AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT	1. CONTRACT ID CODE	PAGE 1 OF 3

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. (If applicable)
PO25		21434888	

6. ISSUED BY CODE 47QFCA	7. ADMINISTERED BY (If other than item 6) CODE
GSA/FEDSIM Acquisition (QF0B1E) **1800 F Street, NW, 3100** **Washington, DC 20405** **Contract Specialist Name: Bryan D Keith** **Contract Specialist Phone: 703-605-9283**	

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and ZIP Code)	(X)	9A. AMENDMENT OF SOLICITATION NO.
SRA INTERNATIONAL, INC. **15036 CONFERENCE CENTER DR** **CHANTILLY, VA, 20151-3848** **Phone: (703) 803-1500 Fax: (703) 378-3910**		9B. DATED (SEE ITEM 11)
	X	10A. MODIFICATION OF CONTRACT/ORDER NO. **GS00Q09BGD0055 / GSQ0017AJ0037**
		10B. DATED (SEE ITEM 13) **03/29/2017**
CODE FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing items 8 and 15, and returning ____ copies of the amendment; (b) By acknowledge receipt of this amendment on each of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and data specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

285F.Q00FB000.AA10.25.AF151.H08 Total Amount of MOD: $8,000,000.00

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
X	D. OTHER (Specify type of modification and authority) **FAR Clause 52.232-22 Limitation of Funds**

E. IMPORTANT: Contractor [X] is not, ☐ is required to sign this document and return ____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

See SF30 continuation page.

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
		Bryan Davis Keith	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BRYAN KEITH Digitally signed by BRYAN KEITH Date: 2020.09.11 14:46:53 -04'00'	16C. DATE SIGNED
(Signature of person authorized to sign)		(Signature of Contracting Officer)	

Line Item Summary

ITEM NO. (A)	SUPPLIES OR SERVICES (B)	QUANTITY ORDERED (C)	UNIT (D)	UNIT PRICE (E)	Rev. Ext. Price (F)	Prev. Ext. Price (G)	Amount Of Change (H)
0001	FFP Labor (Task 1)	[redacted]					
0002	CPAF Labor (Tasks 2-11						
0003	CR Long Distance Travel, Including Indirect Handling Rate						
0004	CR Ancillary Products/Services, Including Indirect Handling Rate						
0005	Contract Access Fee (CAF)						
1001	FFP Labor (Task 1)						
1002	CPAF Labor (Tasks 2-11)						
1003	CR Long Distance Travel, Including Indirect Handling Rate						
1004	CR Ancillary Products/Services, Including Indirect Handling Rate						
1005	Contract Access Fee (CAF)						
2001	FFP Labor (Task 1)						
2002	CPAF Labor (Tasks 2-11)						
2003	CR Long Distance Travel, Including Indirect Handling Rate						
2004	CR Ancillary Products/Services, Including Indirect Handling Rate						
2005	Contract Access Fee (CAF)						
3001	FFP Labor (Task 1)						
3002	CPAF Labor (Tasks 2-11						
3003	CR Long Distance Travel, Including						
3004	CR Ancillary Products/Services, Including Indirect Handling Rate						
3005	Contract Access Fee (CAF)						
				TOTALS:	$179,593,742.39	$171,593,742.39	$8,000,000.00

(b) (4)

The purpose of this modification is to: 1) Updated Task Order (TO) Section B, and 2) Update TO Section J as outlined below.

1. **Update TO Section B as follows:**
   a. Section B.6.1 Incremental Funding Limitation of Government's Obligation is updated to reflect the new total funded amount and estimated date period of performance funds end.

2. **Update TO Section J as follows:**
   a. Attachment G – Incremental Funding Chart has been updated to reflect the obligation of funds to Option Period Three CLINs 3002 (Labor) and 3004 (Ancillary Products) as follows:
      i. CLIN 3002 (Labor) total funding is increased by (b) (4) from (b) (4)
         1. Cost is increased by (b) (4) from (b) (4) to (b) (4)
         2. Award Fee is increased by (b) (4) from (b) (4) to (b) (4)
      ii. CLIN 3004 (Ancillary Products) total funding is increased by (b) (4) from (b) (4)

As a result of this modification, the total funding is increased by (b) (4) from (b) (4) to (b) (4) The TO ceiling remains unchanged at $266,832,932.00.

All changes in the conformed task order have been annotated by a bar in the right margin.

All other terms and conditions remain unchanged.

END OF MODIFICATION

TASK ORDER
GSQ0017AJ0037

Infrastructure Support and Applications Hosting

in support of:

Environmental Protection Agency (EPA)

Issued to:
SRA International, Inc.
15036 Conference Center Drive
Chantilly, VA 20151-3848

The contractor's basic Alliant Government-wide Acquisition Contract (GWAC) is applicable to this Task Order

Issued by:
The Federal Systems Integration and Management Center (FEDSIM)
1800 F Street, NW (QF0B)
Washington, D.C. 20405

Award Date: March 29, 2017

Modification 24

FEDSIM Project Number: EP00807

B.1 GENERAL

The work shall be performed in accordance (IAW) with all Sections of this Task Order (TO) and the contractor's Basic Contract, under which the resulting TO will be placed. An acronym listing to support this Task Order Request (TOR) is included in Section J, Attachment U.

B.2 CONTRACT ACCESS FEE (CAF)

The General Service Administration's (GSA) operating costs associated with the management and administration of this contract are recovered through a CAF. In accordance with the Alliant base contract, the CAF shall be 0.75 percent of the total TO value with a cap of $100,000 per year per order (when the order is in excess of $13.3 Million per order year). This TO shall have a separate Contract Line Item Number (CLIN) to cover this access fee, and this CAF shall be obligated at TO award.

B.3 ORDER TYPES

The contractor shall perform the effort required by this TO on a Firm Fixed Price (FFP) basis for mandatory CLINs 0001, 1001, 2001, 3001, and 4001; a Cost-Plus-Award-Fee (CPAF) basis for mandatory CLINs 0002, 1002, 2002, 3002, and 4002; and a Cost Reimbursable (CR) basis for CLINs 0003, 1003, 2003, 3003, 4003, 0004, 1004, 2004, 3004, 4004, and a Not to Exceed basis for CLINs 0005, 1005, 2005, 3005, and 4005.

B.4 SERVICES AND PRICES/COSTS

Long-distance travel is defined as travel over 50 miles from Research Triangle Park (RTP), North Carolina (NC) or a designated secondary location identified in Section F. Local travel will not be reimbursed.

The following abbreviations are used in this price schedule:

CAF	Contract Access Fee
CLIN	Contract Line Item Number
CPAF	Cost-Plus-Award-Fee
FFP	Firm-Fixed-Price
NTE	Not-to-Exceed
QTY	Quantity

B.4.1 BASE PERIOD:

MANDATORY FFP LABOR CLIN

CLIN	Description	QTY	Unit	Total FFP
0001	Labor (Task 1)	(b) (4) [redacted]		

MANDATORY LABOR CLIN

Only award fee may be proposed; base fee shall not be proposed.

CLIN	Description	Cost	Award Fee	Total CPAF
0002	Labor (Tasks 2–11)	(b) (4) [redacted]		

COST REIMBURSEMENT TRAVEL and ANCILLARY PRODUCTS/SERVICES CLINs

CLIN	Description		Total NTE Price
0003	Long-Distance Travel Including Indirect Handling Rate (b) (4) [redacted]	NTE	$100,000.00
0004	Ancillary Products/Services* Including Indirect Handling Rate (b) (4) [redacted]	NTE	$5,000,000.00

*Ancillary Products may include items such as hardware, software tools, network components, other infrastructure and application related products. Ancillary Products may be Commercial off-the-Shelf (COTS) or custom (non-commercial) products. Ancillary Services may include such services as hardware installation, warranties, maintenance agreements, product technical support, and service desk services, and other similar services. Ancillary Services also include cloud and grid services, Platform as a Service (Paas), Infrastructure as a Service (IaaS), Software as a Service (SaaS), computation services, storage and peripheral device services, network connectivity, and other similar information Technology (IT) services.

CAF

CLIN	Description		Total Ceiling Price
0005	CAF	NTE	$100,000.00

TOTAL CEILING BASE PERIOD CLINs: (b) (4) [redacted]

B.4.2 FIRST OPTION PERIOD:

MANDATORY FFP LABOR CLIN

CLIN	Description	QTY	Unit	Total FFP
1001	Labor (Task 1)	(b) (4) [redacted]		

MANDATORY LABOR CLIN

Only award fee may be proposed; base fee shall not be proposed.

CLIN	Description	Cost	Award Fee	Total CPAF
1002	Labor (Tasks 2–11)	(b) (4) [redacted]		

COST REIMBURSEMENT TRAVEL and ANCILLARY PRODUCTS/SERVICES CLINs

CLIN	Description		Total NTE Price
1003	Long-Distance Travel Including Indirect Handling Rate (b) (4) [redacted]	NTE	$100,000.00
1004	Ancillary Products/Services* Including Indirect Handling Rate (b) (4) [redacted]	NTE	$5,000,000.00

CAF

CLIN	Description		Total Ceiling Price
1005	CAF	NTE	$100,000.00

TOTAL CEILING FIRST OPTION PERIOD CLINs: (b) (4) [redacted]

B.4.3 SECOND OPTION PERIOD:

MANDATORY FFP LABOR CLIN

CLIN	Description	QTY	Unit	Total FFP
2001	Labor (Task 1)	(b) (4) [redacted]		

MANDATORY LABOR CLIN

Only award fee may be proposed; base fee shall not be proposed.

