.

The contractor shall furnish and install the required grounding and bonding conductors and make connections to the grounding system at the data centers, PSAPs and other sites.

### **4.3.13 Data Storage and Reporting Requirements**

#### 4.3.13.1 Data Lake

Maintain AWS GovCloud account for hosting the State 911Department Data Lake.

Maintain the AWS Direct Connect (private network connectivity) services between the NG911 System data centers and the AWS GovCloud environment for the secure transport of NG911 data between the NG911 System’s data centers and the AWS GovCloud account.

Configure Identity and Access Management (IDAM) within the AWS GovCloud account to enable State 911 Department designated employees to securely access the NG911 data from the NG911 System within the State 911 Department Data Lake. The IDAM will be configured to interconnect with the NG911 System Active Directory for user administration and authority. The IDAM will provide Single Sign-On (SSO) and Multi-Factor Authentication (MFA) for State 911 Department designated employees into the AWS GovCloud account for use of the NG911 data from the NG911 System. The IDAM service will be provided to ensure transferability of the State 911 Department owned data within the State 911 Department Data Lake to the State 911 Department at the end of the Agreement for continuity of service.

The NG911 System logging infrastructure is used to populate the State 911 Department Data Lake with applicable NG911 data elements securely over an AWS Direct Connect service. The log data collected from all applicable NG911 elements (Tier 1 data in the AWS terminology) will be stored in AWS Simple Storage Service (S3) and all logs will be maintained in their original state. Any and all replacement of devices and software within the NG911 architecture is expected to populate the Data Lake. Data from the testing environment (reference Section 4.4.3.4) is expected to populate the data lake.

Vendor will provide data management services to support on-going logging and usability of Tier 1 and 2data collected from the NG911 System in the S911D Data Lake for the term of the Agreement. S911D Data Lake Tier 1 data collected will be available 1 hour or less from each recorded log event.

The successful bidder shall provide data management services to take tier 1 data (logs) and structure the data into usable tier 2 data for using in reporting and analytic software. Tier 2 data can be generated on a weekly basis.

#### 4.3.13.2 Third Party Reporting

A third party reporting tool is available to the PSAPs (and the Department) via the NG911 system and shall be maintained until such time as the tool is replaced. Reference the lifecycle calendar for planned replacements.

### **4.3.14 GIS**

MassGIS is the official Massachusetts state agency responsible for the collection, storage, and dissemination of geographic data. In addition, MassGIS is responsible for coordinating geographic information system activity within the Commonwealth and setting standards for geographic data to ensure universal compatibility.   Through MassGIS, the Commonwealth has created a comprehensive statewide database of geospatial information.  MassGIS will be the source of the GIS data that shall be used for the deployment of the system.  The contractor may be required to enter into appropriate non-disclosure or license agreements with a third party database provider, MassGIS, and/or or other parties.

Next Generation 911 depends on Geographic Information System technology and i3-compliant spatial data for a number of functions including, but not limited to, call routing, location validation, and determining the appropriate public safety agency that is responsible for an incident’s location.  The Commonwealth will provide to the contractor the set of i3-compliant spatial datasets necessary for these functions to operate throughout the Commonwealth.   This section of the RFR briefly describes the data available from the Commonwealth.

Bidders shall not bid on the provision of GIS data, and cost proposals shall NOT include provision of GIS data other than as expressly set forth herein.

All GIS data shall remain the exclusive property of the Commonwealth, including without limitation, any derivatives that the contractor may produce.

The following spatial datasets will be made available to the contractor to be used by the system.  All data will be provided in i3-compliant format and will contain all required i3 spatial attributes.  Data sets will be provided on a regional basis (except that data sets for wireless state police PSAPs will be provided on a statewide basis).

#### 4.3.14.1 Polygon Boundaries

The Commonwealth will provide to the contractor the following polygon boundaries, derived from a map of ESNs:

* Public Safety Answering Point Boundaries – non-overlapping boundaries in i3- compatible format for PSAPs throughout the Commonwealth;
* Fire service agency boundaries – non-overlapping boundaries in i3-compatible format for fire departments throughout the Commonwealth;
* Law enforcement service agency boundaries – non-overlapping boundaries in i3- compatible format for all local, regional, and state law enforcement agencies (police and sheriff departments) throughout the Commonwealth;
* Emergency Medical Services agency boundaries – non-overlapping boundaries in i3- compatible format for all emergency medical services agencies throughout the Commonwealth; and
* State Police agency boundaries – non-lapping boundaries for all State Police Jurisdictions.

The Commonwealth will also provide to the contractor:

MSAG community boundaries, within which number/street name are unique (with a handful of exceptions statewide); and

Authoritative municipal and state boundaries.

#### 4.3.14.2 Street Segment File

The Commonwealth will provide to the contractor a complete street centerline file that covers the entire Commonwealth and towns immediately adjacent to the Commonwealth in other states.  This file contains a link from each segment to address ranges, street names and alias street names, and other i3-required attributes, along with i3-compatible coordinates.  Where street segments intersect the polygon boundaries referenced above, the segments will be split to contain appropriate address ranges on both sides of the split.

#### 4.3.14.3 Address Point Locations

The Commonwealth will provide a point file of address locations. All structures in the Commonwealth have been mapped as of 2021 and each structure polygon is associated with one or more address points.  The structures layer is being maintained on a bi-annual basis using aerial imagery, input from field staff, assessing information, as well as on-line resources and other datasets.  In addition to these structure-derived centroids, the address points also include parcel centroids (for vacant properties assigned numbered addresses), non-building locations such as parking lots or playing fields, building entry points, and/or building interior points. In most cases building points represent the most granular level of geographic detail we can provide. However, as we acquire information related to the location of sub-addresses, like room, unit, or wing, we could associate these addresses with their respective locations within the building.

Almost all address points link to one or more address listings in a master list compiled from various sources including the ESL, the statewide voter list, local tax lists, utility customer lists, and other sources.  The master list is maintained daily, and the edits are based on local sources. All the civic style address records in this master list, from whatever source, have had their number and street name standardized to meet NENA-specified format and to cross-reference other address records.   Address records that have no matching point locations are being identified and points that are associated with structures but have no address will be linked using local sources.

#### 4.3.14.4 Other Spatial Data

The Commonwealth will provide to the contractor additional data maintained by MassGIS if required, upon such terms and conditions as may be negotiated with the contractor.  These include, but are not limited to, aerial photographs, elevation data, tax parcel boundaries, hydrologic and other features.  All of these datasets can be provided in ESRI or other industry standard file and database formats as appropriate. MassGIS may organize the data into regional, PSAP, and Commonwealth-wide datasets.  The contractor may also wish to access web mapping services for MassGIS-provided, tiled, cached base map display (see Section 4.3.7).

#### 4.3.14.5 Sample Spatial Data

MassGIS will develop a set of sample datasets that are representative of the Commonwealth-wide spatial data described above and other layers relevant to the Next Generation 911 deployment.  Some of these datasets are currently available on the MassGIS website at [www.mass.gov/mgis](http://www.mass.gov/mgis) and others can be made available to the contractor as ESRI datasets or in an Open Geospatial Consortium’s (OGC) i3-compatible Geography Markup Language with associated i3-required attributes or as web services using either ESRI or OGC-compatible request formats.  The sample datasets will include a mix of urban and rural areas of the Commonwealth, in a contiguous format, to enable the contractor to determine the complexity and breadth of the spatial data that shall be supported.  The sample data sets will include a subset of all of the datasets that will be provided to the contractor.

#### 4.3.14.6 GIS Data Normalization Services

The LDB, LIS, or alternative shall provide GIS data normalization services. The contractor shall work with MassGIS to develop extract, transform, and load routines to populate system tables from existing datasets.

In addition, the spatial interface shall provide quality assurance and control services to include automatic review of the following, at a minimum:

* Missing data layers;
* Missing attribute information;
* Standardization of GIS data attributes in adherence to relevant national standards, both centerline and site/structure location points following the FGDC-STD-016-2011, NENA GIS Data Model, NENA Site Structure Address Point;
* Address range parity in centerline, as well as relating to site/structure location points and centerline;
* Duplicate address ranges;
* Direction and flow errors;
* Gaps in PSAP and service boundaries and edge matching; and
* Centerline breaks at intersections and boundaries.

The contractor shall work with MassGIS to develop a strategy to ensure timely and accurate local input of address information and any other changes to the key datasets required for Next Generation 911 operation. In addition, the contractor shall make the mapping application used in the system directly available to MassGIS staff in the same way as it would be available in a PSAP.

## 4.4 Functional Units

### **4.4.1 Program Administration**

This functional unit serves as the administration of the NG911 program/project.

Bidders shall describe in detail the program management, staffing, testing, change management, procurement, and planning functions. The contractor shall provide for program management to ensure a satisfactory operation, enhancement, and maintenance of the NG911 system.

The successful bidder shall:

* continuously maintain adequate protection of all work from damage and shall protect the State 911 Department's and/or any other property from injury or loss arising in connection with the contract. The contractor shall adequately protect adjacent property as provided by law and the contract;
* effectively secure, manage, train, and staff the Technical Services, Change Management, and Integration Services functional units;
* provide all documentation to be discussed at scheduled meetings at least twenty-four (24) hours prior to said scheduled meeting(s);
* assume complete responsibility for all tools, test equipment, or other items that are the property of the contractor and are being used during equipment installation; (The State 911 Department or its PSAPs will not be responsible for lost or damaged items that the contractor may leave at work sites for their own convenience.);
* create all written documents using Microsoft suite of products and make same available to designated individuals on cloud storage platform provided by the Department;
* hold all meetings at the administrative offices of the State 911 Department, unless agreed to otherwise by the State 911 Department;
* provide screen shots or images for use in the training material as requested/required by the Department;
* Staff for program management to include, at a minimum, one designated program manager responsible for oversight, management, and supervision, and status reporting of their own technical personnel involved in the provisioning activities;
* represent and warrant to the State 911 Department that the contractor shall be sufficiently staffed and equipped to fulfill contractor’s obligations under the contract, contractor’s services shall be performed by appropriately qualified and trained personnel, with due care and diligence and to a high standard of quality as is customary in the industry, in accordance with the terms and conditions of the contract and in accordance with all applicable professional standards;
* Implement, at minimum, a monthly Program Meeting to review program status, updates, etc.;
* Allow for the inspection of installed equipment at the data centers, training centers, and PSAPs by the State 911 Department, at any time;  and
* Support the Department’s Request for Information and/or Request for Procurement processes by assigning necessary staff and thru oversight of the functional units.

#### 4.4.1.1 Key Personnel Functions/Roles

At the request of the State 911 Department, the contractor shall remove any and all individuals identified by the State 911 Department for reasons including, but not limited to, lack of or inadequate training or performance issues, from performing services under the contract, or any renewal thereof.

#### 4.4.1.2 Program Manager

The State 911 Department must approve the appointment of the successful bidder’s Program Manager. The successful bidder shall provide, for review, documentation detailing the proposed program manager’s experience and credentials. Upon approval by the Department of the program manager, the successful bidder is advised that the program manager shall not be changed without the prior written approval of the State 911 Department.

The Program Manager shall:

* be a certified project management professional and shall have obtained the PMI Project Management Professional, or PMP, designation. The requirement for a certified professional certification may be waived for the properly qualified person with at least seven (7) years experience managing projects of this scale and complexity;
* have oversight of the day-to-day activities;
* be responsible for administering the agreement and managing of the day-to-day operations of the contract;
* serve as an interface between the State 911 Department and all personnel, including sub-contractors participating on the contract;
* be located in Commonwealth and shall be available to be on-site at the State 911 Department’s offices within two (2) hours of receipt of a request from the State 911 Department;
* be responsible for the management and deployment of personnel, including sub-contractors;
* participate in regular meetings, at least monthly, or as otherwise scheduled by State 911 Department , to take place on-site at the administrative offices of the State 911 Department or via telephone/videoconference call as scheduled by the Department;
* Have authority to hire/fire personnel, including the removal from the contract of subcontractor personnel;
* facilitate regular communication with the State 911 Department, including weekly status reports/updates, and review of program as well as facilitating monthly program status meetings, to include but not limited to status of outstanding MACs, program timeline updates; technical services summary; security posture and threats mitigated; number of opened and closed tickets by PSAP, preventative maintenance performed, equipment inventory, integration services status updates and vendor updates, for the Term of the contract;
* Provide all documentation to be discussed at scheduled meeting at least twenty-four (24) hours prior to said scheduled meeting;
* Participate and assist on special projects at the request of the State 911 Department with pricing to be negotiated at the time of request;
* Coordinate with any and all subcontractors to ensure that any and all subcontractors participate at meetings or on conference calls;
* Be authorized to sign acceptance forms to acknowledge their receipt from State 911 Department;
* Ensure adherence to best practices change management protocols;
* Coordinate an audio and/or video conference call, within fifteen (15) minutes of a request by the State 911 Department, for the purposes of information sharing, data gathering, and coordination.

#### 4.4.1.3 PSAP Customer Service Liaison

The PSAP Customer Service Liaison shall:

* Be a customer advocate representing PSAP interests within the successful bidder’s internal organization;
* Participate, schedule, and coordinate service review meetings with PSAPs quarterly or as needed;
* Be available to designated PSAPs on a 24x7 basis. Designated PSAPs will be defined by State 911 Department, typically these are ACDs and/or high volume PSAPs.

#### 4.4.1.4 Change Control Manager

The Change Control Manager shall:

* oversee the change management process as outlined in section 4.4.3;
* enable beneficial changes, with zero disruption to 911 call delivery; and
* control the lifecycle of all changes.

##### Response Requirement:

Bidders shall document the authority of the Change Control Manager.

#### 4.4.1.5 Staff Training and Accountability

The contractor shall conduct training of all contractor technicians, including customer service technicians, specially trained technicians, field technicians, regional supervisory service technicians and subcontractor staff, as applicable, performing services under this contract, or any renewal thereof. Such training shall take place at regular intervals and shall include industry standard skill set testing. At the request of the State 911 Department, the contractor shall provide verification of such training to the State 911 Department.

Contractor shall ensure that personnel will act in accordance with PSAPs policies and procedures when within a PSAP, conducting test calls, and act in a professional manor at all times.

All field service new hires must attend 16-hour equipment training provided by State 911 Programs within 10 business days of being hired and before they are allowed to answer calls from PSAPs. Field personnel may be required to obtain CJIS security clearance including fingerprinting.

All Help Desk new hires must attend 16-hour equipment training provided by State 911 Programs within 10 business days of being hired and before they are allowed to answer calls from PSAPs.

All Help Desk new hires must spend a minimum of 8 hours observing and learning within the State 911 PSAP.

It is strongly encouraged that Change Management and Integration Services attend the 16-hour equipment training offered by the Department.

##### Response Requirement:

The contractor shall submit to the State 911 Department a comprehensive training plan, including without limitation, the training curriculum, and shall cooperate with the State 911 Department to correct deficiencies identified by the State 911 Department.

##### Response Requirement:

A list of additional trainings provided to staff pertaining 911 operations and a sample curriculum or PowerPoint.

##### Response Requirement:

Bidders shall document criteria for employee development and discipline.

### **4.4.2 Technical Services**

Technical Services shall be responsible for the 24x7x365(6) operation of the NG911 system.

The contractor shall continually monitor the system for performance issues, faults and failures, utilizing a staffed network operations center with properly trained and certified live personnel providing diagnostic, re-route, trouble ticket issuance, service dispatch and Help Desk functionality on a 24 x 7 x 365(6) basis.

The contractor shall utilize simple network management protocol for the management and monitoring of the system and shall utilize encryption, verification or message integrity and authentication to provide security for the system.

The success bidder shall:

* maintain regular meetings with the State 911 Department Systems Division, occurring on a mutually agreed basis;
* conduct preventative maintenance of all equipment at each PSAP equipment twice per year;
* support PSAP equipment changes, which includes but is not limited to position relocation, position installation, or printer/administrative position removal; (Approximately 10 per year).
* support PSAP dispatch renovations, which includes but is not limited to temporary equipment relocation within PSAPs; (Approximately 7 per year).
* support new PSAP construction, which includes but is not limited to ordering of new circuits, moving all equipment to the new location, and PSAP support during the planning phase as instructed by State 911 Department; (Approximately 3 per year).
* support PSAP closure, which includes but is not limited to removal of the equipment, cancelation of circuits; (Approximately 4 per year).
* technician on-site response for repair/replacement/servicing of PSAP equipment;
* Management of user name, to include but not limited to creation, deletion, and change. for various software components of the NG911 system;
* ALI Discrepancy/dispatchable location follow-up and pattern recognition;
* Update/change payload routing rules, as needed; and
* Support mobile PSAP deployment, including emergency deployments, which includes but is not limited to connecting the mobile to the ESInet, support of PSAP relocation to the mobile PSAP, removal, storage, and relocation/reinstallation of equipment within the PSAP, (2 per year).

#### 4.4.2.1 Key Functions/Roles

#### 4.4.2.2 Help Desk

Throughout the Term of the contract and all renewals thereof, the contractor shall operate a Help Desk for the purpose of receiving, logging, tracking, dispatching, and reporting on trouble calls. The Help Desk shall be fully operational and staffed on a 24 x 7 x365(6) basis. There shall be supervisory staff on-site at the Help Desk on a 24 x 7 x 365(6) basis.

The Help Desk shall be in the United States, with a strong preference that the Help Desk be located within the Commonwealth of Massachusetts. The Help Desk shall be adequately staffed so that calls to the Help Desk are answered by person(s) that are trained and qualified on the systems and services furnished under this RFR.  Refer the Training section below.  Calls shall not be answered by an automated attendant or other automated means.  Help Desk staff must have technical capabilities beyond performing data entry for a ticket and be able to resolve issues.

The Help Desk shall be designed and configured to monitor the entire network, including but not limited to, connections between the data centers and PSAPs, connections within the data centers and PSAPs, and external connections from communication service providers and the Internet.

The Help Desk shall be staffed by individuals trained and experienced in telecommunications networking and the Next Generation 911 system on a 24 x 7 x 365(6) basis. The Help Desk staff shall have immediate access to the contractor’s engineering resources for trouble escalation and resolution. The engineering resources shall have advanced knowledge of all system components, configurations, and applications, and shall have internetworking, network security, and other skill sets necessary to troubleshoot and repair complex problems throughout the system.

The Help Desk shall maintain a dedicated toll-free 24 x 7 x365(6) service number for the purpose of accepting calls from the State 911 Department, EOPSS/OTIS, Help Desk, carriers, and other parties relating to the system or any components of the system and responding to troubles relating to the system or any components of the system. The Help Desk shall perform trouble shooting and diagnose network performance problems. The Help Desk shall automatically generate trouble tickets for outages.

In addition, the Help Desk shall serve as a single point of contact for PSAPs for all matters.  The Help Desk shall have the ability to communicate directly and immediately with maintenance and support services for the system and all components of the system, including without limitation, network troubles. The Help Desk shall maintain a list of contacts for all maintenance and support services, including communication service providers that are connected to Massachusetts NG911 to ensure compliance with this requirement.

The Help Desk shall have the authority to dispatch staff from all contractors, manufacturers, subcontractors and other entities responsible for any components or services contracted for through this RFR. The contractor shall dispatch staff in a manner to meet the response time requirements stated in the RFR.

