Statement of Work

Hurlburt Field AFB
8 7 2018
Additional VESTA-4 Console Request

1.0 PURPOSE

1.1 Scope

This Statement of Work is provided for the purchase and installation of an E911 Emergency Call Taking position that includes an E911 Intelligent Workstation (IWS), the workstation(s) is additional station(s) to be added to the existing VESTA E911 at Hurlburt Field Air Force Base.

2.0 PROGRAM REQUIREMENTS

2.1 Program Requirements

This is a turn-key installation wherein the Contractor shall EFI&T and train an Enhanced 911 solution at site identified in paragraph 2.2. The Contractor shall engineer, furnish, install, test and make operational newly installed equipment to OEM, industry and/or AF specifications with the appropriate vendor pass through licenses. The Contractor shall provide all hardware, software, licensing, and training required for the use of all systems and equipment installed under this PWS.

2.2 Place of Performance

The place of performance shall be at Hurlburt Field Fire Station 2, building 91350.

2.3 Performance Period

The Government desires delivery of all work to be accomplished within 180 days of contract award. If the Contractor is unable to meet the desired delivery schedule, it may, without prejudicing evaluation of its offer, propose a delivery schedule. Any request or justification for change shall be made to the Contracting Officer in writing and must be approved by the Contracting Officer.

2.4 Joint Interoperability Test Center Approved Product List

The Contractor's solution(s) shall be on the JITC-certified Approved Product List (APL). All equipment or system proposed shall be at the latest JITC-certified software version upon time of installation. The systems shall meet interoperability requirements of the JITC to ensure interface with commercial and military interface standards. Operating Systems and applications shall be configured in accordance with Security Technical Implementation Guides (STIGs). Contractor shall provide a copy of all Interoperability (IO) and Information Assurance (IA) certifications and approval letter as an attachment to the proposal. Proposed solution shall be installed in accordance with the JITC deployment guidelines.

2.5 Schedule

The Contractor shall provide a preliminary Integrated Management Schedule (IMS) at time of contract proposal. Contractor shall provide a Government approved final schedule within 14 working days prior to on-site work.

3.0 PROJECT EXECUTION

3.1 Site Coordination

The Contractor shall coordinate with Hurlburt Field AFB Communications Squadron and identified site POCs a minimum of 10 business days prior to arrival on site.

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3.2 Project In-Brief

The Contractor shall conduct a project in-brief with site POCs. Contractor shall support and respond to questions regarding issues pertaining to this SOW.

3.3 Government Delays

In the event that a Government-caused delay requires the Contractor to incur schedule delays or additional costs, the Contractor must document and submit these changes to the Contracting Officer for their review and consideration prior to any change in schedule.

3.4 Routine Working Hours

Routine work efforts shall be performed during normal installation operating hours with exception to the cutover. Cutovers and any other service-affecting actions must be pre-approved by the Government and scheduled during maintenance windows (Approved Service Interruption – ASI). Hurlburt Field AFB working hours will be Monday through Friday between 0730 and 1630. No weekend or holiday work will be performed.

3.5 Personnel Training and Certifications

All personnel identified to support this requirement must be trained and/or certified on the systems involved in this effort. Personnel identified to support this requirement must be able to provide training certification upon Government request. Project Managers and Systems Engineers shall be critical positions for this project. Project Managers and System Engineers assigned shall be, at minimum, intermediate level experience.

3.5.1 Special Qualifications

All installers shall be, at minimum, intermediate level of experience on the installation/programming of the proposed E911 system. Upon request, Contractor shall provide proof of certification.

3.5.2 Information Assurance

The Contractor shall ensure that personnel accessing information systems have the proper and current IA certification to perform IA functions in accordance with DoD 8570.01-M, Information Assurance Workforce Improvement Program, Ref 2.1.5. The Contractor shall meet applicable information assurance certification requirements, including (a) DoD-approved IA workforce certifications appropriate for each specified category and level and (b) appropriate operating system certification for information assurance technical positions as required by DoD 8570.01-M. Contractor personnel who do not have proper and current certifications shall be denied access to DoD information systems for the purpose of performing information assurance functions. Upon request, the contractor shall provide documentation supporting the information assurance certification status of personnel performing information assurance functions, reporting current IA certification status and compliance.