CLIN	Description	Cost	Award Fee	Total CPAF
2002	Labor (Tasks 2–11)	(b) (4) [redacted]		

COST REIMBURSEMENT TRAVEL and ANCILLARY PRODUCTS/SERVICES CLINs

CLIN	Description		Total NTE Price
2003	Long-Distance Travel Including Indirect Handling Rate (b) (4) [redacted]	NTE	$100,000.00
2004	Ancillary Products/Services* Including Indirect Handling Rate (b) (4) [redacted]	NTE	$5,700,000.00

CAF

CLIN	Description		Total Ceiling Price
2005	CAF	NTE	$100,000.00

TOTAL CEILING SECOND OPTION PERIOD CLINs: (b) (4) [redacted]

B.4.4 THIRD OPTION PERIOD:

MANDATORY FFP LABOR CLIN

CLIN	Description	QTY	Unit	Total FFP
3001	Labor (Task 1)	(b) (4) [redacted]		

MANDATORY LABOR CLIN

Only award fee may be proposed; base fee shall not be proposed.

CLIN	Description	Cost	Award Fee	Total CPAF
3002	Labor (Tasks 2–11)	(b) (4) [redacted]		

COST REIMBURSEMENT TRAVEL and ANCILLARY PRODUCTS/SERVICES CLINs

CLIN	Description		Total NTE Price
3003	Long-Distance Travel Including Indirect Handling Rate (b) (4) [redacted]	NTE	$100,000.00
3004	Ancillary Products/Services* Including Indirect Handling Rate (b) (4) [redacted]	NTE	$8,750,000.00

CAF

CLIN	Description		Total Ceiling Price
3005	CAF	NTE	$100,000.00

TOTAL CEILING THIRD OPTION PERIOD CLINs: (b) (4) [redacted]

B.4.5 FOURTH OPTION PERIOD:

MANDATORY FFP LABOR CLIN

CLIN	Description	QTY	Unit	Total FFP
4001	Labor (Task 1)	(b) (4) [redacted]		

MANDATORY LABOR CLIN

Only award fee may be proposed; base fee shall not be proposed.

CLIN	Description	Cost	Award Fee	Total CPAF
4002	Labor (Tasks 2–11)	(b) (4) [redacted]		

COST REIMBURSEMENT TRAVEL and ANCILLARY PRODUCTS/SERVICES CLINs

CLIN	Description		Total NTE Price
4003	Long-Distance Travel Including Indirect Handling Rate [redacted]	NTE	$100,000.00
4004	Ancillary Products/Services* Including Indirect Handling Rate (b) (4) [redacted]	NTE	$550,000.00

CAF

CLIN	Description		Total Ceiling Price
4005	CAF	NTE	$100,000.00

TOTAL CEILING FOURTH OPTION PERIOD CLINs: (b) (4) [redacted]

GRAND TOTAL CEILING ALL CLINs: **$266,832,932**

B.5 SECTION B TABLES

B.5.1 INDIRECT/MATERIAL HANDLING RATE

Long-Distance Travel and Ancillary Products/Services costs incurred may be burdened with the contractor's indirect/material handling rate in accordance with the contractor's disclosed practices, provided that the basic contract does not prohibit the application of indirect rate(s) on these costs,

a. If no indirect/material handling rate is allowable in accordance with the contractor's disclosed practices, no indirect/material handling rate shall be applied to or reimbursed on these costs.
b. If no rate is specified in the schedule of prices above, no indirect rate shall be applied to or reimbursed on these costs.

The indirect handling rate over the term of the TO shall not exceed the rate specified in the schedule of prices above.

B.5.2 DIRECT LABOR RATES

Labor categories proposed shall be mapped to existing Alliant labor categories.

B.6 INCREMENTAL FUNDING

B.6.1 INCREMENTAL FUNDING LIMITATION OF GOVERNMENT'S OBLIGATION

Incremental funding in the amount of **$179,593,742.39** for CLINs 0001 through 3005 is currently allotted and available for payment by the Government. Additional incremental funding for these CLINs may be allotted and available for payment by the Government as the funds become available. The estimated period of performance covered by the allotments for the mandatory CLINs is from award through **December 31, 2020**, unless otherwise noted in Section B. The TO may be modified to add funds incrementally up to the maximum of **$266,832,932.00** over the performance period of this TO. These allotments constitute the estimated cost for the purpose of Federal Acquisition Regulation (FAR) Clause 52.232-22, Limitation of Funds, which applies to this TO on a CLIN-by-CLIN basis.

Incremental Funding Chart for CPAF:

See Section J, Attachment G - Incremental Funding Chart (PDF of Excel Spreadsheet)

B.6.2 AWARD FEE PLANNED VALUE/RESULTS REPORTING TABLE

The Award Fee Determination Plan (AFDP) establishes award fee. See Section J, Attachment CC – Award Fee Determination Plan (Word document).

C.1 BACKGROUND

The Environmental Protection Agency‘s (EPA) Office of Environmental Information (OEI) is responsible for the management and implementation of a secure IT infrastructure and ensures that this infrastructure provides EPA with IT solutions which support mission success. In addition, OEI is charged with IT investment management which entails annual reviews of the IT portfolio of the Agency, maintenance of the enterprise architecture, and development of policies and standards to guide IT expenditures. OEI also leads the Agency's Security Program which is charged with ensuring the Agency has secure IT infrastructure. OEI’s vision is to advance the creation, management and use of information as a strategic resource by providing many IT services and products.

The Office of Information Technology Operations (OITO) within OEI is the Agency focal point for developing and implementing policies for IT and security to ensure the adequacy and integrity of the Agency infrastructure. OITO’s Strategic Technology direction focuses on; consolidating IT infrastructure and management, enabling informed IT business decisions, enabling a mobile workforce and establishing a holistic network of governance policies. These key directions intersect with the Agency’s strategic plan, the OEI vision and the President’s Management Agenda for establishing a citizen-centered, results-oriented and market-based IT management and provisioning infrastructure and product suite.

OEI will continue to move toward an agency-wide, enterprise-based IT model with the upcoming TOs in the Information Technology Services (ITS) EPA III program. ITS EPA III is preceded by ITS EPA I and ITS EPA II. The services acquired under ITS EPA II assisted OEI in meeting its goals for stable, reliable, and responsive IT and telecommunication infrastructure and related services. ITS EPA II has also been successful in moving EPA toward a more mobile environment through improved mobility solutions such as implementing cloud email and productivity applications. These services also supported the Agency’s role in IT Infrastructure Lines of Business and Computer Services Management in addition to responsibilities mandated through Federal legislation and executive orders. The aforementioned program is now in its final term of performance and OEI is seeking the next generation of service solutions.

To assist in meeting its strategic objectives, OEI, and subsequently, OITO, recently underwent a reorganization to improve its IT operations, streamline activities, and focus on delivering improved services to its customers at lower costs. OITO is now organized into six divisions:

a. Desktop Support Services Division
b. Endpoint and Collaboration Solutions Division
c. Enterprise Hosting Division (EHD)
d. Network and Security Operations Division (NSOD)
e. Service and Business Management Division (SBMD)
f. Washington District of Columbia (D.C.) Operations Division

The primary location is RTP, NC. The secondary locations are EPA Headquarters at Potomac Yards, Virginia (VA) and Federal Triangle, Washington, DC. Data Centers in Chicago and Denver sites are in scope, but do not require local support, other than installation, and can be administered remotely. The Infrastructure Support and Application Hosting TO provides support to the EHD, the NSOD, and the SBMD. The EPA considers its infrastructure the backbone of the

agency's IT strategy. It consists of, but is not limited to, physical and cloud hosting, communications services, physical and cyber security, application platform, databases, and the software applications that support the whole of EPA. The EHD infrastructure allows for the performance of mission-critical functions such as backup and restoration, Continuity of Operations (COOP), disaster recovery, deployment of new services, cloud computing, and network security.

Prior to this TO, many of the functions within scope (e.g., infrastructure, applications, security, etc.) were managed as separate contracts. The EPA is moving toward a coordinated, cohesive approach to the operations and management of the OITO by including these functions into one TO. Additional background information regarding the specific tasks will be provided below.

The locations of the EPA TO2 users are seen here: https://www.epa.gov/aboutepa. The contractor shall be responsible for the network connections at all EPA locations, and therefore, on occasion, may be required to travel to EPA locations.

C.1.1 PURPOSE

The purpose of this TO is to develop and operate EPA's infrastructure and application platforms to be reliable, secure, and technologically advanced. The services obtained under this TO support the entirety of EPA at all geographic locations and numerous research facilities across the United States (U.S.) and the world.

This TO shall simplify the operations and management of infrastructure services by obtaining support from a single contractor team. The services consist of data center management, application hosting, application deployment/maintenance, geospatial service support, network security, cyber security, cloud computing, COOP support, and Enterprise Identity and Access Management (EIAM) and Active Directory (AD). Combining the support, standardization, and communication of OITO's infrastructure services will add significant value to the Government.

C.1.2 AGENCY MISSION

The EPA's mission is to protect human health and the environment. Since 1970, EPA has worked for a cleaner, healthier environment for the American people. EPA employs over 15,000 people across the country, including offices in Washington, D.C.; 10 regional offices; and more than a dozen laboratories and other locations. EPA users come from a variety of disciplines; more than half are engineers, scientists, and policy analysts. In addition, many employees are legal, public affairs, financial, information management, and computer specialists. EPA is led by its Administrator, who is appointed by the President of the U.S.

The OEI within EPA is led by the agency's Chief Information Officer to manage the life cycle of information to support EPA's mission of protecting human health and the environment. OEI's mission is to identify and implement innovative information technology and information management solutions that strengthen EPA's ability to achieve its goals. OEI is focused on the quality, efficiency, and reliability of the technology used to execute the mission of EPA.

