ATTACHMENT J-8
SAMPLE TASK ORDER (STO) #1 – CONTINGENCY SATELLITE COMMUNICATIONS SYSTEM AND SERVICES

1.0 Introduction

The United States (US) Government Organization (USGO) has 10 quick reaction teams and requires a turnkey system with commercial satellite communications services as its primary means of communication for both training in garrison and operational deployment for each team. The USGO base of operations is in Germany. Training occurs at the USGO location in Germany. Operational deployment may be anywhere in Southwest Asia, or Northern Africa. Operational deployments occur with less than 48 hours' notice and require units to be passing data traffic within three hours of arrival at the deployed location. Deployments may be two weeks to two months in length. The normal operational tempo will require six (6) terminals to be deployed to multiple locations at one time operating simultaneously, however if a crisis occurs in the Area of Responsibility (AOR), all ten (10) terminals may be deployed and operating simultaneously. Due to changing mission requirements and flexibility required in the network, the Government is not able to provide a distribution of the terminals across the coverage area. The network should be designed to support all of the terminals operating simultaneously in any location in the required coverage area.

2.0 Objective

The objective is to obtain engineering design support, integration services, equipment, commercial satellite communications services, and training for a USGO that has both training and rapid-deployment operational requirements.

3.0 Summary of Requirements

The Contractor shall propose a solution compliant with all sample task order requirements that delivers the required quality of service and availability and articulates rationale for the choice of architecture and components, including life cycle cost considerations.

Services and equipment to be provided include:

- System design
- System documentation
- Integration
- Testing
- Engineering
- On-going maintenance and operational support services
- Training
- Customer care and help desk support
- Central satellite gateway site – Contractor defined location with connection to the internet
- Satellite connectivity to the training area and operational areas

- Deployed terminals

3.1 Management Requirements

3.1.1 The Contractor shall provide a detailed project schedule (e.g., Microsoft Project or equivalent) in PDF format for the entire Task Order lifecycle.

3.1.2 The Contractor shall discuss:

3.1.2.1 A program management approach, procedures, and performance metrics and provide an explanation of how they will be used to ensure timely system development, installation and operation.

3.1.2.2 The roles and responsibilities of the Contractor and Subcontractors that will contribute to the solution, how work will be partitioned among subcontractors (if applicable), and how subcontractors will be managed.

3.1.2.3 Identification and assessment of risks and a mitigation strategy that minimizes cost, schedule, and performance risk.

3.1.2.4 Process and procedures they will employ to develop and furnish the deliverables in Section 7.2.

3.1.2.5 Implementation and maintenance of a governance and reporting structure that provides transparency and Government access to cost, schedule, and performance metrics, and supports timely delivery of services and accurate invoicing.

3.2 Technical Requirements

3.2.1 Satellite Communications Terminals

3.2.1.1 The Contractor shall provide terminal suites that include all necessary satellite communications Radio Frequency (RF) equipment; baseband equipment; time division multiple access (TDMA) modem; two laptop computers; two Voice over Internet Protocol (VoIP) telephones; and all ancillary equipment (e.g., cables, connectors, and power cabling for a complete deployable communications solution.) Power (110 VAC or 220 VAC) will be provided by the Government at the deployed locations.

3.2.1.2 Each terminal suite shall be packed into no more than three ruggedized, transportable, airline baggage-shippable cases. The Contractor shall include the cases and packing foam with each terminal suite. The maximum exterior dimensions (length+width+height) of the baggage shippable cases are 115 inches and the maximum allowed weight for each case is seventy (70) pounds. The Contractor shall ensure the size and weight of any one case does not exceed these maximum exterior dimensions and weight requirements.

3.2.1.3 All equipment delivered as part of the complex satellite solution shall be new equipment.

3.2.1.4 Terminal equipment shall be able to be unpacked, set up, and configured by one person within two hours. Terminals shall be auto-acquire with an automatic peak and pol function to allow full operation no more than 30 minutes after terminal set-up.

