

ATTACHMENT J-8

Sample Task Order (STO) #1 - SATELLITE INTERNET PROTOCOL (IP) SERVICES

1 Background

- 1.1 The United States Energy Commission (USEC) manages a reciprocating agreement among many electric power generation and distribution companies in the United States. The main purpose of the USEC agreement is to facilitate shifting and sharing of resources among member companies to emergency need areas resulting from natural or man-made disasters (e.g., hurricanes, forest fires, earthquakes, terrorist acts). Historically, USEC Electrical Affiliation workers deployed to disaster areas kept in touch with their family and friends with a letter or an occasional telephone call. With the rapid expansion and availability of the Internet, e-mail is taking the place of these more traditional communication methods. Now, deployed workers can have high-speed commercial Internet access that can be used for personal communication, and professional communication such as, e-mail, distance learning, and video teleconferencing.
- 1.2 USEC intends to provide IP Voice, Video, and Data services via multiple Very Small Aperture Terminals (VSAT) within the continental United States (CONUS). USEC requires satellite IP services to support morale, welfare, and recreation (MWR). This document addresses the general parameters and requirements to provide the required satellite IP services for USEC.
- 1.3 Communications systems must provide unlimited data at no additional cost to the end user or to USEC with the Internet access portion of the network to support the requirements of up to 80 simultaneous computers shared between 20 remote Internet Facilities used for browsing, e-mail, chat, music and image downloading, webcams and other typical Internet applications. The system shall be flexible and adaptable to accommodate rapid deployment and set up anywhere in CONUS.

2 Requirements

- 2.1 **Overview.** A requirement exists to provide an MWR system to support USEC CONUS operations. Include solutions to requirements as part of the following documentation:
 - 2.1.1 Project Planning. The Contractor shall develop a Service Plan to include a description of the system(s), a network diagram, procedures and performance metrics to put in place to assure successful and timely completion of the Task, procedures explaining how subcontractors will be managed (if applicable), a description of how costs will be controlled, and a plan to ensure timely submission of invoices. Additionally, include a description of the process(es) that the Contractor will use to interface with the appropriate

USEC Representative(s). The Service Plan shall include a project implementation schedule. The Service Plan shall address all assumptions, risks and resultant mitigation plans associated with the proposed solution.

2.1.2 Infrastructure. The Contractor shall develop and implement the requisite communications infrastructure to support the MWR mission. The Contractor shall select a solution which provides the optimum lifecycle cost-benefit ratio. The Contractor shall identify chosen systems and explain the rationale for selection including life cycle cost considerations, incorporating lessons learned when possible. The Contractor shall provide a detailed architecture and explain all required interfaces. The Contractor shall provide link budgets, as applicable. A network operations center (NOC) shall be employed to manage connectivity and network assets for the period of performance. The NOC shall provide a web services portal with multiple account access to USEC. The Contractor's solution shall address reliability, availability, maintainability, security, and interoperability. The Contractor shall explain what network monitoring and status information will be provided to the Government on a recurring basis, how often it will be provided, and in what format. The Contractor shall demonstrate the ability to comply with the Federal Information Security Management Act of 2002 as implemented by National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53, "*Recommended Security Controls for Federal Information Systems and Organizations*" for a low impact information system, specifically addressing the following controls: IR-5, MA-2 and SC-7. The Contractor shall demonstrate the ability to comply with Committee on National Security Systems Policy (CNSSP) 12 to the maximum extent practicable. See attachment J-3 for additional details on Information Assurance.

2.2 Site Configuration and Locations:

2.2.1 The Contractor shall provide a satellite-based Internet Protocol (IP) network that is initially capable of supporting up to 20 remote Internet Facilities within a disaster region in CONUS, with locations to be specified at an undetermined future time. The Contractor shall store the remote terminals until, as directed by the Government, the Contractor installs the terminals and provides operational support. At the direction of the Government, the Contractor shall also decommission and move the terminals back into storage.