C.2 SCOPE

The scope of the EPA Infrastructure Support and Application Hosting TO includes the provisioning, operations, and security of the infrastructure and application platforms. The scope includes, but is not limited to, the following:

a. Centralized Administration of Infrastructure Services
b. Infrastructure Hosting– including physical space, security, inventory, and safety, servers and storage of devices and their logical, physical, and/or virtual configurations from hardware through the operating system and related utilities.
c. Middleware and Applications Management
    1. Managing application platform software
    2. Application development and deployment
    3. Public cloud
d. Network Connectivity
e. Cyber Security
f. EIAM and AD
g. National Voice Operations

This scope does not include end-user devices and associated services: workstations, laptops, printers, mobile devices (including Mobile Device Management), desktop operating systems and applications. Also out of scope for this TO is high-performance computing.

The scope includes the adherence to all applicable EPA, OEI, OITO, and Agency Working Capital Fund (WCF) policies, procedures, directives, and standards. Interfaces include, but are not limited to, OITO Management, OITO Deployment Team, Enterprise Hosting Division, OITO Security Team, Business Intelligence and Analytics Center (BIAC), customers, service providers, Agency Teams, and other technology experts required to deliver the services specified in the TO. The contractor shall continuously coordinate and communicate across tasks, the EPA OITO community, and other contractors.

The scope includes the use of EPA-provided Government Furnished Property and Government Furnished Information (H.2 and H.3 respectively) for task/work assignments and contract deliverables, and eBusiness for WCF order processing, reporting, workload, and other requirements as needed.

The server and storage infrastructure support managed by the National Computer Center (NCC) is on hardware located primarily in RTP, NC, and Washington, D.C. Denver, Colorado (CO), and Chicago, Illinois (IL) hold satellite data centers that are managed remotely from RTP, NC, in most instances. A Remote Sensing Document Library is located in Las Vegas, Nevada (NV) and physical presence is often necessary.

C.3 CURRENT INFORMATION TECHNOLOGY (IT)/NETWORK ENVIRONMENT

Specific details regarding the different environments are described within the individual tasks, as well as in Section J.

C.4 OBJECTIVE

The objective of the Infrastructure Support and Applications Hosting TO is to support EPA's infrastructure services while remaining compliant, continuously improving, coordinating with others, and demonstrating efficiencies.

EPA seeks significant coordination and communication of plans and activities by the contractor with OITO customers and other TOs. Work performed shall be effectively coordinated and synchronized with work being performed under other TOs to ensure that customer requirements are met.

All systems operated under the TO shall be operated in compliance with EPA policies, directives, Standard Configuration Documents (SCDs), security configuration guidelines, and vendor-recommended patch levels. An inventory of all systems operated under the TO shall be maintained and include an accurate accounting of each system's compliance status with regard to operation, configuration, and security requirements. An inventory of all systems and software shall be maintained, which shall identify the warranty or maintenance status, ensuring consistent maintenance and license coverage. This data shall be maintained in EPA-provided systems and readily accessible.

The contractor shall support National Computer Center in RTP, NC as it offers services with flexibility to customers, providing customers with temporary hosting environments and "do-it-yourself" alternatives. OITO customers expect their provider to be able to quickly establish and retire servers according to their requirements and in an increasingly self-service or cloud-like manner. Many customers also desire the ability to perform application platform administration functions themselves, according to their own schedules. Services shall be continuously evaluated and updated to support these requirements while maintaining the security and integrity of the environment.

An equally important objective is maximizing the efficiencies of data center operations, primarily through standardization, consolidation, virtualization, and implementation of private cloud technologies and processes.

C.5 TASKS

The contractor shall be responsible for meeting all requirements as described in the following task areas:

Task 1: Program Management
Task 2: Transition In
Task 3: Transition Out
Task 4: Technical Consulting Project Administration
Task 5: Infrastructure Hosting
Task 6: Middleware and Applications Management
Task 7: Cloud Computing
Task 8: Network and Security
Task 9: Cyber Security

Task 10: EIAM and AD

Task 11: National Voice Operations

C.5.1 TASK 1 – PROVIDE PROGRAM MANAGEMENT

The contractor shall provide program management support under this TO. This includes the management and oversight of all activities performed by contractor personnel, including subcontractors, to satisfy the requirements identified in this Performance Work Statement. The contractor shall identify a Program Manager (PM) by name who shall provide management, direction, administration, quality assurance, and leadership of the execution of this TO.

C.5.1.1 SUBTASK 1 – COORDINATE A PROJECT KICK-OFF MEETING

The contractor shall schedule, coordinate, and host a Project Kick-Off Meeting at the location approved by the Government. The meeting will provide an introduction between the contractor personnel and Government personnel who will be involved with the TO. The meeting will provide the opportunity to discuss technical, management, and security issues, and travel authorization and reporting procedures. At a minimum, the attendees shall include Key contractor Personnel, relevant Government personnel, and the Federal Systems Integration and Management Center (FEDSIM) Contracting Officer's Representative (COR). The contractor shall provide the following at the Kick-Off Meeting:

a. Prioritization of contractor activities
b. Security Considerations
c. Invoicing Considerations

Due to the accelerated kick-off session requirement the Transition In Plan, Draft Project Management Plan (PMP), and Final Quality Control Plan (QCP) will be discussed at the kick-off but will be due by April 12, 2017.

C.5.1.2 SUBTASK 2 – PREPARE A MONTHLY STATUS REPORT (MSR)

The contractor PM shall develop and provide an MSR using Microsoft (MS) Office Suite applications, to the EPA Technical Point of Contact (TPOC) and the FEDSIM COR. The MSR shall include the following:

a. Activities during the reporting period, by task (including: on-going activities, new activities, activities completed; and progress to date on all above-mentioned activities). Start each section with a brief description of the task.
b. Problems and corrective actions taken. Also include issues or concerns and proposed resolutions to address them.
c. Personnel gains, losses, and status (e.g., security clearance, etc.).
d. Government actions required.
e. Schedule (including major tasks, milestones, and deliverables; and planned and actual start and completion dates for each).
f. Summary of trips taken (attach trip reports to the MSR for the reporting period).

g. Items purchased on behalf of the Government during the month.
h. Accumulated invoiced cost for each CLIN up to the previous month.
i. Projected cost of each CLIN for the current month.
j. Monthly Performance against the Service Level Agreements (SLAs). The contractor shall discuss all measures that do not meet the Performance Standards and provide mitigation that can be completed by the next monthly reporting period. The contractor shall include, in every MSR, its performance against the stated SLAs during the time period of the report.
k. List of all deliverables, by full name, delivered during the period reported through the MSR.

C.5.1.3 SUBTASK 3 – CONVENE TECHNICAL STATUS MEETINGS

The contractor PM shall convene a Technical Status Meeting, as needed, with the EPA TPOC, FEDSIM COR, and other vital Government stakeholders. The purpose of this meeting is to ensure all stakeholders are informed of the monthly activities and MSR, opportunities are provided to identify other activities and establish priorities, and to coordinate resolution of identified problems or opportunities. The contractor PM shall provide the Technical Status Meeting Minutes, including attendance, issues discussed, decisions made, and action items assigned, to the EPA TPOC and FEDSIM COR.

C.5.1.4 SUBTASK 4 – PREPARE A PROJECT MANAGEMENT PLAN (PMP)

The contractor shall document all support requirements in a PMP. The PMP shall:

a. Describe the proposed management approach.
b. Contain detailed Standard Operating Procedures (SOPs) for all tasks.
c. Include milestones, tasks, and subtasks required in this TO.
d. Provide for an overall Work Breakdown Structure (WBS) and associated responsibilities and partnerships between Government organizations.
e. Include a Quality Control Plan (QCP).

The contractor shall provide the Government with a draft PMP at the Kickoff Meeting, on which the Government will make comments. The final PMP shall incorporate the Government's comments.

C.5.1.4.1 SUBTASK 4.1 – UPDATE THE PROJECT MANAGEMENT PLAN (PMP)

The PMP is an evolutionary document that shall be updated annually at a minimum. The contractor shall work from the latest Government-approved version of the PMP.

C.5.1.5 SUBTASK 5 – PREPARE TRIP REPORT

The Government will identify the need for a Trip Report when the request for travel is submitted. The contractor shall keep a summary of all long-distance travel including, but not limited to, the name of the employee, location of travel, duration of trip, and Point of Contact (POC) at travel location.

C.5.1.6 SUBTASK 6 – CREATE AND UPDATE QUALITY CONTROL PLAN (QCP)

The contractor shall create a QCP, as required in Section F, Deliverable 10. The contractor shall periodically update the QCP, as required in Section F and as changes in program processes are identified.

C.5.1.7 SUBTASK 7 – ANCILLARY PRODUCTS/SERVICE SUPPORT

The contractor shall purchase hardware, software, and related supplies under the TO. Such requirements will be identified during the course of the TO, by the Government or the contractor. The contractor shall initiate a purchase (at any dollar value), by submitting an approval request to the applicable EPA point-of-contact. The request shall include the purpose, specific items, estimated cost, and rationale for the purchase. The contractor shall not make purchases without the Government's approval. Purchases over the micro-purchase threshold require a FEDSIM COR-approved Request to Initiate Purchase (RIP). For purchases under the micro-purchase level, the contractor shall coordinate via email with the FEDSIM COR.

C.5.1.8 SUBTASK 8 – BUDGET BRIEFINGS

The contractor shall account for all costs under WCF cost centers identified by the EPA TPOC. The contractor shall provide Budgetary Briefings (Section F, Deliverable 14). The contractor shall modify the content and format of this briefing according to the Government's instructions. The Budgetary Briefings shall include, at a minimum:

a. A list of the EPA service areas by numerical subtask.
b. A spreadsheet with the costs (actual and projected) for each service area by past and current Fiscal Year (FY).
c. A spreadsheet detailing funding (actual and projected) for each CLIN with separate columns for average monthly burn rates.

The contractor shall adhere to all applicable EPA, OEI, OITO, and Agency WCF policies, procedures, directives, and standards. Access to documentation and EPA resources not included with this solicitation will be provided upon award.