3.6 Security Clearance

All contracted personnel shall comply with established security procedures for entering an installation and its facilities, including special security procedures for entry to restricted or controlled areas. The Contractor shall obtain necessary badges or documents required for entry to restricted or controlled areas, if applicable, to meet the requirements of this PWS. The Contractor shall coordinate with the site POC to obtain and return temporary badges and vehicle registrations. Contractors working under this SOW, as a minimum, shall have a favorable National Agency Check. However, if the proposed solution requires a need for access to Government system(s) requiring a higher security level, the Contractor shall ensure personnel have the proper security requirements at no additional cost to the Government.

3.7 Safety

No personnel presenting potential threats to the health, safety, security, general wellbeing, or operational mission of the installation and its population shall be employed by the Contractor during the execution of this SOW. Compliance with AFI 91-202, Air Force Mishap Prevention Program is mandatory.

3.8 Implementation

The Contractor shall have ultimate responsibility for the successful deployment and cutover to the new infrastructure. Any work deemed non-compliant shall immediately be re-worked at the Contractor's expense. This task shall include all necessary work required to connect to the existing infrastructure providing a fully functional network solution.

The Contractor shall plan and manage daily operations and activities associated with providing this requirement to ensure necessary processes and activities are performed to provide an effective and acceptable system. The Contractor will employ effective management tools and methods to assure control of cost, schedule and performance.

The Contractor shall conduct, support, or participate in program management and technical reviews, meetings, and conferences, as required, to ensure effective and efficient PWS execution. The Contractor shall ensure protection of government property to prevent damage during the period of time the property is under the control or in possession of the Contractor. The Contractor shall ensure that any damages incurred during the execution of this PWS shall be repaired at the Contractor's expense.

3.9 Conformance to Standards

All equipment and system solutions shall conform to the applicable industry standards and mil specs as identified in the following table. Also, if any standards aren't identified below but are applicable contractor shall conform to those as well.

TABLE 3.9.1 INDUSRTY STANDARS ORGANIZATIONS

1. Federal Information Processing Standards (FIPS). United States Department of Commerce National Technical Information Service 5285 Port Royal Road Springfield, VA 22161 http://www.itl.nist.gov/fipspubs/	2. Military Standards, Specifications, and Regulations (MIL-STDs, DoD-STDs). Standardization Document Order Desk Bldg. 4, Sec. D, 700 Robbins Ave. Philadelphia, PA 19111-5094
3. National Computer Security Center (NCSC) Documents. Office of Standards and Products National Computer Security Center Fort Meade, MD 20755-	4. National Institute for Standards and Technology (NIST) (formerly National Bureau of Standards, NBS) Documents. National Institute for Standards and Technology US Department of Commerce Washington, DC 20234

6000 http://www.radium.ncsc.mil/	http://www.nist.gov/
5. Code of Federal Regulations (CFRs). Superintendent of Documents US Government Printing Office Washington, DC 20402 http://www.access.gpo.gov/nara/cfr/	6. American National Standards Institute (ANSI) Documents. American National Standards Institute 11 West 42nd Street New York NY 10036 http://www.ansi.org/
7. Electronic Industries Association (EIA) Standards. Electronic Industries Association (Alliance) 2001 Pennsylvania Avenue NW Washington DC 20006 (202) 457-4942 http://www.eia.org/	8. Institute of Electrical and Electronics Engineers (IEEE) Standards. Institute of Electrical and Electronics Engineers 445 Hoes Lane PO Box 1331 Piscataway NJ 08855-1331 http://www.ieee.org/
9. International Standards Organization (ISO) Documents. American National Standards Institute 1430 Broadway New York, NY 10018 http://www.iso.ch/iso/en/ISOOnline.openerpage	10. Data Interchange Standards Community (E-Business) Data Interchange Standards Community 333 John Carlyle Street Suite 600 Alexandria, VA 22314 http://www.disa.org/
11. International Committee for Information Technology Standards INCITS Secretariat c/o Information Technology Industry Council 1250 Eye Street NW Suite 200 Washington D.C. 20005 http://www.ncits.org/	12. International Telecommunications Union ITU Place des Nations CH-1211 Geneva 20 Switzerland http://www.itu.int/home/
13Unified Facilities Criteria (UFC) UFC-3-580-01 **22 June 2007** Telecommunications Building Cabling System Planning, Design and Estimating Whole Building Design Guide http://www.wbdg.org/references/docs_refs.php	14. Telecommunications Industry Association (TIA) 1320 N. Courthouse Rd., Suite 200 Arlington, VA 22201 http://www.tiaonline.org

