Statement of Work (SOW)

Tactical Communications – Land Mobile Radio Equipment and
Services - Houlton
For The
Wireless Technology Programs
Tactical Communications Project
TACCOM LMR Modernization

U.S. Customs and Border Protection
Office of Information and Technology
Enterprise Networks and Technology Support

**Wireless Technology Programs** 

**Tactical Communications Project** 

# CBP TACCOM LMR Deployment Equipment and Services - Houlton Ref. No.\_\_\_\_\_ Source Selection Sensitive Information – See FAR 2.101 and 3.104

## **TABLE OF CONTENTS**

1.0	OBJECTIVES	l
2.0	SCOPE	
3.0	APPLICABLE DOCUMENTS	2
4.0	TASK AREAS	
4.1	RF COMMUNICATIONS SITE DEVELOPMENT TASK	5
4.2	POINT-TO-POINT BACKHAUL IMPLEMENTATION TASK	8
4.3	TACCOM LMR SYSTEM IMPLEMENTATION TASK	
4.4	INFORMATION SECURITY CERTIFICATION AND ACCREDITATION	15
4.5	GENERAL DESIGN AND INSTALLATION REQUIREMENTS	15
4.6	PROJECT MANAGEMENT	17
4.7	AD HOC SUPPORT SERVICES	19
5.0	DELIVERABLES	
6.0	QUALITY MANAGEMENT	
6.1	QUALITY ASSURANCE PLAN	23
6.2	EXPERTISE OF PERSONNEL	
6.3	ACCEPTANCE CRITERIA FOR DELIVERABLES	24
6.4	WARRANTY	
7.0	PERFORMANCE MANAGEMENT AND REPORTING STRUCTURE	
7.1	PERFORMANCE MANAGEMENT	25
7.2	PROBLEM RESOLUTION	
8.0	REPORTING STRUCTURE	25
9.0	SECURITY REQUIREMENTS	26
9.1	CLEARANCE REQUIREMENTS	26
9.2	REQUIRED SECURITY FORMS	27
9.3	IDENTIFICATION BADGES	
9.4	GENERAL SECURITY	
9.5	CONTRACTOR EMPLOYEE ACCESS	
9.6	INFORMATION SECURITY	
10.0	GENERAL REQUIREMENTS	
10.1		
10.2		
10.3		
10.4	INVOICE SUBMISSION AND APPROVAL	33
11.0	PERIOD OF PERFORMANCE	
12.0	GOVERNMENT FURNISHED EQUIPMENT AND INFORMATION	
13.0	NON-DISCLOSURE OF INFORMATION	
14.0	HOMELAND SECURITY ENTERPRISE ARCHITECTURE REQUIREMENTS	
15.0	SECTION 508 COMPLIANCE	36
16.0	DHS GEOSPATIAL INFORMATION SYSTEMS COMPLIANCE	
	NDIX A APPLICABLE SITES - HOULTON SECTOR	
	NDIX B P25 INTER-RF SUBSYSTEM INTERFACE (ISSI) GUIDANCE	
	NDIX C GOVERNMENT FURNISHED EQUIPMENT	
APPE	NDIX D - ACRONYM LIST	43

## **Statement of Work**

# **Tactical Communications Site Deployment Equipment and Services**

U.S. Customs and Border Protection (CBP)
Office of Information and Technology (OIT)
Enterprise Networks and Technology Support (ENTS)
Wireless Technology Programs (WTP)
Tactical Communications Project (TACCOM)

## 1.0 OBJECTIVES

The objective of this statement of work (SOW) is to describe the equipment and services to be provided by the Contractor to implement and support modernization of land mobile radio (LMR) systems for the United States Customs and Border Protection (CBP) ("The Government"). The LMR systems shall be Project 25 (P25), digital, narrowband, Over the Air Re-key (OTAR), and Advanced Encryption Standard (AES) compliant. The LMR systems shall leverage and be backward compatible with the existing capital investment infrastructure and subscriber equipment.

CBP has previously established the CBP Tactical Communication (TACCOM) Modernization Project to meet these critical modernization needs. Through the TACCOM Modernization Project Office, CBP has already performed modernization in some geographic areas. In the process of performing modernization tasks, the CBP TACCOM Project Office has established the following processes and baselines:

- A project governance structure is in place, consisting of Government and contractor staff that provides guidance, direction, facilitation and oversight of TACCOM projects and tasks.
- A TACCOM technology baseline is in place that identifies an overall technical solution. This technology baseline is being implemented in some areas.
- A baseline schedule and work breakdown structure (WBS) has been established, identifying the timeline, work and major milestones necessary to complete a modernization project. This baseline schedule and WBS are in use in some areas.
- A TACCOM modernization process has been developed that aligns with the CBP System Life Cycle (SLC). This process is in use for ongoing modernization efforts.

## 2.0 SCOPE

The purpose of this SOW is to describe the products and services that the Contractor will provide to the CBP, Office of Information and Technology's (OIT), Enterprise

Networks and Technology Support (ENTS), Wireless Technology Programs (WTP) TACCOM Project in support of the TACCOM system modernization in the Houlton, Maine Focus Area <sup>1</sup>.

The Contractor shall provide LMR Equipment, Development, Deployment and Support as needed in support of CBP's LMR network and systems. LMR Equipment, Development, Deployment and Support includes, but is not limited to: assistance in engineering design and analysis, site development, equipment configuration, system installation, system testing, training, warehousing, transportation, field operations support, and equipment and material supply as called for within this SOW.

The equipment and services requested under this SOW will be applied in coordination with the Government Contracting Officer's Technical Representative (COTR), and/or the COTR-designated Task Monitor(s).

#### 3.0 APPLICABLE DOCUMENTS

All applicable documents within this SOW will be provided by the Government upon request and/or at the time of award, and are incorporated by reference.

- 1. Customs Directive No. 51715-006 Separation Procedures for Contractor Employees (CF-242);
- 2. CBP Information Systems Security Policies and Procedures Handbook (HB 1400-05C)
- 3. DHS Management Directive (MD) 4300.1, Information Technology Systems Security Program
- 4. DHS 4300A Sensitive Systems Handbook to be furnished upon award.
- 5. The CBP Tactical Communications Project Operational Requirements Document (ORD) (to be furnished upon award.)
- 6. P25 Inter-RF Subsystem Interface (ISSI) Guidance (Appendix B)
- 7. American National Standards Institute (ANSI) / Telecommunications Industry Association (TIA) Publication 222-G (Structural Standards for Steel Antenna Towers and Antenna Supporting Structures), including addendum (TIA/ANSI 222-G-1) (<a href="http://www.tiaonline.org/standards/">http://www.tiaonline.org/standards/</a>)
- 8. Motorola R56 Standards and Guidelines for Communications Sites
- 9. CFR29 Labor Part 1926. OHSA Work force safety
- 10. CFR47 Federal Communications Commission Part 17 Construction, marking and lighting of antenna structures.
- 11. National Fire Protection Association (NFPA) 70 National Electric Code (NEC) (<a href="http://www.nfpa.org/">http://www.nfpa.org/</a>).

<sup>&</sup>lt;sup>1</sup> Focus Areas follow the geographic boundaries of CBP Border Patrol sectors, but include the operations of Border Patrol, Field Operations, and Air & Marine.

- 12. US Army Corp of Engineers, EM-385-1-1, Safety And Health Requirements Manual
- 13. CBP Tactical Communications Land Mobile Radio System Design Houlton
- 14. Federal Information Processing Standard (FIPS) Publication 140-2, "Security Requirements for Cryptographic Modules" (http://csrc.nist.gov/publications/fips/fips140-2/fips1402.pdf)
- 15. Federal Information Processing Standard (FIPS) Publication 197, "Advanced Encryption Standard"
  - (http://csrc.nist.gov/publications/fips/fips197/fips-197.pdf)

#### 4.0 TASK AREAS

The tasks to be performed under this SOW are listed in the following sections. The Contractor shall perform the tasks and subtasks within this SOW for the Houlton Focus Area.

The Contractor shall provide a plan, approach and details to address all of the tasking stated within this SOW.

The Contractor shall conduct a kick-off meeting, held at Government offices in the metropolitan Houlton, Maine area within 10 days after Task Order award with all involved parties to discuss the project. All documentation that will be discussed shall be prepared by the Contractor and submitted at least one week prior to the kick-off meeting for government review and approval.

The Project Kickoff Meeting includes both the Government and Contractor key project participants. The date, time, and location of the meeting will be mutually agreed upon by the Government and the Contractor. The objectives of this meeting include:

- Introduction of all project participants
- Review the roles of the project participants
- Review of the overall project scope, objectives and deliverables
- Review the resource and scheduling requirements
- Review of the project schedule
- Review the proposed standards for design drawings
- Review methodologies for acceptance testing
- Review methodologies for coverage testing

Detailed project schedules shall be produced by the Contractor's Team with support from the Government to provide a timeline analysis for all tasks within the project. The final Master Project Schedule shall clarify all milestones and the critical path of the project. The milestones shall be described with reference to days after Task Order award. The Government and the Contractor will mutually agree upon the final schedule.

The backhaul design and technical solution were established during previous Contractor tasking, and shall be reviewed during this kickoff meeting. This review is not intended to redesign the system architecture or to re-evaluate specifications previously reviewed and approved, but rather to verify the mutual understanding of the requirements before implementation commences.