C.5.1.9 SUBTASK 9 – DOCUMENTATION SUPPORT

At a minimum, the contractor shall update/develop and provide the following documentation:

a. Training Manuals and Technical User Guides (Section F, Deliverable 15).
b. Updates to Standard Operating Procedures (SOPs) and System Documentation (Section F, Deliverable 16) based on the index and updates when there are system changes.
c. Workflow Process Information (Section F, Deliverable 17).
d. Commercial off-the-Shelf (COTS) Updates/Modification Plans (Section F, Deliverable 18).

The contractor shall integrate current documentation and/or produce documentation of system management tools and applications, software configurations and settings, and system administration processes and procedures sufficient to meet the "specific knowledge" standard of documentation. The specific knowledge standard states that personnel familiar with the

technology, but not familiar with the EPA environment, can manage and maintain the EPA environment based on the documentation. This documentation shall be stored in a centralized document repository in Microsoft SharePoint provided by EPA and maintained in a manner as to be auditable by parties with appropriate authority.

C.5.2 TASK 2 - TRANSITION-IN

The contractor shall execute its Transition-In Plan no later than (NLT) five workdays after Project Start (PS). During the transition-in, the contractor shall ensure that there will be minimum service disruption to vital Government business and no service degradation during and after transition. All transition activities shall be completed 90 calendar days after PS. The contractor shall provide a Transition-in Plan at Kickoff Meeting (Section F, Deliverable 19) based on the contractor's proposed plan.

C.5.3 TASK 3 - TRANSITION-OUT

The Transition-Out Plan shall facilitate the accomplishment of a seamless transition from the incumbent to an incoming contractor/Government personnel at the expiration of the TO. The contractor shall provide a Transition-Out Plan (Section F, Deliverable 20) NLT 120 calendar days prior to expiration of the TO. The contractor shall identify how it will coordinate with the incoming contractor and/or Government personnel to transfer knowledge regarding the following:

a. Project management processes.
b. Points of contact (POCs).
c. Location of technical and project management documentation.
d. Status of ongoing technical initiatives.
e. Appropriate contractor–to-contractor coordination to ensure a seamless transition.
f. Transition of Key Personnel.
g. Schedules and milestones.
h. Actions required of the Government.

The contractor shall also establish and maintain effective communication with the incoming contractor/Government personnel for the period of the transition via weekly status meetings. The contractor shall execute transition-out activities IAW the Government-approved Transition-Out Plan.

C.5.4 TASK 4 – TECHNICAL CONSULTING (TZ) PROJECT ADMINISTRATION

The contractor shall use this task to administer, track, and report the TZ work that is embedded throughout tasks 5 through 11. Technical Consulting Services (TZ) include special EPA projects within tasks 5 through 11 that are funded through the WCF that shall be performed by the contractor. The Operation Lead with the TZ request shall draft requirements for the contractor. The contractor shall clarify customer needs, define a project plan, and calculate the costs associated with the project. The contractor shall provide this specialized service capability in addition to normal service provisioning for those projects that do not fit but are related to the

different common data processing service offering. Additional information regarding TZ projects are described at the task and subtask level.

The contractor shall participate in the Task Assignment (TZ) process, as follows:

a. The OITO will issue a "Requirement Statement" to the contractor. Usually requirements are originated by an EPA program office. Each "Requirement Statement" issued under this process has a unique Task Assignment number for tracking.
b. If needed, the contractor, EPA TPOC, and FEDSIM COR shall meet with the EPA program office to clarify the requirements.
c. The contractor shall respond with a project plan and cost estimate.
d. OITO will review the project plan and cost estimate with the EPA program office customer.
e. If OITO and the program office customer agree to proceed, OITO will approve the Task Assignment.
f. The contractor shall track all work approved under this process by Task Assignment number, WCF Service Code, and Project Code.
g. All work shall be reported in the invoice backup file by service code and project code.

The contractor shall assist OITO staff with WCF cost recovery billing for Technical Consulting Services (TZ) and eBusiness products. A clear understanding of the Application Development Checklist (ADC) process, WCF E-business, and related tools is needed. Access to these tools will be provided.

The contractor shall:

a. Assist in placing orders in e-business, researching existing customer billing, and coordinating with OITO staff on new and existing billing needed for customers.
b. Assist in tracking and reporting ongoing billing issues including a mechanism to review open and resolved issues related for both TZ and eBusiness customer orders.
c. Assist in tracking billing milestones within the ADC process.
d. Research existing customer billing and WCF costs related to an application, an EPA office, or program. Assist OITO staff in determining if billing adjustments are needed for an ADC deployment, upgrade, or decommissioning.
e. Provide weekly TZ billing reports to assist in tracking hourly consumption with all active TZ open WCF registrations.
f. Provide upon request a more detailed analysis of all costs related to an individual, project, deployment, or application support.

C.5.5 TASK 5 – INFRASTRUCTURE HOSTING

The OITO provides server and storage infrastructure in support of EPA information systems on hardware located primarily in RTP, NC, and Washington, D.C., with satellite data centers in Denver, Colorado (CO), and Chicago, IL. This task includes the operation, management, maintenance, and administration of the physical and virtual servers, storage, and storage area networks (SAN) upon which the Agency's applications reside. At this time, EPA has 92 physical chassis hosting virtual machines.

The contractor shall perform the following sub-tasks:

a. Operations
b. Technical Planning
c. Management of the Private Cloud
d. Infrastructure Communication and Coordination
e. Infrastructure Operational Security
f. Backup and Failover
g. COOP
h. Disaster Recovery (DR) Services
i. Data Center Facilities Management
j. Distributed Systems Support (DSS) Services
k. Standard Configuration Documents (SCDs)

The OITO is attempting to standardize on a limited number of server technologies (e.g., Intel-based servers running VMWare with Red Hat Linux and Windows Server virtual machines).

The OITO intends to continue to expand the use of server virtualization technologies in both Windows and Linux environments, developing cost models which emphasize the benefits of utilizing standard technologies while documenting and fully recovering costs associated with non-standard configurations required by customers.

The contractor shall support the OITO efforts to continuously improve infrastructure processes, maintain compliance, and coordinate appropriately. The contractor shall provide smooth operation of the OITO's hosting infrastructure to include well-designed processes and practices while maintaining discipline in operating the services being provided. The contractor shall be transparent in planning, operation, and maintenance of the service, including the management of costs. Outages and escalated issues shall result in action plans that reduce future occurrences of that problem. New technologies and techniques shall be incorporated to improve internal operations and the services being provided.

The contractor shall leverage automated tools which reduce operational costs for both physical and virtual servers and storage. The contractor shall regularly propose and seek EPA-designated personnel approval to implement methods and tools to reduce unit labor costs for server and storage hosting, and to document the practical return on investment anticipated from their implementation.

The Hosting Server service response window classifications are described as:

Service Class	Alert Response Window	Current Service Class Status Breakdown
1	24 hours/day, 365 days/year	64%
2	8:00 AM – 8:00 PM Eastern Time, Monday – Friday	10%
3	8:00 AM – 5:00 PM Eastern Time, Monday – Friday	26%

C.5.5.1 SUBTASK 1 – OPERATIONS

The contractor shall administer the server and storage systems located in the National Computer Center, RTP, NC, and remote locations. This administration includes the following activities which the contractor shall perform in accordance with EPA, OEI, OITO, and WCF policies, procedures, and standards:

a. Support continuous operation of all environments allowing for weekly planned maintenance period, currently scheduled between 8 PM Sunday evening and 7 AM Monday morning, local time.
b. Improve the efficiency of, and minimize the resources required for, ongoing operation and administration of the OITO computing environments, and; provide recommendations for system management tools and utilities.
c. Utilize system tools to their maximum capability to manage system resources such as Control Processing Unit (CPU) utilization, system memory, disk storage, and tape storage to achieve efficient utilization and high performance of the system.
d. Coordinate UNIX, Linux, Windows, and storage systems administration activities for contractor-managed systems to ensure that systems are maintained and operated in a manner consistent with EPA policy, guidance, change management, standard configuration requirements, and secure operational procedures.
e. Provide support necessary to manage server file shares, print queues, file systems, disk space, tape storage, and libraries to maximize utilization and minimize cost. Support and maintain file and storage replication utilizing system capabilities, for example MS Windows distributed File System (DFS) and Symantec NetBackup Appliance replication. Allocate space to users as requested through appropriate process and approved by the designated EPA representative.
f. Manage user access by adding, expiring, removing, and assigning access privileges for user accounts as requested through appropriate process and approved by the designated EPA representative and in compliance with NCC, EPA, and Federal policy.
g. Provide system access to customers and NCC partners, as requested by EPA, for the purpose of managing or deploying application and application platform software in a manner that provides adequate access without sacrificing the integrity and reliability of the systems.
h. Provide on-call support 24 hours a day, seven days a week, 365 days a year (24x7x365) for production systems managed by the contractor.
i. Improve the knowledge and skills of the System Administrators (SAs) through ongoing contractor-provided training.
j. Provide a Root Cause Analysis (RCA), including action plans to mitigate the outage in the future, for all unplanned outages that meet any one or more of the following criteria:
    1. The outage is on a production server for which no failover or load balancing protects customers from being affected by the outage and its duration includes more than 15 minutes of time during core business hours (i.e., 6:00 AM to 9:00 PM Eastern Time, unless defined for the whole TO elsewhere).

2. The outage is on a development or staging server and includes more than three hours of time during core business hours (i.e., 6:00 AM to 9:00 PM Eastern Time).
3. The contractor becomes aware that the outage impacts multiple customer offices.
4. The contractor becomes aware that the outage impacts more than 100 persons.
5. The contractor becomes aware that the outage impacts, in some specific way, any user at the Office Director level or above (i.e., impacts not just the user's organization but the specific manager as a user).
6. The designated EPA representative directs that an RCA be performed, regardless of other criteria.

