

| NASA Task Order under the NASA Research & Education Support Services Contract | | |
|--|--------------------------|-------------------------|
| Contractor | Contract Number | Task Order Number |
| Arctic Slope Technical Services, Inc. | NNH16CO92B | NNH16CP44T |
| Approvals: | Work Order Number | M-04 |
| TASK ORDER (TO) INITIATOR/PERFORMANCE MONITOR [REDACTED] | Office ID M | PHONE NO. [REDACTED] |
| CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE [REDACTED] | Office ID M | PHONE NO. [REDACTED] |
| DESCRIPTION OF SERVICES TO BE PERFORMED & OTHER REQUIRED CONTRACT INFORMATION: | | |

Supplier Facility and Location: Arctic Slope Technical Services, Inc.
2345 Crystal Drive, Suite 500
Arlington, VA 22202

NASA Research and Education Support Services Management and IT Support (Task Order: NNH16CP44T)

Work Plan Overview

Arctic Slope Technical Services, Inc. (ASTS), Inc. shall provide a comprehensive general management program that coordinates and integrates all other Task and Work Plans on the contract; provides for a general management program and functional direction; and provides for the management, sustainment and delivery of a comprehensive information technology program. These requirements consist broadly of the following:

- Fulfill general contract-wide management responsibilities as specified in the contract and manage daily operations;
- Prepare for and process Task Order and Work Order requests and modifications;
- Fulfill contractual requirements for contract administration and related training ;
- Sustain, Operate, and Support the NSPIRES Solicitation and Peer Review System and Related Programmatic IT Systems;
- Provide NSPIRES Application Software Development, Maintenance, and Enhancements
- Operate ASTS's Office Network/Internal IT Program and Operations
- NSPIRES System Refresh Project

This Work Plan covers the contract's Work Breakdown Structure (WBS) as summarized at the end of this document.

Activity Description

ASTS shall provide support for the following services:

1. Activity 1 - Fulfill General Management Responsibilities and Manage Daily Operations

Maintain a Management Program

ASTS will maintain a contract-wide general management program to assure that all contract services and operations are delivered effectively and in accordance with the contract's statement of work.

In addition, maintain a communications program with NASA that consists in particular of communications channels with the following stakeholders and their areas of concern:

- Contracting Officer (CO)
 - Contract administration matters
 - Formal contact for draft Task Plan and Task Plan interactions
 - Review of subcontracts
- Contracting Officer Representative (COR)
 - Informal contact for Task Plan and work order conceptualization and preliminary development
 - Other issues and topics related to contract performance
- Customer Performance Monitors (CPMs)
 - Other issues and topics related to contract performance for each Mission Directorate or Program.
- Other
 - Other NASA management
 - Other NASA contacts (e.g., information security, Safety & Health).

ASTS will:

Maintain a working office and environment including suitable space to conduct peer review panel evaluations.

Conduct personnel management functions for staffing and provide general management oversight capabilities of the overall contract. Manage and oversee contract-wide program direction, business office operations, and logistics operations.

Avoid/mitigate team member corporate conflicts of interest, including in particular the requirement that all employees' non-disclosure agreements are maintained and remain up-to- date.

Prepare a performance self-assessment and provide reviewer and customer surveys reports every six months.

Prepare for and Process Task Plan and Work Order Requests and Modifications

ASTS will schedule and conduct preparatory meetings with the COR and NASA Performance Monitors during definition of initial work and/or the preparation of Government-initiated requests for work order modifications.

The principal steps in preparing for and processing incoming work orders are as follows:

- Receive customer request (obtain advance draft where possible), and identify lead person and staff support for development of contractor's response.
- Analyze government's requirements and seek clarification from NASA, as needed.
- Define specific activities and deliverables and develop WBS as needed.
- Perform resource analysis (labor, ODCs, etc.), define initial staffing requirements, and develop initial cost estimates.
- Prepare final narrative, staffing plan and cost estimate.
- Deliver contractor's response to NASA within seven calendar days after receipt of government's request (not applicable to contractor-initiated modifications).
- Discuss and negotiate work and price with NASA.
- Receive government's approval, establish and authorize labor and expense charge numbers, assign appropriate staff to the work orders, and initiate work consistent with contracting officer's authorization.

ASTS will provide and support a collaborative management tool, [REDACTED], to facilitate and administer workflows related to work order development and approval. Support government's participation and use of the tool to enable prompt communications between contractor and the government related to work flow content and prices.