The system design and technical solution were established during previous Contractor tasking, and shall be reviewed during this kickoff meeting. This review is not intended to redesign the system architecture or to re-evaluate

specifications previously reviewed and approved, but rather to verify the mutual understanding of the requirements before implementation commences.

#### 4.1 RF COMMUNICATIONS SITE DEVELOPMENT TASK

## 4.1.1 EXTENDED NEPA ASSESSMENTS

As part of the Environmental Assessment/transaction screening activity associated with the National Environmental Policy Act (NEPA), the Contractor shall perform extended environmental assessments as required for the 60 sites identified in appendix A of this SOW. Extended NEPA assessments shall include Botanical Inventory, Biological Assessment, Cultural Resources Desk Review, Archaeological Phase 1 Survey, Architectural Survey and Assessment as required for the development work the Contractor is performing at each site. The definitions of the activities to be performed are listed below:

Botanical Inventory – surveys to characterize natural communities in the outlined areas, as well as to conduct on-site rare, threatened, and endangered species surveys (plant species)

Biological Assessment - Information prepared by, or under the direction of, a Federal agency to determine whether a proposed action is likely to: (1) adversely affect listed species or designated critical habitat; (2) jeopardize the continued existence of species that are proposed for listing; or (3) adversely modify proposed critical habitat. Biological assessments must be prepared for "major installation activities" and must address potential impacts on all federally-endangered species that are present or likely present at a project location.

Cultural Resources Desk Review – Site file research at the State Historic Preservation Office (SHPO) and possible archival research at State Archives by a SHPO approved archaeologist, as well as individual review by a SHPO approved Architectural Historian to identify any known archaeological sensitivity or impact to National Register of Historic Places listed or eligible structures. Results will most likely be summarized in a tabular format that can be forwarded to the SHPO.

Per Site Archaeological Phase 1 Survey – Travel to the site location, excavation of up to eight 0.5 m x 0.5 m test pits with all sediment screened through  $\frac{1}{4}$ " hardware cloth; lab work and report preparation.

Per Site Architectural Survey and Assessment – Perform background research at SHPO and locally if necessary; travel to vicinity of project site; assess all structures within the area of potential effect (APE) older than 50 years; prepare

architectural survey report including evaluations of eligibility for the National Register of Historic Places for each structure older than 50 years.

The Contractor shall provide a written report under engineer's seal, documenting the results of each extended NEPA assessment.

## 4.1.2 SITE DEVELOPMENT

The Contractor shall perform site development of 44 previously analyzed and designed communication sites identified in Appendix A of this SOW (site IDs 1 through 44 – analyzed and designed under a previous task order, and reports/design documentation will be provided at kick off.

The Contractor should assume that all locations designated for site development are available, suitable for development and covered by a dual use agreement between CBP and the State of Maine, where applicable. In the event that this assumption does not hold true for any site(s) designated for development under this SOW, then alternate locations that are suitable, comparable and geographically nearby will be identified such that the requirements and conditions of this SOW remain in effect without modification to complexity or scope.

The Contractor shall verify the Government-provided coordinates given in Appendix A of this SOW. In the event of any lat/long errors, the Contractor shall notify the Government prior to commencement of work at those sites.

Site Development shall include, but not be limited to:

- Site design finalization based on previously performed analyses, to include tower loading analysis, tower design, site layout, equipment, shelter and infrastructure layout and schematics, and Bill of Material (BOM) development (The BOM, initially developed by the Contractor based on previously performed analyses, will be used by the Government to procure the open market items needed for site development, separately from this SOW, and provide these open market items to the Contractor as Government Furnished Equipment (GFE). The GFE open market equipment to be provided by the Government to the Contractor is identified in appendix C of this SOW. The Contractor shall install this GFE equipment and materials as part of the site development efforts identified in this task.)
- Investigate / Coordinate Utilities
- Site preparation and construction (grading, soil analysis, foundations, fencing, trenching, etc.)
- Tower development/construction to TIA-222-G/G-1 standards including antennas, cables, ice bridges and R-56 Grounding
- Tower, enclosures/shelters installation (including foundations and pads)
- Electrical/utilities installation

- Circuits provisioning
- Power installation to include Uninterruptible Power Supply (UPS), Backup Power, Solar, Wind and/or Fuel Cell
- Heating/Ventilation/Air Conditioning (HVAC) installation for enclosures/shelters

The Contractor shall submit a proposed BOM for site development in response to this SOW.

#### 4.1.3 PROJECT FINALIZATION

The Project Finalization task ensures that all criteria for Final Project Acceptance have been met. The Contractor shall provide the Government with at least two (2) electronic copies and two (2) hard copies of the design and build documentation. At a minimum this documentation shall include:

- Site Construction and Maintenance Manual to include:
  - Tower block diagram(s)
  - o Tower "as-built" and "as-installed" documentation
  - Antenna loading documentation (including current load and design limits)
  - Wind loading documentation (including current load and design limits)
  - Foundation loading documentation (including current load and design limits)
  - Equipment installation schematic diagram(s) to include "as-built" as "as-installed" documentation
  - Permits and compliance statements associated with applicable standards, ordinances and statutes
  - Construction QA check list
  - PE sign off / certification(s)

The contractor shall provide the following digital photographs as part of their site close out package (to be included as an appendix to the Construction and Maintenance Manual).

- o Pre-construction photos
- Digital pictures of the utility site markings
- Photos of conduit trenches (uncovered)
- Photos of site preparation
- Photos of foundation installation
- If contractor installs a new External Ground Ring, the contractor must take an appropriate number of digital photos of the new trench, ground ring and leads prior to backfilling
- o Photos of antenna, attachments and lines

 Photos of completed site installation (including tower, foundation, structures, and equipment)

The contractor shall also provide the following documents as part of their site close out package (to be included as an appendix to the Construction and Maintenance Manual):

- o Electrical Permit, approved by inspector(s) from appropriate Federal, state and/or local jurisdiction(s), if applicable.
- o Signed-off Building Permit, approved by inspector(s) from appropriate Federal, state and/or local jurisdiction(s), if applicable.
- Test report, documenting results of sweep tests, grounding tests and equipment tests.

All electronic documentation provided by the Contractor shall be in a form that allows for direct upload into the Government's electronic systems for configuration management and archival. The Government will provide specific electronic formats at the kickoff meeting.

This task will be deemed complete when the Government and the Contractor sign the Final Project Acceptance portion of the System Acceptance Certificate.

## 4.2 POINT-TO-POINT BACKHAUL IMPLEMENTATION TASK

## 4.2.1 POINT TO POINT BACKHAUL IMPLEMENTATION

The Contractor shall perform point to point (PTP) backhaul implementation at the previously analyzed and designed communication sites identified during the design review, and drawn from the 60 sites listed in Appendix A of this SOW. Based on previous design activities, it is estimated that a total of 58 point to point links will be needed across 53 locations (52 RF sites plus Houlton headquarters).

Point to point backhaul implementation shall include, but not be limited to:

- Perform the installation of a PTP 4.4 to 4.5 Mhz Radio band equipment solution (Motorola PTP45600), at the locations described during the design review activities associated with the kick off.
- Procure equipment and materials needed for backhaul implementation, according to the Contractor-provided, Government-approved BOM.
- Ship PTP equipment to a Contractor-provided field warehouse
- Review IP scheme with Government COTR's designated technical staff.
- Configure PTP radios (pairs) and test radio pairs.
- Stage equipment for deployment (palletizing radios, cables, brackets, routing equipment, etc by sites.

- Deploy PTP hardware to designated sites according to roll-out schedule.
- Mount antennas and set azimuth for PTP operation.
- Hardware installation and system optimization
- Coordinate and schedule roll-out with the Government.
- Install CAT5 cabling from the radio to the shelter Powered Indoor Unit (PIDU) location.
- Install the networking equipment (Government provided equipment -- V.24 converter and IP Switch).
- Terminate cabling properly (lightning arrestors).
- Install the PIDUs and GF routers.
- Final alignment of antennas.
- Optimization and system testing.
- Perform On-site Acceptance testing of PTP links and alternating routing capabilities.

The Contractor shall submit a proposed BOM for PTP backhaul implementation in response to this SOW.

## 4.2.2 PROJECT FINALIZATION

The Project Finalization phase ensures that all criteria for Final Project Acceptance have been met. During this phase, the Contractor shall provide the Government with at least two (2) electronic copies and one (1) hard copy of the system manuals and equipment manuals. At a minimum this shall include:

- The PTP System component user manuals
- PTP System component service manuals
- System manual to include:
  - System topology diagram
  - System block diagram(s)
  - o System "as-built" system documentation
  - System programming documentation including IP information
  - o RF coverage predictions, where applicable
  - System architecture description
  - o Floor plans
  - o Equipment shelter/tower diagrams
- System acceptance test plan and report, where applicable
- PTP System training materials

This phase will be deemed complete when the COTR and the Contractor sign the Final Project Acceptance portion of the System Acceptance Certificate.

#### 4.3 TACCOM LMR SYSTEM IMPLEMENTATION TASK

#### 4.3.1 SYSTEM STAGING

The Contractor shall perform system staging at Contractor facilities.