C.5.5.2 SUBTASK 2 – TECHNICAL PLANNING

Prior to installation of any new system, the contractor shall complete documentation required for coordination of services, such as an NCC Facilities Service Request (FSR), and include the unique identifier of those requests in the formal Change Record. The contractor shall prepare a project plan subject to designated EPA representative approval indicating all steps and time schedules to be followed to install and implement the system. Project plans shall include a back-out plan should the implementation fail. Requirements for production-level status include implementation of appropriate accounting/charge-back utilities, hardware code addition, application(s)/utility installation, addition to all pertinent recurring reports, addition to the system inventory database, addition to appropriate monitoring/management utilities, and request and receive permission to operate from the designated EPA representative.

C.5.5.3 SUBTASK 3 – MANAGEMENT OF THE PRIVATE CLOUD

The NCC has established a private cloud hosting environment, utilizing VMware vCloud software toolsets, within the NCC Data Center in RTP, NC, by modernizing existing storage, virtualization and web hosting services to meet the National Institute of Standards and Technology (NIST) definition of cloud computing. The NCC plans to provide this capability in three more of its primary data centers (i.e., D.C., Chicago, and Denver), for which the contractor shall be responsible.

The contractor shall be responsible for maintaining and improving EPA's private cloud infrastructure, including the underlying hardware and software systems. The contractor shall be responsible for supporting the services offered within the private cloud including, but not limited to, storage, IaaS, and PaaS. Service support includes maintaining and upgrading host and server operating systems, managing configuration templates, ensuring compliance with security mandates, and monitoring system performance. As stated above, the contractor shall be responsible for deploying the VMware vCloud configuration within the remaining primary data centers.

EPA has submitted an Expression of Interest (EOI) to GSA Office of Govermentwide Policy to become a Federal Inter-agency Shared Service Provider (ISSP).

Where possible, the contractor shall facilitate the migration of hosting customers into this private cloud service. The contractor shall:

a. Manage and maintain an on premise private cloud, ensuring a flexible and secure hosting infrastructure for EPA customers.
b. Manage a 24x7x365 private cloud service with 99.9 percent availability per month for each resource.
c. Manage infrastructure redundancy ensuring access for all users in the event of a failure.
d. Provide data and input into the contingency planning process.
e. Ensure private cloud service is capable of hosting IPv6 only and IPv4/IPv6 dual-stacked services.
f. Ensure private cloud services meet all Federal cloud requirements.
g. Coordinate with third-party assessment services to verify compliance assurance, auditing, and reporting.
h. Maintain current Government standards as outlined by NIST for security of applications, systems, and data.
i. Report on updates to regulatory requirements for security improvements.
j. Maintain current Government and EPA standards for security of applications, systems, and data.
k. Ensure operating systems are Federal Information Security Management Act (FISMA) compliant.
l. Maintain the operating system for IaaS virtual machines and the operating system and application platform for PaaS services.
m. Create and maintain IaaS templates according to EPA SCDs.
n. Monitor and alert on infrastructure reconfiguration ensuring an appropriate audit trail.
o. Create a regular patch management schedule for security and application updates.
p. Manage maintenance operations including scheduling, communication, testing and documentation updates.
q. Coordinate testing of upgraded systems with owners and users.
r. Perform quarterly audits of controls and report on results.
s. Document disaster recovery and COOP procedures in support of EPA's disaster recovery and COOP service offerings.
t. Support data transfer to and from virtual machines via network connection and physical media.
u. Integrate with EPA tools for monitoring of resource utilization, uptime, and resource performance.
v. Report on trends in performance, capacity, availability, and outages utilizing a real-time dashboard with forecasting capabilities.
w. Manage configurations in alignment with EPA configuration management tools and practices.
x. Manage and maintain load-balancing and failover services to legacy hosting platform and private cloud servers.
y. Utilize EPA's user directories for authentication/authorization and application access.

z. User authentication shall be accomplished using two-factor authentication through the EPA standard Personal Identify Verification (PIV) Authentication system for privileged access.

aa. Use EPA's incident and problem management tools and procedures.

The contractor shall administer the private cloud, define roles and responsibilities, and monitor private cloud performance. Specifically, the contractor shall:

a. Document the operating model that defines roles and responsibilities and specific service offerings.

b. Provide a "To Be" roadmap for incorporating new technologies that will help to ensure the cloud service continues to meet mission goals and objectives.

c. Store documents in a centralized document repository in SharePoint as directed by EPA, and maintain the documents in a manner as to be auditable by parties with appropriate authority.

d. Provide monthly status reports containing information on average response times, processor utilization, memory usage, and summaries of problems.

e. Monitor utilization, performance, and system response times, reporting status and trends, identifying current and future capacity issues, and reporting issues to EPA.

f. Monitor storage usage and data traffic, identifying capacity issues affecting the SAN and other storage systems.

g. Recommend capacity changes, including specific hardware and software upgrades, necessary to meet projected requirements to maintain adequate levels of performance.

h. Monitor all systems for outages or changes in operational status. Provide acknowledgement and initiation of investigation within 15 minutes of the initial alert impacting systems in service class 1. Provide on-site (as necessary) response within two hours of the initial alert impacting systems in service class 1. Provide on-site (as necessary) response within two hours of the initial alert impacting systems in other service classes, assuming that the alert occurs at least two hours prior to the end of the day's alert response window, otherwise within two hours of the start of the day's alert response window.

i. Resolve problems and errors impacting systems, reporting problems to EPA in accordance with established escalation procedures.

j. Provide system metering (accounting) to ensure that metered system and process data are correctly captured, stored, and available for customer use.

k. Develop transparent cost models which identify costs associated with each operational environment including physical servers running UNIX, Linux, and Windows, virtual servers, multi-tiered storage, and backup.

C.5.5.4 SUBTASK 4 – INFRASTRUCTURE COMMUNICATIONS AND COORDINATION

The contractor shall:

a. Respond to customer requests for information, support, and problem resolution.

b. Coordinate and oversee problem escalation with hardware and software maintenance vendors (e.g., 3PAR, Dell, IBM, MS, Sun).
c. Report unplanned outages to the customer community utilizing EPA communication procedures.
d. Escort vendors and other technicians performing maintenance in secured facilities.
e. Participate in weekly scheduled NCC meetings, including the Change Management, ADC review, NCC project status, and hosting operations status meetings.
f. Communicate with EPA and customers as directed regarding the status of the systems, resolution of problems in the systems, and status of operational activities in the systems.
g. Schedule preventative and remedial hardware maintenance utilizing EPA change management procedures and in accordance with vendor recommendations, including vendor security patches.
h. Inform system users of scheduled outages in support of approved change requests, and other scheduled outages which are to occur during the periods of reserved system maintenance time via updates to the System Login Message (on supported platforms), Hosting Systems Availability web page, Public Access Systems Availability web page (outages impacting Public Access systems), and Intranet Systems Availability web page (outages impacting EPA intranet systems).
i. Develop and document processes and procedures supporting the timely and effective installation, configuration, and patching of all application layer software managed under this TO. These processes and procedures shall ensure the integrity of hosting systems without unnecessarily delaying application deployment activities.
j. Maintain configuration control of all systems, including configuration records, software license compliance, and system end-of-life schedules reporting changes proposed, planned or, implemented.
k. Maintain web-based hardware and software standard configurations and system management documentation for each system within the EPA-provided document repository.
l. Develop and maintain operational procedures, operators' guides, disaster recovery procedures, contingency plans, system runbooks, and security guidelines where applicable. Ensure documentation is reviewed annually for updates and annotated with the date of review and person or persons completing the review.
m. Maintain the inventory of all systems' hardware and software operated under this TO.
n. Maintain all documentation and reports supporting system administration and customer use of system resources, reports of system hardware and software performance, availability, utilization, and system responsiveness in the EPA-provided central document repository in SharePoint.
o. Document and implement a patch management strategy including the tracking and distribution of firmware upgrades and operating system patches.

C.5.5.5 SUBTASK 5 – INFRASTRUCTURE OPERATIONAL SECURITY

The contractor shall:

a. Configure, implement, and maintain security of the environments in accordance with EPA security policy, including configuration, patches, and access control.
b. Maintain systems in compliance with Agency-approved scanning tools.
c. Perform continuous security monitoring of the environment utilizing EPA toolsets, including annual security assessments.
d. Assess risks to the availability, confidentiality, and integrity of systems.
e. Maintain the system security plan in accordance with EPA security policy ensuring updates include changes in technology.
f. Perform at the time of deployment and monthly thereafter security scanning of systems utilizing EPA-provided scanning tools.
g. Facilitate Technical Vulnerability Assessment (TVA) scans by outside parties, such as OITO/ Cyber Security Staff (CSS), staff, or other Service Providers (SPs).
h. Respond to scans and TVAs by writing point–by-point responses to scan findings and by remediating any vulnerabilities found.
i. Maintain security data documenting breaches, issues, alerts, and status, including open issues, applicable alerts for each system, response to date, and tasks needed to complete the response in the EPA-provided central document repository in SharePoint.
j. Review, analyze, and implement necessary fixes to minimize security vulnerabilities in response to Computer Emergency Readiness Team (CERT) and/or other security advisories.
k. Capture, rotate, and review system activity logs daily (weekend logs reviewed the following Monday) to identify and investigate unusual and/or unauthorized use.
l. Implement data encryption systems and procedures for sensitive data.
m. Ensure compliance with applicable security policies, standards, and procedures, including, but not limited to, Federal (e.g., Office of Management and Budget (OMB), FISMA, EPA), and contract-specific requirements (e.g., the applicable User Agreements).
n. Ensure compliance with controls and safeguards that are cost effective for supported systems.
o. Ensure contingency planning and provide contingency support for supported systems.
p. Implement applications and platform security plans relating to supported systems.
q. Monitor Standard Configuration and Audit Logs for resources and systems managed under this TO.
r. Establish and implement a central POC and backup for Computer Security Incident Response Capability (CSIRC) alerts and incident remediation efforts.