Fulfill contractual requirements for contract administration and related employee training

ASTS will perform ongoing contract administration in accordance with applicable sections of the contract. Provide the following services and reports as required according to schedule and content requirements or as may be further defined in subsequent work orders:

ASTS will comply with specific guidance related to records retention; and a Freedom to

Manage Initiative approved by the NASA Grants Steering Group that requires informing the research community, via the NSPIRES website, of any schedule changes to NRA selection dates.

Financial Reporting

- Financial management reports
- Vouchers for payment with 1 copy each to the CO, COTR, and Customer Performance Monitors
- Monthly NF 533M Report
- Overall contract reporting.

Performance Reporting:

- Customer satisfaction reporting (WBS 7.8/ 3.29)
- Ad hoc reporting (WBS 4.1)
- Continuous improvement reporting.

Variance Analysis Reporting (+/-10%) to comply with the Agency CFO's monthly Continuous Monitoring Program's requirements.

ASTS will provide and support a collaborative management tool to facilitate control and reporting related to the relationship between Task Plan contract value and work order consumption of contract value. Support government's participation and use of the tool to enable prompt communications between contractor and the government related to contract's financial management.

ASTS will deliver employee training required by the contract to comply with NASA Safety and Health Program requirements, NASA Information Technology Security Training, NASA HQ Security Awareness Training, NASA HQ-Sensitive But Unclassified (SBU) Awareness Training, Organizational Conflict of Interest (OCI) Training, NASA financial management training and other staff training as needed to meet the requirements of the contract.

2. Activity 2 - Sustain, Operate, and Support the NSPIRES Solicitation and Peer Review System and Related Programmatic IT Systems

ASTS will support the systems covered by this requirement are as follows:

- NSPIRES
- Human Exploration and Operations Mission Directorate's Taskbook system.
- NASA's Office of Education's International Astronautics Congress (IAC) system.

ASTS will maintain an IT security program for all systems within scope of this requirement. Include system-specific Security Plans in accordance with NPR 2810 and

NPR 1600. Provide for conformance with the Agency's external system security processes and continuous monitoring processes. Perform annual IT security risk assessments and annual tests of Contingency Plans to ensure on-going security compliance and system integrity. Comply with NASA FAR Supplement 1852.204-76 "Security Requirements for Unclassified Technology Information Resources (January 2011) and the IT-related elements of NASA FAR Supplement 1852.223-75 "Major Breach of Safety or Security (February 2002).

ASTS will prepare and/or maintain the appropriate amount of documentation to assure IT systems integrity and, at a minimum, maintain the following:

- NSPIRES Risk Assessment
- NSPIRES Security Plan
- NSPIRES Contingency Plan
- Continuous Monitoring Workbook as supplied by NASA HQ IT Security
- Other security documentation as required by NASA, and as noted in NASA security assessments/audits.

ASTS will support the use of NASA-approved web conferencing software when requested/where appropriate to facilitate economical peer review. We will also make use of NASA provided [REDACTED] collaborative tools to support the panel reviews.

ASTS will manage and operate the NSPIRES system in an efficient and responsible manner, including sustainment of system data, availability, reliability, security, data transfer and backup, contingency planning/disaster recovery and system risk management, testing support, customer support/help desk, system and application software maintenance, data backup and restoration.

ASTS will purchase as Other Direct Costs (ODCs) all necessary hardware and software not provided by the Government to ensure a fully operational system with appropriate levels of redundancy. All equipment shall meet NASA minimum standards and shall be able to perform all functions of the NSPIRES system. System support services contracts will be maintained with vendors to ensure system performance requirements are met. An IT security posture for NSPIRES, ASTS and the supporting systems will be maintained, including Digital certificates in order to provide secure HTTP services for the NSPIRES web site.

ASTS will provide software maintenance services for system software, including the operating system, security software and appropriate middleware communications software, operating system (OS) services, application services and system management services. These activities include diagnostics and troubleshooting, system configuration tracking and documentation, periodic vulnerability scanning, and patch acquisition, testing, verification, and installation. Perform and provide data backup and restoration services.

ASTS will manage and operate the system in an efficient and responsible manner. Maintain the government owned, contractor developed system source code; maintain system data; assure system availability, reliability, security, data transfer and backup, contingency planning/disaster recovery; and perform system risk management.