3.2.1.5 Satellite communications terminals shall be Ku-band.

3.2.1.6 The Contractor shall provide all original manufacturer equipment documentation with each terminal suite.

3.2.1.7 The Government will provide one ViaSat AltaSec KG-250 High Assurance Internet Protocol Encryptor (HAIPE) network encryption device per terminal suite for the Contractor to integrate with the terminal suite equipment. There is no need for the Contractor to integrate the device into the terminal equipment cases

3.2.1.8 The Contractor shall procure, configure, test, and deliver ten (10) remote terminal suites.

3.2.1.9 The Contractor shall develop a test plan and schedule for the procured terminals and provide it to the Government for review/approval no later than 30 days after award. All procured terminals shall undergo testing at the Contractor facility prior to shipment. The Government reserves the right to attend all tests. The Government will provide one KG-250 HAIPE device for testing purposes only. This device shall be returned to the Government and not shipped with the terminals. The input to the KG-250 is an Ethernet connection. The Contractor is only responsible for ensuring the Contractor provided equipment is interoperable with the KG-250. The Contractor shall provide completed test reports to the Government within ten (10) days of test completion. The Contractor shall not ship any equipment prior to Government review of test results.

3.2.1.10 The Contractor shall ensure that all components are interoperable and shall integrate all components into a single turnkey solution.

3.2.2 Equipment Service and Support

The Contractor presents an approach for lifecycle management (on-going maintenance and operational support services, customer care and help desk support to include electromagnetic interference (EMI)/radio frequency interference (RFI) resolution support, and training). The Contractor shall provide a maintenance service plan that describes how the Contractor will provide continued technical support for all equipment and minimize mean time between failure and mean time to repair including warranty service, spare parts, and field support. Field support is only required for Germany.

3.2.3 Managed Network Services

3.2.3.1 The Contractor shall provide baseline commercial satellite communications managed network services for 10 terminals operating simultaneously. The Contractor shall provide a private, dedicated managed network to support a committed information rate to each terminal of 768 kbps x 512 kbps. The network outroute(s) shall support a minimum committed information rate (CIR) of 768 kilobits per second (kbps) to each remote terminal. The network inroute(s) shall be sufficient to ensure a CIR of 512 kbps per terminal. The Contractor shall provide a link budget for the solution explaining how the capacity proposed meets the Government's CIR requirements. The Contractor shall describe how unused network resources can be re-allocated to terminals operating in the network to provide them with higher throughput.

Direction	Definition	CIR (kbps)
Inroute	Data transmitted by the VSAT to the Gateway	512
Outroute	Data received by the VSAT from the Gateway	768

3.2.3.2 The managed network services shall include space segment, teleport, and terrestrial components as necessary to ensure a complete end-to-end communications solution.

3.2.3.3 The Contractor's teleport services shall include access to the public Internet. Public Internet access shall be via a U.S.-based Internet Point of Presence (PoP). The Contractor shall provide a static IP address for each terminal in order for a secure tunnel to be established from the KG-250s the Government will provide for each terminal. The gateway/destination KG-250 will be at a Government facility with the Black (Cypher Text) side reachable from the public internet. For example, users should reach google.com and not google.de.

3.2.3.4 Space segment coverage shall include Germany for terminals in the training environment. Space segment coverage for support of operational deployments shall include the African continent north of 15 N latitude, Yemen, Oman, Saudi Arabia, United Arab Emirates, Bahrain, Qatar, Kuwait, Jordan, Lebanon, Syria, Iraq, Iran, Turkey, Afghanistan, and Pakistan. The Contractor shall provide maps with clearly depicted and labeled contour lines, demonstrating coverage across the required locations. Contour lines should clearly demonstrate satellite gain to noise temperature ratio (G/T), effective isotropic radiated power (EIRP), and elevation angle values for proposed satellite(s) and covered region(s).

3.2.3.5 The Contractor shall meet or exceed a 99.5% link availability for all required satellite links to and from each remote site.

3.2.3.6 The Contractor shall develop and provide a high-level network architecture diagram showing nodes and gateway locations. A detailed network architecture, configuration documentation, and transmission plans are required after task order award.

3.2.3.7 The Contractor shall have a means of satellite communications EMI and RFI identification, characterization, and geo-location. The Contractor will be required to analyze and report all EMI/RFI to the Government and may be asked to participate in exercises involving EMI/RFI.