C.5.5.6 SUBTASK 6 – BACKUP AND FAILOVER

The contractor shall:

a. Maintain continuity of operations and failover capability consistent with the specific requirements of the NCC systems.

b. Utilize the Veritas system (Symantec NetBackup, Symantec Backup Exec), or an EPA-approved replacement, for backup and restore functions in such a fashion as to provide optimal protection of data assets.
c. Perform incremental backups Monday through Thursday and weekly full backups over the weekend, scheduled to minimize impact on normal operations.
d. Document and maintain an online backup schedule in the EPA-provided central document repository in SharePoint.
e. Manage the backup and restore systems, ensuring that data can be retrieved consistent with EPA retention policies.
f. Maintain custom retention policies for customers such as the Office of Air and Radiation (OAR) and Office of the Chief Financial Officer, including associated documentation and testing procedures.
g. Test file restoration capabilities and report outcomes on a weekly basis.
h. Perform file restorations as requested via the EPA Incident and Problem Management System.
i. Implement and manage failover systems located at an alternate EPA data center.
j. Ensure data replication, compression, and duplication are optimally maintained to ensure data reliability and minimize network impact.
k. Execute contingency plan tests and exercises.

C.5.5.7 SUBTASK 7 – CONTINUITY OF OPERATIONS (COOP)

As part of the EPA COOP practices, the contractor shall provide support for mock exercises prior to, during, and after all exercises and during actual emergencies. Contractor support includes participating in the exercise, providing input and updates to documentation and practices, and providing administration and management of systems and services maintained by the Service Provider.

For an exercise or actual emergency, the contractor shall:

a. Report to the COOP site within four hours of the notification.
b. Provide onsite support for the duration of the event or exercise.
c. Submit the Post-Exercise Report to the EPA designated representative within 72 hours after an event or exercise ends.

C.5.5.8 SUBTASK 8 – DISASTER RECOVERY (DR) SERVICES

The contractor shall support DR services that are available on a subscription basis to customers under the WCF, through the TZ process outlined in Section C.5.4. DR services shall provide increased data protection and recovery support for Agency mission critical applications running at EPA Data Centers.

The contractor shall provide DR preparedness for critical applications that subscribe to the DR service through the WCF. This includes maintaining, updating, and safeguarding the DR manual at least annually as well as when changes are noted or required. The DR manual is the operational process authority while conducting recovery activities. The contractor shall be

responsible for the execution and support of annual offsite DR exercises and actual recovery efforts due to a declared disaster. The contractor shall assist and provide support for new/potential DR customers as well as implementing new technology supporting this effort.

The contractor shall perform the following in the event of a disaster: an initial damage assessment, communicate status to EPA and senior management, execute the plan for recovery, manage the designated disaster recovery facility during its use, and restore systems at the EPA facility when available for normal processing.

Communications in the project shall include, but are not limited to, face-to-face meetings, teleconferences, phone, status meetings, reports, and email. Responses to customer questions and/or problems shall occur in a timely manner. The DR program uses the EPA Call Center and EPA Incident/Problem Management System to record problems, which ensures that customer concerns are recorded and addressed.

The contractor shall provide logistical support in arranging the quarterly and annual DR meetings which consists of DR customers, EPA management, and contractor support personnel. The contractor shall be responsible for maintaining the meeting agenda, capturing the meeting minutes, and any documentation shared within the meeting. These meeting artifacts shall be stored in a centralized document repository in SharePoint within one week following the meeting and maintained in a manner as to be auditable by parties with appropriate authority.

C.5.5.9 SUBTASK 9 - DATA CENTER FACILITIES MANAGEMENT

The EPA Data Centers host a range of platforms and information resources such as UNIX, Linux, and Windows services and high performance scientific computing. The contractor shall support EPA's Data Center hosting. The EPA Data Centers shall operate 24 hours per day, 7 days per week, 365 days a year (24x7x365).

The contractor shall support the overall computer facility operations and provide the necessary personnel on site at the EPA NCC to continually monitor environmental controls, heating, ventilation, and air conditioning (HVAC) systems on a 24x7x365 schedule. The contractor shall facilitate visitor access to the computing facilities and maintain visitor and access logs for the data center facility according to EPA policy and procedures. The contractor shall coordinate the activities of vendors who provide preventive and remedial maintenance for automated data processing equipment within the EPA facilities.

The contractor shall participate in infrastructure management and provide expert advice concerning infrastructure activities and improvements. This includes supporting the effective and efficient use of facility space as well as maintaining accurate facility space drawings of equipment. The contractor shall follow established failure resolution procedures when unplanned outages occur within the EPA computing facilities or environmental warnings for these facilities. The contractor shall perform periodic inspections and tests of fire suppression and alarm systems in accordance with EPA policy and procedures. The contractor shall be prepared to receive emergency calls after hours.

The contractor shall arrange and facilitate weekly facility meetings with EPA management and contractor support. The contractor shall capture, distribute, and properly maintain meeting minutes and action items.

C.5.5.10 SUBTASK 10 - DISTRIBUTED SYSTEMS SUPPORT (DSS) SERVICE

The contractor shall provide the DSS Services, providing high-level support to SA that use, operate, and/or manage UNIX, LINUX, MS Windows Operating Systems (OS), Sun Microsystems MySQL, and MS SQL. This service supports configuration requirements for all EPA network attached resources such as servers, virtual servers, and workstations. The DSS Services directly supports EPA's FISMA compliance efforts for information security.

The contractor shall maintain, update, and develop SCDs for EPA operating system environments. All SCDs for which DSS manages shall be kept current with all service packs, patches, anti-virus updates and hot fixes being tested for compatibility, compliance, and necessity with the Agency network and security requirements. The contractor shall investigate proposed or actual vendor version changes, upgrades, or introductions for Agency-approved and non-approved OS and test them as they become available in the DSS test lab.

The contractor shall evaluate and test new operating and application system server environments for optimal performance and security in the DSS test lab and document the standard configuration. The contractor shall provide Tier 3 customer technical support to administrators for EPA-approved SCDs only.

The DSS service supports SAs and the general customer community within EPA. Communications in the project shall include face-to-face meetings, teleconferences, phone, status meetings, reports, email and listserv, and website notifications. The contractor shall respond to customer questions and/or problems. DSS Services uses the EPA Incident and Problem Management System to record problems, which ensures that customer concerns are recorded and addressed.

The contractor shall provide logistical support in arranging the Monthly DSS Telecom Meeting which consists of SAs and the general customer community. In these meetings, the contractor shall provide an update on alerts and advisories, updates and changes to DSS SCDs, and other general information as it relates to DSS. The contractor shall record meeting minutes and store artifacts in a centralized document repository in SharePoint within one week following the meeting and maintained in a manner as to be auditable by parties with appropriate authority. The contractor shall maintain and update the DSS website with relevant information from the meeting.

C.5.5.11 SUBTASK 11 – STANDARD CONFIGURATION DOCUMENTS (SCD)

Any change to EPA servers or server operating systems shall warrant an SCD creation by the contractor. The contractor shall provide a draft SCD within three weeks after issuance of direction from the EPA representative. Draft SCDs will include guidance provided from Defense Information Systems Agency (DISA) Security Technical Implementation Guides (STIGs) where appropriate. After the EPA TPOC representative approves the draft, the final SCD document shall be submitted within five workdays. After the final document has been approved by the EPA TPOC representative, the contractor shall post the SCD document to the DSS website within three workdays.

All other documents as referenced, excluding the SCD, shall be submitted to the EPA TPOC representative within three workdays after the event has occurred. The EPA representative will notify the contractor when to post information to the DSS listserv.

C.5.5.12 SUBTASK 12 – DATA CENTER MIGRATION

In 2010, the OMB launched the Federal Data Center Consolidation Initiative (FDCCI) to promote the use of green IT by reducing the overall energy and real estate footprint of Government data centers. As part of this effort, EPA is consolidating datacenters and intends to migrate network, security, and hosting infrastructure from the Potomac Yard data center in Arlington, VA to the National Earthquake Information Center (NEIC) data center in Lakewood, Colorado (CO). This transition is expected to occur no later than option year two of the TO and the contractor shall perform the data center migration.

The contractor shall:

a. Utilize the Task Assignment process (Section C.5.4) to develop an implementation plan and cost estimate to migrate operations.
b. Ensure proper and timely coordination between functional areas and external Feds/Contractors/Vendors during all phases of the project.
c. Ensure design, plan, and implementation are supported by EPA policy, FISMA, NIST and industry best practice.
d. Provide new documentation and update existing documentation to reflect operations at the new location. Operational documentation to include diagrams, procedures, reports, and inventories at a minimum.
e. Ensure ancillary systems supporting monitoring, provisioning, and reporting are updated to reflect operations at the new location.
f. Provide support for application, hosting, network, and facility operations and management at the new location.

C.5.5.13 SUBTASK 13 - APPLICATION AND DATABASE HOSTING FOR GEOSPATIAL SERVICES

The contractor shall provide technical support to comprehensively manage shared and dedicated server hosting environments for small, intermediate, and large mission-critical geospatial applications across a variety of technology platforms.

C.5.6 TASK 6 – MIDDLEWARE AND APPLICATIONS MANAGEMENT

The scope of the Middleware and Applications Management task includes supporting the operation, maintenance, and management of COTS, Government-off-the-Shelf (GOTS) and custom application platforms operated by the OITO, regardless of hosting provider location. The Middleware and Applications Management task includes deployment of EPA applications into the production environment. The Government seeks to improve Application Management customer service, streamline the processes and enhance service tracking. The successful operations and management of all applications and platforms operated by the OITO are essential for the Agency to meet its mission and goals.

These Middleware and Applications Management requirements include above the operating system level and include the operations, maintenance and management of the application platform layer, as well as all production applications. The Middleware and Application Task includes coordination and communication with EPA development teams, NCC Hosting Team, Customers, Contractors, Agency teams and associated organizations involved with Web applications, deployments and/or hosting.