ASTS will satisfy the system performance requirements for NSPIRES as defined in the following table:

| System Elements | Performance Requirements |
|----------------------------------|---|
| Web availability | 7x24x52; 98% of time |
| Web response time | 5 sec; 98 % of the time (Defined as the time from when the link is selected to when the full form is displayed) |
| System Administration | Requests completed by next business day |
| Customer support/help desk | 5x10x52; Respond to call within 30 minutes |
| System Software Maintenance | Restore to service within 4 hours |
| Application Software Maintenance | Restore to service within 4 hours |
| Database Maintenance | Restore to service within 4 hours |
| Data Backup and Restoration | Redundant, on-line data and daily backup |
| Secure remote access | 7x24x52, 98% of the time |

ASTS will provide the following:

1. A Customer Support/Help Desk: ASTS will provide a Help Desk contact, on-line resolution and tracking services for NSPIRES web user diagnostics and troubleshooting.
2. System Software Maintenance: Provide software maintenance services for system software including the operating system, security software and appropriate middleware communications software, OS services, application services and system management services. Services will include:
 - Diagnostics and troubleshooting
 - Application configuration, tracking and documentation
 - Patch acquisition, testing, verification and installation on a quarterly basis as per NASA IT security requirements.
3. Application Software Maintenance: Provide services for application software. Services include:
 - Diagnostics and troubleshooting
 - Configuration changes, tracking and documentation
 - Patch acquisition, testing, verification and installation
4. Data Backup and Restoration: Provide backup and restore services for the NSPIRES server disk storage. Provide the capability to restore files and directories within 4 hours of request for files and directories changed more than 1 day before

- and no older than 30 days. Exercise the contingency plan annually.
5. Vulnerability Scanning and Remediation: Maintain a disciplined information technology security program to protect the NSPIRES system and its components from unauthorized intrusions. Remediation plans prepared in response to vulnerabilities or breaches shall be reported to the COR as defined in the applicable work orders. Add vulnerabilities or breaches that cannot be addressed without system modification to the Plan of Actions & Milestones (POA&M) or the risk will be accepted in writing by the System Authorizing Official.
 6. Security Incidents – ASTS shall immediately report all security incidents involving the NSPIRES system to the NASA Security Operations Center (SOC) at (877)627-2732 (toll free).
 7. Gathering Data and Preparing Reports: ASTS will provide assistance to NASA, as needed, in gathering data and preparing reports in response to data requests from the NASA CIO and OMB. [REDACTED]
 8. Postings to Grants.gov: ASTS will post NASA grant application packages on Grants.gov, using information supplied by NASA civil servant staff or NRESS mission support staff.

ASTS will perform baseline tests to determine whether the fully operational system (with active data) meets the response time requirements. Network, system, and database performance monitoring tools and equipment shall be used to baseline the system standard operation, ensure that the delivered system complies with the system performance requirements, and to provide on-going monitoring of the system to plan for system upgrades as usage dictates.

ASTS will provide redundancy of major components and services.

ASTS will gather usage statistics for the NSPIRES web site from the web logs in order to provide detailed reports to the Government.

ASTS will perform quality checks and verify that Congressional Districts accurately correlate with the 9-digit zip code. ASTS will correct errors in the database relative to Congressional District identifiers by verifying with the addressee or in the case of obvious errors, correcting the error. Software and quarterly updates shall be used to validate these data fields.

ASTS will provide a Help Desk contact for users and support diagnostics and troubleshooting, and on-line resolution and tracking services of the NSPIRES web site. ASTS will provide this service from [REDACTED] exclusive of federal government holidays.

On an annual basis, ASTS will provide an analysis of the Other Direct Costs (ODC's) planned for IT equipment acquisition, along with the related costs and dates of purchase.

3. Activity 3 - Provide NSPIRES Application Software Development, Maintenance, and Enhancements

ASTS will support the sustainment and maintenance of the NSPIRES application software. These activities include bug fixes and modest operational changes to NSPIRES. These activities include diagnostics and troubleshooting, release planning, modest development, configuration change tracking and documentation, and patch acquisition, testing, verification, and installation. All recommendations for enhancements will be collected, prioritized, assessed, and approved by NASA as part of the Activity 5 refresh efforts.

ASTS will prepare and/or maintain the appropriate amount of documentation to assure IT systems integrity and, at a minimum, maintain the following:

- Requirements Documents;
- Design Documents;
- Data Dictionary;
- User and Operations Guide;
- Test Plan and Procedures;
- Configuration Management Items;
- COR approvals for all NSPIRES releases, with signature approval from the contract COR;

ASTS will operate and maintain Taskbook and IAC hardware, web servers, and the supporting software. Security patches and routine backups of the data will be performed.