3.2.3.8 The Contractor will be required to meet Federal and DoD Information Assurance requirements for a Moderate Impact Information System. The Contractor’s information assurance boundary is where the Contractor’s services connect to the user terminals/equipment (i.e., includes satellite command encryption (ground and space); systems used in the Satellite Operations Centers (SOCs), Network Operations Centers (NOCs), and teleport).

3.2.4 Frequency Clearances and Approvals

3.2.4.1 The Contractor shall describe the frequency clearance requirements and explain how the requirements will be met to allow transmission in Host Nations. The Contractor shall support Host Nation Agreement (HNA) efforts in obtaining international approvals for radio spectrum operations under this contract in foreign nations. The Contractor shall ensure that international services provided under this contract may be provided as scheduled with the full approval of each affected host nation. Typical services may include, but are not limited to: host nation approvals, landing rights, operating agreements, site licenses, and frequency clearances.

3.2.4.2 Frequency Clearances for all ten (10) terminals operating in Germany, Saudi Arabia, United Arab Emirates, Bahrain, Qatar, and Kuwait shall be required prior to the start of managed network services. Frequency clearances for all other countries within the coverage area will be requested when needed as mission dictates throughout the life of this sample task order and do not need to be priced with proposal submission.

3.2.4.3 If additional host nation support becomes necessary during the life of the Task Order, contract line item numbers will be added to the order at the time they are required and shall be invoiced at pass-through rates. The Contractor may be required to provide HNAs for any nation covered within the limits defined in the coverage area, as needed by the user.

3.2.4.4 Frequency Clearances shall be requested for the maximum time period allowed by the host nation, up to the life of the contract.

3.2.4.5 The Contractor shall provide the Government with copies of regulatory licenses and approvals obtained to operate and use the spectrum for countries within the required service region. This will be a post-award contract deliverable. See Section L.22.2 regarding submission of post-award contract deliverables.

3.2.5 Training Support

3.2.5.1 The Contractor shall develop a Training Plan and training materials to provide USGO personnel with classroom training for operation and maintenance of terminals and services. The training must include fundamentals of satellite communications, Very Small Aperture Terminal (VSAT) configuration, planning, network architecture, orbits, and hands-on equipment set-up, operation, and trouble- shooting. The Contractor shall provide the Training Plan to the Government for approval at least 30 days prior to training. Training is required once annually for up to 20 personnel. This will be a post-award contract deliverable. See Section L.22.2 regarding submission of post-award contract deliverables.

3.2.5.2 The USGO will provide the classroom for training at the USGO facility in Stuttgart, Germany. The Contractor shall provide all training materials.

3.2.5.3 The Contractor shall plan for initial acceptance testing of all Contractor provided equipment to be conducted in conjunction with the initial training session in Germany.

3.2.6 Additional Requirements

3.2.6.1 The Contractor shall staff a 24/7/365 Network Operations Center (NOC) as a focal point for network access, technical support, and troubleshooting. NOC staff shall be English-speaking and U.S. citizens.

3.2.6.2 The Contractor shall be required to coordinate with external offices and agencies, USGO Operations Centers, and other communications planners, managers and operators.

3.2.6.3 The Contractor shall provide status reporting on equipment status, network status, and network utilization. The Contractor shall create and manage trouble tickets. The Contractor shall produce monthly and annual resource utilization reports. These will be post-award contract deliverables. See Section L.22.2 regarding submission of post-award contract deliverables.

3.2.6.4 The Contractor shall provide two (2) new laptop computers. Laptop computers shall be Dell Latitude 14 5000 Series (E5470), or equivalent, with the following minimum specifications for the laptops computers:

- Windows 7 or 10 Professional
- 14” Non-Touch HD LCD without Camera
- Intel Core i5 -6200 Dual Core processor or equivalent

- 4 GB Memory
- 500 GB hard drive

Laptops will be re-imaged by the Government for use on an Unclassified network, so no additional software is required.

3.2.6.5 The Contractor will provide an unpriced Bill of Materials (BOM) in Microsoft Excel that will include services, equipment, and labor (see J-18).