The Contractor shall build the system from approved engineering drawings, and stage the equipment as it will be installed at the final destination. Cables are customized to the appropriate lengths and are labeled with "to / from" designations. Major components shall be configured and programmed based on the system's specific engineering design features.

The Government reserves the right to visit the Contractor's staging facilities and work with the Contractor's staging and quality personnel to verify system upgrade configuration, operation, and functionality before in-plant acceptance testing begins.

System staging allows a complete system to be assembled, programmed, tested, and inspected before it is shipped to the field and includes the following processes:

- System assembly as it will appear in the final location
- Initial equipment programming and level setting
- Complete system feature and functionality testing
- Development of a system installation manual including equipment layout drawings, system interconnect documentation, and all programming information
- Custom-fabrication of cables and connectors based on equipment layout drawings
- Packaging and shipment from the staging facility to the final installation location.

## 4.3.2 SYSTEM INSTALLATION

Upon completion of system staging, the Contractor shall transport system equipment the final installation locations. The Contractor PM shall coordinate with local Government personnel for the installation at each RF site.

After the equipment is delivered to the installation location by the Contractor, the Contractor shall install the staged equipment, cable it using the cables created as part of the staging activity and power it up in preparation for optimization and testing.

#### 4.3.3 SYSTEM OPTIMIZATION

System Optimization occurs when the Contractor completes the final adjustments of equipment for optimal operation and functionality. The Contractor's optimization team shall provide the technical support necessary to tune and adjust system equipment to its peak operational capability.

Upon completion of equipment installation, an audit for compliance with Motorola's 'Standards and Guidelines for Communication Sites' (R56) installation quality standards shall be performed by the Contractor. Deficiencies shall be documented and reported by the Contractor to the Government. The Contractor shall then take the necessary corrective action. Following this audit, the Contractor shall:

- 1. Make final adjustments to the CBP Houlton system, as required
- 2. Set required audio levels
- 3. Test system readiness prior to the acceptance test including antenna and network optimization
- 4. Take steps related to optimization at sites to minimize effect of frequency reuse
- 5. Communicate with the Government regarding technical issues, as required
- 6. Red-line system manual "as-built" documentation, as required

## 4.3.4 ACCEPTANCE TESTING

All tests will be performed as described in the Acceptance Test Plan and Acceptance Test Procedures mutually approved during the Design Review. During acceptance testing, the system will be tested and the results documented as defined in the Acceptance Test Plan. This phase is considered complete when the Government acknowledges successful completion of the procedures by signing a System Acceptance Certificate.

System tests shall include operational testing of dispatch console subsystem, system management terminal subsystem, selected subscriber units, and coverage testing of the implemented RF site(s) within this Focus Area. System acceptance is considered complete when the COTR acknowledges successful completion of the procedures by signing a System Acceptance Certificate.

#### 4.3.4.1 ACCEPTANCE TEST PLAN

The Acceptance Test Plan (ATP) details the procedures to be run to confirm that the solution provided by the Contractor is complete and meets the acceptance test criteria.

## 4.3.4.2 ACCEPTANCE TEST

The Contractor will conduct acceptance testing based upon the test documents approved during the Design Review. Both the Contractor and COTR-designated CBP Houlton representatives must witness the performance of the acceptance test to approve the test(s).

Resolutions of any deficiencies found during testing will be agreed upon between the Contractor and the COTR-designated CBP Houlton representatives, and documented. If the documented deficiencies do not prevent productive operational use of the system, then the test will be deemed completed. The Contractor shall remain responsible for the resolution of any documented deficiencies.

Upon successful completion of the field acceptance test, the COTR-designated CBP Houlton representative and the Contractor will sign a System Acceptance Certificate.

## **4.3.4.3 RF COVERAGE TEST**

The Coverage Test Plan (CTP) defines the coverage testing methods and procedures, the test documentation, and the responsibilities of both The Contractor and the COTR-designated CBP Houlton representative. Coverage testing is based upon a coverage prediction that represents the implemented infrastructure consistent with the system design.

#### 4.3.4.4 COVERAGE TEST METHODOLOGY

One repeater at each transmit site will be tested for correlation with predicted coverage contours. Updated coverage maps, based on installed sites at the time of testing will determine the areas that will be tested for coverage. It is anticipated that each area of responsibility (AOR) will require three days of drive testing.

The contractor shall generate reports detailing the test results for each transmit site. These reports shall include signed documentation (by both The Contractor and the COTR-designated CBP Houlton representative) indicating the test was performed in accordance with the CTP. The results of the test indicate the acceptance or non-acceptance of the coverage portion of the system. The CTP results are not associated with the Acceptance Test Plan. They are provided to verify proper site operation and to identify requirements for coverage improvement in future phases.

#### 4.3.5 USER TRAINING

CBP Houlton's effective use of the TACCOM system is directly related to the technical and operational efficiency of the new solution. These efficiencies are realized when each member within CBP Houlton is fully trained to properly operate, administer, and maintain the solution.

The Contractor shall present a robust and in-depth training plan defined by CBP requirements and input from the Contractor's training organization.

Training curricula and the execution of end user training shall include CBP end users and dispatch console operators. Training activities include, but are not limited to, the following:

- Providing training materials relating to subscriber equipment feature sets and functionality
- Providing training materials relating to system functionality, including OTAR, vote scan, and other critical system features, as well as console functionality
- Facilitating "train the trainer" sessions for designated OIT personnel
- Facilitating training sessions for dispatch operators.

To the extent required, the Contractor shall also support OIT Field Training representatives in the development of user training plans and schedules in accordance with project plans, including subscriber rollout, equipment installation, acceptance testing, and system cutover plans.

## 4.3.6 PROJECT FINALIZATION

Project Finalization ensures that all criteria for Final Project Acceptance have been met. During this phase, the Contractor shall provide the Government with at least two (2) electronic copies and one (1) hard copy of the system manuals and equipment manuals. At a minimum this shall include:

- The Contractor System component user manuals
- System component service manuals
- System manual to include:
  - System block diagram(s)
  - System "as-built" documentation
  - o System programming documentation
  - RF coverage predictions
  - System architecture description
  - Floor plans
  - Equipment shelter/tower diagrams
- System acceptance test plan and report
- Training materials

This phase will be deemed complete when the COTR and the Contractor sign the Final Project Acceptance portion of the System Acceptance Certifica

## 4.3.7 COMMUNICATIONS EQUIPMENT PROVISIONING

The Contractor shall supply equipment and materials necessary to perform the system implementation described in this task. Provisioning activities shall be performed in accordance with government standards and best practices established by the Government during the kickoff meeting, and will focus on meeting the goals of the project while obtaining the best value for the Government.

Provisioning involves supplying, receiving and inventorying LMR equipment to support the Contractor provided, Government approved bill of materials (BOM) for the system design. LMR equipment includes all electronic and other supplies and materials for RF site infrastructure, subscriber (i.e., mobile and portable) units and console equipment.

The Contractor shall develop a BOM based on the equipment needs indentified in the design activities performed in a previous task order, and will include all necessary specifications to successfully perform the procurement. The Contractor shall submit the BOM for approval by the COTR in accordance with (IAW) the design review milestone associated with the kick off activities in this task.

The Contractor shall submit a proposed BOM for system implementation in response to this SOW.

All solutions and equipment shall meet DHS Enterprise Architecture policies, standards, and procedures as it relates to this SOW and associated Task Orders. Specifically, the Contractor shall comply with the following Homeland Security Enterprise Architecture (HLS EA) requirements:

- 1. All developed solutions and requirements shall be compliant with the HLS EA.
- All IT hardware or software shall be compliant with the HLS EA Technology Reference Model (TRM) Standards and Products Profile.
- All data assets, information exchanges and data standards, whether adopted or developed, shall be submitted to the DHS Enterprise Data Management Office (EDMO) for review and insertion into the DHS Data Reference Model.

The encryption functions for all equipment shall be Federal Information Processing Standard (FIPS) 140-2 and FIPS 197 compliant.

The Contractor shall record a Government Point of Contact, as identified by the COTR, with all equipment, material and service procurements, such that the Government is the owner of record for present and future warranty, help desk and maintenance agreement actions.

## 4.4 INFORMATION SECURITY CERTIFICATION AND ACCREDITATION

The Contractor provided system must be certified and accredited prior to the system becoming operational. Certification and Accreditation (C&A) of the redesigned system will be directed by the Certification Authority (CA) designated by the CBP Designated Accreditation Authority (DAA), and in accordance with DHS Management Directive 4300.1, and CBP Information Systems Security Policies and Procedures Handbook (HB 1400-05C). C&A activities will center on development of an accreditation package and culminate with the DAA granting an Approval to Operate (ATO). The Contractor shall provide direct support to the CA as an authority to operate (ATO) is sought for the system. This support shall include the following:

- 1. All information assurance (IA) activities necessary to meet CBP IA requirements and comply with CBP security C&A processes as part of the LMR system implementation
- 2. Provide support for the initial "type accreditation" to be used as a basis for C&A on each re-design.
- 3. Provide system information and security assistance to the CA and certification agents during certification recommendation and accreditation decisions.
- 4. Prepare C&A packages in support of the CA recommendation to the DAA for ATO. If an ATO is not immediately granted because of outstanding security requirements when the system is otherwise ready for customer acceptance, the acceptance will be contingent upon a written interim authority to operate (IATO) from the DAA supported by efforts to address outstanding requirements within the allotted IATO period.