4. Activity 4 – Operate the Contractor’s Office Network/Internal IT Program and Operations

ASTS will operate and maintain an office IT network to support the NRESS staff and in-house panels. Network devices and mail servers will be managed to provide the office network services needed by the office staff to perform their day-to-day duties. This activity will include on-going support of the internal LAN, including installing necessary cabling and the purchase and installation all hardware and software.

All contractor servers will be operated, maintained, and upgraded through hardware and software technology refreshment to keep them an operating system level supported by the operating software vendor. Regular patches and updates will be evaluated and applied. Security of the office network shall be maintained in accordance with the ASTS

System Security Plan. Upgrades and refresh of internal infrastructure will be performed as needed.

Desktop computers, laptops, and shared storage will be provided to support the NRESS staff. Regular patches, security scans, virus checking, and data backups will be provided to maintain the integrity of the work environment. A help desk is provided to assist users to trouble shoot and support their IT needs.

In addition to the ongoing support tasks, the follow activities will be completed to improve the security posture and to refresh End-of-Life (EoL) equipment:

- [REDACTED] used for two-factor authentication is no longer supported and will be refreshed
- [REDACTED] will be utilized for better management of patches to officer computers and for better management of security scans of office computers
- Selected EoL equipment will be refreshed

5. Activity Five: NSPIRES System Refresh Project

ASTS will plan and execute a project, the objective of which is to achieve a significant refresh of the NSPIRES system's architecture and functionality.

[REDACTED]

[REDACTED]

All recommendations for enhancements shall be prioritized, assessed, and approved by NASA before implementation of proposed solutions begins. NASA's implementation decisions shall be executed and managed consistent with the other information technology requirements defined in this work statement.

Activity Five Deliverables:

| <u>Deliverable Number</u> | <u>Product</u> | <u>Performance Standard</u> |
|---------------------------|--|-----------------------------|
| 1. | Project management plan, including schedule and cost. | [REDACTED] |
| 2. | Recommended NSPIRES interface improvements. | [REDACTED] |
| 3. | Project status reports bi-weekly to the project manager. | [REDACTED] |

Performance Schedule

Activity 5: NSPIRES System Refresh Project

| Activity 5 Milestones | Performance Schedule |
|--|-----------------------------|
| Delivery of NSPIRES [REDACTED] | February 15, 2019 |
| Deliver NSPIRES and TaskBook security documents to NASA | March 31, 2019 |
| Deliver ASTS NRESS security documents to NASA | April 30, 2019 |
| Complete decommissioning of EoL NSPIRES hardware | June 30, 2019 |
| Completion of the first major milestone of the NSPIRES Refresh | January 31, 2020 |

Performance Schedule

The following performance schedule and task milestones are proposed:

| | |
|------------------|--|
| February 1, 2019 | Start Work Plan |
| Ongoing Weekly | Provide weekly status reports to the COR |
| Ongoing Monthly | Provide Performance Reporting to the Customer Performance Monitors |
| Ongoing Monthly | Provide ad-hoc reports as requested by NASA |
| Ongoing Monthly | Overall Contract Management as defined in Task Plans |
| Ongoing Monthly | Prepare and process Incoming Work/Task Plans |
| Ongoing Monthly | Provide Contract Administration |
| January 31, 2020 | Work Plan Completed |

Performance Requirements Summary

This Task Plan invokes the contract SOW's WBS sections as follows:

WBS 6.0 Process or Systems Improvements and User Acceptance

All sections as appropriate.

WBS 7.0 Information Technology

All sections as appropriate.

WBS 8.0 Electronic Commerce

All sections as appropriate.

WBS 9.0 Electronic and Information Technology Accessibility Standards (Section 508)

All sections as appropriate.

Reporting Requirements Summary

The following reporting requirements are for the overall Task Plan. All other reporting requirements will be specified in underlying work orders:

- Weekly status reports to the COR.
- Performance Reporting (to the Customer Performance Monitor).
- Ad hoc reporting.

Provide continuous business process improvement reports and recommendations on an ad hoc basis or as explicitly requested in response to an identified customer request.

Period of Performance

The period of performance for this Task Plan will be the February 1, 2019 through January 31, 2020.

Labor Summary

A summary of proposed labor hours by labor category is provided in the attached table. Additional labor details and all cost information are provided in the attached cost sheets.

Cost Summary

| Cost Summary | <u>Base</u> | <u>Total</u> |
|---------------------|--------------------|---------------------|
| [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] |

Submitted By: _____
[REDACTED]

Date: January 31, 2019

| |
|---|
| Authorized Signature: |
| <u>This Task Plan is issued according to the Contract Clause I.15 “Task Ordering Procedures”</u> |
| _____ Date: _____ [REDACTED] |