3.2.6.6 The Contractor shall plan for a complete tech refresh of all Contractor provided satellite communications terminals and ancillary equipment (i.e. laptops, VoIP phones). The tech refresh shall be scheduled for the beginning of first option period (Year 6) as specified in Section 4.2. The Contractor should assume an annual rate of inflation of 2.5% of the proposed equipment price in Year 1.

4.0 Performance

4.1 Locations

Work is to be performed at Contractor facilities. Equipment shall be shipped to the USGO location in Germany. The Government will perform installation and checkout for the equipment prior to acceptance. The acceptance testing will be conducted in conjunction with the initial training session in Germany Technical support may be required at the USGO location in Germany. Training is required annually at the USGO location in Germany.

4.2 Period of Performance

The period of performance for this Task Order will be five (5) years. In addition to the CLINs priced by the Contractor during the 5-year period of performance (Years 1 through 5), the Contractor shall propose pricing for the two CS3 option periods: one (1) three-year option period (Years 6 through 8) followed by one (1) two-year option period (Years 9 and 10), and the FAR 52.217-8 six-month extension option.

In the first six months after contract award, the Contractor shall acquire, integrate, test, and deliver the requested capability, and conduct training for the deployed teams.

5.0 Government Support

5.1 Government Furnished Equipment/Facilities:

The Government will provide one ViaSat AltaSec KG-250 HAIPE network encryption device per terminal to be connected to the equipment provided by the Contractor.

The Government will provide one ViaSat AltaSec KG-250 HAIPE network encryption device for testing by the Contractor.

The Government will provide a PoE-capable Ethernet switch (Cisco SF 110D-08HP or equivalent).

Power (110 VAC or 220 VAC) will be provided by the Government at the deployed locations.

The Government will provide a classroom for training at the USGO location in Germany.

6.0 Security

The Contractor shall articulate processes and procedures to address the security requirements for personnel assigned to the task order. All Contractor personnel assigned to this task shall be U.S. citizens and undergo background checks prior to their assignment. The required background investigations for administrative personnel shall be a minimum of a National Agency Check with Written Inquiries (NACI) and for technical staff shall be a Minimum Background Investigation (MBI) or higher depending upon their access and control over the systems.

All Contractor personnel with access to key operational security information (e.g., unit locations, troop movement information) and key personnel (e.g., Program Manager) shall possess United States SECRET security clearances. Contractor personnel performing system administration functions shall possess United States SECRET security clearances.

The Contractor shall ensure that all sensitive and classified information is safeguarded in accordance with the guidance provided in the CS3 DD254. Although the Contractor may be provided access to SECRET information in order to accomplish tasks, documents generated shall not include classified information unless directed by the Government and in accordance with classification guidelines and standards for documentation.

7.0 Deliverables

The following deliverables will be used to document the comprehensiveness of the Contractor's complex satellite solution for Contingency Satellite Communications Systems and Services.

7.1 Pre-Award Deliverables (Submitted with Contractor's proposal)

- Link Budget
- High-level Network Architecture diagram showing nodes and gateway locations

- Maps with clearly depicted and labeled contour lines, demonstrating coverage across the required locations. Contour lines should clearly demonstrate satellite gain to noise temperature ratio (G/T), effective isotropic radiated power (EIRP), and elevation angle values for proposed satellite(s) and covered region(s).
- Bill of Materials
- Original Equipment Manufacturer (OEM) Terminal/Equipment Technical Specifications (e.g. datasheets)
- Project Schedule (submitted in Adobe Portable Document Format (PDF))

7.2 Post-Award Deliverables

- Training Plan and Materials
- Test Plan
- Detailed Network Architecture
- Configuration Documentation
- Transmission Plan
- Maintenance Service Plan
- HNA Frequency Clearances, Regulatory Licenses and Approvals
- Status Reports
- All required software and firmware for Contractor furnished equipment
- Original Manufacturer Equipment Documentation for Each Terminal Suite

8.0 Pricing

8.1 Instructions

Section B (Supplies or Services and Prices/Costs) and the STO #1 Excel Workbook (Attachment J-9) contain all pricing instructions.

(END OF SECTION J, ATTACHMENT J-8)