When reported 911 system troubles or failures are received, the contractor shall open a trouble ticket that includes the date, time, affected PSAPs, and all available details of the incident.  The Help Desk shall direct, prioritize, escalate, and oversee the repair of all reported failures and/or trouble tickets.

The Help Desk shall be equipped with appropriate software tools to initiate trouble tickets and shall track and monitor the progress of trouble tickets.

The software tools shall be configured to allow authorized users from the State 911 Department or individual PSAPs to initiate trouble tickets electronically, to track and monitor the status of trouble tickets, and to view and create management reports.

The Help Desk shall have the ability to access the contractor’s trouble ticket reporting system for all aspects of the system, including without limitation, the applications and appliances at the data centers and CPE, and shall communicate directly with each other regarding troubles.

The Help Desk shall open a ticket for all calls received.   All troubles that do not fall under the direct responsibility of the contractor shall be forwarded to the appropriate party, monitored for progress until resolution is achieved, documented in detail and with updates included in ticketing software, and communicated to State 911 Department or the PSAP as appropriate. For example, if a cellular call does not provide a location, it is expected that a ticket be opened with the cellular service provider.

It is expected that the Help Desk staff be experts in the use of the CPE provided to PSAPs. Help Desk staff shall be able to differentiate between a training issue or dispatcher error versus a system error.

The Help Desk shall be housed in a facility with a backup power generator to ensure continuity of operations.

The Help Desk staffing plan shall address continuity of operations during weather or other major events that may restrict travel. Staff schedules shall be augmented, supplemented, or changed as needed for the entirety of the weather or other major events.

The Help Desk shall be equipped with a Network Management System (NMS) that monitors the performance of the network and infrastructure.

The NMS shall continuously monitor the performance and availability of all devices, network connections, applications, appliances, CPE, and other functional elements throughout the Next Generation 911 system on the network.

The NMS shall monitor network performance, including throughput, latency, jitter, packet loss, MOS and other parameters, including any performance criteria set forth in this RFR.

The NMS shall monitor the network for network intrusion attempts, security breaches, issue network security alerts to the network services provider and State 911 Department staff, maintain logs of all activities that may indicate potential security breaches, and initiate appropriate predetermined responses to potential security breaches (such as blocking traffic or disabling an account).

The NMS shall create alarms based on thresholds and parameters developed in concert with the State 911 Department, distribute alarm notifications to appropriate personnel and State 911 Department staff by telephone, email, texting or other means, initiate remedial processes.

The NMS shall monitor the environment at all data centers where critical network components are housed, including temperature, humidity, equipment room physical security, etc. If not already in place and operational at the time of contract award, the contractor shall furnish and install necessary sensors and connectivity to support this requirement.

The NMS shall monitor ancillary network components such as power utilization and backup power systems (including generator status, fuel levels, battery condition, etc.).

All NMS services supporting the network shall be available to the State 911 Department and EOPSS/OTIS over a secure web-based interface. The NMS shall allow up to five (5) simultaneous users with no degradation to the network operations or performance. The NMS shall allow multiple levels of access based on logon and password.

In the event of any service-affecting outage, the Help Desk shall, within fifteen (15) minutes of the onset of the outage, notify through a single point of contact a designated State 911 Department and PSAP representative(s) and other personnel as identified by the State 911 Department via telephone or other electronic means (e.g., Email, text, etc.). Additional notifications shall be sent at least once every two (2) hours while the outage continues.

In the event of a non-service-affecting outage (i.e. failure of a major network component that may not directly affect service due to network redundancy, but which reduces the level of available redundancy), the Help Desk shall notify through a single point of contact a designated State 911 Department employee, and PSAP representative, and other personnel as identified by the State 911 Department via telephone or other electronic means (e.g., Email, text, etc.) within one (1) hour during normal business hours or if after hours at the beginning of the next business day.

In addition to real-time performance monitoring, the NMS shall prepare historical reports quantifying the performance of the networks (at no additional charge to the State 911 Department). Standard reports shall include call counts by type, origination point, destination PSAP, latency, jitter, packet loss, throughput, traffic volumes, up time, alarms received, and a description of responses and resolutions. All incidents shall be time stamped. Reports shall be able to be prepared on an hourly, daily, weekly, monthly, and annual basis. Trend analysis shall also be included in these historical reports. Reports shall be provided in electronic format using commonly available office software to facilitate sorting and analysis of data.

The network performance monitoring tools shall be industry standard platforms designed for and deployed by network operators on networks of the same size and complexity as the State 911 Department’s Next Generation 911 network.

#### 4.4.2.2.1 Phone System and Performance Metrics

The contractor must operate a phone system with the following minimum reporting requirements and standards:

* Average Call Abandonment Rate, goal of less than 30 calls per month;
* Average Time in Queue, goal of less than 10 seconds;
* Average Call Answer Time, goal of less than 10 seconds;  and
* Automatic fail over to another location, goal of less than 4 per calendar month

Such reports shall be presented to State 911 Department on the 10th business day of each calendar month for the previous month.

#### 4.4.2.2.2 Ticketing System Capabilities

Ticketing system shall:

* categorize tickets;
* respond based on pre-determined procedures;
* route to various support levels based on pre-defined procedures;
* automatically escalate based on ticket severity and/or age;
* have the ability to email tickets to stakeholders;
* Ensure tickets and other notifications  be written in  coherent and understandable language  and the information contained must be concise and provide actionable information;
* Identify ticket patterns; and
* have the ability for single incident tickets to be combined/tracked under one ‘ticket’.

#### 4.4.2.2.3 Staffing Level

The below noted staffing level shall be maintained.

Monday thru Friday during the hours of 0700-1700, minimum of 3 individuals, excluding supervisory personnel.

Minimum of 2 individuals on all other shifts, excluding supervisory personnel.

#### 4.4.2.2.3 User ID

No user ID shall be created for call handling, audio/video retrieval, and other software as noted by the Department without a written request from the designated State 911 Department staff.

##### Response Requirement:

Bidders shall describe in detail the Help Desk proposed, including without limitation, details about the location, staff, training, standard operating procedures, provisions for disaster recovery and redundancy, and location, equipment, and software expected to be in use.

#### 4.4.2.2.4 Location Discrepancy Management

The vendor shall manage location discrepancies. The PSAPs file discrepancies when the location provided by the carrier is inaccurate. The vendor shall forward discrepancies to the appropriate CSP and follow up until resolution. Should the problem be related to the underlying GIS data, it is expected that the vendor forward that information to MAGIS or the Department’s designee for resolution.

#### 4.4.2.3 Field Services

Field dispatch to any part of the State must not exceed 2 hours, 24x7x365(6), except during weather emergencies as declared by Governor of the Commonwealth.

Spare Equipment and Inventory Management

The contractor shall maintain a sufficient supply of spare parts at various locations within the Commonwealth to allow expeditious restoration of services. Purchasing and stocking of spare parts shall remain the sole responsibility of the contractor and at no additional line item cost to the Commonwealth.

The contractor shall, on a quarterly basis, track and analyze equipment failures at data centers and PSAPs that require a replacement from spare inventory. The contractor shall adjust the inventory as needed based upon this analysis. Analysis shall be documented and provided to the State 911 Department upon request.

The contractor shall use the spare inventory to support the data centers, PSAPs, and training centers and shall be adjusted and add to the inventory on an as needed basis. If there is a repeated malfunction or failure, the State 911 Department may require the contractor to increase its spare parts inventory to ensure sufficient inventory is available to address such repeated malfunction(s). Equipment should be stored per the manufacturer’s recommendations for temperature, dust, vibration, etc.

Storage at any PSAP, shall not exceed three (3) days unless previous approval by the State 911 Department has been received.

##### Response Requirement

Provide a general plan, including the number of employees assigned and their percentage working on the Massachusetts system, for meeting the requirement of 4.4.2.3.

#### 4.4.2.3.1 Removal of CPE, Applications, and Appliances

At the request of the State 911 Department at the termination or expiration of the contract, the contractor shall de-install and remove all CPE, applications and appliances furnished hereunder, including without limitation, servers, cabling workstations, interfaces, etc. to be stored in a location on-site at the PSAP or at such other location to be designated by the State 911 Department. State 911 Department will pay for the movement, storage, and destruction of this equipment. It is expected that the vendor removes all shipping supplies, boxes, etc when work is completed on site.

#### 4.4.2.3.2 Inventory Management

The contractor shall assume responsibility for the current asset database. It is understood that such an assumption of responsibility shall become effective upon an audit and verification of the asset database within 30 days of contract award.

For the duration of the contract performance the contractor shall:

Affix an asset control identifier, e.g., asset tag, to all newly installed/replaced equipment and entered in the database. The format of the asset tag is to be determined by mutual agreement;

Structure the database such that detailed listing of equipment at each PSAP and datacenter is readily available; and

Store the database on a cloud storage platform such as Microsoft SharePoint and provide electronic access to designated individuals at the written request of the State 911 Department.

#### 4.4.2.3.3 Circuit ID Management

The contractor shall maintain a database of circuit information that includes but not limited to: PSAP name, circuit ID, Circuit Provider, TSP Code, bandwidth, installation date, etc. The contractor shall promptly notify the State 911 Department of all changes in circuit. An electronic copy of this database in an Excel or Access format shall be provided to the State 911 Department annually and as otherwise requested by the State 911 Department.

#### 4.4.2.3.4 Preventive Maintenance Tasks

The contractor shall perform the following preventive maintenance tasks for all workstations and servers on a schedule recommended by the equipment manufacturer, but such preventive maintenance shall occur no less than twice per year:

The contractor shall clean all PCs and servers based on the equipment manufacturer’s recommendation and at a minimum shall include vacuuming dust and dirt from all fans, intakes and drive devices. All PCs and servers shall be opened to clean inside each unit. Prior to commencement of work, the contractor shall provide a listing of sites to be visited during a particular month to the State 911 Department. The contractor shall develop a checklist/form detailing the items addressed during the scheduled preventive maintenance and shall, upon completion of the maintenance, deliver the completed checklist/form to the State 911 Department verifying that this maintenance was completed.

#### 4.4.2.3.5 PSAP Moves/Renovations

As requested by the State 911 Department, the contractor shall provide all necessary services to relocate or move existing PSAP CPE to a new location within the existing site or to a new site while minimizing service interruptions of such PSAP. Services shall include detailed cost estimates, project management, scheduling, and coordination of appropriate resources. The contractor shall utilize a step-by-step conversion checklist for each PSAP or data center relocation or move.

#### 4.4.2.3.6 Installation Support

The contractor shall provide specialized technical service personnel to provide support in all areas of the project, to include but not be limited to, communications, computer hardware and software, equipment service and repair, as required by the project work plan. All technical service personnel shall be fully qualified in their respective disciplines. All costs associated with the provision of the technical support services, if any, are to be included in the proposal.

#### 4.4.2.3.7 De-Installation of Equipment

As authorized by the State 911 Department in connection with site cutovers and otherwise at the request of the State 911 Department, the contractor shall de-install any and all equipment, including without limitation, servers, cabling workstations, interfaces, CPE, etc., to be stored in a location on-site at the PSAP or such other location to be designated by the State 911 Department. All such work shall be performed under oversight by the State 911 Department.

#### 4.4.2.3.8 Mobile PSAP Deployments

Field Services is to perform the necessary functions to support Mobile PSAP as defined in Section 4.3.11 and 4.3.11.1

### **4.4.3 Change Management**

The Change Management functional unit is responsible for the operation of our testing environment, functional testing of hardware/software prior to release into production, and the schedule of releases to production.

The successful bidder shall:

* Conduct regular meetings with the State 911 Department Systems Division, occurring on a mutually agreed basis;
* Maintain staffing and Equipment necessary to meet the goals and objectives of this RFR, including but not limited to Section 4.5 System, Lifecycle and Program Calendar; and
* Approve policies and procedures for Technical Services use.

Bidders shall employ change management protocols and shall describe in detail their procedures for service and change management processes that shall include all aspects of the project, including without limitation, data center, network, and CPE.

Change Management practices should include the segregation of work being performed on production vs pre-production equipment/software.

##### Response Requirement:

Bidders shall document how they plan to segregate and enforce the segregation.

**ITIL**

The contractor shall use best practices using the ITIL framework to improve service, manage change, and minimize downtime (or another comparable framework).  The contractor shall provide change management process and reports for system and other changes.

##### Response Requirement:

The bidder shall submit a formal process for change management.

**Testing Environment**

The Department’s current NG911 system has a production and pre-integration environment. Change Management shall be responsible for the scheduling and operation of the integration environment. Additionally change management shall review, test, and approve all procedures developed by the Integration Team. Field Services and/or Integration Team may not do any work on a production system without an approved procedure.

**Communication**

The successful bidder shall:

* Ensure efficient scheduling of the pre-integration environment;
* Pre-Approve policies and procedures for staff touching production equipment;
* Define and develop a process for standard and emergency changes;
* Manage testing both automated and manual;
* Implement a change review board, with State 911 Department participation, for final approval for releases into Production; and
* Effectively communicate changes to State 911 department.

Changes that will affect the normal operation of a PSAP, the graphical interface, and/or, call routing shall be communicated with enough notice, documentation, and resources to allow for the updating of training and notification to trained telecommunicators/PSAPs.

##### Response Requirement:

Bidders shall describe how an after-action review is completed.

##### Response Requirement:

Bidders shall document how the success of an implementation is scored and who gets that document.

##### Response Requirement:

Bidders shall provide an example of a failed change. Explain how change management processes were improved.

### **4.4.3.1 Testing Requirements**

The system and process should contain automated elements that can provide true/false fact-based testing. Automated tests should reflect the entire functions of a telecommunicator process on the system. The automated system should detect changes in call routing or call flow.

The reports shall not be simply a pass/fail but a score to show if not all tasks/procedures went as expected. The contactor will work cooperatively to refine and improve change management processes, procedures and reporting.

The contractor shall apply the following acceptance test procedures to the individual systems as they are installed and prior to any live operation. The contractor shall also apply test procedures to the system prior to providing final system acceptance.

The contractor shall conduct all system testing at an i3-compatible laboratory approved by the State 911 Department, and the State 911 Department reserves the right to require testing at the State 911 Department’s facilities and/or training centers.  The contractor shall provide to the State 911 Department for its approval documentation that demonstrates that the applications, appliances, and CPE for the system are ready for testing.  The State 911 Department reserves the right to inspect that test equipment, applications and appliances, and CPE have been properly configured and installed.  The contractor shall refine and resubmit the system design and technical documents to reflect results of system testing.

##### Response Requirement:

The contractor shall develop and shall submit to the State 911 Department for approval a comprehensive test plan for the system, the network, for each functional element of the system, and for each PSAP, that addresses, at a minimum, the following test procedures.  In addition, the contractor shall provide a list of automated tests

#### Functional Acceptance Testing

Prior to Production release, the contractor shall conduct a functional acceptance test to verify that the systems installed provide the expected functional capabilities in accordance with the design criteria for the system.  The contractor shall demonstrate to the satisfaction of the State 911 Department that each function and option operates according to the design documentation, including the RFR, and applicable standards. Shall any failures be identified during the test, the contractor will have a reasonable opportunity to correct the deficiencies, after which a retest may be scheduled.  The State 911 Department, at its sole discretion, may require a retest of the failed functions, or may elect to require the contractor to conduct a complete retest. This process will continue until all functions have passed or it becomes obvious that the system under test will not support one or more functions that it was designed to accomplish. At this point, the State 911 Department may compensate the contractor for work completed or may take other steps as deemed appropriate.

#### ESInet and Network Test Requirements

The contractor shall design, conduct, pass, and document a thorough test procedure for the network and network monitoring components of the system. This test plan shall at minimum, confirm that these components meet the specifications in the RFR as well as any other requirements necessary for the compliance with applicable standards, rules, and regulations.

This shall include, but not be limited to, tests for:

* Data Center end-to-end connectivity of all circuits;
* Throughput;
* Packet loss;
* Latency;
* Jitter;
* Routing;
* QoS mechanisms;
* Fault recovery;
* Fail-over from primary to secondary paths;
* Simulation of peak traffic load for a minimum of twenty-four (24) hours;
* Network monitoring systems;
* Faulty notification systems;
* Firewalls, intrusion detection systems, intrusion protection systems; and
* Data Center network connections to third parties (LEC’s, Internet, etc.)

Call Flow and Throughput Acceptance Test

The contractor shall design, conduct, pass, and document system throughput performance tests for the system and each of its components and subsystems (LVF, ECRF, ESRP, CPE, and all other components and subsystems). These tests shall verify that the installed system and subsystems shall meet the expected throughput capability and provide the expected operational speed and growth potential. The amount of throughput to be tested shall be based on the peak number of transactions experienced by the PSAPs, combined with the contractor's claim for system throughput capability. The contractor shall execute and provide a standard benchmark test based on peak load characteristics with a transaction rate corresponding to the system loading information.

The throughput test shall exercise each component of the system.

Shall any failures be identified during the performance test, the contractor will have a reasonable opportunity to correct the deficiencies, after which a retest may be scheduled. The State 911 Department, at its discretion, may require a retest of the failed functions or may elect to require a complete retest. This process will continue until all functions have passed or the system fails to provide the throughput required by the State 911 Department.   Bidders shall provide details in the proposal(s) on how acceptance tests will be conducted.

System throughput testing shall last for a minimum of twenty-four (24) hours and shall involve sufficient transactions, simulating 200% peak traffic load, to validate the capabilities of the systems. All subsystems will be exercised during this test. Delays caused by external systems will not be considered a cause for failure. The system shall not crash due to a transaction overload.

#### System Availability Acceptance Test

##### Response Requirement

Bidders shall describe how they will test the components for installation into system, including all subsystems, to ensure that the system performs at a 99.999% level of availability and to ensure that the system allows for all 911 payloads to be delivered to a PSAP.

The availability test shall last a minimum of sixty (60) days and shall be conducted for each of the following:

* Hardware and related equipment;
* Software; and
* ESInet availability.

Hardware and related equipment provided by the contractor shall perform at a 99.999% level of availability, with a maximum of two (2) periods of down time resulting from hardware or related equipment failures.

The contractor shall test software during the same time period. A maximum of two (2) software component failures will be permitted during the testing period. Shall the same software component fail more than once during the test, the contractor shall correct or replace the software component. The repair/maintenance procedures in effect during the test shall be the same repair/maintenance procedures that shall be in effect during normal system operation after site acceptance.  Any corrective redesign necessary to meet reliability and availability requirements shall be the sole responsibility of the contractor and shall be accomplished without cost to the State 911 Department.

Bidders shall describe in detail how acceptance testing shall be conducted. The final system testing procedures shall be subject to the approval of the State 911 Department

#### Validation Testing Documentation

Bidders shall, for each functional element of the system, include in the response a complete set of validation testing documentation. Such documentation shall be sufficient to identify all elements performing a function as required to fulfill the role of each functional element in sufficient detail to allow analysis of the adequacy of the proposed element by the State 911 Department.

The contractor shall provide an updated (then current) suite of validation test documentation for actual installation. The State 911 Department reserves the right to determine the adequacy of the validation testing documentation and procedures.

### 4.4.3.2 Software Upgrades and Documentation

Bidders shall describe how they propose to provide operating system and/or software upgrades without adversely impacting service availability or performance.