3.10 System Installation Plan (SIP) / Project Support Agreement (PSA)

A System Installation Plan (SIP) / Project Support Agreement (PSA) is required for this PWS no later than thirty (30) days prior to project installation. The SIP/PSA shall be approved by the base prior to the start of any onsite work. The system must be installed with little or no disruption to existing services. Any disruption of service must be coordinated with the Government

3.11 Position Turn Over

The Contractor shall assist the Government in completing the AFTO Form 747, Communications and Information Systems Acceptance Certificate. Configuration Management information shall be provided to site POCs as part of this SOW as PDF files. The Contractor shall provide as-built documentation including, but not limited to:

a. Bayface layout drawings and diagrams of the chassis/shelf/cabinet identifying installed cards , modules, equipment, etc.

b. The as-built documentation shall also include cable and power drawings/specifications, floor plans, and engineering specifications generated in support of the installation of the system.

c. The documentation shall include, if needed, drawings that depict the overall installed system configuration and network topology.

d. Documentation shall also include an equipment listing with serial/model numbers and manufacturer specifications.

e. The Contractor shall provide an inventory of any newly installed equipment and software, identification of test results, site-specific "as-built" engineering drawings, and a summary of any open items.

4.0 TECHNICAL REQUIREMENTS

4.1 Baseline

Unless otherwise specified in the following paragraphs, the base shall receive baseline requirements for an E911 system as described in Section 4.2.

The contractor shall be responsible for providing all premise wiring and networking elements to facilitate the requirements that support the system connectivity from the demarcation or the fiber patch panel.

4.1.1 Hurlburt Field AFB

The Contractor shall provide an E911 solution for an additional console with the minimum requirements as outlined in section 4.2.

4.2 Baseline Requirement

Establish PSAP with an outlay of one Intelligent Call Taker Workstation/E911 operator console in the Emergency Control Center (ECC). The ECC building number is 6000. The system shall include all hardware, software, and installation to support one (1) E911 operator console. Unless otherwise specified, the Contractor shall perform all tasks (premise and power wiring) as necessary to provide a complete working system. The PSAP shall provide, at a minimum, the following features.

- Computerized Telephony Integration (CTI) for IWS

- The proposed solution shall provide the ability to support the base's migration from legacy TDM platforms to VoIP, regardless of VSS manufacture, without requiring E911 system replacement

- Integrated Telecommunication Device for the Deaf (TDD/TTY) capability at each call taker position without need for additional hardware

- The system shall have an Environmental Systems Research Institute (ESRI) Geographic Information System (GIS) based map application shall be integrated, provided by a single vendor and cohabited on a single CPU at the call taker IWS position. A dedicated server CPU for the map system data and application is permitted. The system shall provide a means of automatically managing and synchronizing map data across all system CPUs (server and position) from a dedicated administrator workstation.

- The system shall support calls from on base PBX (DSN) wire-line extensions, PSTN (commercial) wire-line (housing, on-base contractors, vendors, etc.), and commercial wireless sources. Call routing for all 911 calls shall be based on the associated Emergency Service Number, automatically delivering the call to the designated on-base PSAP.

- All E911 call data shall display on the operator workstations including the calling party's Automatic Number Identification (ANI) and the location of the caller (ALI). Call data shall be displayed textually and plotted to the map. Based on the call source ANI, the Automatic Location Information (ALI) shall be derived from a current data directory provided as follows:

    - DSN PBX Call Source: This system shall provide a stand-alone ALI database system (hardware and software) to store phone set location information associated with the appropriate PBX extension number. This stand-alone ALI database system shall be installed on the Air Force premises. Note: The source for this ALI data shall be provided by the Government in the form of a compatible extract file format.
    - PSTN (Commercial) Wire-Line Call Source (CONUS): The system shall provide an interface to E911 trunk circuits (aka CAMA) provided by the local commercial telephone Local Exchange Carrier (LEC) to deliver E911 caller voice and ANI data from PSTN commercial wire-line (traditional POTS or VoIP) telephone numbers. The system shall include the capability to interface via ALI modems to query for) ALI from the database provided by the LEC, based on ANI data delivered with the call via the E911 (CAMA) trunks with ability to support both RFAI and NENA i3 standards with minor reconfiguration requirements.
    - PSTN (Commercial) Wireless Call Source (CONUS): The Contractor shall provide, as part of this system, the provision to interface to E911 trunk circuits (aka CAMA) provided by the local commercial telephone LEC and deliver caller voice and ANI data for processing E911 calls from commercially provided wireless carriers. The system shall include the capability to interface to ALI modems, to query for (aka "fetch") ALI from the database provided by the LEC, based on ANI data delivered with the call via the E911 (CAMA) trunks with ability to support both RFAI and NENA i3 standards with minor reconfiguration requirements. The system shall be capable of supporting Phase I and Phase II compliant wireless calls and location data.