2.2.2 Internet Facility configuration is 3 Voice Over Internet Protocol (VoIP) instruments, 4 personal computers, satellite communications remote modem, antenna, UPS unit. All locations with VoIP or VTC instruments/suites shall be assumed to be operating simultaneously. The Internet Facility shall include shelters and any ancillary equipment needed to support operation in a disaster area.

- 2.3 Engineering Support:** The Contractor shall provide the results of MWR system engineering studies to provide a clearly explained recommendation for bandwidth and per-site Committed Information Rate (CIR), stating assumptions. The Contractor shall propose the method for implementing Quality of Service (QoS) to ensure prioritization of traffic (VOIP, video and data) categories. The Contractor shall engineer the MWR communications architecture, including capacity planning and preparing and developing designs, plans, and reports. The Contractor shall implement configuration management, prepare engineering documents and reference manuals, and provide engineering, installation, configuration and testing services for the MWR communications infrastructure. Contractor engineering studies shall articulate how system expansion can be accommodated at minimum costs and support other potential emerging methods for obtaining cost efficiencies. The Contractor is encouraged to suggest alternative, innovative approaches to achieve desired capabilities. The Offeror is encouraged to use non-proprietary solutions when possible.
- 2.4 Satellite Access:** The Contractor shall provide USEC with recommendations for which satellite to use for commercial satellite spectrum. The Contractor shall provide a satellite network availability of at least 97.5%. The Contractor shall propose additional metrics to confirm service levels. The availability will be calculated based on the number of satellite network availability minutes during any calendar month divided by the number of total minutes during the same month. Periods of unavailability include network maintenance periods in addition to network outages, rain fade, and network hardware/software failures. The 97.5% availability is for the entire network to the remote site terminal, excluding the VOIP phones and personal computers (local area network suite). The period of unavailability is measured across all sites.
- 2.5 Sustainment:** The Contractor shall explain a plan to implement and execute logistics, fielding, training, and O&M support. A phased approach can be considered.
- 2.5.1 Integrated Logistics Support** - The Contractor shall develop and implement a maintenance and supply concept necessary to ensure the order, receipt, delivery and accountability of materials necessary to support delivery of the project within the schedule and budget identified by USEC. Logistics support shall include all hardware/software elements and ancillary items necessary for maintaining an operational schedule.
- 2.5.2 Training** - The Contractor shall explain the required operator and maintenance training plans and courses for USEC.
- 2.5.3 Operations and Maintenance** - The Contractor shall provide qualified technical support for the duration of the task's period of performance. Maintenance support shall include the replacement of defective components, onsite technical support, upgrades to include COTS technology insertion, and any software updates, as recommended by the Contractor engineering

support. Operations support includes 24/7 NOC support. The Contractor shall deliver and install the equipment within the disaster region within 5 days of Government notification. The NOC shall support site commissioning by USEC personnel with an 8-hour notification period maximum after installation.

- 2.6 Delivery Schedule:** The infrastructure shall be operational and set of 20 remote sites readied within 60 days after contract award.
- 2.7 Period of Performance:** The period of performance for this effort will commence on the date of task order award and will continue for 3 years, with two 1-year option periods.
- 2.8 Pricing:** At a minimum, pricing is required for the following line items. The Contractor shall note if certain line items are not separately priced. All prices shall be fixed price.
- Service Plan – one time fixed price deliverable
 - Commercial satellite communications infrastructure (including satellite bandwidth and terrestrial connections) per unit cost –per month
 - Commercial satellite communications infrastructure (including satellite bandwidth and terrestrial connections) per unit cost –per year
 - Network operations center (NOC) operations cost
 - Gateway Site terminal cost
 - Remote Site terminals cost per unit
 - Engineering Support cost per Month
 - Sustainment support cost per Month
 - Storage cost per Month
 - Onsite Technical Support – cost per day
 - Installation and Commissioning – cost per unit
 - Decommissioning – cost per unit
 - Travel can be charged as ODC and is not required as part of the STO pricing.

(END OF ATTACHMENT J-8)