## 4.5 GENERAL DESIGN AND INSTALLATION REQUIREMENTS

The Contractor shall ensure that:

(A) Prior to any digging, the Contractor shall complete buried utility location, either through use of the local utility locator services if available, or through

whatever means necessary to ensure that there is no disruption of existing buried facilities.

- (B) Where applicable, the Contractor shall place Underground Utility indicator tape in conduit trench and/or fuel line trench at an 8 inch depth below ground level.
- (C) The Contractor shall be responsible to correct any and all damages caused by contractor's employees, subcontractors, and/or representatives and agents while performing on this contract.
- (D) All site work to be performed shall be in accordance with (IAW) manufacturer's installation specifications, technical manuals, and with the R56 standards and guidelines for communications sites.
- (E) The Contractor shall provide transportation for all designated equipment/materials to all sites and to transport unused equipment/materials to their original locations. The Contractor shall also be responsible for packaging, loading and, off-loading all equipment/materials. The contractor shall be responsible for cleanup and removal of all debris resulting from work being performed on a daily basis. All trash shall be removed from the job site as required to maintain a clean work environment at all times. The contractor shall keep the work area neat, orderly and free from accumulation of waste materials. Upon completion of work at each tower site, the contractor shall remove all tools, equipment, obstructions, and debris.
- (F) A COTR-designated, on-site Government point-of-contact must inspect the specific location of the planned construction site to determine suitability with respect to the overall site function. The Contractor shall receive construction location approval from the Government prior to beginning construction.
- (G) The Contractor shall use appropriate hardware, sealer, and covers to facilitate installation in accordance with manufacturer's specifications.
- (H) Throughout the contract period, the government reserves the right to perform random inspections and/or to contract with other organizations performing such services to ensure the government's interest is protected.
- (I) All work will be done adjacent to operating Border Patrol facilities. The Contractor shall coordinate all work with designated Government representative in order to minimize interference with Government operations.
- (J) The Contractor shall level and compact the ground surface, in accordance with TIA-222-G/G-1, to ensure that the area is sufficient for supporting the tower and equipment. Geo-tech stabilizing cloth shall be installed on leveled ground.

New gravel shall be installed over the stabilizing cloth. The gravel shall be leveled and compacted.

- (K) The Contractor shall install all equipment and materials in accordance with manufacturers' specification and shall conform to Motorola R56 Quality Standards and Guidelines for Communications Sites. All installations shall follow applicable federal, state or local jurisdictional codes whether incidental or superseding the standards specified in Motorola's R-56 Standards and Guidelines for Communication Sites while developing or installing equipment at the site.
- (L) The Contractor shall follow Federal, state and/or local building and electrical codes, where applicable, and shall secure all necessary permits and approvals.

## 4.6 PROJECT MANAGEMENT

The Contractor shall provide Project Management; which shall include overall project reporting to the COTR, and detailed management and reporting of progress and activities in each Focus Area, and on each task order. Project Management services should include government and industry best practices such as work breakdown structure (WBS) creation, cost/performance tracking and reporting, risk management planning, tracking and mitigation, configuration management of hardware, software and documentation that comprise the system baseline, and regular, frequent project status reporting.

## 4.6.1 STATUS REPORTING

The Contractor shall submit monthly status reports that summarize the Contractor's completed and planned activities as well as any anticipated project risks. In order to facilitate the Government's efforts to utilize earned value management (EVM), the Contractor's reports shall include reporting such as progress and work completed by milestone, CLIN and/or task (i.e. WBS) category, as mutually agreed to by the Government, and the Contractor during the kickoff meeting.

The monthly report will include:

- A management summary, indicating any major problems and any significant progress or events
- A narrative description of work performed during the reporting period and expected to be performed in the next reporting period, including discussion of any problems and recommendations for correction
- A summary of completed actions

- An action item list identifying the action item, person or persons responsible, target completion date, and status, along with explanatory notes
- Problems that require Contracting Officer or Program intervention;
- Identification by name and labor category of individuals being added to the task by the Contractor, along with an indication of dedication to the task (full time permanent, full time temporary, part time)
- In connection with any required non-local travel (beyond 100 miles of the
  assigned duty station of the involved personnel) in performance of the
  work outlined above, the Contractor will provide a written accounting of the
  number of trips by destination/location, the number of personnel on each
  trip, the inclusive dates of the trips, and the significant results
  accomplished during the trip

The Contractor shall be aggressive in the identification and resolution of risks, issues, and dependencies.

The Contractor shall be proactive in the identification of internal and external dependencies.

The Contractor shall use task order identifiers and CLINs to separate new and existing projects and funding sources as requested.

The Contractor shall align monthly invoices with monthly reports such that itemized costs at the task order and CLIN levels on invoices can be easily identified and verified within each report.

The Contractor shall be equipped to document their cost and performance in a system that monitors and reports program and project costs, schedule and technical performance.

The Contractor shall provide detailed standard reports and ad hoc reports as requested by the Government. The standard reports shall include the Integrated Master Schedule and Cost Performance Report.

The Contractor shall provide Integrated Baseline Reviews as requested.

In addition, meetings/teleconferences will be held with the Contractor on an asneeded basis. Recent monthly reports will be used during these meetings to guide the discussion.

## 4.6.2 PROJECT STATUS REVIEW (PSR) MEETINGS

The Contractor shall participate in regular, periodic PSR meetings and conference calls throughout the project. These PSR meetings will be held on a

monthly or as needed basis as determined by the Government. The Contractor shall provide a detailed meeting agenda recommendation to the COTR, who in turn will finalize the agenda and forward to the required participants. The Contractor shall include any existing action items for both the Government and the Contractor. The Contractor shall provide electronic minutes to all attendees within 3 business days after the conclusion of each meeting for all phone conferences and meetings.

## 4.7 AD HOC SUPPORT SERVICES

The Government may choose to direct the Contractor to perform additional services in conjunction with special events, operations and exercises.

The Contractor may be asked to provide services, equipment and materials as described throughout this SOW, on an individual cost basis (ICB), to support special events, operations and exercises as directed by the COTR. Examples of the types of events that might require additional support are:

 providing TACCOM LMR support during a major event such as a political convention, sporting event, or in response to a disaster (natural or manmade)

These ad hoc tasks will require skills and resources associated with some or all of the other service areas stated in this SOW.

Upon request, under the direction of the COTR, and based on a Government-provided task request, the Contractor shall submit estimated WBS, schedule, staff plan and a not-to-exceed cost estimate to the Government for a particular ad hoc request. Once the Government approves the proposed work package, the Contractor shall provide support to the Government for the ad hoc task. These ad hoc tasks shall be tracked, reported on, and documented within the already established project management, and invoicing methods of this SOW. The Contractor shall also notify the Government when 75% of costs have been incurred for a particular task, and provide information as to whether or not the tasking will be completed within the estimated cost and schedule.

For each identified ad hoc task, the Contractor shall coordinate and integrate these separate projects into the master schedule for the CBP TACCOM project and the specific Focus Area(s) that are affected.

## **5.0 DELIVERABLES**

All materials and information developed or produced under this SOW, including but not limited to design drawings, documents, presentations, hardware, software and configurations, are the property of the Government.

The required deliverables for this project are shown in Table 1. Contractor format is acceptable for all deliverable items, unless otherwise specified. Standards for design drawings and documentation will be mutually agreed during the kickoff for the task order associated with this SOW.

Table 1
CBP P25 TacCom Systems Modernization Project Required Deliverables

Deliverable Title	Referenced SOW Section	Frequency	Due Date(s)
1) Kick-off meeting materials: Documentation and materials to be used by the Contractor during the kick-off meeting. To be delivered in Electronic form, using Microsoft Project, Word, Excel and/or Powerpoint.	4.0	once	Initial: 10 days before scheduled kick-off Update: at kick-off
2) Master Project Schedule: This is the schedule for the project that is completed after the Project Kickoff meeting. To be delivered in Electronic and paper form, using Microsoft Project format.	4.0	monthly	Initial: 2 weeks after Kickoff. Update: 7 days after Government review. Updates on the first of each month
3) Extended NEPA Assessments: Documentation describing the results of the extended NEPA assessment activities for candidate sites. To be delivered in electronic and paper form, using Microsoft Word, Excel and/or AUTOCAD formats.	Error! Reference source not found.	IAW design milestones	Initial: 30 days after site survey visit. Update: 14 days after Government review.
4) Site Development Materials, Equipment and Documentation: Site design documentation, permits, utilities information, site development BOM, and site equipment and materials as described in the site development task. The final (as-built) information is included as part of the Site Construction and Maintenance Manual. To be delivered in electronic and paper form, using Microsoft Word, Excel and/or AUTOCAD formats.	4.1	IAW design milestones	Initial: IAW with kickoff and Project Finalization. Update: 14 days after Government review.
5) PTP Backhaul Materials, Equipment and Documentation: PTP backhaul design documentation, circuit provisioning information, BOM, and site equipment and materials as described in the PTP Backhaul Implementation task. The final (as-built) information is included as part of the PTP System component users and service manuals. To be delivered in electronic and paper form, using Microsoft Word, Excel and/or AUTOCAD formats.	4.2	IAW design milestones	Initial: IAW with kickoff and Project Finalization. Update: 14 days after Government review.