4.2.1 System Requirements

The E911 system shall meet the following minimum performance and physical requirements.

4.2.1.1 Performance

The following performance requirements shall be met.

4.2.1.1.1 Voice Switching System Interoperability

The system shall be interoperable and directly interface with Host Voice Switching Systems (VSS) that perform the base level voice communications and unified capabilities. At a minimum the system shall directly interface with Multi-Function Soft Switches (MFSS), WAN Soft Switches (WANSS), Multi-Function Switches (MFS), Local Session Controllers (LSC), End Offices (EOs), and PBXs without the addition of a PBX. It is acceptable for the proposed system to offer soft-phone software that is integrated with the system.

4.2.2 System Capabilities

The system capabilities shall meet the following functional requirements:

4.2.2.1 Call Taker Workstation

The call taker workstation shall utilize Computerized Telephony Integration (CTI) to present E911 calls with ANI and ALI to the screen. Each call taker position shall provide:

4.2.2.1.1 PSAP Equipment Compatibility

Call taker positions shall be NENA2-compliant Intelligent Workstations (IWS). IWS shall be compatible with the NENA-compliant PSAP core system servers and is a current production product from the same manufacturer.

The minimum requirements for the workstations shall meet the following specifications:

Case Style / Units	Small Form Factor
Chip Set	Intel® C216 Chipset
CPU	Intel Core i7-3770 processor, 3.4/3.9 GHz, 77W, 8MB cache, 1600 memory, Quad-Core
Optical Drive	16X DVD+/-RW SATA Super Multi
Expansion Bays	2 (1 Internal 3.5", 1 External 5.25)
RAM	4GB 1600 nECC Unbuffered DIMMS
Hard Drive	250.0GB SATA/300 7200rpm 1" Hard Drive
Keyboard	USB Standard Keyboard
Mouse	USB optical 2-button scrolling mouse carbon
NIC	Integrated Intel 82579LM PCIe GbE Controller

4.2.2.1.2 Displays

The displays shall be minimum 20-inch, maximum 24-inch touch screen for the E911 call data screen and other optional applications related to call dispatch. Displays shall be mounted on multi-screen mount, as applicable.

4.2.2.1.3 Login

The dispatch workstation shall utilize operator unique usernames and passwords. Future support for upgrade to Common Access Card (CAC) authentication and login is desired.

4.2.2.1.4 Integrated Telecommunication Device for the Deaf (TDD/TTY)

The system shall provide an Integrated Telecommunication Device for the Deaf (TDD/TTY) capability. TDD/TTY capability shall be a fully embedded, native function of the IWS. Use of external coupling devices, third party software or hardware applications shall not be permitted.

4.2.2.1.5 American Disabilities Act (ADA)

The system shall be ADA compliant

4.2.2.1.6 Instant Recall

Call taker position shall have the ability to instantly replay conversations. This position level audio recorder shall instantly replay telephone or radio conversations to aid in interpreting difficult to understand callers. The Audio Recording shall be stored on the call taker's workstation CPU. This capability is above and beyond the system-wide archiving, digital logging recording capability.

4.2.2.1.7 Headsets

The system shall include compatible headsets for each workstation.

4.2.2.1.8 Call Handling

The position shall be capable of capturing ANI/ALI information in the event a caller disconnects before dispatcher answers. The system shall indicate the call was abandoned and display the ANI/ALI related to that call.

The position shall automatically forward E911 calls to designated PSAP on busy, ring-no-answer, and manually forward calls with originating ANI data. If the caller hangs up, the system shall allow the call taker via single key command, to perform a call back function.

The position shall be capable of transferring PSTN (commercial) originated 911 calls to a designated civilian PSAP via the LEC selective tandem router, with ANI data using a one button transfer provision on the call takers screen. The solution shall have the capability of receiving a call from a designated civilian PSAP with ANI via the LEC selective tandem routing network (CONUS only).

4.2.3 Site Telephone Switch Integration

The system shall be compatible with site telephone switch topology. The E911 call taking system shall provide the direct delivery of E911 calls to a DoD-staffed PSAP without the need for intermediate call answering by the local civilian PSAP. The system shall be approved to integrate directly with the site-specific switch equipment with ability to support migrate to SIP based trunking in the future with minimum reconfiguration requirements.