When software updates or enhancements become available, the contractor shall notify the State 911 Department of such availability within 10 days following the manufacturer's release announcement.  The State 911 Department shall then have the opportunity to request installation of the new software in the test environment, which shall be installed by the contractor at no charge to the State 911 Department.  However, when such software releases are intended by the manufacturer as generic version updates to correct reproducible and/or recurring defects (software bugs), these releases shall be installed in the production environment by the contractor upon prior approval by the State 911 Department at no charge to the State 911 Department.  Software updates for this system shall be supplied for the duration of the contract utilizing defined change management protocols.

The contractor shall maintain for the State 911 Department a comprehensive inventory of all current release versions which shall include any operating systems and application software, in a document entitled “Software Inventory.” Prior to delivery of the CPE at the PSAP, the contractor shall install the latest software versions and/or patches applied to all components of the system. These latest versions shall be mutually agreed upon by the State 911 Department and the contractor.  The contractor shall provide a checklist, previously verified by the State 911 Department, to technicians performing the installations, to be used by the technicians to verify that the software versions installed are those that were mutually agreed upon by the State 911 Department and the contractor.

#### Configuration Documentation and Changes

The contractor shall provide the State 911 Department with configuration documentation in a mutually agreed upon format.

The contractor shall provide the State 911 Department with a standard change management document that will describe any software or hardware system or manufacturer default setting changes that are implemented by the contractor in the staging facility.  Any change shall be approved by the State 911 Department prior to the execution of a change. The contractor shall, if the standard change management document is updated or revised, promptly provide the State 911 Department with a new version of the change management document. The contractor shall follow industry standards best practices such as ITIL or the equivalent, and shall maintain a change management database that can be accessed by the State 911 Department.

#### Maintenance of Contractor-Furnished Software

The contractor shall maintain a pre-production release environment similar to production environment. Such pre-production environment shall be used to test, simulate and validate software and/or hardware releases prior to implementation in production.

The contractor shall install all software designated as General Release by the manufacturer within 45 days of such release in the pre-production environment unless the contractor obtains a waiver from the State 911.

The maintenance service fee shall include providing and installing any system software patches, upgrades, enhancements, etc., developed by the software manufacturer during the service contract period.

### 4.4.3.3 Production Release Schedule

The contractor shall maintain a timeline that includes the replacement of equipment, the expected version releases of software and hardware on the project. The timeline should include requested enhancements made by the State 911 Department . The timeline should be detailed enough to derive the different project phases such as testing. The timeline should be updated on a quarterly basis

### 4.4.3.4 Pre-Production Testing Environment

The pre-production testing environment shall be as close to the production environment as possible. The environment shall have the ability to generate payload in order to do end to end testing. It shall contain automation tools as well as physical positions for human interaction.

### 4.4.4 Integration Services

The contractor shall provide staffing and management of an engineering team to facilitate the integration of new software, products, devices, etc.

The selected bidder shall:

* Test and Upgrade software patches, windows updates, firmware updates, etc;
* Assist with writing of technical requirements and specification documentation for RFI/RFP process for new system components;
* Write policies and procedures for Technical Services use;
* Be available to the Department during Request for Information processes for any replacement/additional equipment needed;
* Upon selection of replacement/additional equipment, shall work to test component with current infrastructure; and
* Submit requests for software/hardware releases to the production environment.

##### Response Requirement:

Describe the bidder’s procurement process, include any relevant internal policies. Include in the description how the bidder, when searching for new products, determines best value.

##### Response Requirement:

Demonstrate an experience with a vendor who was underperforming and what steps were taken to resolve the issue.

### 4.4.4.1 Large Projects

Large Projects as mutually agreed by the Department and contractor will require a dedicated Integration Project Manager

Integration Project Manager shall:

* Be responsible for oversight, planning, coordination, and communication between State 911, PSAPs, and Contractor Staff;
* Develop and maintain the Transition Project Plan, in consultation with the State 911 Department;
* Have minimum of five (5) years of experience working on large scale, integrated public safety technology implementations;
* Facilitate regular communication with the State 911 Department, including weekly transition status reports/updates, and review the project performance against the transition plan.  Facilitate weekly transition status meetings for the duration of the transition;
* Provide all documentation to be discussed at scheduled meetings at least twenty-four (24) hours prior to said scheduled meeting;
* Update the transition project plan on a weekly basis and distribute at weekly meetings for the duration of the engagement;

### 4.4.4.2 Facilitating Transition

Bidders shall develop for each large project a detailed transition plan.   Such plan shall at minimum include:

* Detailed changes and timeline to current infrastructure, including servers, workstations, etc.;
* Required training for telecommunicators;
* PSAP acceptance Testing polices and procedure to be approved by the Department;
* Describe any additional software and hardware needed;
* Describe any proprietary Software or Hardware; (Note that proprietary means not available as COTS.)
* Test and acceptance plan development, including trial and testing in the pre-integration environment; and
* Migration, Test, and Acceptance for PSAP equipment installation/migration.

### 4.4.4.3 Quality Control Records

The contractor shall maintain adequate records of inspections and tests throughout all stages of contract performance, including checks made to ensure accuracy of inspection and testing equipment and other control media. All quality control records shall be available for review by the State 911 Department, and copies of individual records shall be furnished to the State 911 Department upon request. The contractor shall furnish records requested within ten (10) business days of the request.

### 4.4.4.4 Corrective Action

The contractor shall take prompt action to correct conditions that might result in defective supplies or services. The contractor shall make use of feedback data generated and furnished by user activities, as well as that generated in the contractor's facility.

##### Response Requirement:

Bidder shall give an example from the bidder’s experience and describe how the bidder overcame it.

### 4.4.4.5 Resistance to Interference

The system shall not suffer from interference or measurable performance degradation from use of installed console devices, public safety radio transceiver equipment, microwave communication systems, other installed data processing equipment, or any other devices present in the system’s operational environment.

### 4.4.4.6 Emissions Criteria

The system shall not cause interference to the existing radio, security, or closed circuit television communications systems, installed communications console equipment, or other data processing equipment present in the operational environment, and, in addition, shall comply with all applicable FCC standards as applied to data processing equipment.

### 4.4.4.7 Responsibility for Contractor Equipment

Contractors shall assume complete responsibility for all tools, test equipment, or other items that are the property of the contractor and are being used during equipment installation. The State 911 Department will not be responsible for lost or damaged items that the contractor may leave at work sites for their own convenience.

### 4.4.5 Additional Services

At the request of the State 911 Department, the contractor may be required to provide additional services.  The contractor shall, upon request, provide a quote for the requested services for review and approval by the State 911 Department.   The quote shall not contain any new contract terms and any and all rates shall not exceed those identified on Attachment A- Cost Tables. The cost tables are intended to capture all known commodities and services that may be needed as of the date of release of this RFR.  Should the State 911 Department identify a need for a commodity and/or service within the scope of this RFR, but for which a rate was not requested on Attachment A- Cost Tables, the selected bidder shall provide a quote for the requested service(s). Bidders are advised that all rates shall be reasonable and consistent with that available in the industry and or available through Commonwealth of Massachusetts statewide contracts.  Further bidders are advised that detailed documentation shall be required to support the requested rates.

Such additional services will be requested in writing by the State 911 Department.  The selected vendor shall have ten (10) business days to provide a detailed quote, identifying at a minimum services to be provided, costs of services (hours, rates) and equipment and materials needed.   Quotes shall be all inclusive.  Costs not clearly identified shall be the responsibility of the vendor and the State 911 Department shall bear no obligation for said costs.  The State 911 Department will review the quote submitted and take one of the following actions: 1) request additional documentation/information and/or modifications; 2) provide written acceptance/approval of the quote; or 3) reject the quote thereby cancelling the request for the additional services.

The contractor may be required to train Commonwealth personnel on the function of the Help Desk and the network monitoring software. Costs relating to such training will be negotiated at the time the Commonwealth elects to engage the contractor for the provision of these services.

## 4.5 System Lifecycle and Program Calendar

The contractor shall maintain a timeline that includes the replacement of equipment, the expected version releases of software and hardware on the project. The timeline should include requested enhancements made by MACs or other State 911 Department requests or requirements. The timeline should be detailed enough to derive the different project phases such as testing. The timeline should be updated on a monthly basis.

The State 911 Department has outlined below contract activity, in addition to the day-to-day management, maintenance and monitoring of the system, it anticipates through the initial Term of this contract.

Sections 4.5.2 thru 4.5.6 is a projected timeline, the Department reserves the right to add, change, or delete projects from the Calendar.

### 4.5.1 Transition Period

Contractor shall familiarize themselves with the system architecture, and work with the incumbent Next Generation 911 service provider and State 911 Department to develop and implement plans for transition of all services. State 911 Department will at its discretion review and approve procedures and policies. The transition period shall be at a maximum six months. The Department will retain the services of its existing Next Generation 911 service provider for the transition period. Should the successful bidder be unable to complete the transition in six months, the successful bidder may be required to compensate the Department for costs incurred to retain the incumbent 911 service provider for the additional time period needed to complete the transition.

* Milestone A: Submission of Plans of Action for Section 4.3.4.2 Anti-Virus, Patch Management and Security, Section 4.3.8.1 Network Design, and Section 4.3.8.5 Network Performance and Service Levels specifically “Outage Escalation Procedures”.
* Milestone B: Submission for approval a chart or list of “Outage Escalation Procedures” and other policies and procedures requested by the Department.
* Milestone C: Assume operations of the Help Desk.
* Milestone D: Assume operation of Field Services.
* Milestone E: Successful completion of the transition of all security keys, license agreements, encryption tokens, and other related security elements.
* Milestone F: Successful transfer of access to the physical data centers.
* Milestone G: Successful transfer of the testing environment.
* Milestone H: Confirmation of signing of subcontractor contracts.
* Milestone I: Assume operation of the network, including monitoring.

Three months after award, a detailed transition plan shall be submitted to the Department.

##### Response Requirement:

Bidders shall submit a high-level plan which includes the milestones in Section 4.5.1 for assuming operation of the NG911 system. The Milestones are not listed in the order the Department expects the Vendor to complete, the ordering and timing are flexible relative to the overall plan.

### 4.5.2 Year 1 (2024)

* Review of NENA i3 Version 3
* RFP for Call Handling software
* RFP for Citizen Information Portal
* Text to 911 simulation in training centers implementation
* 3d Modeling (structures and topography) technical, legal, and use case preparation
* Using third party locations for routing preparation
* Forrest Guide planning

### 4.5.3 Year 2 (2025)

* Implementation: Citizen Information Portal
* Call Handling Software Pilot
* RFP Map Enhancements to include z axis, Near Real Time Imagery and Street View
* RFP: PSAP situational awareness display
* RFP: Third Party Reporting Service for PSAPs
* RFP: Location Database tools for CSPs
* Automatic Outbound Text to abandoned calls implementation
* TDos Mitigation Tool
* Inbound Video technical and legal requirements preparation
* 3d Modeling and Visualization Pilot
* Forrest Guide Implementation
* 3rd party location routing option implementation
* Legacy Network Gateway decommissions

### 4.5.4 Year 3 (2026)

* Implementation: Call Handling and Mapping
* RFP AI software or tools for QA
* TDos Mitigation Tool
* RFP/Study secondary wireless network connections
* RFP 3d mapping
* Inbound Video Pilot
* Intrastate interconnection

### 4.5.5 Year 4 (2027)

* Inbound Video/media Statewide
* Implementation Software tools for QA
* Intrastate interconnection (State TBD)
* PSAP’s Uninterruptable Power Supply replacement

### 4.5.6 Year 5 (2028)

* Intrastate interconnection (State TBD)

### 4.5.7 Anticipated RFP Process during Contract

This section defines the general steps that may be taken by the Department and the successful bidder when procuring replacement or enhancement components for its Next Generation 911 system.

State 911 Department will prepare the RFI. The Department will conduct and manage the RFI process. The Technical Services functional unit will provide the technical requirements for the RFI. The RFI will be posted via the appropriate Massachusetts procurement process. The Technical Services functional unit may be required to participate by offering technical support and advice. The Department, in its sole discretion, shall select the product/service that best meets the needs of the Commonwealth of Massachusetts in support of its Next Generation 911 system.

Upon notification from the Department, the contractor will execute agreements with the selected sub-contractor. When a large project is started, a dedicated project manager will be assigned by the contractor. Integration Services will install and verify that the new product meets the technical requirements provided during the RFI. Should the new product not meet the requirements of the RFI, the Department may decide not to move forward.

Should the new product be accepted, Integration Services will then be required to begin testing the new software/device for integration into the Next Generation 911 system. For larger integrations, the acceptance process defined in this RFR will be engaged. For standard integrations, Integration Services will request release to Production via change management process as defined within the successful bidders CM process.

For integrations/deployments related to PSAP operation (for example call handling equipment replacement) the departments training centers will be upgraded first.

## 4.6. Compliance with Applicable Regulations

### 4.6.1 Americans with Disabilities Act

All goods and services provided by the contractor shall comply with the Americans with Disabilities Act.  The contractor shall be responsible for all modifications to hardware, software, or CPE as may be requested by a PSAP and/or the State 911 Department to ensure compliance with the ADA.

The contractor shall coordinate with the State 911 Department in the identification of all prospective attendees at contractor training(s) who require accommodation and shall cooperate with the State 911 Department in its provision of such accommodation.

All technical and user documentation and any additional training material delivered by the contractor shall include alternative keyboard commands that may be substituted for mouse commands. Any documentation delivered under this Agreement and wholly owned by the State 911 Department shall be in an agreed-upon editable format.

### 4.6.2 Information Technology Division Accessibility Standards

The contractor shall ensure that all deliverables adhere to (1) the Section 508 Standards for Electronic and Information Technology Accessibility, [36  C.F.R. §1194](http://www.access.gpo.gov/nara/cfr/waisidx_05/36cfr1194_05.html), issued under Section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794(d)) (the “Section 508 Standards”), and (2) the Web Accessibility Standards, (the “ITD Standards”) issued by the Commonwealth of Massachusetts’ Information Technology Division (“ITD”), available online at  [www.mass.gov/itd](http://www.mass.gov/itd). For purposes of this Agreement, contractor’s obligations pertaining to these standards shall be limited to those subsections thereof that have been certified by ITD and the Massachusetts Office on Disability as objective and measurable. Such subsections shall be posted by ITD at [www.mass.gov/itd](http://www.mass.gov/itd). The Section 508 and ITD Standards may be modified from time to time and is responsible for compliance with the most current version in effect on the date that contractor executes the contract.

### 4.6.3 AT/IT Adaptive List

Appendix 7 AT/IT Adaptive List sets forth a list of the specific assistive technology (AT) (including class, brand, and version) and specific desktop configuration against which the contractor’s deliverables will be tested under this Agreement (the “AT/IT Adaptive List”).

The list can be downloaded from this link <https://www.mass.gov/doc/generic-atit-accessibility-list/download>.

### 4.6.4 Software Developed under the Agreement

Prior to commencing any design work under this Agreement, contractor’s Project Manager and design professionals shall meet with State 911 Department to review the Section 508 and ITD Standards, and the AT/IT Adaptive List, and to discuss their impact on the design process.

The contractor shall test every software deliverable delivered under this Agreement, including the custom code created to customize commercial off the shelf software (COTS) (collectively, “Software Deliverables”), and any updates, new releases, versions, upgrades, improvements, bug fixes, patches or other modifications to the software (“Enhancements”) developed under this agreement, against Section 508 and ITD Standards, and for interoperability with the AT and IT environment listed in the AT/IT Environment list. At the time each such Software Deliverable or Enhancement is delivered to the State 911 Department, the contractor shall deliver to the State 911 Department and the ITD Accessibility Laboratory (the “ITD ATL”) the results of such testing.

In addition, the contractor shall cooperate with the ITD ATL, and any Accessibility Testing Contractor engaged by the ITD ATL, or by the State 911 Department under the supervision of the ITD ATL, in the performance of testing.  The ITD ATL, any Accessibility Testing engaged by the ITD ATL, or by the State 911 Department under the supervision of the ITD ATL, shall test each Software Deliverable or Enhancement against the Section 508 and ITD Standards, and for interoperability with the AT and the IT environment described in the AT/IT Environment List. The ITD ATL shall certify such deliverables or Enhancements as compliant with the Section 508 and the ITD Standards and interoperable with the AT and environment described in the AT/IT Environment List.

The contractor shall be responsible for curing each instance in which its deliverables fail to comply with the Section 508 or ITD Standards.  The contractor shall use its best efforts to cooperate with the State 911 Department, the ITD ATL, and any pertinent AT to correct any problems identified during such testing with the interoperability of the Software Deliverables or Enhancements with the AT and the IT environment specified in the AT/IT Environment List.

The contractor shall provide a credit against amounts due by the State 911 Department under this agreement for all testing, including repeat accessibility testing required with respect to Software Deliverables or Enhancements that fail initial testing with respect to the Section 508 or ITD Standards and are required by the ITD ATL to be retested in that regard. Such credits shall not exceed 5% of either (1) the total fixed price due the contractor under this Agreement, or (2) the total not-to-exceed amount of this Agreement if entered under a time and materials basis.

### 4.6.5 COTS and ASP Software

The contractor shall conduct testing against the Section 508 and ITD Standards, and for interoperability with the AT and IT environment listed in the AT/IT Environment list, on all COTS referenced in  the contractor’s bid that must be acquired by the State 911 Department in order to implement the system to be delivered by the contractor under this Agreement, and all COTS (including for purposes of this section COTS configured by the contractor), or software to be provided by the contractor or its subcontractors in their capacity as application contractors (ASP), delivered under this agreement, and any Enhancements thereto or new versions thereof, prior to its delivery to the State 911 Department (collectively, COTS and ASP Software). The contractor shall deliver to both the State 911 Department and the ITD ATL the results of such testing with each delivery of COTS or ASP Software.

The contractor need not conduct such tests for COTS and ASP Software for which accessibility testing has already been conducted and test results have already been provided to the ITD ATL. Instead, the contractor shall provide notice to the State 911 Department that such software has already been certified by the ITD ATL. The notice shall include the name of the software or Enhancement, and the date the software was so certified.

The ITD ATL, or any Accessibility Testing Contractor engaged by the ITD ATL, or by the State 911 Department under the supervision of the ITD ATL, shall test such software for accessibility against the Section 508 Standards and the ITD Standards, and for interoperability with the specific AT and the IT environment set forth in the AT/IT Environment List.   The ITD ATL shall certify as accessible all software so tested that complies with the Section 508 Standards and the ITD Standards and is interoperable with the AT and the environment specified in the AT/IT Environment List and shall maintain a central web-based list of certified software for use by the Executive Department.

The contractor shall be responsible for curing each instance in which its deliverables fail to comply with the Section 508 and ITD Standards.  The contractor shall use its best efforts to cooperate with the State 911 Department, the ITD ATL, and any pertinent AT to correct any problems identified during such testing with the interoperability of the Software Deliverables or Enhancements with the AT and the IT environment specified in the AT/IT Environment List.

The contractor shall provide a credit against amounts due by the State 911 Department under this agreement for all testing, including repeat accessibility testing required with respect to Software Deliverables or Enhancements that fail initial testing with respect to the Section 508, ITD Standards and are required by the ITD ATL to be retested in that regard. Such credits shall not exceed 5% of either the total fixed price due Contractor under this Agreement, or the total not-to-exceed amount of this Agreement if entered under a time and materials basis.