# CBP TACCOM LMR Deployment Equipment and Services - Houlton Ref. No.\_\_\_\_\_ Source Selection Sensitive Information – See FAR 2.101 and 3.104

Deliverable Title	Referenced SOW Section	Frequency	Due Date(s)
6) TACCOM LMR System Materials, Equipment and Documentation: TACCOM LMR System design documentation, BOM, and site equipment and materials as described in the TACCOM LMR System Implementation task. The final (as-built) information is included as part of the PTP System component users and service manuals. To be delivered in electronic and paper form, using Microsoft Word, Excel and/or AUTOCAD formats.	4.1,4.2,4.3	IAW design milestones	Initial: IAW with kickoff and Project Finalization. Update: 14 days after Government review.
4) Acceptance Test Plan and Procedures: These are provided at the kickoff, and are used to perform acceptance testing. These plans are updated during Design Reviews. To be delivered in electronic and paper form, using Microsoft Word, Excel and AUTOCAD formats.	4.2,4.3	IAW design review milestones	Initial: IAW design review milestones Update: 14 days after Government review.
5) System Manual: A document that contains the final versions of the System Description, Drawings, Acceptance Test Procedures, Programming Templates, and Customer Support Plan. One will be provided for the entire Houlton Focus Area. To be delivered in electronic and paper form, using Microsoft Word, Excel and AUTOCAD formats.	4.1,4.2,4.3	Once	Initial: IAW with kickoff and Project Finalization. Update: 14 days after Government review
6) CBP P25 TacCom Systems Modernization Project Status Reports. To be delivered in electronic and paper form, using Microsoft Word, Excel and Project formats.	4.6.1	monthly	5th business day of each month
7) CBP P25 TacCom Systems Modernization Project Subscriber Equipment Training Materials. To be delivered in electronic and paper form, using Microsoft Word, Excel, PowerPoint and AUTOCAD formats.	4.3	IAW installation, finalization and training schedules	Initial: IAW installation, finalization and training schedules. Update: 10 days after Government review
8) CBP P25 TacCom Systems Modernization Project System and Console Functionality Training Materials. To be delivered in electronic and paper form, using Microsoft Word, Excel, PowerPoint and AUTOCAD formats.	4.2, 4.3	IAW installation, finalization and training schedules	Initial: IAW installation, finalization and training schedules. Update: 10 days after Government review
9) Coverage Test Plan: This is used to perform coverage testing. This plan is should be developed in conjunction with the ATP. To be delivered in electronic and paper form, using Microsoft Word, Excel and AUTOCAD formats.	4.2, 4.3	IAW design review and testing milestones	Initial: IAW design review and testing milestones Update: 14 days after Government review
11) Test Reports: Reports identifying results of all tests, including acceptance and RF coverage. To be delivered in electronic and paper form, using Microsoft Word, Excel and AUTOCAD formats.	4.2, 4.3	IAW testing milestones	IAW testing milestones

# CBP TACCOM LMR Deployment Equipment and Services - Houlton Ref. No.\_\_\_\_\_ Source Selection Sensitive Information – See FAR 2.101 and 3.104

Deliverable Title	Referenced SOW Section	Frequency	Due Date(s)
12) Contractor Information Technology Security Plan: Describes the processes and procedures that will be followed to ensure appropriate security of IT resources. To be delivered in electronic and paper form, using Microsoft Word and Excel.	9.6	30 days after award	Initial: 30 days after award Update: 14 days after Government review
13) Information Security Certification and Accreditation documentation: Technical documentation and information to support development of C&A packages in support of the CA recommendation to the DAA for ATO.	4.4	IAW developmen t schedule	IAW development schedule
14) Contractor Quality Assurance Plan: Describes the processes and procedures that will be followed to ensure quality materials and service. To be delivered in electronic and paper form, using Microsoft Word and Excel.	6.1	30 days after award	Initial: 30 days after award Update: 14 days after Government review

## **6.0 QUALITY MANAGEMENT**

## 6.1 QUALITY ASSURANCE PLAN

The Contractor shall produce and maintain a Quality Assurance Plan that describes the processes, procedures and controls that will be used to assure consistently high quality performance in the services and deliverables provided to the Government.

Within 30 calendar days after contract award, the Contractor shall submit for approval its Quality Assurance Plan, which shall be consistent with and further detail the approach contained in the Contractor's proposal. The plan, as approved by the CO, and COTR shall be incorporated into the contract as a compliance document.

## 6.2 EXPERTISE OF PERSONNEL

The Contractor must possess the skills, experience, education and expertise to meet the needs of WTP. The Contractor shall demonstrate experience and qualifications in the following areas:

- Demonstrated successful management of similar tasks in type and scope;
- Demonstrated experience in managing law enforcement LMR infrastructure initiatives
- Demonstrated expertise in project planning, project risk management, and implementation planning for law enforcement LMR system development efforts
- Demonstrated experience in the areas of frequency coordination, RF site planning and management, secure wireless communications planning and analysis, and microwave wireless systems analysis
- Demonstrated effective application of project management controls to ensure that estimated labor mix and hours are appropriate to the work to be performed
- Demonstrated experience analyzing mission critical, tactical communications systems and interoperability solutions
- Demonstrated experience in providing field support to deployment, initiation, training and initial operation of law enforcement LMR systems

Transport of materials and personnel to RF sites often involves accessing extremely remote, rugged environments. These sites are often not accessible by any means other than helicopter lift. These remote sites often have little or no habitat to support persons at the site. Work at these sites often requires knowledge of and experience with survival skills, multi-day exposure to the

elements, and emergency first aid. The Contractor shall provide personnel with the requisite skills to perform their duties in these environments.

The Contractor will be working in various environments ranging from a standard office environment to remote tower RF site locations. Specialized experience shall include the current application of knowledge and expertise in areas such as: project management and various technical aspects of wireless telecommunications, RF and LMR system equipment, RF system design, and systems engineering associated with RF sites.

## 6.3 ACCEPTANCE CRITERIA FOR DELIVERABLES

The general quality measures as set forth below will be applied to each Work Product received from the Contractor under the Task Order.

Accuracy - Work Products shall be accurate in presentation, technical content, and adherence to accepted elements approved by the COTR.

Clarity - Work Products shall be clear and concise; engineering terms shall be used, as appropriate. All diagrams shall be clearly written and marked without ambiguity for Government team members and relevant project stakeholders.

Specifications Validity - All Work Products must satisfy the requirements of the Government as specified herein and approved by the and, when appropriate, Field Support project managers.

File Editing - All text and diagrammatic files shall be editable by the Government.

Format - Work Products shall be submitted in hard copy (where applicable) and in media defined by the. The Work Product format may change from Subtask to Subtask. Hard copy formats shall follow Government best practices and be approved by the COTR.

Timeliness - Work Products shall be submitted on or before the due date specified by the COTR or submitted in accordance with a later scheduled date determined by the COTR.

## 6.4 WARRANTY

Warranty on all parts and labor shall be for a minimum of 12 months from time of acceptance, and in IAW the master contract under which this task order is issued.

The Contractor shall provide a general warranty statement in their response to this SOW.

The Contractor shall supply additional warranty statements and information as required in response to specific task order requests.

## 7.0 PERFORMANCE MANAGEMENT AND REPORTING STRUCTURE

## 7.1 PERFORMANCE MANAGEMENT

The Contractor shall manage the tasks in this SOW within the cost, schedule, and performance constraints.

The Contractor shall conduct reviews with the Government that accurately report cost, schedule, and performance status.

The Contractor shall be aggressive in the identification and resolution of risks, issues, and dependencies.

The Contractor shall be proactive in the identification of internal and external dependencies.

The Contractor shall provide monthly status reports on the project progress.

## 7.2 PROBLEM RESOLUTION

Any issues, risks, or changes identified during the course of performing this SOW shall be reported to the COTR in writing.

The following general procedure will be used to manage project issues and risks:

- Identify and document
- Assess impact and prioritize
- Assign responsibility
- Monitor and report progress
- Communicate issue resolution

A mutually agreed issue escalation process will be defined at the outset of execution for each task.

## 8.0 REPORTING STRUCTURE

The Contractor's Project Manager and staff will work closely with the COTR to direct all services and deliverables specified under this SOW.

All deliverables completed in support of the activities described in this SOW shall be delivered to the CO and COTR.

## 9.0 SECURITY REQUIREMENTS

The Contractor shall comply with Government administrative, physical and technical security controls to ensure that the Federal Government's security requirements are met. During the course of this task, the Contractor shall not use, disclose, or reproduce data, which bears a restrictive legend, other than as required in the performance of this Task Order. The Contractor and its personnel shall be required to sign a non-disclosure agreement prior to working on this task.

Contractors hired for work within the United States or its territories and possessions, and who require access to Government owned or controlled facilities, information systems, security items or products and/or sensitive but unclassified information shall either be U.S. Citizens or have lawful permanent resident status.

The positions identified within this SOW are considered Government Trusted positions. All Contractor staff must be able to pass full Background Investigation (BI) clearances prior to starting work at CBP. This process can take from six weeks to 12 months. A Contractor staff member can start with an interim BI, but will have limited access to resources and applications.