NCC currently has 650 applications in the production environment and between 75 and 100 in the deployment process at any given time.

C.5.6.1 SUBTASK 1 - MIDDLEWARE PLATFORM OPERATIONS AND MANAGEMENT

The contractor shall operate, manage and support all application platforms, and environments operated by the OITO. Operations, management and technical support include communications, assessments, deployments, upgrades, planning, testing, documentation, coordination, operations, monitoring, and maintenance. Each application platform is managed by a Government NCC application platform manager. The contractor shall provide updates, status and reports to the platform manager and EPA TPOC, as required.

NCC policy does not allow the deployment of Beta or version .0 software releases. NCC policy is to keep platforms up-to-date within one release of the publisher's most recent major release level. Exceptions to this policy may be made to accommodate specific applications or customers.

The contractor shall perform the following activities for all application platforms and environments in accordance with EPA, OEI, OITO, NCC, and WCF policies, procedures, and standards:

a. Install and configure new releases of the application platforms in accordance with NCC policies and procedures.
b. Operate and manage development, staging, and production servers for each application platform.
c. Resolve problems and faults arising in the environments, to the extent possible within the contractor's ability (e.g., problems with the configuration settings of an environment under the control of the contractor, rather than its underlying product coding that is not accessible to the contractor). This includes working with EPA customers, other NCC teams, and coordinating with EPA's contract hardware and software vendors (e.g., Akamai, Dell, Oracle, MS, IBM, etc.).
d. Report to the OITO and the customer community every unplanned outage arising from within the environment, the underlying operating system or related software, communications facilities, adjunct facilities or services (e.g., identity management or security services), hardware, or any other source. An unplanned outage includes the failure of the platform or environment to respond normally to any user or service request due to any malfunction. Initial detection of an apparent outage, or receipt of a report of an outage by a customer or service dependent upon the environment, may result in a subsequent conclusion that the apparent outage was related to a telecommunications or network failure or failure of some other facility outside the strict definition of the

environment itself. Reports of this type of externally caused outage shall still be reported by the contractor. Unplanned outage reports shall include a description of the nature and extent of the outage, the underlying causes, the ramifications and impacts (particularly upon customers), and the plan for correction of weaknesses exposed and avoidance of repetition. The outage information provided by the contractor will be reported by the Government on workdays via the Service Tracking and Reporting (STAR) Daily Status Report.

e. Maintain configuration control of development, staging, and production environments, including configuration records, and report on the environments' configuration sufficiently to keep the EPA TPOC informed of any changes proposed or planned.

f. Maintain security of the environments in coordination with the TOs responsible for physical and operational security of the underlying servers, and their operating systems and other software, and for the telecommunications facilities of the NCC.

g. Monitor utilization and performance of the environments, perform diagnostics and tuning, and communicate status and trends to the Platform Manager and EPA TPOC when identified and provide advance notice of any foreseeable shortfalls in capacity.

h. Recommend capacity changes, including specific hardware and software requirements, to meet projected requirements for capacity to maintain adequate levels of performance. To the extent directed by the EPA TPOC when identified, perform acquisition, installation and configuration of software components of additional capacity. (Hardware is handled via the hosting subtask.)

i. Maintain continuity of middleware/applications operations and DR capabilities. Coordinate with infrastructure and participate in DR tests.

j. Provide application systems administration, database administration, and security functions.

k. Provide operational support (monitoring, administration, backup) for the web-hosting servers including the shared/dedicated application environments.

l. Provide 24x7x365 pager support for all production systems.

m. Perform application and database security scanning of the NCC web-hosting servers. Facilitate TVA scans by outside parties, such as OITO/CSS staff, or other contractors. Respond to scans and TVAs by writing point-by-point responses to scan findings and by remediating any vulnerabilities found.

n. Provide customer support to application owners and developers (i.e., respond to inquiries regarding the operations status, assistance in connecting to and using the environments, resolution of problems with use of the environments, etc.). (Customer support to the end user should be referred to the appropriate help desk support.)

o. Provide monthly briefings to the EPA on the status of the environments and the activities of the contractor support

p. Provide notifications and customer support using the Listserv service. Support includes the creation of Listserv services, the management and maintenance of the Listserv, and customer and billing information.

q. Develop and document SCDs for each application and database platform.

C.5.6.1.1 SUBTASK 1.1 - ADMINISTER BUSINESS INTELLIGENCE AND ANALYTICS CENTER (BIAC) APPLICATION PLATFORMS AND ENVIRONMENTS

The contractor shall administer the application platforms and environments supported by the BIAC, including BusinessObjects, Oracle Business Intelligence, Informatica PowerCenter, SAS, and any added by the BIAC during the period of performance. Historically, BIAC platforms have changed no earlier than every three years. The contractor shall maintain applications in accordance with EPA, OEI, OITO, NCC, BIAC, and WCF policies, procedures, and standards in accordance with the Program Manager, BIAC.

C.5.6.1.2 SUBTASK 1.2 - INFRAVIEW

The contractor shall operate the Agency's ScienceLogic EM7 tool, OITO's selected technology solution for presenting IT Managers information about the configuration and status of the Agency infrastructure. ScienceLogic's EM7 tool was adopted by the EPA in 2009. The technology monitors operational status of infrastructure devices and presents, via a web-based dashboard, various views of the infrastructure. Multiple audiences are served by this information, from CIO/CTO through Federal and contractor IT operations personnel.

The contractor shall develop, maintain, and arrange for the distribution of documentation describing the system and its use. The contractor's functions shall include user account management, user assistance, device discovery, device monitoring protocol design and configuration, alert protocol design and configuration, dashboard and report design and development, "dynamic application" development and implementation, integration with external data management systems, integration with problem/incident management systems, monitoring the health and performance of the EM7 system, configuring the EM7 system for data backup/recovery, configuring EM7 system security, recommending enhancements to the EM7 infrastructure, and recommending enhanced and additional application of EM7 to improve the EPA IT infrastructure and the operation thereof.

C.5.6.1.3 SUBTASK 1.3 – SECOND LEVEL TECHNICAL SUPPORT

For middleware platforms, the contractor shall provide all labor, supervision, and processes necessary to resolve customer questions and problems that cannot be resolved in the EPA Call Center. This staff shall be responsible for providing support to customers in accessing and effectively using any platform and any supported software on those platforms operated by the NCC. The contractor shall use the OITO Incident Management/Ticketing system (Currently Remedy) to capture user questions and problem resolution.

C.5.6.2 SUBTASK 2 –APPLICATION DEPLOYMENT AND SUPPORT

The contractor shall deploy applications and systems across EPA NCC platforms, including cloud platforms, and environments. Currently, 98% of deployments are for custom EPA applications.

The contractor shall deliver the Application hosting and deployment services through NCC's ADC process. The contractor shall utilize the checklist (Attachment R) in order to ensure that

each application can be hosted in the target environments, that sufficient capacity and configuration requirement are in place, and that Agency-required procedures and documentation are in place. The contractor shall perform any necessary verbal and email communications between application developers and the hosting teams. Detailed information on the ADC Process is provided in Section J, Attachment R.

The contractor shall:

a. Provide technical support for the deployment and hosting of Program Office applications across all application platforms (Section J, Attachment BB) operated by the NCC in accordance with EPA, OEI, OITO, NCC, and WCF policies, procedures, and standards.
b. Continually improve the efficiency of, and optimize the resources required for, ongoing deployment and hosting support.
c. Provide real-time monitoring and troubleshooting of application performance issues, using EPA-provided tools (currently Riverbed AppResponse).
d. Provide operations and maintenance support for the ADC system including front-ends, databases, and any additional technology used as part of the ADC system as well as ensure data quality. The contractor shall produce standard and ad hoc reports as needed.
e. Perform code reviews of applications in the ADC process and of application maintenance, modifications, and updates.
f. Upon direction through the Task Assignment Process, perform load testing during the deployment process. (Historically there are two to six load tests per year.)
g. Scan all code deployed to NCC-managed platforms using EPA tools before deployment to production.

The contractor shall manage the communication and meetings required to support the ADC process. The contractor shall:

a. Coordinate, schedule, and document in the ADC system as the application complexity requires.
b. Plan, prepare, and document meetings and training regarding the ADC process as directed by EPA.

C.5.6.3 SUBTASK 3 – WEB APPLICATION DEVELOPMENT

The contractor shall develop applications, websites, web pages, web-based applications, and databases, in accordance with EPA policies and related Federal standards and procedures. The contractor shall utilize Agile methodologies where applicable. The contractor shall provide search engine enhancements and support. The contractor shall manage the full lifecycle of application and web projects efficiently and cost effectively. The contractor shall provide requirement analysis, design, development, testing, documentation, and implementation as defined. The contractor shall provide graphic and media support to those customers who require it.

Each application development project is assigned via the TZ process of section C.5.4. The contractor shall deploy all applications through the ADC process and provide the customer with support throughout the engagement.

The contractor shall provide weekly Application Development updates and organize and/or attend meetings as needed. The information shall be reported, such as issues, TA updates, customer budget updates, status of deliverables, progress on tasks, and trip reports.

The Application Development assignments will follow the TZ process described in C.5.4. Historically, there have been 120-130 Web Application Development related Task Assignments per year. The types of Web Application Development related task assignments are outlined below in Subtasks 3.1 through 3.6.