The contractor shall not deliver COTS or ASP software under this Agreement that fails to meet such standards unless it has documented (1) that it has performed due diligence in seeking accessible alternative COTS or ASP Software, offering equivalent features and functionality to the inaccessible COTS or ASP Software, for which the contractor is or can readily become a licensed distributor; and (2) the cost of developing substitute accessible software under this Agreement. (Such documentation need not include reference to any specific competing COTS or ASP Software and its level of accessibility).  COTS or ASP Software delivered under this Agreement or under another contract with a state agency in connection with a system delivered under this Agreement that does not meet the Section 508 Standards or the ITD Standards shall be acceptable if either (1) the software contractor provides a roadmap for meeting such standards and interoperating with such AT or (2) the agency seeks and obtains a waiver from ITD that it would be an undue hardship on the agency to eschew use of such COTS or ASP Software.

## 4.7 Supplier Diversity Program

### 4.7.1 Program Background

Pursuant to [Executive Order (EO) 565](https://www.mass.gov/executive-orders/no-565-reaffirming-and-expanding-the-massachusetts-supplier-diversity-program), the Commonwealth’s [Supplier Diversity Program](https://www.mass.gov/info-details/learn-about-the-supplier-diversity-program-sdp) (SDP) promotes business-to-business relationships between awarded Contractors and diverse businesses and non-profit organizations (“SDP Partners”) certified or recognized by the [Supplier Diversity Office (SDO)](https://www.mass.gov/supplier-diversity-office).

### 4.7.2 Financial Commitment Requirements

All Bidders responding to this solicitation are required to make a significant financial commitment (“SDP Commitment”) to partnering with one or more SDO-certified or recognized diverse business enterprise or non-profit organization. This SDP Commitment must be expressed as a percentage of contract sales resulting from this solicitation that would be spent with the SDP Partner(s).

After contract award (if any), the Total SDP Commitment shall become a contractual requirement to be met annually on a Massachusetts fiscal year basis (July 1 – June 30) for the duration of the contract. The minimum total SDP Commitment acceptable in responses to this solicitation shall be 1%. Bidders shall be awarded additional evaluation points for higher SDP Commitments.

No contract shall be awarded to a Bidder without an SDP Commitment that meets the requirements stated herein. This requirement extends to all Bidders regardless of their own supplier diversity certification.

### 4.7.3 Eligible SDP Partner Certification Categories

SDP Partners must be business enterprises and/or non-profit organizations certified or recognized by the SDO in one or more of the following certification categories:

* Minority-Owned Business Enterprise (MBE)
* Minority Non-Profit Organization (M/NPO)
* Women-Owned Business Enterprise (WBE)
* Women Non-Profit Organization (W/NPO)
* Veteran-Owned Business Enterprise (VBE)
* Service-Disabled Veteran-Owned Business Enterprise (SDVOBE)
* Disability-Owned Business Enterprise (DOBE)
* Lesbian, Gay, Bisexual, and Transgender Business Enterprise (LBGTBE)

### 4.7.4 Eligible Types of Business-to-Business Relationships

Bidders and Contractors may engage SDP Partners in the following two ways:

Subcontracting, defined as a partnership in which the SDP partner is involved in the provision of products and/or services to the Commonwealth.

Ancillary Products and Services, defined as a business relationship in which the SDP partner provides products or services that are not directly related to the Contractor’s contract with the Commonwealth but may be related to the Contractor’s own operational needs.

Other types of business-to-business relationships are not acceptable under this contract. All provisions of this RFR applicable to subcontracting shall apply equally to the engagement of SDP Partners as subcontractors.

### 4.7.5 Program Flexibility

The SDP encompasses the following provisions to support Bidders in establishing and maintaining sustainable business-to-business relationships meeting their needs:

* SDP Partners are not required to be subcontractors.
* SDP Partners are not required to be Massachusetts-based businesses.
* SDP Partners may be changed or added during the term of the contract provided the Contractor continues to meet its SDP Commitment.

### 4.7.6 SDP Plan Form Requirements

##### Response Requirement:

All Bidders must complete the SDP Plan Form included in this solicitation and attach it to their bid response. In addition to proposing an SDP Commitment, each Bidder must propose one or more SDP Partner(s) to utilize to meet its SDP Commitment. Certified diverse Bidders may not list their own companies, or their subsidiaries or affiliates, as SDP Partners and may not meet their SDP Commitment by spending funds internally or with their own subsidiaries or affiliates.

 Bidders may propose SDP Partners that are:

* Certified or recognized by the SDO: Such partners appear in the [SDO Directory of Certified Businesses](https://www.sdo.osd.state.ma.us/BusinessDirectory/BusinessDirectory.aspx) or in the [U.S. Dept of Veterans Affairs VetBiz Vendor Information Pages](https://www.vetbiz.va.gov/basic-search/) directory. After contract award (if any), spending with such partners will contribute to meeting the Contractor’s SDP Commitment.
* Not yet certified or recognized by the SDO: Such partners must be certified in eligible categories by a third-party certification body, such as another city or state supplier diversity certification office, the [National Minority Supplier Development Council](https://nmsdc.org/mbes/mbe-certification/), the [Women Business Enterprise National Council](https://www.wbenc.org/certification/), [Disability:IN](https://disabilityin.org/what-we-do/supplier-diversity/get-certified/), or the [National LGBT Chamber of Commerce (NGLCC)](https://www.nglcc.org/get-certified), but not listed in the above-mentioned directories. Self-certification is not acceptable. While Bidders may list such proposed SDP Partners on their SDP Plans, spending with such partners will not contribute to meeting the Contractor’s SDP Commitment unless they apply for and are granted SDO supplier diversity certification or recognition. If proposed SDP Partners do not receive SDO supplier diversity certification or recognition, the Contractor must find alternative SDP Partners to meet their SDP Commitment.

 It is the responsibility of the Contractor to ensure that their proposed SDP Partners obtain such certification or recognition by the SDO after contract award (if any). The issuing department and the SDO will not conduct outreach to proposed SDP Partners to ensure their certification. Furthermore, no guarantee may be made that a proposed SDP Partner will be certified, or regarding the time it may take to process a proposed SDP Partner certification. Contractors may direct partners to the SDO’s homepage, [www.mass.gov/sdo](file:///C%3A/Users/bborchrote/AppData/Local/Microsoft/Windows/Temporary%20Internet%20Files/Content.Outlook/002B2JQ1/www.mass.gov/sdo) and the [Certification Self-Assessment Tool](https://www.mass.gov/forms/take-the-certification-self-assessment) for guidance on applying for certification.

It is desirable for Bidders to provide an SDP Focus Statement that describes the Bidder’s overall approach to increasing the participation of diverse businesses in the provision of products and services under this proposal/contract (subcontracting) and in the Bidder’s general business operations (ancillary products and services). Such a description may include but not be limited to:

* A clearly stated purpose or goal.
* Specific types of diverse and small businesses targeted.
* Which departments/units within the business are responsible for implementing supplier diversity.
* Types of opportunities for which diverse and small businesses are considered.
* Specific measures/methods of engagement of diverse and small businesses.
* An existing internal supplier diversity policy.
* Public availability of the Bidder’s supplier diversity policy.

It also is desirable for Bidders to use the SDP Plan Form to describe additional creative initiatives (if any) related to engaging, buying from, and/or collaborating with diverse businesses. Such initiatives may include but not be limited to:

* Serving as a mentor in a mentor-protégé relationship.
* Technical and financial assistance provided to diverse businesses.
* Participation in joint ventures between nondiverse and diverse businesses.
* Voluntary assistance programs by which nondiverse business employees are loaned to diverse businesses or by which diverse business employees are taken into viable business ventures to acquire training and experience in managing business affairs.

### 4.7.7 Evaluation of SDP Forms

To encourage Bidders to develop substantial supplier diversity initiatives and commitments as measures valuable to the Commonwealth, at least 25% of the total available evaluation points for this bid solicitation shall be allocated to the evaluation of the SDP Plan submissions. Because the purpose of the SDP is to promote business-to-business partnerships, the Bidders’ workforce diversity initiatives will not be considered in the evaluation.

### 4.7.8 SDP Spending Reports and Compliance

After contract award, Contractors shall be required to provide reports demonstrating compliance with the agreed-upon SDP Commitment as directed by the department, which in no case shall be less than annually.

Only spending with SDP Partners that appear in the [SDO Directory of Certified Businesses](https://www.sdo.osd.state.ma.us/BusinessDirectory/BusinessDirectory.aspx) or in the [U.S. Dept of Veterans Affairs VetBiz Vendor Information Pages](https://www.vetbiz.va.gov/basic-search/) directory shall be counted toward a Contractor's compliance with their SDP Commitment. Spending with SDP Partners that do not appear in the directories above shall not be counted toward meeting a Contractor’s SDP Commitment.

It is the responsibility of the Contractor to ensure they meet their SDP Commitment. The SDO, and the issuing department assume no responsibility for any Contractor’s failure to meet its SDP Commitment.

### 4.7.9 SDP Spending Verification

The SDO and the contracting department reserve the right to contact SDP Partners at any time to request that they attest to the amounts reported to have been paid to them by the Contractor.

### 4.7.10 Program Resources and Assistance

Contractors seeking assistance in the development of their SDP Plans or identification of potential SDP Partners may visit the SDP webpage, [www.mass.gov/sdp](http://www.mass.gov/sdp), or contact the SDP Help Desk at sdp@mass.gov.

## 4.8 Environmental Specifications

Bidders are encouraged to submit information identifying any and all environmental attributes of the requested product or services in addition to overall practices relating to environmental purchasing policies. Bidders are encouraged to complete the “Environmental Preferred Products and Practices” form posted with this RFR. Bidders are encourage to identify and provide, if requested,

### 4.8.1 Executive Order 515, Establishing an Environmental Purchasing Policy

Products and services purchased by state agencies must comply with [Executive Order 515](https://www.mass.gov/executive-orders/no-515-establishing-an-environmental-purchasing-policy?_ga=2.237660352.1741219494.1633353146-758386467.1632336759), issued October 27, 2009. Under this Executive Order, Executive Departments are required to reduce their impact on the environment and enhance public health by procuring environmentally preferable products and services (EPPs) whenever such products and services perform to satisfactory standards and represent best value, consistent with 801 CMR 21.00. In line with this directive, all contracts, whether departmental or statewide, must comply with the specifications and guidelines established by OSD and the EPP Program. EPPs are products and services that help to conserve natural resources, reduce waste, protect public health and the environment, and promote the use of clean technologies, recycled materials, and less toxic products. Questions concerning the EO or the appropriate specifications may be directed to OSD’s EPP Procurement Program, [www.mass.gov/epp](http://www.mass.gov/epp). The Order may be seen at <https://www.mass.gov/executive-orders/no-515-establishing-an-environmental-purchasing-policy>.

### 4.8.2 Environmental plan

Beginning the first year of the Contract and throughout the life of the Contract, awarded Bidders must agree to work with the SSST to examine the feasibility of implementing an environmental plan. Such a plan may include, but not be limited to, the following:

Implementing energy efficiency initiatives at the corporate level in line with [Executive Order 484](https://www.mass.gov/executive-orders/no-484-leading-by-example-clean-energy-and-efficient-buildings?_ga=2.100925761.1741219494.1633353146-758386467.1632336759), such as lighting retrofits, purchase of energy from renewable sources, use of bio-heat fuel, and other energy reduction technologies.

Encouraging environmental initiatives at the corporate and/or manufacturing level for the purpose of reducing the impact of manufacturing on the environment; such as clearly identifying recycled content of packaging on the packaging, providing product life cycle assessments, working toward the elimination of ozone-depleting chemical usage in the manufacturing or refining process (where applicable), and conducting internal environmental auditing related to pollution control.

Adopting standards and/or obtain certifications, where applicable, for product development and manufacturing processes such as, but not limited to. LEED, ISO 14001, Cradle to Cradle (C2C) Protocol, Green Seal, Environmental Choice, and others.

### 4.8.3 Other

The contractor may be required to report on the quantity and value of EPPs purchased by the department.

Bidders are advised that the Department reserves the right to negotiation during the contract term to permit the substitution or addition of EPPs when such products become available at a competitive cost, are readily available and satisfy the department’s performance needs.

## 4.9 Compensation Structure/Pricing

All rates shall become fixed for the initial term of the contract, unless there is a material change to a regulation, guidelines, standard, or order of the State 911 Department or the FCC or other regulatory or governing body that significantly alters the contractor’s ability to provide services, as determined solely in the discretion of the State 911 Department. Any renegotiation of rates or pricing resulting from any such material change shall be supported by appropriate and detailed documentation to the satisfaction of the State 911 Department. Further, any renegotiation of rates or pricing at the time of renewal of the contract shall be supported by detailed documentation to the satisfaction of the State 911 Department.

All purchases of hardware, software, and/or CPE necessary to fulfill the requirements of the contract, and any renewal thereof, may be made by the contractor on behalf of the State 911 Department and/or the Commonwealth if the contractor demonstrates, to the satisfaction of the State 911 Department, that procurement by the contractor of such material will achieve the best value in fulfilling the requirements of the contract, or any renewal thereof.  The State 911 Department reserves the right to procure any such hardware, software, and/or CPE through a procurement vehicle other than this RFR if to do so would result in the best value in fulfilling the contract, or any renewal thereof.  The contractor shall be required to install and maintain any and all such hardware, software, and/or CPE, and shall provide pricing on a per position basis to install and maintain any and all such hardware, software and/or CPE procured directly by the State 911 Department and/or the Commonwealth.

This contract may be funded in part with federal funds.

### 4.9.1 Cost Tables

The pricing for each and every service and commodity required to be furnished under the contract shall be set forth on Attachment A- Cost Tables.

For any and all equipment or services that are not set forth in this RFR, but that may be requested by the State 911 Department during the term of the contract, or any renewal thereof, the contractors shall provide a detailed, itemized cost estimate for such equipment and/or services that separately displays each component cost, installation cost, maintenance and monitoring cost, and any other cost.  However, in no event shall the cost categories exceed those provided on Attachment A- Cost Tables.

Bidders shall include a cost for each cost element identified on Attachment A- Cost Tables.  Bidders shall NOT attempt to incorporate costs in other cost elements and indicate that such costs are included in another cost element.  The Cost Table in its entirety shall be completed.  If there is no cost for a noted cost element, the bidder shall clearly indicate “no cost” for that element.

Bidders are advised that the monthly charges shall reflect an adjustment using the applicable unit cost noted to reflect the number of PSAPs supported under this contract to determine the overall monthly cost.

Further, bidders may NOT modify the cost table in any way, except that the cell height may be expanded to allow for sufficient space for the entry of the response.  Any response that modifies the costs table (other than indicated above) may be considered non-responsive and be given no further evaluation.

Bidders may, however, add in the space provide on the costs tables or attach an additional cost table that clearly details the cost associated with any required specification(s) or component(s) that are not addressed in this RFR but are required for the bidder’s proposed comprehensive response to support the Department’s Next Generation 911 system.

Bidders are advised that any and all cost associated with the provision of goods and services detailed in this RFR not herein identified shall become the sole responsibility of the qualified bidder in fulfillment of its obligations under the awarded contract.

The contractor shall not include the amounts of credits or the risk associated with incurring the amounts set forth in Section 5.1- Remedies, in the calculation of any price or any cost of the contract or any renewal thereof.

Bidders shall provide a prompt payment discount.

### 4.9.2 Labor Rates or project-based compensation

The bidder shall clearly identify all labor categories and hourly rates for any and all professionals, skilled staff, trades workers, or any other personnel that may be utilized to support additional services as may be requested under this RFR. Attachment A – Cost Tables includes examples of labor categories, however, it is incumbent on the bidder to identify its known labor categories and rates. The bidder may add additional rows to this cost table, as needed to properly identity all its labor categories.

### 4.9.3 All Other Expenses

For all other costs not specifically identified on the cost tables, bidders shall provide a percentage above its actual cost for all commodities and services that may be requested throughout the Term of this Agreement.

### 4.9.4 Invoicing and Payment

The contractor shall submit a detailed invoice within thirty (30) days of completion of requested goods and/or services and acceptance of deliverable(s), where applicable.   Invoices shall, where applicable, clearly detail contract number, project information, number of hours worked, hourly rate, unit cost, service rate(s), itemization of any other costs with supporting documentation, including but not limited to, invoicing from communication service providers to contractor for circuit costs, applicable prompt payment discount, any and all credits applied during that billing cycle and invoice total.

The State 911 Department reserves the right to request modifications to the invoice to ensure that the invoice is clear and concise as to the commodities and services for which it is being billed.

All invoices to and payments from the State 911 Department will be reviewed and processed in compliance with the Commonwealth’s standard terms and conditions and bill paying policy as issued by the Office of the State Comptroller and/or any and all applicable local procurement and contracting laws, regulations, rules and policies.

For all services provided to eligible entities, other than the State 911 Department, payment will be the responsibility of the eligible entity.  The contractor shall, therefore, agree to coordinate invoicing and payment terms to comply with the requirements of such eligible entities. Invoices shall, at a minimum, clearly detail the product(s), and/or services, number of hours worked, hourly rate (if applicable), itemization of any other costs with supporting documentation, applicable prompt payment discount terms and invoice total.

Bidders are advised that all payments issued by the State 911 Department will be made directly to the contractor, and no payments will be made to any parties other than the contractor for goods and services furnished under this contract.

# 5.0 Other Terms

## 5.1 Remedies

### 5.1.1 System Remedies

The State 911 Department recognizes that it may be impossible to ascertain the amount of damages arising out of failure by the contractor to meet its obligations under the contract.  The State 911 Department will assess liquidated damages within ninety (90) days of a breach; however, the State 911 Department may extend this period for up to ninety (90) additional days by notifying the contractor in writing and stating the reason for the extension.  Failure to assess liquidated damages within these timeframes shall not act as a waiver of any other rights or remedies available to the State 911 Department under the contract or at law.

The contractor agrees that such liquidated damages shall be in addition to and without limitation on any rights or remedies which the State 911 Department may have under the contract, or any renewal, or at law or in equity arising out of or related to any other breach by the contractors of its obligations. All malfunctions regardless of severity shall be logged and be available for traceability and analysis. Currently there are 3 levels of severity:

#### 5.1.1.1 Catastrophic System Malfunction:

* Failure to deliver 911 payloads to a primary PSAP, for any duration, where the payloads cannot be immediately redirected to an alternate PSAP or default PSAP.
* Failure to deliver the i3 equivalent of ALI (civic address location information or geo-coordinates) to all PSAPs for any reason.
* Failure to deliver the i3 equivalent of ANI, the number used to place the 911 call, or a callback number to all PSAPs for any reason.
* Failure to deliver 911 payloads to more than five (5) primary PSAPs, RECCs, Regionals, or, Wireless Center; simultaneously.

**Notification**: within 15 minutes of determination email and text messages shall be sent to predefine distribution lists.

**Escalation**: Immediately upon determination, the issue shall be escalated to Director, or next higher, level within the organization.  At the request of the Department an informational teleconference shall be established.  In absence of such a request from the Department, the contractor shall provide status updates to the department using agreed upon means and frequency at time of event.

**Remedy:** The contractor shall pay to the State 911 Department a credit of $150,000.00 for each catastrophic system malfunction arising out of failure by the contractor to meet its obligations under the contract. Such credits shall be cumulative.