The Contractor's manufacturing, staging, site development, and equipment installers will not be required to complete the BI process, but will require escort by BI cleared Government or Contractor staff when at Government facilities.

## 9.1 CLEARANCE REQUIREMENTS

All personnel employed by the Contractor or responsible to the Contractor for the performance of work under this contract shall either currently possess or be able to favorably pass a full field five-year employment background investigation. The Contractor shall submit within ten (10) working days after award of this contract a list containing the full name, social security number, and date of birth of those people who claim to have successfully passed a background investigation by CBP, or submit such information and documentation as may be required by the Government to have a background investigation performed for all personnel. The information must be correct and be reviewed by a CBP Security Official for completeness.

The Contractor shall notify the COTR, CO, the OIT Automated Information System (AIS) Security Division, Information Systems Security Branch (ISSB) via phone, FAX, or electronic transmission, no later than one work day after any personnel changes or access requirements occur. Written confirmation is required for phone notification. This includes, but is not limited to, name changes, resignations, terminations, and reassignments to another contract. The

Contractor shall provide the following information to OIT AIS Security Division, Information Systems Security Branch (ISSB) at Tel. (703) 921-6116 and FAX (703) 921-6570:

Full Name Social Security Number Effective Date Reason for Change

#### 9.2 REQUIRED SECURITY FORMS

Normally, such documentation will consist of SF-85P, "Questionnaire for Public Trust Positions" or SF-86, "Questionnaire for Sensitive Positions (For National Security)" TDF 67-32.5, "U.S. Customs Authorization for Release of Information"; FD-258, "Fingerprint Chart"; and a Financial Statement. The forms are obtained from CBP by contacting the COTR for the contract. Failure of any Contractor personnel to pass a background investigation shall be cause for the candidate's dismissal from the project and replacement by a similar and equally qualified candidate as determined and approved by the CO/COTR. This policy also applies to any personnel hired as replacements during the term of the Task Order.

## 9.3 IDENTIFICATION BADGES

Contractor employees shall be required to wear CBP identification badges at all times when working in Government facilities.

## 9.4 GENERAL SECURITY

All Government furnished information must be protected to the degree and extent required by local rules, regulations, and procedures. The Contractor shall conform to all security policies contained in the U.S. Customs and Border Protection Security Policies and Procedures Handbook, CIS HB 1400-05B. All services provided under this task order must be compliant with DHS Information Security Policy, identified in MD4300.1, Information Technology Systems Security Program and 4300A Sensitive Systems Handbook.

## 9.5 CONTRACTOR EMPLOYEE ACCESS

(a) Sensitive Information, as used in this Chapter, means any information, the loss, misuse, disclosure, or unauthorized access to or modification of which could adversely affect the national or homeland security interest, or the conduct of Federal programs, or the privacy to which individuals are entitled under section 552a of title 5, United States Code (the Privacy Act), but which has not been specifically authorized under criteria established by an Executive Order or an Act of Congress to be kept secret in the interest of national defense, homeland

security or foreign policy. This definition includes the following categories of information:

- (1) Protected Critical Infrastructure Information (PCII) as set out in the Critical Infrastructure Information Act of 2002 (Title II, Subtitle B, of the Homeland Security Act, Public Law 107-296, 196 Stat. 2135), as amended, the implementing regulations thereto (Title 6, Code of Federal Regulations, Part 29) as amended, the applicable PCII Procedures Manual, as amended, and any supplementary guidance officially communicated by an authorized official of the Department of Homeland Security (including the PCII Program Manager or his/her designee);
- (2) Sensitive Security Information (SSI), as defined in Title 49, Code of Federal Regulations, Part 1520, as amended, "Policies and Procedures of Safeguarding and Control of S SI," as amended, and any supplementary guidance officially communicated by an authorized official of the Department of Homeland Security (including the Assistant Secretary for the Transportation Security Administration or his/her designee);
- (3) Information designated as "For Official Use Only," which is unclassified information of a sensitive nature and the unauthorized disclosure of which could adversely impact a person's privacy or welfare, the conduct of Federal programs, or other programs or operations essential to the national or homeland security interest; and
- (4) Any information that is designated "sensitive" or subject to other controls, safeguards or protections in accordance with subsequently adopted homeland security information handling procedures.
- (b) "Information Technology Resources" include, but are not limited to, computer equipment, networking equipment, telecommunications equipment, cabling, network drives, computer drives, network software, computer software, software programs, intranet sites, and internet sites.
- (c) Contractor employees working on this contract must complete such forms as may be necessary for security or other reasons, including the conduct of background investigations to determine suitability. Completed forms shall be submitted as directed by the Contracting Officer. Upon the Contracting Officer's request, the Contractor's employees shall be fingerprinted, or subject to other investigations as required. All contractor employees requiring recurring access to Government facilities or access to sensitive information or IT resources are required to have a favorably adjudicated background investigation prior to commencing work on this contract unless this requirement is waived under Departmental procedures.

- (d) The Contracting Officer may require the Contractor to prohibit individuals from working on the contract if the government deems their initial or continued employment contrary to the public interest for any reason, including, but not limited to, carelessness, insubordination, incompetence, or security concerns.
- (e) Work under this contract may involve access to sensitive information. Therefore, the Contractor shall not disclose, orally or in writing, any sensitive information to any person unless authorized in writing by the Contracting Officer. For those contractor employees authorized access to sensitive information, the Contractor shall ensure that these persons receive training concerning the protection and disclosure of sensitive information both during and after contract performance.
- (f) The Contractor shall include the substance of this clause in all subcontracts at any tier where the subcontractor may have access to Government facilities, sensitive information, or resources.
- (g) Before receiving access to IT resources under this contract the individual must receive a security briefing, which the Contracting Officer's Technical Representative (COTR) will arrange, and complete any nondisclosure agreement furnished by DHS.
- (h) The Contractor shall have access only to those areas of DHS information technology resources explicitly stated in this contract or approved by the COTR in writing as necessary for performance of the work under this contract. Any attempts by Contractor personnel to gain access to any information technology resources not expressly authorized by the statement of work, other terms and conditions in this contract, or as approved in writing by the COTR, is strictly prohibited. In the event of violation of this provision, DHS will take appropriate actions with regard to the contract and the individual(s) involved.
- (i) Contractor access to DHS networks from a remote location is a temporary privilege for mutual convenience while the contractor performs business for the DHS Component. It is not a right, a guarantee of access, a condition of the contract, or Government Furnished Equipment (GFE).
- (j) Contractor access will be terminated for unauthorized use. The Contractor agrees to hold and save DHS harmless from any unauthorized use and agrees not to request additional time or money under the contract for any delays resulting from unauthorized use or access.
- (k) Non-U.S. citizens shall not be authorized to access or assist in the development, operation, management or maintenance of Department IT systems under the contract, unless a waiver has been granted by the Head of the Component or designee, with the concurrence of both the Department's Chief

Security Officer (CSO) and the Chief Information Officer (CIO) or their designees. Within DHS Headquarters, the waiver may be granted only with the approval of both the CSO and the CIO or their designees. In order for a waiver to be granted:

- (1) The individual must be a legal permanent resident of the U. S. or a citizen of Ireland, Israel, the Republic of the Philippines, or any nation on the Allied Nations List maintained by the Department of State;
- (2) There must be a compelling reason for using this individual as opposed to a U. S. citizen; and
- (3) The waiver must be in the best interest of the Government.
- (I) The Contractor shall identify in their proposal(s) the names and citizenship of all non-U.S. citizens proposed to work under the contract. Any additions or deletions of non-U.S. citizens after contract award shall also be reported to the contracting officer.

## 9.6 INFORMATION SECURITY

All services provided under this Task Order shall be compliant with DHS Information Security Policy, identified in MD4300.1, Information Technology Systems Security Program and 4300A Sensitive Systems Handbook.

The Contractor shall be responsible for Information Technology (IT) security for all systems connected to a DHS network or operated by the Contractor for DHS, regardless of location. This clause applies to all or any part of the contract that includes information technology resources or services for which the Contractor must have physical or electronic access to sensitive information contained in DHS unclassified systems that directly support the missions of DHS and CBP.

The Contractor shall provide, implement, and maintain an IT Security Plan. This plan shall describe the processes and procedures that will be followed to ensure appropriate security of IT resources that are developed, processed, or used under this SOW.

Within 30 days after contract award, the Contractor shall submit for approval its IT Security Plan, which shall be consistent with and further detail the approach contained in the Contractor's proposal. The plan, as approved by the Contracting Officer (CO), and the COTR, shall be incorporated into the contract as a compliance document.

The Contractor's IT Security Plan shall comply with Federal laws that include, but are not limited to, the Computer Security Act of 1987 (40 U.S.C. 1441 et seq.); the Government Information Security Reform Act of 2000; and the Federal

Information Security Management Act of 2002; DHS Management Directive (MD) 4300 and with Federal policies and procedures that include, but are not limited to, OMB Circular A-130.

The security plan shall specifically include instructions regarding handling and protecting sensitive information at the Contractor's site (including any information stored, processed, or transmitted using the Contractor's computer systems), and the secure management, operation, maintenance, programming, and system administration of computer systems, networks, and telecommunications systems.

Examples of tasks that require security provisions include-- (1) Acquisition, transmission or analysis of data owned by DHS with significant replacement cost should the Contractor's copy be corrupted; and (2) Access to DHS networks or computers at a level beyond that granted the general public.

