PERFORMANCE WORK STATEMENT (PWS)

FOR

SECOND GENERATION WIRELESS LOCAL AREA NETWORK (2GWLAN)

86 LRS B-2368 & B-2379 Wi-Fi EXPANSION

Ramstein AB, Germany

(16 June 2020)
# PERFORMANCE WORK STATEMENT (PWS)

## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SCOPE</td>
<td>3</td>
</tr>
<tr>
<td>2. GENERAL INFORMATION</td>
<td>4-6</td>
</tr>
<tr>
<td>3. APPENDICES</td>
<td>12</td>
</tr>
</tbody>
</table>
1. **Purpose.**
This is a non-personnel services contract to provide a, contractor-installed solution to engineer, furnish, install, configure, and test 2GWLAN additions to obtain full coverage in the interior spaces in the in the Logistics Readiness Squadron (86 LRS) buildings 2368 and 2379.

2. **Scope of Work.**
This PWS defines the requirements for the Contractor to engineer, furnish, install, configure, test (EFI&T) and place into service an approved wireless network system listed on the Approved Products List for the 86 LRS facilities 2368 and 2379 at Ramstein Air Base (AB), Germany (DE).

**System Description.** The proposed WLAN will consist of Interior mounted Access Points (APs), Air Monitors (AMs), and new premise wiring to connect the APs/AMs back to the existing network switches in each facility. The APs and AMs will be installed throughout the affected facilities of the 86 LRS facilities 2368 and 2379.

2.1 **Access Points/Air Monitors.** All Access Points and Air Monitors proposed for this project will be listed on the Air Force BITI-Wireless approved products suite.

2.1.1 **86 LRS Building 2368 (1 floors)**
2.1.2 Contractor shall Engineer, Furnish, Install and Test (EFI&T) APs and AMs to support the identified offices and storage spaces in building 2368.
2.1.3 Contractor shall EFI&T Local Area Network (LAN) cabling from the AP/AM location to the existing network switch. This will include all equipment and materials necessary, such as conduit (if needed), cable, clamps, connectors, junction boxes, faceplates, and patch cords.

2.2 **86 LRS Building 2379 (1 floors)**
2.2.1 Contractor shall EFI&T APs and AMs to support the vehicle support bays, equipment bays, warehouse spaces, and training spaces surrounding the exterior of the warehouse building 2379.
2.2.2 Contractor shall EFI&T Local Area Network (LAN) cabling from the AP/AM location to the existing network switch in building 2368 as there is no current infrastructure present at 2379. This will include all equipment and materials necessary, such as conduit (if needed), cable, clamps, connectors, junction boxes, faceplates, and patch cords.

3. **Systems Engineering.** The contractor shall provide systems engineering solutions for the analysis, installation, integration, configuration, and testing of new and upgraded systems associated with delivery of infrastructure capabilities. After award, the contractor shall be responsible for submitting a Telecommunications Systems Installation Plan (TSIP) for approval before accomplishing any tasks.

For the contractor, the following works are considered minimum:

- **Functional Specifications (FS):** Includes the description of supply, technology and hardware used, and data structures functionality. It will include annexes with documentation on hardware manufacturers. List of materials shall indicate manufacturer.
4. **Requirement/Description of Services.** The contractor shall provide all personnel, equipment, supplies, facilities, transportation, tools, materials, supervision, travel, and other items and non-personal services necessary to engineer, furnish, install, configure, and test (EFI&T) a new wireless network coverage area to the existing Ramstein AB wireless architecture. The Government shall not exercise any supervision or control over the contract service provider performing the services herein. Such contract service providers shall be accountable solely to the Contractor who, in turn is responsible to the Government. The new coverage area will encompass the following areas:

4.1. Internal coverage of building 2368 (See Attachment 1, diagram 1)
4.2. Internal coverage of building 2379 (See Attachment 1, diagram 2)

It is the contractor’s responsibility to determine ultimate placement of hardware for optimal WIFI coverage and to ensure the proposed WLAN will consist of Interior mounted Access Points (APs), Air Monitors (AMs), and new premise wiring to connect the APs/AMs back to the existing network switches in each facility.

The contractor shall perform to the standards in this task order (T.O.). These services are considered mission non-essential.

**Period of Performance:** The period of performance shall be for 8 months from date of T.O. award.

**Continuation of Essential DOD Contractor Work During Crisis.** IAW DoDI 3020.37. IAW AFI 63-124, para 2.7.1, and DODI 3020.37 this requirement is not considered mission essential.