#### 5.1.1.2 Major System Malfunction:

* One (1) or more data centers are unable to process a 911 payload.
* Failure to deliver 911 payloads to a primary PSAP, where the payloads are redirected to an alternate PSAP.
* Loss of payload detail records and/or event recording records within three (3) years of the date of creation of the record.
* Failure to deliver the i3 equivalent of ANI, the number used to place the 911 call, or a callback number to a PSAP, where such information was received from the carrier.
* Failure to deliver the i3 equivalent of ALI (civic address location information or geo-coordinates) to a call taker on all platforms (Map, UI, Phone).
* Loss or diminished call processing functionality of 20 minutes or longer at one answering position in a two (2) position PSAP.
* Failure to repair or replace a failed Answering Position hardware at a two (2) position PSAP within 3 hours of failure detection/diagnosis.
* Loss or diminished call processing functionality of 20 minutes or longer at two (2) or more   positions in a PSAP with three (3) or more positions.
* Failure to deliver a transferred 911 call to an on-net PSAP.

**Notification**: within 15 minutes of determination email and text messages shall be sent to predefine distribution lists.

**Escalation**: if within 30 minutes of determination proper resources have not been committed, the issue shall be escalated to Director, or next higher, level within the organization.

**Remedy:** The contractor shall pay to the State 911 Department a credit for each major system malfunction arising out of failure by the contractor to meet its obligations under the contract, as follows: a $25,000 credit if one (1) to five (5) major system malfunctions occur in a month; a $75,000 credit if six (6) to ten (10) major system malfunctions occur in a month; and a $150,000 credit if more than ten (10) major system malfunctions occur in a month. Such credits shall be cumulative.

#### 5.1.1.3 High

Generally triggered by non-redundant devices such as management workstations or redundant devices, redundant network paths or call answering position at sites with more than two (2) positions; such alerts are intended to raise awareness of an impending disruption in service.

**Notification**: an email notification to all appropriate parties is sufficient.

**Escalation**: as appropriate, after review.

**Remedy:** The contractor shall pay to the State 911 Department a credit for each high system malfunction arising out of failure by the contractor to meet its obligations under the contract, as follows: a credit in the amount of $2,500 if one (1) to five (5) failures occur in a month; a credit in the amount of $5,000 if six (6) to ten (10) failures occur in a month; and a $10,000 credit if more than ten (10) failures occur in a month. Such credits shall be cumulative.

#### 5.1.1.4 Lack of Notification/Escalation

The contractor shall pay to the State 911 Department a credit for each time the contractor fails to comply with notification/escalation timeframes for catastrophic system malfunctions, major system malfunctions, and high priority system malfunctions, as follows: a credit in the amount of $2,500 if one (1) to five (5) failures occur in a month; a credit in the amount of $5,000 if six (6) to ten (10) failures occur in a month; and a $10,000 credit if more than ten (10) failures occur in a month. Such credits shall be cumulative.

Any and all credits shall appear as a credit on the invoice submitted to the State 911 Department for payment of the services in the month following the month in which the event triggering the credit has occurred, or in the month following the State 911 Department assessment, or in the month following the conclusion of any mediation of a dispute in accordance with Section 14 of the Commonwealth’s Terms and Conditions.  If such credit is not provided, the State 911 Department may reduce the monthly invoice amount to be paid by the amounts specified.  In addition, to the extent that the credits owed to the State 911 Department pursuant to this Section exceed the amounts owed by the State 911 Department to the contractor under the contract, including any and all renewals thereof, the contractor shall promptly make a direct payment to the State 911 Department in such amount.

#### 5.1.1.5 Outage Definition

A period of time that begins the moment a system malfunction is reported via a phone call to the NSOC or generated by an automated alert via the monitoring system, whichever occurs first.  An outage occurs whether monitoring systems alerts to the failure or not; an outage ends the moment the system malfunction has been mitigated.

### 5.1.2 Program Management Remedies

#### 5.1.2.1 Change Management Remedies

As part of this RFR bidders will provide a framework for change management. A penalty of up to Twenty Thousand Dollars ($20,000) per occurrence of a violation of the vendor’s change management process/procedures that affects 911 payloads. A penalty of up to One Thousand Dollars ($1,000) per occurrence of a violation of the vendor’s change management process/procedures for occurrences not affecting 911 payload. These two remedies are in addition to any other relevant remedies that are applied to the occurrence such as Major or Catastrophic. 911 payload is affected if the payload routing is changed, the payload does not provide location information, the payload is unable to be delivered to a PSAP, the payload is unable to be answered, or the payload is unable to be transferred.

All information presented at the change management approval process must represent what is released to production. A change management failure is considered to be any release to production that changes the graphical interface, payload answering process, mapping display, or call routing that has NOT been communicated to the department before the release. If a change management failure occurs, a 10% penalty for the following month’s MRC shall be assessed in additional to any other applicable remedy.

#### 5.1.2.2 Integration Services Remedies

MAC Response - When a MAC is requested, the Department shall get a response in ten business days, unless otherwise agreed to by the Department. The Department will withhold the payment for the monthly recurring costs of integration services as noted in 4.4.4 until such time as the MAC is received by the Department.

MAC Completion – Some MACs that will be requested by State 911 Department will require the Vendor’s Statement of Work to have a completion date for milestones as well as the overall MAC. The State 911 Department will retain 2.5% of the value of each milestone that is not completed by the date noted in the MAC. This retainage will be paid at such time as the MAC is complete should the vendor complete the overall MAC in compliance with the established completion date. Should the MAC not be completed by the overall completion date, such retainage shall be forfeited by the vendor, unless the State 911 Department elects, in its sole discretion, to waive such forfeiture.

#### 5.1.2.3 Technical Services Remedies

The monthly recurring cost for technical services will be withheld, until such time as the deficiencies have been addressed to the satisfaction of the State 911 Department, if:

* Equipment preventative maintenance schedule is behind by 30 days or more; or
* Help Desk and/or Field Services staff is not trained as defined herein; or
* Consistent management failures that inhibit the effectiveness of the Technical Services Functional Unit; or
* Equipment/goods identified by the Department to be removed from a PSAP has not be done within 60 days.

A 10% penalty shall be assessed against the monthly recurring cost for technical services if:

* Any employee performs work on the production system without adequate training; or
* An employee does not follow the change management approved procedure. This will be assessed whether or not there is disruption to services.
* Failure to deploy and execute agreed upon procedures shall incur a penalty until corrected.

Failure to meet the metrics listed in Section 4.4.2.2.1 Phone System and Performance Metrics for 2 consecutive months shall incur a penalty equivalent to 1 month of monthly recurring fees for Technical Services.

### 5.1.3 Supplier Diversity Program Remedies

The Department reserves the right to retain a percentage, up to that percentage committed by the successful bidder under the SDP program, of each invoice should the bidder fail to meet its obligation beginning six (6) months after contract execution. Said retainage will be released in increments equal to the selected bidder’s reported compliance.

## 5.2 Intellectual Property

### 5.2.1 Source of Property

The delivery of services under this RFR will involve intellectual property derived from four different sources: (1) third party software contractors; (2) that developed by the contractor for the open market; (3) that developed by the contractor for other individual clients, or for internal purposes prior to the effective date of the contract entered by the contractor under this RFR and not delivered to any other client of the contractors; and (4) that developed by the contractor specifically for the purposes of fulfilling its obligations to the State 911 Department under the terms of this RFR.  Ownership of the first and second categories of intellectual property will be addressed in separate agreements between the State 911 Department and the owners and resellers of such property. This section of the RFR addresses exclusively ownership rights in the third and fourth categories of intellectual property.

### 5.2.3 Contractor Property and License

The contractor will retain all right, title and interest in and to all Property developed by it, i) for clients other than the Commonwealth, and ii) for internal purposes and not yet delivered to any client, including all copyright, patent, trade secret, trademark and other intellectual property rights created by contractor in connection with such work (hereinafter the "Contractor Property").  The State 911 Department acknowledges that its possession, installation or use of Contractor Property will not transfer to it any title to such property.

The State 911 Department acknowledges that the Contractor Property contains or constitutes commercially valuable and proprietary trade secrets of the contractor, the development of which involved the expenditure of substantial time and money and the use of skilled development experts. The State 911 Department acknowledges that the Contractor Property is being disclosed to the State 911 Department to be used only as expressly permitted under the terms of the license described in this RFR and any agreement entered with the contractor hereunder.  The State 911 Department will take no affirmative steps to disclose such information to third parties, and, if required to do so under the Commonwealth’s Public Records Law, Massachusetts General Laws c. 66, § 10, or by legal process, will promptly notify the contractor of the imminent disclosure so that contractor can take steps to defend itself against such disclosure.

Except as expressly authorized in this RFR or any agreement entered hereunder, the State 911 Department will not copy, modify, distribute or transfer by any means, display, sublicense, rent, reverse engineer, decompile or disassemble the Contractor Property.

The contractor grants to the State 911 Department a fully-paid, royalty-free, non-exclusive, non-transferable, worldwide, irrevocable, perpetual, assignable license to make, have made, use, reproduce, distribute, modify, publicly display, publicly perform, digitally perform, transmit and create derivative works based upon the Contractor Property, in any media now known or hereafter known, but only to the extent reasonably necessary for the State 911 Department’s exploitation of the deliverables to be developed.  The contractor will provide to the State 911 Department the most current copies of any Contractor Property to which the State 911 Department has rights pursuant to the foregoing, including any related documentation.

Notwithstanding anything contained herein to the contrary, and notwithstanding the State 911 Department’s use of the Contractor Property under the license created herein, the contractor shall have all the rights and incidents of ownership with respect to the Contractor Property, including the right to use such property for any purpose whatsoever and to grant licenses in the same to third parties.

### 5.2.4 Commonwealth Property

In conformance with the Commonwealth’s Standard Terms and Conditions, on the date on which the State 911 Department reimburses the contractor for a deliverable accepted by the State 911 Department under the terms of this RFR and any agreement entered hereunder, all of the contractor’s right, title and interest in all Property developed by contractor under the terms of this RFR and any agreement entered hereunder solely for purposes of creating the deliverables described in such agreements shall pass to and vest in the Commonwealth, including all copyright, patent, trade secret, trademark and other intellectual property rights created by the contractor in connection with such work and any causes of action relating to or based upon such work (hereinafter the "Commonwealth Property"). The Commonwealth Property shall also include all data, including without limitation LIS, ALI, GIS, recordings, stored in the system or obtained from any source whatsoever. The contractor hereby assigns to the Commonwealth, as of the date on which the State 911 Department reimburses the contractor for such deliverables, all intellectual property rights that it may now or hereafter possess in the Commonwealth Property related to such deliverable and all derivative works thereof.  The contractor also agrees to execute all documents and take all actions that may be necessary to confirm such rights, including providing any code used exclusively to develop such deliverables for the State 911 Department and the documentation for such code.  The contractor acknowledges that there are currently and that there may be future rights that the Commonwealth may otherwise become entitled to with respect to Commonwealth property that does not yet exist, as well as new uses, media, means and forms of exploitation, current or future technology yet to be developed, and that the contractor specifically intends the foregoing ownership or rights by the Commonwealth to include all such now known or unknown uses, media and forms of exploitation.

The contractor shall take such actions as may be reasonably requested by the State 911 Department to evidence the transfer of ownership of or license to intellectual property rights described in this section, including without limitation, action to transfer licenses from third parties to the Commonwealth.  All licenses shall be able to be transferred from one PSAP to another PSAP, and all licenses shall allow for the concurrent use of such licenses by PSAP personnel throughout the Commonwealth.

### 5.2.5 Third-party Intellectual Property

If the deliverables contain or will contain any third-party intellectual property to which the contractor intends to provide a sublicense, the contractor shall provide copies of all such sublicense agreements as early in the process as possible.   The sublicense agreements shall be included in the contractor’s initial quotation to the State 911 Department, or, if the requirement to utilize sublicensed intellectual property is not known at the outset of the project, as soon as the requirement becomes known.

Intellectual Property Agreement for Contractor’s Employees, Contractors, and Agents

The contractor shall ensure that all contractor personnel providing services under any agreement entered under this RFR that will result in the creation of Commonwealth Property, regardless of whether they are the contractor’s employees, contractors, or agents, shall, prior to rendering any services under any agreement entered under this RFR, sign the Intellectual Property Agreement for Contractor’s Employees, Contractors and Agents and return signed copies of the same to the State 911 Department prior to the delivery of such services under such agreement.

### 5.2.6 Warranty of non-infringement

The contractor represents and warrants to the State 911 Department that all goods, services, equipment, software, supplies, any other products provided hereunder do not, and shall not, infringe upon or violate any patent, copyright, trade secret, or proprietary right of any third party.  In the event of any claim by a third party against the State 911 Department and/or the Commonwealth, the contractor shall defend, indemnify, and hold harmless the State 911 Department and the Commonwealth against any loss, cost, expense, or liability arising out of such claim, including reasonable attorney fees.

## 5.3 Clearances

The contractor represents and warrants to the State 911 Department that it has obtained all rights, grants, assignments, conveyances, licenses, permissions and authorizations necessary or incidental to any materials owned by third parties supplied or specified by it for incorporation in the deliverables to be developed.

## 5.4 Security and Confidentiality

All persons performing services hereunder shall, at the discretion of the State 911 Department, be subject to a criminal background check, including state and national fingerprint checks conducted by the Department of Criminal Justice Information Services.  At a minimum, one CORI check will occur prior to any person performing services hereunder in addition to the above.

## 5.5 Performance and Payment Bonds

The contractor shall furnish, at its own expense, payment and performance bonds naming the Commonwealth executed by a surety licensed in the Commonwealth.

The performance bond shall be in the amount of fifty (50) per cent of the total value of the contract.  The payment bond shall be in the full amount of the value of commitments to subcontractors.

Performance and payment bonds shall be maintained during the term of the contract, and any renewal thereof.

**The State 911 Department reserves the right to collect on the performance bond if the contractor fails to meet the transition deadline of August 3, 2024.**

## 5.6 Insurance

The contractor shall maintain during the term of the contract, and any renewal thereof, insurance in at least the following minimum amounts:

* Commercial general liability in the amount of $5,000,000 per occurrence;
* Workers’ Compensation and employer’s liability as required by law; and
* Property in the amount of $5,000,000 per occurrence.

The contractor shall furnish the State 911 Department with certificates of insurance evidencing the coverage required herein.

# 6.0 Evaluation Criteria

Responses to this RFR shall be submitted via COMMBUYS on or before 5:00 PM Eastern Standard Time on Friday, May 26, 2023.  Responses received after the noted date and time or via a delivery method other than COMMBUYS will be considered non-responsive and will be given no further consideration.

Responses will be evaluated in accordance with the following criteria:

* Bidder’s ability to meet the required specifications;
* Bidder Interview;
* Business History;
* Demonstration of knowledge, experience and expertise;
* Help Desk policies, procedures, and operations;
* Pricing;
* Program management plan;
* Qualifications of Contractor and Key Personnel;
* Qualifications of Subcontractors, if any;
* Quality and completeness of bidder’s overall response;
* Supplier Diversity Program Plan;
* Change Management; and
* Scenario Based Responses.

The criteria are not listed in order of importance.

The contractor will be selected based upon the fulfillment of the RFR’s qualifications, completion of all the required RFR specifications and attachments listed in this RFR and a determination that the contractor will provide “best value” to the Commonwealth.

# 7.0 Instructions for submission of responses.

The Commonwealth will not be responsible for any costs or expenses incurred by Bidders responding to this RFR. Responses must be sent via the “Create Quote” functionality contained in COMMBUYS. For instructions concerning how to submit a Quote, please see the COMMBUYS documentation.

## 7.1 Response submission method

All bidder responses shall be submitted via Commbuys on or before 5:00 PM Eastern Standard Time on Friday, May 26, 2023.

All bidders shall submit a RFR Response to Requirements and a pricing proposal.

Bidder’s RFR response to Requirements shall follow the same sectional format of this RFR and provide an individual response to each RFR specification in its response. All responses shall be presented using the same numbering sequence and order used in this RFR.

Bidders shall acknowledge that the bidder accepts the terms and conditions of the RFR specification by clearly stating in the affirmative that the bidder shall “comply” with or “agree” to” the specification.  Bidders are advised that a response of “understands” or “understood” may be considered non-responsive. In addition, bidders shall explain in detail how they shall meet the requirements of the RFR, and a failure to do so may be viewed as an incomplete response.

 Bidders shall provide a detailed specification/features of any proposed replacement the Next Generation 911 application software, equipment, etc.

Bidders shall include a product and technology roadmap indicating future features and capabilities that are being added to NG911 system; where possible, bidders shall include release dates for new features.

Bidders shall NOT include any information relative to costs, cost elements, or pricing in the RFR response to Requirements.  All cost and pricing shall be addressed solely in the pricing response.

Attachment A – Costs Tables shall be utilized for submission of pricing proposal.

## 7.2 Subcontractors

Bidders shall provide the State 911 Department with a detailed list disclosing every subcontractor, CPE vendor, appliance vendor, software and/or application vendor, partner, or co-bidder whose services, hardware, software, application, or any other item included in their response to this RFR.  The response shall identify any such subcontractor(s) on Appendix 8 List of Commodities & Services and the Subcontractor Responsible, and for each such subcontractor(s) the goods, services, and/or commodities that the bidder intends for the subcontractor to furnish, and shall include executed subcontracts or letters of intent from subcontractors with whom the contractor has subcontracted or intends to subcontract to fulfill the requirements of this RFR.  The State 911 Department reserves the right to approve in advance any subcontracted service.  The State 911 Department reserves the right to require the contractor to furnish additional supporting documentation to verify that any subcontractor is in good standing, and the State 911 Department reserves the right to require the contractor to replace any and all subcontractors whom the State 911 Department deems, in its sole discretion, are not in good standing.  All subcontracts shall be in writing, and copies of such subcontracts shall be provided to the State 911 Department and/or the Commonwealth promptly upon request.  Unless otherwise provided by law, neither the State 911 Department nor the Commonwealth is bound by any provisions contained in any subcontract.  The contractor shall be responsible for the satisfactory performance and adequate oversight of subcontractors.

No bidder may respond to this RFR with a response or proposal that is based upon or is subject to, in whole or in part, an exclusive relationship or agreement with any subcontractor, CPE vendor, appliance vendor, software and/or application vendor, partner, or co-bidder.

The State 911 Department reserves the right to disqualify any bidder from consideration in the event that said bidder submits a response that is based upon or subject to, in whole or in part, an exclusive relationship or agreement.

## 7.3 Bidder’s Contact Information

It is the Bidder’s responsibility to monitor the email address provided in the Quote for the Bidder’s contact person. The SSST may need to contact the Bidder’s contact person with clarification requests or for other reasons. The SSST and the Commonwealth assume no responsibility if a Bidder’s designated email address is not current, or if technical problems, including those with the Bidder’s computer, network or internet service provider (ISP), cause e-mail communications between the Bidder and the SSST to be lost or rejected by any means including email or spam filtering.

## 7.4 Prohibitions

Bidders are prohibited from communicating directly with any employee of the procuring Department or any member of the SSST regarding this RFR except as specified in this RFR, and no other individual Commonwealth employee or representative is authorized to provide any information or respond to any question or inquiry concerning this RFR. Bidders may contact the contact person using the contact information provided in the Header Information this Bid if this RFR is incomplete or information is missing. Bidders experiencing technical problems accessing information or attachments stored on COMMBUYS should contact the OSD Help Desk.