The Contractor shall perform all telephone switch programming necessary to accommodate the routing of calls to the system and network. Programming shall include the base host switch and any PBX attached that is maintained by the host maintenance unit.

4.2.3.1 Direct Dialing

At any time, calls shall be routable to single line direct dialable extensions. The Contractor shall ensure the voice switching system allows for immediate three-digit dialing without timeouts when 911 is dialed.

5.0 TESTING REQUIREMENTS

5.1 General Testing Requirements

The Contractor shall perform testing and inspections of solution to ensure the technical adequacy and accuracy of all work, including reports and other documents required in support of that work. The Contractor shall conduct on-site testing in accordance with the Original Equipment Manufacturer (OEM) installation manuals, practices, and the appropriate vendor's test procedures. The testing shall ensure the cabling is fully functional and meets the user requirements. The Site POC shall be on-site during the entire testing procedure.

The Contractor shall provide preliminary Installation and Test Acceptance Plan to the Government 30 days prior to installation start for review and approval. The Government will have 10 days to review and provide comments to the contractor. The Contractor shall update changes and provide to Government for final review and approval. The Contractor shall conduct with the Government testing of the complete Enhanced 911 system console. Post install audits shall verify that all cutover acceptance testing has been performed satisfactorily in accordance with the standard practices and identify those tests, if any, which have not been successfully completed and shall be re-tested prior to acceptance.

Testing shall be performed in two steps: Position testing (all equipment assembled and operating correctly) and Operational testing (real world). The Contractor shall provide a logical test process that minimizes interruptions and avoids sustained downtime and presents a contingency procedure to be implemented in the event of systems failure during testing.

5.1.1 Test Results

Test results shall be reviewed upon test completion, and a Government POC shall sign the system test acceptance upon complete satisfaction that the system has passed all the required test procedures. Test results shall be included with the as-built documentation.

5.1.2 Site Acceptance/Project Completion

Site acceptance and project completion shall be considered as accepted/completed per the Services Summary in this SOW and the successful testing of the installation. Only the Government POC shall authorize site acceptance showing the site agrees that all testing, implementation, and training was successful. Site acceptance is required prior to invoicing.

The Government reserves the right to refuse final acceptance until all discrepancies have been resolved to the satisfaction of the Government. The Contractor shall prepare a project discrepancy list, report detected issues during meetings, and track all discrepancies until resolved. The Government will review and monitor all discrepancies and deliverables. The discrepancy list shall include any problem(s) detected and identified during the upgrade. The Contractor shall retain a history of discrepancies. Problems identified during the upgrade period shall be documented, provided to the Government, and corrected prior to final acceptance.

Site acceptance shall conclude upon successful installation, commissioning, connecting and testing of the position.. The Contractor's task completion form shall be used to

document this completion. The document shall be forwarded through the SOW manager for approval prior to base signature.

6.0 LOGISTICS SUPPORT

6.1 Warranty

The Contractor shall provide warranty services for workmanship deficiencies and equipment provided or installed as described and in accordance with Section 52.246-17 WARRANTY OF SUPPLIES OF A NONCOMPLEX NATURE (JUN 2003) ; 52.246-19 WARRANTY OF SYSTEMS AND EQUIPMENT UNDER PERFORMANCE SPECIFICATIONS OR DESIGN CRITERIA (MAY 2001) ; 52.246-20 WARRANTY OF SERVICES (MAY 2001) of the BASIC ITES-2S contract. Warranty period shall begin upon site acceptance (reference paragraph 5.1.2 of this PWS). The Contractor shall provide warranty services for workmanship deficiencies and equipment installed for a period of one (1) calendar years. The Contractor shall provide written procedures and required information (24/7 contact number) for sustainment and warranty services prior to cutover in the site acceptance form or as an attachment to the site acceptance form. This information shall include, but is not limited to, written confirmation of the warranty period and phone numbers and contact information/procedures for technical support, troubleshooting assistance, and replacement of faulty cards/equipment. The Contractor shall notify the site and Hill AFB Program Manager ninety (90) days prior to warranty expiration.

6.2 Packaging, Handling, Storage, and Transportation.

The Contractor shall be responsible for packaging, handling, storage, transportation, staging, and deployment of any equipment and materials provided as part of this SOW. The Contractor shall be responsible for the removal and disposal of items installed/replaced under this installation and shall comply with all applicable industry rules and regulations. Any equipment removal and/or disposal shall be coordinated with a designated official at the host base communications squadron.

7.0 PROGRAM MANAGERS