4.1 **Network Services and Solutions**
Any wireless infrastructure installed must be capable of being incorporated into the existing core wireless network architecture. All wireless installations must comply with Air Force 2nd Generation Wireless Local Area Network (2GWLAN) outlined in the National Security Agency Central Security Service web site https://www.nsa.gov/Resources/Everyone/csfc/Components-List/ from approved vendors using CNSSP-11 Compliance standards for which NIAP Validation has been completed. Contractor must show how the Joint Interoperability Test Center (JITC) wireless network architecture is met in their design.

4.2 **Network Infrastructure**
It is the Contractor’s responsibility to test all Access Points (AP), Air Monitors (AM), antennas a and grounding for functionality and that they meet all standards and requirements. The Contractor must correct any deficiency and provide 86 CS/SCX all testing results. The Contractor shall provide a frequency and channel test at peak times to ensure that there is minimal interference and correct functionality. The Communications Squadron will serve as the installation focal point.

4.3 **Site Preparation and Installation Services**
The contractor shall perform site preparation and installation activities to support implementation of required services and solutions under this contract at Ramstein AB at locations as outlined at attachment 1, hereafter “required locations”.

4.4 **Requirements Analysis and Conceptual Design**
The contractor shall perform requirements analyses and conceptual designs at required locations. During this process, the contractor shall collect all the information to complete a requirements analysis and conceptual design. The contractor shall survey, evaluate and provide technical advice concerning all existing infrastructures, communications, power, Heating, Ventilation and Air Conditioning (HVAC) and environmental aspects of the site. The contractor shall provide an implementation plan, in accordance with the T.O., reflecting the strategy, schedule and recommendations (e.g., site architecture, topology and configuration) for the implementation with considerations of on-site failover and continuity of operations. The government will provide applicable information, as available, such as existing/projected user network resources and locations, base support requirements and other written information related to specific implementation for this T.O. to establish the unique characteristics of each site.

4.5 Site Survey
The contractor shall perform site surveys at required locations. The findings of the site survey and any actions required in preparation for system installation shall be documented.

4.6 Systems Engineering
The contractor shall provide systems engineering solutions for the analysis, installation, integration, installation, configuration, and testing of new and upgraded systems associated with delivery of infrastructure capabilities. After award, the contractor shall be responsible for submitting a Telecommunications Systems Installation Plan (TSIP) for approval before accomplishing any tasks.

For the contractor, the following works are considered minimum:

- **Functional Specifications (FS):** Includes the description of supply, technology and hardware used, and data structures functionality. It will include annexes with documentation on hardware manufacturers. List of materials shall indicate manufacturer.

- **Test protocols:** Testing protocols for monitoring and verifying correct commissioning will be developed.

5. **Government Support**
The government will furnish facilities and utilities to the contractor, including light, heat, ventilation, electric current and outlets for use by installation personnel as required. The facilities will be readied prior to arrival of contractor personnel and be provided at no cost to the contractor. The contractor shall provide required temporary utilities, which are not readily available in the work area.

6. **Installation**
Install cables, antennae, and access points to provide indoor and outdoor access through the designated area to ensure NIPR coverage is available to the maintenance technicians in the 86 LRS compounds.

6.1.1.1. **Inside Plant**
The contractor shall, install and configure all the components for inside the plant (e.g., power, groundings, HVAC, racks, fiber optic distribution panels, equipment, internal cabling, comm. closet, etc.). The contractor shall install and test all cable and components IAW accepted industry standards. Electrical and communications cable, conduits, and circuits shall be installed IAW the Berlin Protocol Expert Panel Microelectronics 2010 / Complies with IEC 60364. The contractor shall clearly label each end of every individual cable in accordance with the floor plans or engineering drawings. The contractor shall provide attached labels that are durable and legible.

6.1.1.2. **Tools and Testing Support**
The contractor shall provide all tools, installation materials and test equipment required to perform any required product installation and maintenance. All tools and test equipment shall remain the property of the contractor. Any damage caused by the contractor to existing site facilities or equipment which might occur during site preparation, installation, testing or cutover of the system will be repaired at the expense of the contractor. The site shall be restored to the original condition which existed prior to the event unless otherwise directed. The contractor shall demonstrate that the installed system meets the reliability/availability/maintainability requirements of the TO. Mean Time between Failure data will be used to calculate the reliability/availability/maintainability of the system. The calculations shall be based on all of the equipment installed in the network. The contractor shall be capable of performing reliability, availability and maintainability analyses of components, isolated sub-networks and the entire system.