## 7.5 Public Records Law

All Quotes and information submitted in response to this RFR are subject to the Massachusetts Public Records Law, M.G.L., Chapter 66, Section 10, and to Chapter 4, Section 7, Subsection 26. Any statements in submitted Quotes that are inconsistent with these statutes shall be disregarded.

# 8.0 Appendices

## 8.1 Appendix 1 Required Terms General Procurement Information

### Access to security-sensitive information

Bidders agree to adhere to this section in the event that an eligible entity provides a Contractor with security-sensitive information which, pursuant to MGL c. 4, § 7, cls. 26(n), is generally exempt from public disclosure under the Commonwealth’s public records laws and must, for public safety purposes, be safeguarded from widespread public disclosure. This security-sensitive information may be in the form of blueprints, plans, policies, procedures, schematic drawings, etc., which relate to internal layout and structural elements, security measures, emergency preparedness, threat or vulnerability assessments, and/or any other records relating to the security or safety of persons (pursuant to MGL c. 66A) or buildings, structures, facilities, utilities, transportation, information technology, or other infrastructure located within the Commonwealth. Qualified prospective Bidders interested in accessing this information for the purpose of preparing a Bid must, before being allowed to access the information, sign a confidentiality agreement, thereby agreeing to:

Restrict the use of these sensitive records for any other purpose than as authorized and for the purpose of putting together a bid proposal;

Safeguard the information while it is in their possession (consistent with Section 6 of the Commonwealth Terms and Conditions); and

Return such records and materials to the Commonwealth upon completion of the project.

### Alterations

Bidders may not alter (manually or electronically) the Bid language or any Bid component files, except as directed in the RFR. Modifications to the body of the Bid, specifications, terms and conditions, or which change the intent of this Bid are prohibited and may disqualify a Bid.

### Ownership of Submitted Quotes

The SSST shall be under no obligation to return materials submitted by a Bidder in response to this Bid. All materials submitted by Bidders become the property of the Commonwealth of Massachusetts and will not be returned to the Bidder. The Commonwealth reserves the right to use any ideas, concepts, or configurations that are presented in a Bidder’s Quote, whether or not the Quote is selected for Contract award.

Quotes stored on COMMBUYS in the encrypted lockbox are the file of record. Bidders retain access to a “read-only” copy of this submission via COMMBUYS, as long as their account remains active. Bidders also may retain a traditional paper copy or electronic copy on a separate computer, or network drive or separate media, such as CD or DVD, as a backup.

### Prohibitions

Bidders are prohibited from communicating directly with any employee of the procuring Department or any member of the SSST regarding this RFR except as specified in this RFR, and no other individual Commonwealth employee or representative is authorized to provide information or respond to questions or inquiries concerning this RFR. Bidders may contact the individual listed in contact information section of the Header Information this Bid in the event that this RFR is incomplete or information is missing. Bidders experiencing technical problems accessing information or attachments stored on COMMBUYS should contact the OSD Help Desk (see the document cover page for contact information).

In addition to the certifications found in the Commonwealth’s Standard Contract Form, by submitting a Quote, the Bidder certifies that the Quote has been arrived at independently and has been submitted without any communication, collaboration, or without any agreement, understanding, or planned common course of action with any other Bidder of the commodities and/or services described in the RFR.

### Terms and Requirements Pertaining to Awarded Contracts

### Commonwealth Tax Exemption

Invoices or invoices submitted to Massachusetts government entities must not include sales tax.

### Contractor’s Contact Information

It is the Contractor’s responsibility to keep the Contractor’s Contract Manager information current. If this information changes, the Contractor must notify the Contract Manager by email immediately, using the address located in the Header Information of the Purchase Order or Master Blanket Purchase Order on COMMBUYS. The Contractor’s COMMBUYS account also must be updated to reflect the new information.

The Commonwealth assumes no responsibility if a Contractor’s designated email address is not current, or if technical problems, including those with the Contractor’s computer, network, or internet service provider (ISP), cause email communications between the Bidder and the SST to be lost or rejected by any means, including email or spam filtering.

### Contractual Status of Orders and Service Contracts

Orders or service engagements placed under the Contract established as a result of this Bid by Eligible Entities shall be considered separate Contracts between the Eligible Entity and the Contractor, and shall be deemed to incorporate all of the terms and conditions of the Contract. Nothing contained in any order or service contract shall amend or vary the terms of the Contract. Additional terms which do not conflict with the Commonwealth’s Terms and Conditions, the Massachusetts Standard Contract Form, this Bid and any amendments, or the Bidder’s Quote, may be included in an order or service contract if mutually agreed upon by the Contractor and eligible entity.

### Publicity

Any Contractor awarded a contract under this Bid is prohibited from selling or distributing any information collected or derived from the Contract, including lists of participating Eligible Entities, Commonwealth employee names, telephone numbers, addresses, or other information except as specifically authorized by the SSST.

## 8.2 Appendix 2 Required Specifications

Revision Date: October 5, 2021

In general, most of the required contractual stipulations are referenced in the Standard Contract Form and Instructions and the Commonwealth Terms and Conditions. However, the following RFR provisions must appear in all Commonwealth competitive procurements conducted under 801 CMR 21.00.

The terms of 801 CMR 21.00: Procurement of Commodities and Services are incorporated by reference into this RFR. Words used in this RFR shall have the meanings defined in 801 CMR 21.00. Additional definitions also may be identified in this RFR. Other terms not defined elsewhere in this document may be defined in OSD’s Glossary of Terms. Unless otherwise specified in this RFR, all communications, responses, and documentation must be in English, all measurements must be provided in feet, inches, and pounds and all cost proposals or figures in U.S. currency. All responses must be submitted in accordance with the specific terms of this RFR.

1. COMMBUYS Market Center. COMMBUYS is the official source of information for this Bid and is publicly accessible at no charge at www.commbuys.com. Information contained in this document and in COMMBUYS, including file attachments, and information contained in the related Bid Questions and Answers (Q&A), are components of the Bid, as referenced in COMMBUYS, and are incorporated into the Bid and any resulting contract.

Bidders are solely responsible for obtaining all information distributed for this Bid via COMMBUYS. Bid Q&A supports Bidder submission of written questions associated with a Bid and publication of official answers.

 It is each Bidder’s responsibility to check COMMBUYS for:

* Any amendments, addenda, or modifications to this Bid, and
* Any Bid Q&A records related to this Bid.

The Commonwealth accepts no responsibility and will provide no accommodation to Bidders who submit a Quote based on an out-of-date Bid or on information received from a source other than COMMBUYS.

2. COMMBUYS Registration. Bidders may elect to register for a free COMMBUYS Seller account which provides value-added features, including automated email notification associated with postings and modifications to COMMBUYS records. However, to respond to a Bid, Bidders must register and maintain an active COMMBUYS Seller account.

All Bidders submitting a Quote (previously referred to as Response) in response to this Bid (previously referred to as Solicitation) agree that, if awarded a contract: 1) they will maintain an active seller account in COMMBUYS; 2) they will, when directed to do so by the procuring entity, activate and maintain a COMMBUYS-enabled catalog using Commonwealth Commodity Codes; 3) they will comply with all requests by the procuring entity to utilize COMMBUYS for the purposes of conducting all aspects of purchasing and invoicing with the Commonwealth, as added functionality for the COMMBUYS system is activated; and 4) in the event the Commonwealth adopts an alternate e-procurement platform, successful Bidders will be required to utilize such system, as directed by the procuring entity. Commonwealth Commodity Codes are based on the United Nations Standard Products and Services Code (UNSPSC).

 COMMBUYS uses terminology with which bidders must be familiar to conduct business with the Commonwealth. To view this terminology and to learn more about COMMBUYS, please visit the Learn about COMMBUYS Resources page on mass.gov.

3. Multiple Quotes. Bidders may not submit Multiple Quotes in response to a Bid unless the RFR authorizes them to do so. If a Bidder submits multiple quotes in response to an RFR that does not authorize multiple responses, only the latest dated quote submitted prior to the bid opening date will be evaluated.

4. Quote Content. Bid specifications for delivery, shipping, billing, and payment will prevail over any proposed Bidder terms entered as part of the Quote, unless otherwise specified in the Bid.

5. Supplier Diversity Office (SDO) Programs. Pursuant to Executive Orders 523 and 565, the Commonwealth supports the use of diverse and small businesses through the Small Business Purchasing Program (SBPP) and the Supplier Diversity Program (SDP). Based on the estimated value of the procurement, one of the above-mentioned programs shall be applicable to this RFR. For more information on the program that applies to this solicitation, see the body of this RFR.

6. Small Business Purchasing Program (SBPP)

Program Background. The Massachusetts Small Business Purchasing Program (SBPP) was established pursuant to Executive Order 523 to increase state contracting opportunities with small businesses having their principal place of business within the Commonwealth of Massachusetts. Pursuant to the SBPP, it is the intention of the issuing department to award this Small Procurement to one or more SBPP participating business(es) as described below.

SBPP Award Preference. While all businesses, no matter the size or principal place of business, may submit responses to this solicitation, should an SBPP participant respond and meet the best value criteria described in this solicitation, the SBPP participant shall be awarded the contract. The Strategic Sourcing Services Team (SST) will not evaluate submissions from non-SBPP participants unless no SBPP Bidder meets the SSST’s best value evaluation criteria.

SBPP Participation Eligibility. To be eligible to participate in this procurement as an SBPP participant, an entity must meet the following criteria, and be marked as an SBPP-registered business in COMMBUYS:

* Have its principal place of business in the Commonwealth of Massachusetts;
* Been in business for at least one year;
* Employ a combined total of 50 or fewer full-time equivalent employees in all locations, or employees work less than a combined total of 26,000 hours per quarter; and
* Have gross revenues, as reported on appropriate tax forms, of $15 million or less, based on a three-year average.

Non-profit firms also must be registered as a non-profit or charitable organization with the MA Attorney General’s Office and be up to date with all filings required by that office and be tax exempt under Section 501(c) of the Internal Revenue Code.

SBPP Compliance Requirements. It is the responsibility of the Bidder to ensure that their SBPP status is current at the time of submitting a response and throughout the life of any resulting contract. Misrepresentation of SBPP status will result in disqualification from consideration, and may result in debarment, contract termination, and other actions. To learn more about the SBPP, including how to apply, visit the SBPP webpage, http://www.mass.gov/sbpp.

Program Resources and Assistance. Bidders and Contractors seeking assistance regarding SBPP may visit the SBPP Webpage, or contact the SBPP Help Desk at sbpp@mass.gov.

7. Supplier Diversity Program (SDP)

Program Background. Pursuant to Executive Order 565, the Commonwealth’s Supplier Diversity Program (SDP) promotes business-to-business relationships between awarded Contractors and diverse businesses and non-profit organizations (“SDP Partners”) certified or recognized (see below for more information) by the Supplier Diversity Office (SDO).

Financial Commitment Requirements. All Bidders responding to this solicitation are required to make a significant financial commitment (“SDP Commitment”) to partnering with one or more SDO-certified or recognized diverse business enterprise(s) or non-profit organization(s). This SDP Commitment must be expressed as a percentage of contract sales resulting from this solicitation that would be spent with the SDP Partner(s).

After contract award (if any), the Total SDP Commitment shall become a contractual requirement to be met annually on a Massachusetts fiscal year basis (July 1 – June 30) for the duration of the contract. The minimum acceptable Total SDP Commitment in response to this solicitation shall be 1%. Bidders shall be awarded additional evaluation points for higher SDP Comitments.

No contract shall be awarded to a Bidder without an SDP Commitment that meets the requirements stated herein. This requirement extends to all Bidders regardless of their own supplier diversity certification.

Eligible SDP Partner Certification Categories

SDP Partners must be business enterprises and/or non-profit organizations certified or recognized by the SDO in one or more of the following certification categories:

* Minority-Owned Business Enterprise (MBE)
* Minority Non-Profit Organization (M/NPO)
* Women-Owned Business Enterprise (WBE)
* Women Non-Profit Organization (W/NPO)
* Veteran-Owned Business Enterprise (VBE)
* Service-Disabled Veteran-Owned Business Enterprise (SDVOBE)
* Disability-Owned Business Enterprise (DOBE)
* Lesbian, Gay, Bisexual, and Transgender Business Enterprise (LBGTBE)

Eligible Types of Business-to-Business Relationships. Bidders and Contractors may engage SDP Partners as follows:

Subcontracting, defined as a partnership in which the SDP partner is involved in the provision of products and/or services to the Commonwealth.

Ancillary Products and Services, defined as a business relationship in which the SDP partner provides products or services that are not directly related to the Contractor’s contract with the Commonwealth but may be related to the Contractor’s own operational needs.

Other types of business-to-business relationships are not acceptable under this contract. All provisions of this RFR applicable to subcontracting shall apply equally to the engagement of SDP Partners as subcontractors.

Program Flexibility. The SDP encompasses the following provisions to support Bidders in establishing and maintaining sustainable business-to-business relationships meeting their needs:

* SDP Partners are not required to be subcontractors.
* SDP Partners are not required to be Massachusetts-based businesses.
* SDP Partners may be changed or added during the term of the contract, provided the Contractor continues to meet its SDP Commitment.

SDP Plan Form Requirements. All Bidders must complete the SDP Plan Form included in this solicitation and attach it to their bid response. In addition to proposing an SDP Commitment, each Bidder must propose one or more SDP Partner(s) to utilize to meet its SDP Commitment. Certified diverse Bidders may not list their own companies, their subsidiaries, or affiliates as SDP Partners and may not meet their SDP Commitment by spending funds internally or with their own subsidiaries or affiliates.

Bidders may propose SDP Partners that are:

* Certified or recognized by the SDO: Such partners appear in the SDO Directory of Certified Businesses or in the U.S. Dept of Veterans Affairs VetBiz Vendor Information Pages directory. After contract award (if any), spending with such partners will contribute to meeting the Contractor’s SDP Commitment.
* Not yet certified or recognized by the SDO: Such partners must be certified in eligible categories by a third-party certification body, such as another city or state supplier diversity certification office, the National Minority Supplier Development Council, the Women Business Enterprise National Council, Disability: IN, or the National LGBT Chamber of Commerce (NGLCC), but are not listed in the above-mentioned directories. Self-certification is not acceptable. While Bidders may list such proposed SDP Partners on their SDP Plans, spending with such partners will not contribute to meeting the Contractor’s SDP Commitment unless they apply for and are granted SDO supplier diversity certification or recognition. If proposed SDP Partners do not receive SDO supplier diversity certification or recognition, the Contractor must find alternative SDP Partners to meet the SDP Commitment.

It is the responsibility of the Contractor to ensure that their proposed SDP Partners obtain such certification or recognition by the SDO after contract award (if any). The issuing department and the SDO will not conduct outreach to proposed SDP Partners to ensure their certification. Furthermore, no guarantee may be made that a proposed SDP Partner will be certified, or regarding the time it may take to process a proposed SDP Partner certification. Contractors may direct partners to the SDO’s homepage, www.mass.gov/sdo and the Certification Self-Assessment Tool for guidance on applying for certification.

It is desirable for Bidders to provide an SDP Focus Statement that describe the bidder’s overall approach to increasing the participation of diverse businesses in the provision of products and services under this proposal/contract (subcontracting) and in the Bidder’s general business operations (ancillary products and services). Such a description may include but not be limited to:

* A clearly stated purpose or goal.
* Specific types of diverse and small businesses targeted.
* Which departments/units within the business are responsible for implementing supplier diversity.
* Types of opportunities for which diverse and small businesses are considered.
* Specific measures/methods of engagement of diverse and small businesses.
* An existing internal supplier diversity policy.
* Public availability of the Bidder’s supplier diversity policy.

It also is desirable for Bidders to use the SDP Plan Form to describe additional creative initiatives (if any) related to engaging, buying from, and/or collaborating with diverse businesses. Such initiatives may include but not be limited to:

* Serving as a mentor in a mentor-protégé relationship.
* Technical and financial assistance provided to diverse businesses.
* Participation in joint ventures between nondiverse and diverse businesses.

Voluntary assistance programs by which nondiverse business employees are loaned to diverse businesses or by which diverse business employees are taken into viable business ventures to acquire training and experience in managing business affairs.

Evaluation of SDP Forms. To encourage Bidders to develop substantial supplier diversity initiatives and commitments as measures valuable to the Commonwealth, at least 25% of the total available evaluation points for this bid solicitation shall be allocated to the evaluation of the SDP Plan submissions. Because the purpose of the SDP is to promote business-to-business partnerships, the Bidders’ workforce diversity initiatives will not be considered in the evaluation.

SDP Spending Reports and Compliance. After contract award, Contractors shall be required to provide reports demonstrating compliance with the agreed-upon SDP Commitment as directed by the department, which in no case shall be less than annually.

Only spending with SDP Partners that appear in the SDO Directory of Certified Businesses or in the U.S. Dept of Veterans Affairs VetBiz Vendor Information Pages directory shall be counted toward a Contractor’s compliance with their SDP Commitment. Spending with SDP Partners that do not appear in the directories above shall not be counted toward meeting a Contractor’s SDP Commitment.

It is the responsibility of the Contractor to ensure they meet their SDP Commitment, and the SDO and the issuing department assume no responsibility for any Contractor’s failure to meet its SDP Commitment.

SDP Spending Verification. The SDO and the contracting department reserve the right to contact SDP Partners at any time to request that they attest to the amounts reported to have been paid to them by the Contractor.

Program Resources and Assistance. Contractors seeking assistance in the development of their SDP Plans or identification of potential SDP Partners may visit the SDP webpage, www.mass.gov/sdp, or contact the SDP Help Desk at sdp@mass.gov.

8. Agricultural Products Preference (only applicable if this is a procurement for Agricultural Products). Chapter 123 of the Acts of 2006 directs the State Purchasing Agent to grant a preference to products of agriculture grown or produced using locally grown products. Such locally grown or produced products shall be purchased unless the price of the goods exceeds the price of products of agriculture from outside the Commonwealth by more than 10%. For purposes of this preference, products of agriculture are defined to include any agricultural, aquacultural, floricultural, or horticultural commodities; the growing and harvesting of forest products; the raising of livestock, including horses; raising of domesticated animals, bees, and/or fur-bearing animals; and any forestry or lumbering operations.

9. Best Value Selection and Negotiation. The Strategic Sourcing Services Team or SSST may select the response(s) which demonstrates the best value overall, including proposed alternatives that will achieve the procurement goals of the department. The SSST and a selected bidder, or a contractor, may negotiate a change in any element of contract performance or cost identified in the original RFR or the selected bidder’s or contractor’s response which results in lower costs or a more cost effective or better value than was presented in the selected bidder’s or contractor’s original response.

10. Bidder Communication. Bidders are prohibited from communicating directly with any employee of the procuring department or any member of the SSST regarding this RFR except as specified in this RFR, and no other individual Commonwealth employee or representative is authorized to provide any information or respond to any question or inquiry concerning this RFR. Bidders may contact the contact person for this RFR in the event this RFR is incomplete or the bidder is having trouble obtaining any required attachments electronically through COMMBUYS.

11. Contract Expansion. If additional funds become available during the contract duration period, the department reserves the right to increase the maximum obligation to some or all contracts executed as a result of this RFR or to execute contracts with contractors not funded in the initial selection process, subject to available funding, satisfactory contract performance and service or commodity need.

12. Costs. Costs which are not specifically identified in the bidder’s response and accepted by a department as part of a contract will not be compensated under any contract awarded pursuant to this RFR. The Commonwealth will not be responsible for any costs or expenses incurred by bidders responding to this RFR.