At the expiration of the contract, the Contractor shall return all sensitive DHS information and IT resources provided to the Contractor during the contract, and certify that all non-public DHS information has been purged from any Contractor-owned system.

The Government may elect to conduct periodic reviews to ensure that the security requirements contained in this contract are being implemented and enforced. The Contractor shall afford DHS including the Office of Inspector General, DHS and CBP Offices of the CIO, CBP ISSM, COTR and other government oversight organizations, access to the Contractor's and subcontractors' facilities, installations, operations, documentation, databases, and personnel used in the performance of this contract. The Contractor will contact the DHS Chief Information Security Officer (CISO) to coordinate and participate in the review and inspection activities of Government oversight organizations external to DHS. Access shall be provided to the extent necessary for the Government to carry out a program of inspection, investigation, and audit to safeguard against threats and hazards to the integrity, availability, and confidentiality of DHS/CBP data or the function of computer systems operated on behalf of DHS/CBP, and to preserve evidence of computer crime.

# 9.6.1 ACCESS TO UNCLASSIFIED FACILITIES, INFORMATION TECHNOLOGY RESOURCES, AND SENSITIVE INFORMATION

The assurance of the security of unclassified facilities, Information Technology (IT) resources, and sensitive information during the acquisition process and contract performance are essential to the DHS mission. DHS Management Directive (MD) 11042.1 Safeguarding Sensitive But Unclassified (For Official Use Only) Information, describes how contractors must handle sensitive but unclassified information. DHS MD 4300.1 Information Technology Systems Security and the DHS Sensitive Systems Handbook prescribe policies and

procedures on security for IT resources. Contractors shall comply with these policies and procedures, any replacement publications, or any other current or future DHS policies and procedures covering contractors specifically for all Task Orders that require access to DHS facilities, IT resources or sensitive information. Contractors shall not use or redistribute any DHS information processed, stored, or transmitted by the contractor except as specified in the task order.

## 10.0 GENERAL REQUIREMENTS

## 10.1 PLACE OF PERFORMANCE AND HOURS OF OPERATION

Should any effort be required by this SOW to be performed at specified Government facilities, the Contractor shall abide by Department of Homeland Security directives regarding provisions for authorized entrance and exit at these facilities. Hours of work are generally 8:00~AM-5:00~PM, Monday – Friday, excluding federal holidays. During these hours, all Contractor staff, whether they are located at a Government site or Contractor site, must be accessible by telephone.

#### 10.2 HOLIDAYS AND ADMINISTRATIVE LEAVE

CBP personnel observe the following days as holidays:

New Year's Day
Martin Luther King's Birthday
Presidents' Day
Memorial Day
Independence Day

Labor Day
Columbus Day
Veterans Day
Thanksgiving Day
Christmas Day

Any other day designated by Federal statute, by Executive Order or by the President's proclamation.

When any such day falls on a Saturday the preceding Friday is observed. When any such day falls on a Sunday, the following Monday is observed. Observance of such days by Government personnel shall not be cause for an extension to the delivery schedule or period of performance or adjustment to the price, except as set forth in the task order.

Except for designated around-the-clock or emergency operations, the Contractor personnel will not, without written consent from the COTR, be allowed to perform on site under this task order with CBP on the holidays set forth above. The Contractor will not charge any holiday as a direct charge to the task order.

In the event CBP grants administrative leave to its Government employees, at the site, on-site Contractor personnel shall also be dismissed if the site is being closed, however, the Contractor shall continue to provide sufficient personnel to perform around-the-clock requirements of critical efforts already in progress or scheduled and shall be guided by the instructions issued by the CO or her/his duly appointed representative. In each instance when the site is closed to Contractor personnel as a result of inclement weather, potentially hazardous conditions, explosions, or other special circumstances; the Contractor shall direct its staff as necessary to take actions such as reporting to its own site(s) or taking appropriate leave consistent with its policies.

Work may only be performed on a Federal holiday and/or at the Contractor's site with written consent of the COTR and/or the Task Manager.

## 10.3 TRAVEL

Government transportation of Contractor personnel via Government vehicles to and from existing and proposed RF sites is not authorized. Therefore, the Contractor is required to pre-coordinate all travel related activities in advance to mitigate project delays. The Contractor will be responsible for identifying and securing its own mode of transportation, separate from the Government. The Contractor shall take all reasonable safety precautions when traveling to and visiting RF sites or other sites of interest and will arrange for directions and access. The Contractor shall also be responsible to ensure that means of transportation adequate for the size of the party is available on time per the project schedule (as provided by COTR).

#### 10.4 INVOICE SUBMISSION AND APPROVAL

Invoices shall be submitted for all milestones completed in association with the CLINs for this project. Invoices shall be submitted within ten (10) working days of the completion of the milestone(s) for a CLIN(s).

All invoices shall be submitted using a standardized, Government approved format and the Government approved EVM, CLIN and WBS structures in accordance with the prompt payment procedures specified in the Federal Acquisition Regulations.

Invoices shall contain:

- Company name and address.
- Name and address of person to whom payment is to sent, including EFT information, if applicable.
- Name, title, and phone number of person to notify in the event of defective invoices.

- The period being invoiced. This must include the beginning and end dates (dd/mm/yyyy format) of the calendar month or billing cycle period being invoiced.
- Contract/Task Order Number (or Task Order Modification Number).
- Total Value of Contract/Task Order (or Task Order Modification Value).
- Contract/Task Order Period of Performance.
- The CLIN(s)/milestone(s) being invoiced. This must include the completion date(s) (dd/mm/yyyy format) of the items being invoiced.
- CLIN Tabulation as follows:
  - Total cost by CLIN and milestone.
- Summary Tabulation as follows:
  - o Total cost, to date, by CLIN.
- Certification by a competent company official that the invoice contains all accrued costs for the month to the best of the official's knowledge.

The COTR will be responsible for review and approval of all invoices. The Contractor will be responsible for submitting all invoices directly to the COTR. The Contractor's Project Manager(s) and the COTRwill agree on invoice format and content prior to submission of the first invoice for this contract.

## 11.0 PERIOD OF PERFORMANCE

The period of performance for this SOW shall be from the award date through May 31 2012.

## 12.0 GOVERNMENT FURNISHED EQUIPMENT AND INFORMATION

Information and equipment necessary to accomplish the tasks of this SOW, and held by the Government, will be furnished to the Contractor. All such government furnished information and equipment remain the property of the Government at all times.

The Government has previously acquired LMR equipment for use in the Houlton Focus Area. The Contractor shall use this equipment first in the design and implementation of the LMR solution for this Focus Area. The LMR equipment previously acquired for the Houlton Focus Area is identified in Appendix C of this SOW.

Any Government Furnished Information or Equipment needed by the Contractor in order to perform the SOW will be provided by the Government through the COTR, and will be returned to that same contact upon completion of this Task Order.

The Government will also provide detailed Requirements Traceability Matrices (RTMs) for this Focus Area, no later than 15 days prior to the kickoff meeting for this Focus Area.

It is the goal of CBP and DHS to move towards consolidation of infrastructure and network services under the DHS OneNet initiative. In the event that additional telecommunications services are needed in order to meet the requirements of this SOW, the Contractor will be directed by the Government to utilize DHS OneNet services where possible and when it provides the best value to the project. The Contractor will work with the COTR to develop and put in place an interconnectivity service agreement (ISA) that will govern the services provided by OneNet.

## 13.0 NON-DISCLOSURE OF INFORMATION

Any information made available to the Contractor by the Government shall be used only for the purpose of carrying out the provisions of this task and shall not be divulged or made known in any manner to any persons except as may be necessary in the performance of the task. Contractor staff will be requested to sign Non-Disclosure statements.

Materials and information developed or produced by the Contractor under this SOW will be marked by the Contractor as "CBP Proprietary", and the Contractor will not disclose this information outside of its staff or its subcontractors performing work under this order, unless the Government approves the release of this information. Materials and information to be marked as "CBP Proprietary" and protected from disclosure includes but is not limited to the following:

- Project Schedules
- Site Candidate Information Packages
- BOMs associated with site, LMR system and PTP system designs
- Site Layout Drawings
- Test Plans and procedures for sites, LMR system and PTP system
- LMR System Diagrams, installation and configuration information
- LMR Coverage Calculations Predictions
- PTP System Diagrams, installation and configuration information
- PTP Backhaul Path Calculations Prediction
- Final System Manuals and documentation

#### 14.0 HOMELAND SECURITY ENTERPRISE ARCHITECTURE REQUIREMENTS

The Contractor shall ensure that the design conforms to the DHS and CBP enterprise architecture (EA), the DHS and CBP technical reference models (TRM), and all DHS and CBP policies and guidelines as promulgated by the DHS and CBP Chief Information Officers (CIO), Chief Technology Officers (CTO) and Chief Architects (CA)

such as the CBP Information Technology Enterprise Principles and the DHS Service Oriented Architecture - Technical Framework.

The Contractor shall conform to the federal enterprise architecture (FEA) model and the DHS and CBP versions of the FEA model as described in their respective EAs. Models will be submitted using Business Process Modeling Notation (BPMN 1.1, BPMN 2.0 when available) and the CBP Architectural Modeling Standards for all models. Universal Modeling Language (UML2) may be used for infrastructure only. Data semantics shall be in conformance with the National Information Exchange Model (NIEM). Development solutions will also ensure compliance with the current version of the DHS and CBP target architectures.