7. **Host Nation Installations**
   
The contractor shall determine if any host nation restrictions are applicable to any installation. The contractor shall be responsible for compliance with all host nation labor, safety and environmental laws, regulations and standards applicable at each installation location. If any additional permits or regulations apply, the contractor shall inform the government and provide a proposal to initiate the appropriate documentation upon approval from the government.

8. **Relocation and Removal**
   
The contractor shall relocate and remove systems as specified in the T.O. The contractor shall be responsible for storage, staging and deployment of any equipment and materials provided as part of awarded T.O.s unless otherwise mutually agreed upon by the contractor and the government. If removal of equipment and/or material is necessary, the contractor shall be responsible for disposal 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. All trash and hazardous waste, generated as a result of the work performed, safety inspections, emergency or routine repairs, shall be disposed of off base, IAW the German Waste Disposal Law at no additional cost to the Government.

9. **Conformance with Environmental Management Systems**
   
The Contractor shall perform work under this contract consistent with the relevant environmental policy and objectives identified in the installation environmental management system (EMS) applicable for your contract. The Contractor shall perform work in a manner that conserves water, energy and other resources to the maximum extent feasible and ensure minimum production of waste as possible, giving preference to recycling and reutilization opportunities. Furthermore, the Contractor shall give preference to less toxic materials whenever available and still reliable for their work. In the event an environmental nonconformance or noncompliance of host nation and USAF environmental laws and regulations associated with the contracted services is identified, the contractor shall take corrective and/or preventative actions. In the case of a noncompliance, the Contractor shall respond and take corrective action immediately. In the case of a nonconformance, the Contractor shall respond and take corrective action based on the time schedule established by the EMS Coordinator. In addition, the Contractor shall ensure that their employees are aware of the environmental management system on base and how these requirements affect their work performed under this contract.

All on-site contractor personnel shall receive the installation EMS awareness level information.

Conformance with Environmental Requirements. The contractor shall perform all work in accordance with applicable German and US Air Force environmental laws, regulations and operating standards, including but not limited to the Final Governing Standards (FGS) for Germany. The contractor shall be immediately capable of understanding and addressing environmental laws and regulations as they pertain to work performed under this contract.
The FGS for Germany and other important environmental laws & requirements applicable for all contractors working on base will be provided upon request.

10. Contractual Requirements

10.1 Contractor Manpower Reporting Application (CMRA).
The contractor shall report ALL contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract for the Government via a secure data collection site. The contractor is required to completely fill in all required data fields at http://www.ecmra.mil. Reporting inputs will be for the labor executed during the period of performance for each Government fiscal year (FY), which runs 1 October through 30 September. While inputs may be reported any time during the FY, all data shall be reported no later than 31 October of each calendar year. Contractors may direct questions to the CMRA help desk.

Reporting Period: Contractors are required to input data by 31 October of each year. Uses and Safeguarding of Information: Information from the secure web site is considered to be proprietary in nature when the contract number and contractor identity are associated with the direct labor hours and direct labor dollars. At no time will any data be released to the public with the contractor name and contract number associated with the data. User Manuals: Data for Air Force service requirements must be input at the Air Force CMRA link. However, user manuals for government personnel and contractors are available at the Army CMRA link at http://www.ecmra.mil.

10.2 Program Management
Within 30 days of task order award, the Contractor shall obtain approval through DCOPS order to perform the services outlined in this performance work statement. The contractor shall identify a Program Manager who shall be the primary representative responsible for all work awarded under this contract, participating in Program Management Reviews and ensuring all standards referenced herein are adhered to. The contractor work hours will be: Monday-Friday, 0900-1700L, no weekends, holidays, or command down days.