13. Electronic Communication/Update of Bidder’s/Contractor’s Contact Information. It is the responsibility of the prospective bidder and awarded contractor to keep current on COMMBUYS the email address of the bidder’s contact person and prospective contract manager, if awarded a contract, and to monitor that email inbox for communications from the SSST, including requests for clarification. The SSST and the Commonwealth assume no responsibility if a prospective bidder’s/awarded contractor’s designated email address is not current, or if technical problems, including those with the prospective bidder’s/awarded contractor’s computer, network, or internet service provider (ISP) cause email communications sent to/from the prospective bidder/awarded contractor and the SSST to be lost or rejected by any means including email or spam filtering.

14. Electronic Funds Transfer (EFT). All bidders responding to this RFR must agree to participate in the Commonwealth Electronic Funds Transfer (EFT) program for receiving payments, unless the bidder is able to provide compelling proof that it would be unduly burdensome. EFT is a benefit to both contractors and the Commonwealth because it ensures fast, safe, and reliable payment directly to contractors and saves both parties the cost of processing checks. Contractors may track and verify payments made electronically through the Comptroller’s Vendor Web system. A link to the EFT application may be found on the OSD Forms page ( www.mass.gov/lists/osd-forms). Additional information about EFT is available on the VendorWeb site (www.mass.gov/osc). Click on MASSfinance.

Successful bidders, upon notification of contract award, will be required to enroll in EFT as a contract requirement by completing and submitting the Authorization for Electronic Funds Payment Form to this department for review, approval, and forwarding to the Office of the Comptroller. If the bidder already is enrolled in the program, it may so indicate in its response. Because the Authorization for Electronic Funds Payment Form contains banking information, this form, and all information contained on this form, shall not be considered a public record and shall not be subject to public disclosure through a public records request.

The requirement to use EFT may be waived by the SSST on a case-by-case basis if participation in the program would be unduly burdensome on the bidder. If a bidder is claiming that this requirement is a hardship or unduly burdensome, the specific reason must be documented in its response. The SSST will consider such requests on a case-by-case basis and communicate the findings to the bidder.

15. Executive Order 509, Establishing Nutrition Standards for Food Purchased and Served by State Agencies. Food purchased and served by state agencies must be in compliance with Executive Order 509, issued in January 2009. Under this Executive Order, all contracts resulting from procurements posted after July 1, 2009, that involve the purchase and provision of food must comply with nutrition guidelines established by the Department of Public Health (DPH). The nutrition guidelines are available at the Department’s website: Tools and Resources for Implementation of Executive Order 509.

16. HIPAA: Business Associate Contractual Obligations. Bidders are notified that any department meeting the definition of a Covered Entity under the Health Insurance Portability and Accountability Act of 1996 (HIPAA) will include in the RFR and resulting contract sufficient language establishing the successful bidder’s contractual obligations, if any, that the department will require in order for the department to comply with HIPAA and the privacy and security regulations promulgated thereunder (45 CFR Parts 160, 162, and 164) (the Privacy and Security Rules). For example, if the department determines that the successful bidder is a business associate performing functions or activities involving protected health information, as such terms are used in the Privacy and Security Rules, then the department will include in the RFR and resulting contract a sufficient description of business associate’s contractual obligations regarding the privacy and security of the protected health information, as listed in 45 CFR 164.314 and 164.504 (e), including, but not limited to, the bidder's obligation to: implement administrative, physical, and technical safeguards that reasonably and appropriately protect the confidentiality, integrity, and availability of the protected health information (in whatever form it is maintained or used, including verbal communications); provide individuals access to their records; and strictly limit use and disclosure of the protected health information for only those purposes approved by the department. Further, the department reserves the right to add any requirement during the course of the contract that it determines it must include in the contract in order for the department to comply with the Privacy and Security Rules. Please see other sections of the RFR for any further HIPAA details, if applicable.

17. Minimum Quote (Bid Response) Duration. Bidders Quotes made in response to this Bid must remain in effect for at least 90 days from the date of quote submission.

18. Prompt Payment Discounts (PPD). All bidders responding to this procurement must agree to offer discounts through participation in the Commonwealth’s Prompt Payment Discount (PPD) initiative for receiving early and/or on-time payments, unless the bidder provides compelling proof that it would be unduly burdensome. PPD benefits both contractors and the Commonwealth. Contractors benefit by increased, usable cash flow as a result of fast and efficient payments for commodities or services rendered. Participation in the Electronic Funds Transfer (EFT) initiative further maximizes the benefits with payments directed to designated accounts, thus eliminating the impact of check clearance policies and traditional mail lead time or delays. The Commonwealth benefits because contractors reduce the cost of products and services through the applied discount. Payments that are processed electronically may be tracked and verified through the Comptroller’s Vendor Web system. The PPD form may be found as an attachment for this Bid on COMMBUYS.

Bidders must submit agreeable terms for Prompt Payment Discount using the PPD form within their proposal, unless otherwise specified by the SSST. The SSST will review, negotiate, or reject the offering as deemed in the best interest of the Commonwealth.

The requirement to use PPD offerings may be waived by the SSST on a case-by-case basis if participation in the program would be unduly burdensome on the bidder. If a bidder is claiming that this requirement is a hardship or unduly burdensome, the specific reason must be documented in or attached to the PPD form.

19. Public Records. All responses and information submitted in response to this RFR are subject to the Massachusetts Public Records Law, M.G.L., c. 66, s. 10, and to c. 4, s. 7, ss. 26. Any statements in submitted responses that are inconsistent with these statutes, including marking by bidders of information as confidential during the quote submission process in COMMBUYS, shall be disregarded.

20. Reasonable Accommodation. Bidders with disabilities or hardships that seek reasonable accommodation, which may include the receipt of RFR information in an alternative format, must communicate such requests in writing to the contact person. Requests for accommodation will be addressed on a case by case basis. A bidder requesting accommodation must submit a written statement which describes the bidder’s disability and the requested accommodation to the contact person for the RFR. The SSST reserves the right to reject unreasonable requests.

21. Restriction on the Use of the Commonwealth Seal. Bidders and contractors are not allowed to display the Commonwealth of Massachusetts Seal in their bid package or subsequent marketing materials if they are awarded a contract because use of the coat of arms and the Great Seal of the Commonwealth for advertising or commercial purposes is prohibited by law.

22. Subcontracting Policies. Prior approval of the department is required for any subcontracted service of the contract. Contractors are responsible for the satisfactory performance and adequate oversight of its subcontractors. Human and social service subcontractors are also required to meet the same state and federal financial and program reporting requirements and are held to the same reimbursable cost standards as contractors.

23. Acceptable Forms of Signature

Effective June 15, 2021, for all 1) CTR forms, including the Standard Contract Form, W-9s, Electronic Funds Transfer (EFT) forms, ISAs, and other CTR-issued documents and forms, or 2) documents related to state finance and within the statutory area of authority or control of CTR (i.e. contracts, payrolls, and related supporting documentation), CTR will accept signatures executed by an authorized signatory in any of the following ways: 1. Traditional “wet signature” (ink on paper); 2. Electronic signature that is either: a. Hand drawn using a mouse or finger if working from a touch screen device; or Page 2 b. An uploaded picture of the signatory’s hand drawn signature 3. Electronic signatures affixed using a digital tool such as Adobe Sign or DocuSign. If using an electronic signature, the signature must be visible, include the signatory’s name and title, and must be accompanied by a signature date. Please be advised that typed text of a name not generated by a digital tool such as Adobe Sign or DocuSign, even in computer-generated cursive script, or an electronic symbol, are not acceptable forms of electronic signature.

## 8.3 Appendix 3 Other specifications

Issue Date: November 1, 2005

Refresh Date: June 6, 2016

The following RFR provisions appear in this section at the department’s discretion. If a specification is selected by the department, it is required of the bidder.

Access to Security-Sensitive Information. This solicitation contains security-sensitive information which, pursuant to MGL c. 4, s. 7, cls. 26(n), is generally exempt from public disclosure under the Commonwealth’s public records laws and must, for public safety purposes, be safeguarded from widespread public disclosure. This security-sensitive information is in the form of blueprints, plans, policies, procedures, schematic drawings, which relate to internal layout and structural elements, security measures, emergency preparedness, threat or vulnerability assessments, and/or any other records relating to the security or safety of persons (pursuant to M.G.L. c. 66A) or buildings, structures, facilities, utilities, transportation, information technology or other infrastructure located within the commonwealth.

Qualified prospective bidders that are interested in accessing this information for the purpose of preparing a bid response must, before being allowed to access the information, sign a confidentiality agreement, thereby agreeing to:

* restrict the use of these sensitive records for any other purpose than as authorized and for the purpose of putting together a bid proposal;
* safeguard the information while it is in their possession (consistent with Section 6 of the Commonwealth Terms and Conditions); and
* return such records and materials to the Commonwealth upon completion of the project.

Alternatives. A response which fails to meet any material term or condition of the RFR, including the submission of required attachments, may lose points or be deemed unresponsive and disqualified. Unless otherwise specified, bidders may submit responses proposing alternatives which provide equivalent, better or more cost effective performance than achievable under the stated RFR specifications. These alternatives may include related commodities or services that may be available to enhance performance during the period of the contract. The response should describe how any alternative achieves substantially equivalent or better performance to that of the RFR specifications.

 The department will determine if a proposed alternative method of performance achieves substantially equivalent or better performance. The goal of this RFR is to provide the best value of commodities and services to achieve the procurement goals of the department. Bidders that propose discounts, uncharged commodities and services or other benefits in addition to the RFR specifications may receive a preference or additional points under this RFR as specified.

Contractors may also propose alternatives for equivalent, better or more cost effective performance than specified under the contractor’s original response to enable the department to take advantage of enhanced technologies, commodities or services which become available during the term of the contract.

Brand Name or Equal. Unless otherwise specified in this RFR, any reference to a particular trademark, trade name, patent, design, type, specification, producer or supplier is not intended to restrict this RFR to any manufacturer or proprietor or to constitute an endorsement of any commodity or service, and the department may consider clearly identified offers of substantially equivalent commodities and services submitted in response to such reference.

Emergency Standby Commodities and/or Services. Due to a declaration of a state of emergency where the safety and well-being of Commonwealth citizens are at risk, the Commonwealth of Massachusetts may request specific commodities and/or services from its contractors. Contractors may be called upon to supply and/or deliver to the Commonwealth on a priority basis such commodities and/or services currently under contract.

Such accommodations may be requested from a contractor during an actual emergency. To accommodate such requests, contractors may be requested and must make every effort to service these requests from regular sources of supply at the rates set forth in any standard contract resulting from this RFR.

Environmentally Preferable Products and Services. The department and contractor(s) may negotiate during the contract term to permit the substitution or addition of Environmentally Preferable Products (EPPs) when such products are readily available at a competitive cost and satisfy the department’s performance needs.

Estimated Provisions. The Commonwealth makes no guarantee that any commodities or services will be purchased from any contract resulting from this RFR. Any estimates or past procurement volumes referenced in this RFR are included only for the convenience of bidders, and are not to be relied upon as any indication of future purchase levels.

## 8.4 Appendix 4 Required Specifications for Information Technology

Revised: July 1, 2020

Information Technology. Required for Information Technology contracts. All IT systems and applications developed by or for Executive department agencies or operating within the Massachusetts Access to Government Network (MAGNet) must conform with the Enterprise Information Security Policies and Standards promulgated by the Secretary of the Executive Office of Technology Services & Security (EOTSS). Non-conforming IT systems may not be deployed unless the purchasing agency and their contractor(s) have jointly applied for and received in writing from the Secretary of EOTSS or the Secretary’s designee, notice that a specified deviation will be permitted. The Enterprise Information Security Policies and Standards are available at https://www.mass.gov/handbook/enterprise-information-security-policies-and-standards. Additional policies, standards, and requirements that do not conflict with the Enterprise Information Security Policies and Standards may apply and shall be made available to Bidders by the purchasing agency.

Please Note: Given the pace of information technology innovation, purchasing agencies and their contractors are required to contact EOTSS to signal a system or application design and development initiative. Such advance notice helps to ensure conformance with the relevant Enterprise Information Security Policies and Standards.

Contractor delivery of IT systems and applications that fail to conform to the Commonwealth’s Enterprise Information Security Policies and Standards, absent the Secretary of EOTSS’s grant of written permission for a deviation, shall constitute breach of contract. The Commonwealth may choose to require the contractor, at no cost to the Commonwealth, to re-engineer the non-conforming system for the purpose of bringing it into compliance with Commonwealth Enterprise Information Security Policies and Standards.

## 8.5 Appendix 5 Instructions for Execution and Submission of Commonwealth Standard Forms

The purpose of this appendix is to provide guidance to Bidders on the Commonwealth Standard forms to be submitted (in addition to the other forms and documents required) and how they must be executed and submitted. Please note that these instructions are meant to supplement the Instructions found on each of these forms

Forms listed below may be electronically signed by the Bidder, see Acceptable Forms of Signatures. Bidders must, if notified of Contract award, submit the following four (4) forms within the timeframe referenced in the RFR section entitled Acceptable Forms of Signatures: the Commonwealth Standard Contract Form, the Commonwealth Terms and Conditions, the Request for Taxpayer Identification Number and Certification (Mass. Substitute W9 Form) and the Contractor Authorized Signatory Listing.

1.1 Commonwealth Standard Contract Form

By executing this document, the Bidder certifies, under the pains and penalties of perjury, that it has submitted a Response to this RFR that is the Bidder’s Offer as evidenced by the execution of its authorized signatory, and that the Bidder’s Response may be subject to negotiation by the SSST. Also, the terms of the RFR, the Bidder’s Response, and any negotiated terms shall be deemed accepted by the Department and included as part of the Contract upon execution of this document by the State Purchasing Agent or his designee.

If the Bidder does not have a Vendor Code beginning with “VC” or does not know their Vendor Code , the Bidder should leave the Vendor Code field blank. The Bidder should NOT enter a Vendor Code assigned prior to May 2004, as new Vendor Codes have been assigned to all companies since that time.

1.2 Commonwealth Terms and Conditions/Commonwealth IT Terms and Conditions

If the Bidder has executed and filed the appropriate Commonwealth Terms and Conditions form pursuant to another RFR or Contract, a copy of this form may be included in . If the Bidder’s name, address, or Tax ID Number have changed since the Commonwealth Terms and Conditions form was executed, a new Commonwealth Terms and Conditions form is required. The Commonwealth Terms and Conditions are hereby incorporated into any Contract executed pursuant to this RFR.

This form must be unconditionally signed by one of the authorized signatories (see Contractor Authorized Signatory Listing, below), and submitted without alteration. If the provisions in this document are not accepted in their entirety without modification, the entire Proposal offered in response to this Solicitation may be deemed non-responsive.

The company’s correct legal name and legal address must appear on this form, and must be identical to the legal name and legal address on the Request for Taxpayer Identification and Certification Number (Mass. Substitute W9 Form).

1.3 Request for Taxpayer Identification Number and Certification (Mass. Substitute W9 Form)

If a Bidder previously submitted a Request for Taxpayer Identification and Certification Number (Mass. Substitute W9 Form) and has received a valid Massachusetts Vendor Code, an original W-9 form is not required. A copy of the form as filed may be included. If the Bidder’s name, address, or Tax ID Number have changed since the Mass. Substitute W9 Form was executed, a new Mass. Substitute W9 Form is required. The information on this form will be used to record the Bidder’s legal address and where payments under a State Contract will be sent. The company’s correct legal name and legal address must appear on this form, and must be identical to the legal name and legal address on the Commonwealth Terms and Conditions. Please do not use the U.S Treasury’s version of the W9 Form.

1.4 Contractor Authorized Signatory Listing

In the table entitled “Authorized Signatory Name” and “Title,” type the names and titles of those individuals authorized to execute contracts and other legally binding documents on behalf of the Bidder. Bidders are advised to keep this list as small as possible, as Contractors will be required to notify the Procurement Manager of any changes. If the person signing in the signature block at the bottom of the first page of this form also will serve as an “Authorized Signatory,” that person’s name must be included in the typed table.

With regard to the next paragraph, which begins “I certify that I am the President, Chief Executive Officer, Chief Fiscal Officer, Corporate Clerk, or Legal Counsel for the Contractor…,” if your organization does not have these titles, cross them out and handwrite the appropriate title above the paragraph.

The second page of the form (entitled “Proof of Authentication of Signature”) states that the page is optional. However, the “optional” aspect of the form is that Commonwealth Departments are not required to use it. In the case of Statewide Contracts, however, this page is required, not optional. The person signing this page must be the same person signing the Standard Contract Form, the Commonwealth Terms and Conditions, and the RFR Checklist.

Please note that in two places where the form states “in the presence of a notary,” this should be interpreted to mean “in the virtual presence of a notary or corporate clerk/secretary.” Either a notary or corporate clerk/secretary may authenticate the form; only one is required.

Organizations whose corporate clerks/secretaries authenticate this form are not required to obtain a Corporate Seal to complete this document.

1.5 Supplier Diversity Program Plan Form

<NOTE: SDP is REQUIRED for procurements with annual values greater than $250,000.>

Download this form and complete as directed by the form instructions; include with online submission. Ink signature is not required.

The specific Supplier Diversity Program (SDP) requirements for this procurement may be found earlier in this document. Bidders are required to state a specific percentage of contract revenues that will represent the annual SDP commitment for the entire contract period, including any renewals.

1.6 Current Environmentally Preferable Products / Practices Form

In line with the Commonwealth’s efforts to promote products and practices which reduce our impact on the environment and human health, Bidders are encouraged to provide information regarding their environmentally preferable/sustainable business practices as they relate to this Contract wherever possible. Bidders must complete this form and submit it with their RFR Response.

1.7 Prompt Payment Discount Form

Download this form and complete as directed below; include with online submission. Ink signature is not required.

Pursuant to the Prompt Payment Discount terms set forth in the RFR Required Specifications for Contracts and on the Prompt Payment Discount Form itself, all Bidders must execute this form. After entering the “Bidder Name” and “Date of Offer for Prompt/Early Payment Discount,” the Bidder must identify the prompt payment discount(s) terms by indicating the “Percentage Discount off of the Proposed Pricing” and the “Turn-around-time for Payments.” In the event of a hardship that prevents the Bidder from offering a prompt payment discount, the Bidder must document this fact and provide supporting information. If awarded a contract, the final negotiated prompt payment discounts should be reflected on the Commonwealth Standard Contract Form.

1.8 Business Reference Form

Download this form and complete as directed below; include with online submission. Ink signature is not required.

Bidders must provide all requested information on this form for required references. In completing this form, note that the “Bidder” is the name of the company submitting a Quote in response to this RFR and the “RFR Name/Title” and the “Agency Document Number” may be found on the cover of the RFR document and in the Short Description field in the Header Information of the Bid record in COMMBUYS. Also, please note that: “Reference Name” is the name of the organization (if not applicable, then name of the individual) that is providing the reference; “Contact” is the name of the individual inside the organization that will provide the reference; and the “Address,” “Phone #,” and “Fax/Internet Address” are those of the “Contact” so that the SSST may reach her/him/them.

8.6 Appendix 6 instructions for vendors responding to bids electronically through Commbuys

Introduction

COMMBUYS refers to all solicitations, including, but not limited to, Requests for Proposals (RFP), Invitations for Bid (IFB), Requests for Response (RFR), Requests for Quote (RFQ), as “Bids.” All responses to Bids are referred to as “Quotes.”