Where possible, the Contractor shall use DHS/CBP approved products, standards, services, and profiles as reflected by the hardware software, application, and infrastructure components of the DHS/CBP TRM/standards profile. If new hardware, software and infrastructure components are required to develop, test, or implement the program, these products will be coordinated through the DHS and CBP formal technology insertion process which includes a trade study with no less than four alternatives, one of which shall reflect the status quo and one shall reflect multi-agency collaboration. The DHS/CBP TRM/standards profile will be updated as technology insertions are accomplished.

All developed solutions shall be compliant with the HLS (Homeland Security) EA (Enterprise Architecture).

All IT hardware or software shall comply with the HLS EA.

Compliance with the HLS EA shall be derived from and aligned through the CBP EA.

All data assets, information exchanges and data standards, whether adopted or developed, shall be submitted to the DHS Enterprise Data Management Office (EDMO) for review and insertion into the DHS Data Reference Model. Submittal shall be through the CBP Data Engineering Branch and CBP EA.

In compliance with OMB mandates, all network hardware provided under the scope of this Statement of Work and associated Task Orders shall be IPv6 compatible without modification, upgrade, or replacement.

#### 15.0 SECTION 508 COMPLIANCE

Section 508 of the Rehabilitation Act, as amended by the Workforce Investment Act of 1998 (P.L. 105-220) requires that when Federal agencies develop, procure, maintain, or use electronic and information technology, they must ensure that it is accessible to people with disabilities. Federal employees and members of the public who have

disabilities must have equal access to and use of information and data that is comparable to that enjoyed by non-disabled Federal employees and members of the public. All deliverables within this work statement shall comply with the applicable technical and functional performance criteria of Section 508 unless exempt.

This Electronic and Information Technology (EIT) system has been determined to be applicable to Section 508. In accordance with DHS Management Directive 4010.2 – Electronic and Information Technology Accessibility, claims for National Security Exception require a review and approval by the DHS Office on Accessible Systems and Technology (OAST), formerly known as the DHS Section 508 Program Management Office.

DHS OAST has reviewed this acquisition request and has determined that a National Security Exception for the purposes of Section 508 applies and is thereby authorized. A memorandum identifying OAST approval will be included in the contract file.

#### 16.0 DHS GEOSPATIAL INFORMATION SYSTEMS COMPLIANCE

All implementations shall comply with the policies and requirements set forth in the DHS Geospatial Information Infrastructure (GII), including the following:

- All developed solutions and requirements shall be compliant with the HLS EA.
- All IT hardware or software shall be compliant with the HLS EA Technical Reference Model (TRM) Standards and Products Profile.
- The DHS geospatial data model shall be used building to the GII.
- All data within the GII, whether adopted or developed, shall be submitted to the DHS Enterprise Data Management Office (EDMO) for review and insertion into the DHS Data Reference Model.

## APPENDIX A APPLICABLE SITES - HOULTON SECTOR

## **HOULTON SECTOR**

As-is: b(7)(e); b(7)(f)

Site ID	Site Name	Lat (deg:min:sec)	Long (deg:min:sec)	Comment
1				
2		e);		<b>/                                    </b>
3			D(/	
4				/(1/
5				
6				
7				
8				
9	-			
10	-			
11	-			
12	-			
13	-			
14	-			
15				
16				
17				
18				
19 20				
21	-			
22	-			
	-			
23				
24	-			
25				
26				
27				
28				
29				
30	-			
31	-			
32				
33				
34				
35				
36				
37				
38				
39				

# CBP TACCOM LMR Deployment Equipment and Services - Houlton Ref. No.\_\_\_\_\_ Source Selection Sensitive Information – See FAR 2.101 and 3.104

Site ID	Site Name	Lat (deg:min:sec)	Long (deg:min:sec)	Comment
40				
41				
42		<del>e</del> );		
43				
44	\ / \			
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				

## APPENDIX B P25 INTER-RF SUBSYSTEM INTERFACE (ISSI) GUIDANCE

When procuring equipment for communications systems development and expansion, a standards-based approach should be used to begin migration to multi-jurisdictional and multi-disciplinary interoperability. Specifically, all new voice systems should be compatible with the Project 25 (P25) suite of standards. This recommendation is intended for government-owned or leased land mobile public safety radio equipment, and its purpose is to make sure that such equipment or systems are capable of interoperating with other public safety land mobile equipment or systems. It is not intended to apply to commercial services that offer other types of interoperability solutions and does not exclude any application if it demonstrates that the system or equipment being proposed will lead to enhanced interoperability. P25 has also been endorsed by the U.S. Department of Defense for Land Mobile Radio (LMR) systems.

The government programs requiring P25 acquisition through federal grants must have confidence that the equipment required operates to the standards. The Inter-RF Subsystem Interface (ISSI) permits users in one subsystem to communicate with users in a different system, from one jurisdiction to another, from one agency to another, from one city to another, etc. One or more TIA-published documents are identified in each category of Overview, Protocol, Conformance Test Procedures, Performance Measurements Methods, Performance Recommendations, and Interoperability Test Procedures. The following lists current P25 Inter-RF Subsystem Interface (ISSI) description, specification, and assessment documents to be used as guidance in the development of interoperable LMR systems.

- Project 25 Inter-RF Subsystem Interface Overview, TSB-102.BACC-A (Dec 2003) (ISSI Requirements and Standards Considerations)
- Project 25 Inter-RF Subsystem Interface Messages and Procedures for Voice Service, TIA-102.BACA-A (Apr 2007) (Architecture and Protocol Suite Overview, SIP Messages and Parameters Definition, RTP Message Vocabulary, Mobility Management, Call Control, and Push-to-Talk Management)
- Project 25 Inter-RF Subsystem Interface Measurement Methods for Voice Services, TIA-102.CACA (Apr 2007)
- Project 25 Inter-RF Subsystem Interface Performance Recommendations for Voice Services, TIA-102.CACB (Apr 2007)

# CBP TACCOM LMR Deployment Equipment and Services - Houlton Ref. No.\_\_\_\_\_ Source Selection Sensitive Information – See FAR 2.101 and 3.104

## APPENDIX C GOVERNMENT FURNISHED EQUIPMENT

New Equipment in Inventory (Does not reflect existing equipment in field):

Vendor	Equipment ID	Description	Quantity
Motorola	XTS 5000	Portable Subscriber Unit	b(7)(e); b(7)(f)
Motorola	XTL 5000	Mobile Subscriber Unit	
Motorola	MCC 5500	Dispatch console	

Item	Sub	Qty	Description	Delivery Point
			SITE EQUIPMENT	
1				7\ /(\
2				
3				7 / 1 / 1 /
4			(/)(e); b(	' / \ ' /
5				
6				
7				
7	а			
7	b			
7	С			
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

# CBP TACCOM LMR Deployment Equipment and Services - Houlton Ref. No.\_\_\_\_\_ Source Selection Sensitive Information – See FAR 2.101 and 3.104

Item	Sub	Qty	Description	Delivery Point
32				
33			(/)(e);	
34			(I)(E),	D(/)(T)
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				

## APPENDIX D ACRONYM LIST

AES Advanced Encryption Standard AIS Automated Information System

APE Area of Potential Effect

BOM Bill of Materials

BPMN Business Process Modeling Notation

CA Chief Architect

CBP Customs and Border Protection

CIO Chief Information Officer
CLIN Contract Line Item Number

COTR Contracting Officer's Technical Representative

CTO Chief Technology Officer

DHS Department of Homeland Security

EA Enterprise Architecture

EDMO Enterprise Data Management Office EIT Electronic and Information Technology

EVM Earned Value Management

EVMS Earned Value Management System FEA Federal Enterprise Architecture

FIPS Federal Information Processing Standard
GII Geospatial Information Infrastructure
GSA General Services Administration

HLS EA Homeland Security Enterprise Architecture

HVAC Heating/Ventilation/Air Conditioning

IAW In Accordance With

IDIQ
 Indefinite Delivery Indefinite Quantity
 ISA
 Interconnectivity Service Agreement
 ISSB
 Information System Security Branch
 ISSM
 Information Systems Security Manager

IT Information Technology
IPv6 Internet Protocol, Version 6

LAN Local Area Network
LMR Land Mobile Radio
MD Management Directive

NEPA National Environmental Policy Act NIEM National Information Exchange Model

NIST National Institute of Standards and Technology

NTIA National Telecommunication and Information Administration

OAST Office on Accessible Systems and Technology

ODC Other Direct Cost

OIT Office of Information and Technology ORD Operational Requirements Document

OTAR Over-The-Air Rekeying

P25 Project 25

PDR Preliminary Design Review

PIDU Powered Indoor Unit
PM Project Manager
PTP Point to point
RF Radio Frequency

SHPO State Historical Preservation Office

SOW Statement of Work

TIA Telecommunications Industry Association

THPO Tribal Historical Preservation Office

TO Task Order

TRM Technical Reference Model
UML2 Unified Modeling Language, 2
UPS Uninterruptible Power Supply
WBS Work Breakdown Structure
WTP Wireless Technology Programs