Holiday and Command Down Days 2020
Date Federal holiday - Day of the week
January 1, 2020 New Year's Day - Wednesday
January 2, 2020 New Year's Day (observed) - Thursday
January 21, 2020 Martin Luther King Day - Monday
February 17, 2020 Presidents' Day* - Monday
May 29, 2020 Memorial Day - Monday
July 3, 2020 USAFE-AFAFRICA Down Day - Friday
September 7, 2020 Labor Day - Monday
October 12, 2020 Columbus Day - Monday
November 11, 2020 Veterans Day - Wednesday
November 26, 2020 Thanksgiving Day - Thursday
November 27, 2020 USAFE-AFAFRICA Down Day Friday
December 25, 2020 Christmas Day - Friday

Holiday and Command Down Days 2021
Date Federal holiday - Day of the week
January 1, 2018 New Year's Day – Friday
January 18, 2021 Martin Luther King Day - Monday
February 15, 2021 Presidents' Day* - Monday
11. T.O. Management
The contractor shall establish and provide a qualified workforce capable of performing the required tasks. The workforce may include a project/T.O. manager who will oversee all aspects of the T.O. The contractor shall use key performance parameters to monitor work performance, measure results, ensure delivery of contracted product deliverables and services, support management and decision-making and facilitate communications. The contractor shall identify risks, resolve problems and verify effectiveness of corrective actions. The contractor shall institute and maintain a process that ensures problems and action items discussed with the government are tracked through resolution and shall provide timely status reporting. Results of contractor actions taken to improve performance should be tracked and lessons learned incorporated into applicable processes. The contractor shall establish and maintain a documented set of disciplined, mature and continuously improving processes for administering all contract and T.O. efforts with an emphasis on cost-efficiency, schedule, performance, responsiveness and consistently high-quality delivery.

12. Configuration and Data Management
The contractor shall establish, maintain and administer an integrated data management system for collection, control, publishing and delivery of all program documents. The data management system shall include but not be limited to the following types of documents: White Papers, Status Reports, Audit Reports, Agendas, Presentation Materials, Minutes, Contract Letters and T.O. Proposals. The contractor shall provide the government with electronic access to this data, including access to printable reports. The contractor shall provide as-built documentation including, but not limited to, drawings and diagrams of the solution provided under each T.O. identifying specific cards in a chassis/shelf. The as-built documentation shall also include layout drawings, power drawings/specifications, floor plans and engineering specifications generated in support of the installation of the system. Documentation shall also include equipment listing with serial/model numbers and manufacturer specifications. The contractor shall review and update the T.O. associated documentation, to include test data, within 20 days of completed testing and before completion of the AFTO 747.

12.1. Records, Files and Documents
All physical records, files, documents and work papers, provided and/or generated by the government and/or generated for the government in performance of this PWS, maintained by the contractor which are to be transferred or released to the government or successor contractor, shall become and remain government property and shall be maintained and disposed of IAW AFMAN 33-363, Management of Records; AFI 33-364, Records Disposition – Procedures and Responsibilities; the Federal Acquisition Regulation, and/or the Defense Federal Acquisition Regulation Supplement, as applicable. Nothing in this section alters the rights of the government or the contractor with respect to patents, data rights, copyrights, or any other intellectual property or proprietary information as set forth in any other part of this PWS (including all clauses that are or shall be included or incorporated by reference into that contract).
13. Security Management

13.1. Department of Defense (DoD) Identification/Installation Entry
Contractor/Employee Base Pass and Identification, Special Clearances And Vehicle Passes. The Contractors personnel shall obtain Base Entry Identification, Installation Common Access Card (ICAC). In order to obtain the ICAC the Contractor is required to submit a BACO-90 (Request for Base Entry Identification) at a minimum 20 days prior, Memo of Base ID request and the Security Questionnaire for simple security check as well as a Police Good Conduct Certificate (Polizeiliches Fuehrungszeugnis). Coordination for completion of these tasks is the responsibility of the contractor.

13.2. Personnel Security
 Individuals performing work under this contract shall comply with applicable program security requirements and will support the following levels of security: Unclassified.

The Contract Security Classification Specification (DD Form 254) will be at the basic contract and T.O. level and will encompass all security requirements. All contractors located on military installations shall also comply with Operations Security (OPSEC) requirements as set forth in DoD Directive 5205.02, Operations Security Program and AFI 10-701, Operations Security. In accordance with DoD 5200.2-R, Personnel Security Program (Jan 87), DoD military, civilian, consultants and contractor personnel using unclassified automated information systems, including e-mail, shall have, at a minimum, a completed favorable National Agency Check plus Written Inquiries (NACI).