Steps for Bidders to Submit a Quote

1. Launch the COMMBUYS website by entering the URL ([www.COMMBUYS.com](http://www.commbuys.com/)) into the browser.
2. Enter Bidder login credentials and click the Login button on the COMMBUYS homepage. Bidders must be registered in COMMBUYS to submit a Quote. Each Vendor has a COMMBUYs Seller Administrator, who is responsible for maintaining authorized user access to COMMBUYS.
3. Upon successful login, the Vendor home page displays with the Navigation and Header Bar, as well as the Control Center. The Control Center is where documents assigned to your role are easily accessed and viewed.
4. Click on the Bids tab
5. Clicking on the Bid tab opens four sections:
	1. Request for Revision
	2. Bids/Bid Amendments
	3. Open Bids
	4. Closed Bids
6. Click on the blue Open Bid hyperlinks to open and review an open bid
7. A new page opens with a message requesting you acknowledge receipt of the bid. Click Yes to acknowledge receipt of the bid. Bidders should acknowledge receipt to receive notifications of amendments/updates concerning this bid.
8. After acknowledgement, the bid will open.
9. The top left half of the page contains the following information:
	1. Purchaser
	2. Department
	3. Contact for this bid
	4. Type of purchase
		1. Open Market
		2. Blanket
10. Bidders’ Conference details (if applicable)
11. Ship-to and Bill-to addresses
12. Any attachments to the bid, which may include essential bid terms, response forms, etc.
13. The top right half of the bid includes the following information:
	1. Bid Date
	2. Required Date
	3. Bid Q&A Close Date – date after which bidders no longer may ask questions about the bid
	4. Bid Opening Date – date the bid closes and no further quotes will be accepted
	5. Informal Bid Flag
	6. Date goods/services are required
14. The lower half of the page provides information about the specific goods/services the bid is requesting.
15. Click Create Quote to begin.
16. The General tab for a new quote opens. This page is populated with information from the bid. Fields available to update include:
	1. Delivery days
	2. Shipping terms
	3. Ship via terms
	4. Is “no” bid – select if you will not be submitting a quote for this bid
	5. Promised Date
	6. Info Contact
	7. Comments
	8. Discount Percent
	9. Freight Terms
	10. Payment Terms

It is important to note that the bid documents (RFR and attachments) may specify some or all of these terms and may prohibit you from altering these terms in your response. Read the bid documents carefully and fill in only those items that are applicable to the bid to which you are responding.

Update these fields as applicable to the bid and click **Save & Continue** to save any changes and create a Quote Number. The page refreshes and messages display. Any message in Red is an error and must be resolved before the quote may be submitted. Any message in Yellow is a warning and will allow processing to continue.

The following messages are received:

* Terms & Conditions is not acknowledged – to resolve this, click on the Terms & Conditions tab and accept the terms.
* Your quote has not been submitted – information message; no action required
1. Click on the Terms & Conditions tab. This tab refers to the terms and conditions that apply to this bid. The terms and conditions must be accepted before your quote may be submitted. If your acceptance is subject to exceptions, those exceptions must be identified here. Exceptions may not contradict the requirements of the RFR or required Commonwealth standard forms and attachments for the bid. For instance, an RFR may specify that exceptions may or will result in disqualification of your bid.
2. Click the Items tab. The Items tab displays information about the items requested in the bid. To view additional details about an item, click the item number (blue hyperlink) to open.
3. The item opens. Input your quote information and click Save & Exit.
4. CONFIDENTIAL INFORMATION: If documents uploaded in your quote response contain confidential information (security sensitive, EFT, W9, Commonwealth Terms and Conditions), you must mark each item as confidential. The confidential column on the Attachments view allows the user to select whether the attached form is confidential or not. Check the box in the confidential column for each attached form that contain confidential information.
5. Click on the Attachments Tab. Follow the prompts to upload and name all required attachments and forms and bid response documents in accordance with the instructions contained in the solicitation or bid documents. After uploading each individual file or form, click Save & Continue. After you have uploaded all required documents click Save & Exit. Be sure to review your attachments to ensure each required document has been submitted.
6. Click the Summary tab. Review the information and update/correct, as needed. If the information is correct, click the Submit Quote button at the bottom of the page.
7. A popup window displays asking for verification that you wish to submit your quote. Click OK to submit the quote.
8. The Summary tab redisplays with an updated Status for the quote of Submitted.
9. Your quote submission is confirmed only when you receive a confirmation email from COMMBUYS. If you have submitted a quote and have not received an email confirmation, please contact the OSD Help Desk at OSDHelpDesk@mass.gov. If you wish to revise or delete a quote after submission, you may do so in COMMBUYS: 1) for a formal bid, prior to the bid opening date, or 2) for an informal bid (which may be viewed upon receipt), prior to the opening of your quote by the issuing entity or the bid opening date, whichever is earlier.

Bidders may not submit Multiple Quotes in response to a Bid unless the Bid authorizes Multiple Quote submissions. If you submit multiple quotes in response to a bid that does not allow multiple quotes, only the latest submission prior to the bid opening date will be evaluated.

## 8.7 Appendix 7 Non-Disclosure Agreement

THE STATE 911 DEPARTMENT WILL MAKE AVAILABLE CONFIDENTIAL PSAP ADDRESS AND SITE SURVEY INFORMATION ONLY UPON THE EXECUTION AND SUBMISSION OF THE FOLLOWING NON-DISCLOSURE AGREEMENT BY THE BIDDER. PLEASE COMPLETE AND SUBMIT THE NON-DISCLOSURE AGREEMENT TO:

KAREN ROBITAILLE

State 911 Department

151 Campanelli Drive, Suite A

Middleborough, MA 02346

NON-DISCLOSURE AGREEMENT

In consideration of the State 911 Department providing the undersigned with confidential Public Safety Answering Point information (hereinafter the “Security Information”) in connection with a procurement for Next Generation 911 Products and Services being conducted by the Commonwealth of Massachusetts, the undersigned \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (hereinafter “Bidder”) hereby agrees as follows:

1. Bidder shall use the Secure Information solely for the purpose of a procurement conducted by the Commonwealth.
2. Bidder understands that disclosure of the Secure Information to individuals not involved in the above-referenced procurement could threaten the security of the Commonwealth and therefore the Commonwealth’s ability to serve the public.
3. Bidder shall make the minimum number of copies of the Secure Information necessary to respond to the above-referenced procurement. Bidder shall keep a record of the names of all individuals who receive a copy of the Secure Information, and the number of copies of the Secure Information that Bidder makes.
4. Bidder shall require each recipient of the Secure Information, including its own employees, contractors and agents, to sign a copy of this Non-Disclosure Agreement before receiving copies of the Secure Information.
5. Following its participation in the above-referenced procurement, Bidder shall destroy all copies of the Secure Information in its possession.
6. Bidder understands that Bidder is responsible for the Secure Information.
7. Bidder shall physically safeguard the Secure Information at all times.
8. Bidder understands that the Secure Information does not constitute a public record.
9. Bidder shall immediately report to the Director of the State 911 Department any violation of this Non-Disclosure Agreement of which Bidder becomes aware.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Printed Name and Title

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature Date

## 8.8 Appendix 8 AT/IT Adaptive List- Accessibility Contract Language for Information Technology Solutions

### Overview

The Commonwealth is legally obligated under multiple federal laws, its own Constitution, state statute and Governor-issued Executive Orders to ensure non-discrimination and equal access to state services on the part of people with disabilities and to provide reasonable accommodations to state employees with disabilities. To effectively meet its responsibilities, the Commonwealth must contract with its IT providers to achieve accessibility in the acquisition, deployment and utilization of information technology.

The Commonwealth defines accessibility to include compliance with its Enterprise Information Technology Accessibility Policy. This policy sets technical standards based on the principles of Section 508 of the Federal Rehabilitation Act, the World Wide Web Consortium’s Web Content Accessibility Guidelines (WCAG), version 2.1, level AA, and the concept of usability for people with disabilities.

Bidders and Vendors[[1]](#footnote-2) must meet each of the obligations detailed in this document. As a brief summary, Bidders and the Vendor must:

Prior to contract execution:

Provide an Accessibility Conformance Report (ACR), such as a VPAT®, for any pre-existing software, including Third Party Software, that Vendor is delivering to the Commonwealth.

* If Vendor is delivering a SaaS offering, provide access to the offering for accessibility testing.
* Cooperate with the Commonwealth on addressing accessibility issues, including identifying commitments in an agreed mitigation plan if necessary.

After contract execution:

* Address accessibility in every phase of the project.
* Collaborate with the Commonwealth on addressing accessibility issues.
* Test for accessibility before delivery and include testing results with all End User Deliverables.
* Cooperate with the Commonwealth’s accessibility testing after delivery.
* Work to resolve any issues identified in testing and in the mitigation plan.

### Definitions

“**Accessibility Conformance Report**” (“**ACR**”) is a document that reports on the conformance of an IT product as measured against named accessibility standards.

“**Accessibility Audit Testing**” is accessibility testing conducted on the Commonwealth’s behalf by a third-party testing vendor engaged and paid for by the Commonwealth (an “**Accessibility Testing Vendor**”), as opposed to accessibility testing conducted by Vendor.

The “**AT/IT List**” is the Generic Assistive Technology (“AT”)/Information Technology (“IT”) Environment List, which may be attached to the Solicitation or available at <https://www.mass.gov/guides/generic-assistive-technology-and-information-technology-atit-environment-list>.

“**End User Deliverables**” are any software, documentation, and other interfaces or materials, and any configuration, implementation, or customization thereof, used by end users (which may include internal end users, such as Commonwealth employees and contractors, and external end users, such as Commonwealth residents) and delivered by Vendor. End User Deliverables include, without limitation: any configuration, implementation, or customization of Third Party Software or Vendor software; and any updates, new releases, versions, upgrades, improvements, bug fixes, patches or other modifications to software.

“**Enterprise Information Technology Accessibility Policy** ” includes the technical standards for IT accessibility (“**IT Accessibility Standards**”), and is available at <https://www.mass.gov/policy-advisory/enterprise-information-technology-accessibility-policy>.

“**Solicitation**” refers to a Request for Response (RFR), Request for Quotes (RFQ), or other request for goods and/or services to which these terms apply.

The term “**software**,” as used in these accessibility requirements, includes without limitation commercial off-the-shelf software (“**COTS**”) and software as a service or other cloud-based software (“**SaaS**”).

“**Third Party Software**” is software not licensed or provided by Vendor.

A “**VPAT®**” is a Voluntary Product Accessibility Template®, a standardized form developed by the Information Technology Industry Council. The template can be used to produce an Accessibility Conformance Report that shows how a software product meets various international accessibility standards. Template areas for WCAG2.1 A and AA and for Section 508 Chapters 3 and 4 are needed to show compliance with the IT Accessibility Standards.

### Accessibility Obligations

### 1. Compliance with Commonwealth Standards

Vendor is responsible for addressing accessibility problems in any implementation, configuration, or documentation delivered or performed by Vendor, and in any software provided or licensed by Vendor and delivered to the Commonwealth.

Vendor shall ensure that all End User Deliverables adhere to the IT Accessibility Standards set in the current version (as of the date of this Solicitation) of the Enterprise Information Technology Accessibility Policy and interoperate with the environments listed on the AT/IT List. At a minimum, Vendor is expected to remain compliant with the latest version of the [Commonwealth Enterprise Information Technology Accessibility Policy](https://www.mass.gov/policy-advisory/enterprise-information-technology-accessibility-policy), or the standard set forth by the purchasing agency, and must be able to update any software/systems in the event of updates to either. .

Vendor must ensure that accessibility and usability are addressed at every stage of the project. At the commencement of any project, prior to beginning any significant design or implementation work, Vendor’s project manager shall meet with the Commonwealth’s project manager and appropriate resources to review the Enterprise Information Technology Accessibility Policy, the AT/IT List, and any accessibility guidance provided by Vendor, in order to discuss their impact on the project.

### 2. ACRs and Mitigation Plan

Prior to Contract execution, Vendor must provide Accessibility Conformance Reports (ACRs) for any existing Vendor and third-party software with which end users will interact.

Upon request, Vendor must provide the Commonwealth with accessibility-related content in the technical reference manual or program documentation proposed products.

If the Commonwealth determines that accessibility issues exist but can be resolved or mitigated after Contract execution, the Vendor will, at the Commonwealth’s option, enter into a mitigation plan, pursuant to Section 4 of the Enterprise Information Technology Accessibility Policy. A mitigation plan is not a waiver of accessibility obligations, but rather a roadmap that contains a list of accessibility issues and the Vendor’s commitment to cooperate with the Commonwealth in resolving or mitigating the issues within a reasonable time following contract execution. Any mitigation plan shall become part of the Contract.

### 3. Testing

#### Prior to Contract execution

For SaaS offerings, the Commonwealth reserves the right to test for accessibility or to engage a third party Accessibility Testing Vendor to conduct Accessibility Audit Testing at the Commonwealth’s expense prior to scoring and selecting a Bidder. Bidders must cooperate with the Commonwealth and the Accessibility Testing Vendor, including providing appropriate access to the applicable cloud products for such testing. The results of any such accessibility testing, the ACR or other accessibility documentation provided by the Bidder, and the cooperation of the Bidder, will be taken into account in scoring and selecting a Bidder.

In connection with its accessibility testing as permitted above, the Commonwealth shall have the right to configure the applicable cloud product in accordance with the technical reference manual or program documentation for the Commonwealth’s accessibility needs.

#### Vendor Testing

Accessibility testing must be incorporated as part of Vendor’s overall quality assurance process. Vendor shall test end user software for accessibility during any or all of unit testing, integration testing, final acceptance testing and system testing. All activities performed by Vendor to ensure compliance with the IT Accessibility Standards will be done at Vendor’s cost and expense.

Vendor shall test every End User Deliverable against the IT Accessibility Standards, and for interoperability with the AT and IT environments listed in the AT/IT List. Vendor shall resolve any problems identified in such testing prior to delivering the End User Deliverable to the Commonwealth. Vendor shall deliver to the Commonwealth the results of the final testing, with all accessibility problems resolved, at the same time it delivers the End User Deliverable. Vendor may use its internal resources, hire an outside vendor, or both to conduct testing.

#### Testing of Third Party Software

While Vendor is obligated to test any configuration, customization, or other modification it makes to Third Party Software, Vendor is not responsible for testing out-of-the-box, non-configured Third Party Software for which accessibility testing has already been conducted and test results have already been provided to the Commonwealth in the form of a satisfactory ACR.

If Vendor is recommending or providing Third Party Software, Vendor is responsible for working with the Commonwealth and the licensor of such Third Party Software to identify and resolve accessibility issues. However, Vendor is not responsible for accessibility issues relating to Third Party Software that are not related to Vendor’s software or configuration, customization, or other modification of such Third Party Software.

#### Commonwealth Audit Testing

The Commonwealth may hire a third party Accessibility Testing Vendor to conduct Accessibility Audit Testing for this project. The Accessibility Testing Vendor will test End User Deliverables against the IT Accessibility Standards and the AT/IT List. Vendor shall cooperate with the Accessibility Testing Vendor at no additional cost to the Commonwealth.

Audit testing will be in addition to and following Vendor’s own accessibility testing.

#### Failure to Comply; Repeat Testing

If any End User Deliverables fail the Commonwealth’s initial post-delivery Accessibility Audit Testing, Vendor shall provide a credit to the Commonwealth for any repeat Commonwealth Accessibility Audit Testing that is needed. Such credits shall not exceed 5% of either (1) the total fixed price due to the Vendor under the contract or (2) the total not-to-exceed amount of the contract if entered under a time and materials basis.

### 4. Accessibility Advisory Committee (AAC)

The Commonwealth and Vendor may create an Accessibility Advisory Committee. The purpose of the AAC shall be to prioritize the list of accessibility defects identified by the Vendor and/or the Commonwealth (through its Accessibility Testing Vendor), discuss any questions relating to accessibility testing and accessibility requirements, to ensure that any concerns raised by a member of the AAC or a third party regarding accessibility of the Services are discussed, identified and addressed, and to advise on maintenance of the Mitigation Plan. The AAC shall be comprised of at least one representative from each Vendor and the Commonwealth, and representatives of certain agencies designated by the Commonwealth such as the Massachusetts Office on Disability, Executive Department disability coordinators, Massachusetts Rehabilitation Commission, Massachusetts Commission for the Blind, and Massachusetts Commission on the Deaf and Hard of Hearing.

The AAC shall convene its first meeting no later than ten (10) calendar days after the Effective Date of any Contract. Following this initial meeting, the AAC shall meet as mutually agreed to by the Commonwealth and Vendor in consultation with the AAC, but at a minimum, once a quarter.

### 5. Prioritizing and Remediating Accessibility Issues

Vendor shall collaborate with the Commonwealth, the AAC, and the Accessibility Testing Vendor to prioritize accessibility defects based on severity.

Vendor shall be responsible for promptly curing each instance identified by the Commonwealth or by its own accessibility testing in which the End User Deliverables fail to comply with the IT Accessibility Standards or interoperate with the environments specified on the AT/IT List. Remediation of accessibility issues which pose a very minor inconvenience to disabled users but do not prevent them from using the software may be waived by the Commonwealth in the Commonwealth’s sole discretion. Correction of accessibility issues may require, among other things, writing new core code, shutting off inaccessible features, providing users with Third Party Software in addition to their assistive technology, or providing disabled users with an alternative pathway to the inaccessible feature or the business process that it automates.

### 6. Training and Documentation

Vendor shall coordinate with the Commonwealth and the AAC in the identification of all prospective attendees at Vendor training who require accommodation and shall cooperate with the Commonwealth in its provision of such accommodation.

All administrator and end user documentation and any training materials delivered by Vendor under this Solicitation (whether in a classroom or online) must be accessible to users with disabilities and in conformance with the IT Accessibility Standards. All such materials delivered under this Solicitation and wholly owned by the Commonwealth shall be in an agreed-upon editable format.

### 7. Ongoing Maintenance

If the Vendor has agreed to perform maintenance for the Commonwealth, Vendor’s obligations above apply to its performance of maintenance. During the maintenance period, unless otherwise agreed in writing by Vendor and the Commonwealth, Vendor must ensure that the system continues to interoperate with the environments specified on the AT/IT List, including any changes to the AT/IT List that occur during the maintenance period, and must collaborate with the Commonwealth and any pertinent Third Party Software vendor and Accessibility Testing Vendor to correct any problems identified regarding interoperability.

## 8.9 Appendix 9 List of Commodities & Services and the Subcontractor Responsible

Bidders shall identify by listing below which components are to be provided by a subcontractor and/or another vendor.

|  |  |  |  |
| --- | --- | --- | --- |
| Commodity/ Service | Function | Subcontractor | Comments |
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Bidders shall identify by listing below any required specifications or components that are not addressed in this RFR.

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| --- | --- | --- | --- |
| Commodity/ Service | Function | Subcontractor | Comments |
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# 9.0 List of Attachments

These files are separately downloaded from COMMBUYS.

9.1 Attachment A Cost Table

1. As referenced in this document, the term “Vendor” refers to bidders that were named as the apparent successful bidder(s) and/or awarded a contract by the Commonwealth. [↑](#footnote-ref-2)