The types of Personnel Security Investigations (PSI) required for the contractor vary in scope of investigative effort depending upon requirements of the government and/or conditions of the contract/T.O. In cases where access to systems is as a condition of the contract/ application/cost for the appropriate PSI shall be the responsibility of the contractor. In such instances the contractor shall diligently pursue obtaining the appropriate PSI for its employees prior to assigning them to work any active TO. Acquisition planning must consider Antiterrorism (AT) measures when the effort to be contracted could affect the security of operating forces (particularly in-transit forces), information systems and communications systems IAW DoD Instructions 2000.16 Antiterrorism Standards.

14. Protection of System Data
Unless otherwise stated in the contract, the contractor shall protect system design-related documents and operational data whether in written form or in electronic form via a network in accordance with all applicable policies and procedures for such data, including DOD Regulations 5400.7-R and DoDM 5200.01 to include latest changes and applicable service/agency/combatant command policies and procedures. The contractor shall protect system design related documents and operational data at least to the level provided by Secure Sockets Layer (SSL)/Transport Security Layer (TSL)-protected web site connections with certificate and or user id/password-based access controls. In either case, the certificates used by the contractor for these protections shall be DoD or IC approved PKI certificates issued by a DoD or IC approved External Certification Authority (ECA) and shall make use of at least 256-bit encryption.

15. Authorization of Contractor Personnel
The representative host country and U.S. Government shall make the determination of a contract employee’s status with respect to being an ordinary resident. Authorized Contractor personnel will be granted privileges consistent with those granted members of the civilian component of the U.S. Forces, as defined below.

An authorized contractor personnel is defined as an individual who: (1) has been hired as a
consequence of this contract, (2) is a full-time (40 hours per week or more) contract employee, (3) is employed in a Host Nation country, (4) is a national (citizen) of or an ordinary resident of the United States provided that the contract employee is not also a Host Nation country (local) resident (i.e., a dual citizen), or (5) is a U.S. citizen or a citizen of a NATO country other than the Host Nation provided that the contract employee is not an ordinary resident of the Host Nation.

16. Overseas Requirements The contractor is responsible for ensuring that all country clearances, passports, visas, and accreditations required by the Host Nation are obtained prior to employment of individuals under this contract. Documentation requirements are subject to change as Status of Forces Agreement(s) (SOFA) change. In the event a proposed Contractor employee is denied Host Nation approval, accreditation, and/or permission, the prospective awardee shall submit like documentation for another nominee. The Contractor will be responsible for obtaining the appropriate country specific requirements, and will coordinate this with the CO. All Contractor personnel shall have been accredited, cleared, granted visas, etc., to specific positions at specific overseas locations. The Contractor shall provide written notification to the CO and the COR within 24 hours of becoming aware of accredited Contract personnel no longer performing duties requiring accreditation/clearances/permissions. The Contractor shall recognize that Host Nation authorities may conduct on-site inspections at any time in the Contractor personnel’s work area for the purpose of verifying the status of positions and Contractor personnel and appropriate visas or permissions. The Contractor shall assume all costs related to submission of required documentation. The Contractor shall provide the CO the required documentation to include a BACO-90 (https://www.eur.army.mil/contractor/) for all support services personnel in due time to comply with required performance periods of the contract by taking into consideration that the DoD Contractor Personnel Office (DOCPER) process requires an average of 12-16 weeks for completion.

17. Quality Processes. As a minimum, the prime contractor shall be appraised at ISO 9001:2000 or ISO 9001:2008 or ISO/IEC 20000 for the entire performance period of the contract, inclusive of options. This certification must be held at the prime offer’s organizational level performing the contract.

Assessment of the quality of work performed will be conducted by 86 Communications Squadron quality management team prior to completion of the AFTO 747 which signifies completion of the contract.

18. Deliverables

All deliverables are subject to Government approval and acceptance. They shall meet professional standards and the requirements set forth in this PWS. All deliverables shall be produced using recommended software tools/versions as accepted by the Government. The Contractor shall submit the following product resulting from this task order: As-builts of access point and air monitor placement, work schedule, testing plan, and functional test report will be provided.
Appendix 1:

Attachment 1 – Coverage Areas

NOTE: Coverage areas represented in these diagrams are the contractor responsibility to verify. Contractor is responsible to ensure adequate coverage is reached in each of these areas as described in the PWS.
86 LRS WIFI Installation

DIAGRAM 2: B-2379 FLOOR PLAN (For informational use only – not to scale).
Attachment 2 – Notional Heat Map Diagrams (For informational use only – not to scale). The contractor shall determine ultimate placement of all APs/AMs through verification coverage testing.