C.5.6.3.1 SUBTASK 3.1 - DEVELOPMENT OF APPLICATIONS

The contractor shall provide full software lifecycle development support in response to a Task Assignment. The contractor shall utilize business process analysis methodology and system design alternatives to assist customers in the planning process. The following EPA standard tools are available to the contractor:

a. Oracle database
b. Cold Fusion
c. Perl, Java, PHP, and CGI
d. LAMP
e. ASP.NET
f. Oracle ApEx
g. SharePoint
h. Drupal

C.5.6.3.2 SUBTASK 3.2 - DEVELOPMENT OF CUSTOMER WEBSITE PAGES

The contractor shall provide the following support in response to a Task Assignment:

a. Graphic design and development
b. Search engine meta-tags
c. Document conversion
d. Content management
e. Section 508 compliance
f. Link verification and validation

C.5.6.3.3 SUBTASK 3.3 - DEVELOPMENT OF SEARCH ENGINE ENHANCEMENTS

The contractor shall provide any of the following support in response to a Task Assignment:

a. Create custom search pages / results templates
b. Evaluate new search technologies
c. Develop extensions to search engine such as Try-Me-First
d. Develop special reports and web content tracking tools

C.5.6.3.4 SUBTASK 3.4 - OITO WEBSITE SUPPORT

The contractor shall develop, implement, and maintain the program office's website, including gathering and distributing materials to keep the client community informed of all program office services or changes in services. The contractor shall keep the information current and up to date in order to refresh the look and feel of the site to encourage more visibility and access to pertinent information. The contractor shall continuously seek new information and update the intranet websites.

The contractor shall provide standard website maintenance for the program office website to include the pages supporting WebForms, HTML, graphics support, organizational charts produced in Visio, and HTML link checking. The contractor shall provide support for maintenance and minor enhancements to the Oracle databases and ColdFusion interface pages within the program office website.

The contractor shall work with NCC staff and the program office immediate office and shall provide development, maintenance, and technical support for the program office website. The contractor shall:

a. Maintain, update, and post OTEP web content to include WCF billing spreadsheets, new FY information for WCF services (must be completed 75 days after the receipt of the WCF data from NCC/OITO), OITO-wide news stories, articles, memos, outages etc., change management agenda (weekly basis), OTEP employee web pages, Portal/Sametime/Quickplace pages, calendar, organizational charts, and Operational Directives.
b. Create news alerts and memos; convert text and post hardware/software changes and items of interest as approved by EPA.
c. Maintain IT Services pages including Service Managers, Service Information, and Ordering Information.
d. Support front and back-end components of OITO intranet web application.

The contractor shall provide development, maintenance, and technical support for NCC-specific pages. This support includes:

a. Update and maintain NCC content and all web pages to include, but not be limited to: BIA Website, NCC Improvement Project pages, Change Management pages, Hosting and Network pages, Websites and Application pages.
b. Ensure all links work and material is pertinent.
c. Draft NCC content as appropriate.
d. Post NCC-related news stories, articles, memos, outages, etc. to front page of intranet site.
e. Create news alerts and memos; convert text and post hardware/software changes and items of interest as approved by EPA.
f. Administer and maintain Development Server.
g. Develop test applications prior to going production.
h. Post monthly meeting summaries as needed.
i. Provide revisions, redesign, and content management as needed for the CEMVL site.

C.5.6.3.5 SUBTASK 3.5 – DATA ANALYTICS SUPPORT

The contractor shall support the EPA Data Analytics Program (EDAP), including the following:

a. Operate and maintain the dedicated VM Servers (currently 6 Linux and 4 Windows) hosted within the NCC and the associated software (Qlik Server 3.0, Tableau 9.2, HortonWorks Data Platform (HDP) 2.5, Open Source Statistics software includes Open CPU 1.3, Revolution R Open 3.2.1, RevoMath-3.2.1 and Open Source RStudio version 1)

b. Provide secondary support for users accessing the EDAP environment hosted on the Amazon Cloud via the CDX contract.

c. Provide project support to the EPA customers using the EDAP environments (NCC and Amazon), including support with technical issues (i.e. access, login, rights and privileges) and project specific support (e.g., use of software tools and data)

d. Support EPA efforts to establish a fully operational cloud hosting environment with a full Security Plan and ATO.

e. Assist with and support training sessions conducted for new users.

C.5.6.3.6 SUBTASK 3.6 - APPLICATION AND DATABASE

The contractor shall provide all the necessary personnel and tools responsible for the performance, integrity, and security of customer databases and application design, adhering to EPA data definition and data attribution standards, and compliant with the EPA enterprise and technical architecture.

When tasked through an Assignment Task (Section 5.4), the contractor shall:

a. Analyze security and data requirements.

b. Analyze database content.

c. Identify data storage efficiency improvements.

d. Provide recommendations regarding data normalization and optimal database design.

e. Test and review system design documents, analyzing for performance impact within the production environment.

f. Provide application performance monitoring and troubleshooting.

g. Perform application maintenance which includes, but is not limited to, problem analysis, modification, enhancement, and application database administrator functions.

h. Provide technical support for the deployment and hosting of Program Office applications across all application platforms (Attachment QQ, “TO2 SWInventory.xlsx”) operated by the NCC in accordance with EPA, OEI, OITO, NCC, and WCF policies, procedures, and standards.

i. Provide project management support and team coordination for application deployment and hosting activities as defined below.

j. Provide customers with real-time monitoring of application performance.

k. Use the ADC process to manage application deployments.

l. Provide technical services, security, database, GIS, imaging, and any other application requirements as defined within the hosting options and record decisions, project schedule, and other relevant information in the ADC system.

m. Perform code reviews and code scans of applications in the ADC process and of application maintenance, modifications, and updates.

n. Perform load testing.

C.5.6.4 SUBTASK 4 - STATIC WEB PRIVILEGED GROUP MANAGEMENT (PGM) APPLICATION SUPPORT

The NCC utilizes a static web hosting platform to house content for a portion of EPA's intranet and public access (www.epa.gov) websites. A static web-hosting platform is also used to offer File Transfer Protocol (FTP) services and provide a staging area for static content. Access to the static web platforms are managed by the Privileged Group Management (PGM) system. PGM ties directly into the Web Access Management (WAM) system to manage both server-level and group-level permissions for these servers. PGM provides static web content owners and Automated Data Processing (ADP) coordinators the ability to manage access to specific web areas on each static web server without intervention from WAM support staff.

The contractor shall manage the PGM application, including developing enhancements and reporting capabilities, troubleshooting problems, and maintaining the application database. The contractor shall investigate problems with user access and work with other TO groups to resolve user access problems.

C.5.6.5 SUBTASK 5 – WEBFORMS SUPPORT

WebForms is the Agency electronic forms application which is widely used across the Agency for the Standard Form (SF) 182 and over 50 other forms. WebForms is built on Domino and a COTS product, PDF Infusion, from ITM Associates. WebForms is now in legacy operations mode, which means that functionality is frozen and that all form changes are paid for by form owners. The WebForms service is provided under the WebForms WCF (sometimes referred to as Service DF). Service DF is mandatory for all Federal employees and is optionally orderable for other desktop subscribers.

The contractor shall provide the necessary personnel, facilities, and equipment, except such facilities and equipment that may be set forth as Government furnished, to assist the OEI to:

a. Maintain the existing WebForms with operations and maintenance support.

b. Create and modify Workflow and Fill and Print forms utilizing the PDF infusion software.

c. Create and implement additional features and functions needed by OEI to enhance existing capabilities and satisfy user recommendations.

d. Modify and/or create new forms as requested by the user community.

e. Provide documentation to meet Agency system lifecycle documentation requirements.

f. Maintain a database of potential enhancements, modifications, and, bug fixes, and make this data available in a format suitable for use by the EPA WebForms Workgroup. The Workgroup's charter includes advising OEI on the priority of WebForms modifications and enhancements.
g. Provide second- and third-level support for WebForms users. That is, when end users call or email the EPA Call Center or WebForms Support, the WebForms Support team shall assist end users and resolve WebForms tickets.

C.5.6.6 SUBTASK 6 –ENTERPRISE CONTENT MANAGEMENT SYSTEM (ECMS) AND IMAGING SUPPORT

The Enterprise Content Management System (ECMS) is the Agency's national records management system. ECMS is built on the EMC Documentum framework. ECMS was deployed as an Agency-wide project led by the OEI's Office of Information Collection (OIC).

EPA's imaging and ECMS infrastructure establish a foundation for the secure, integrated, and accessible storage and management of the Agency's document content and records. This includes electronic records and documents, email, and web sites.

The scope of this sub-task does not include the development of imaging and ECMS applications, but rather is the support for the program office applications targeted for this infrastructure. The contractor shall perform the following activities:

a. Advancement and ongoing planning with program offices and application developers.
b. Participation in the ADC process and to identify issues, problems, requirements, technology consultation and other steps necessary to deploy imaging applications.
c. Technical assistance to application developers to identify and resolve application or infrastructure problems.
d. Troubleshoot performance problems with other teams, identify the root cause, and make recommendation for resolution.
e. Provide technical consulting services to developers to identify deployment processes, security requirements, schedules, architecture issues, application integration, etc.
f. Provide consulting support to OIC for new and existing applications.
g. Support the following operational imaging applications and new imaging systems which go through the ADC process:
    1. superfund enterprise management system (SEMS)
    2. ECMS/Email
    3. Scorpios
    4. administrative records on the web (ARWEB)
    5. correspondence management system (CMS)
    6. 5Year

The contractor shall provide additional technical support for the ECMS infrastructure as documented below. The contractor shall:

a. Provide installation and maintenance of Documentum and miscellaneous other imaging supporting software and components at the NCC and in some cases program or regional offices.
b. Provide technical support for imaging applications targeted for the ECMS infrastructure.
c. Provide support for performance analysis, tuning, and troubleshooting of the ECMS and imaging infrastructure.
d. Provide program and regional office support for image scanning applications. This includes the installation, maintenance, and troubleshooting of imaging hardware and software. Currently, remote scanning infrastructure components are Kofax and EMC/Captiva technologies, and Abby FindReader. The contractor shall also support new imaging technologies.

C.5.6.7 SUBTASK 7 – GEOSPATIAL SUPPORT

Through the OITO, EPA provides services to assist with, maintain, and enhance the Geospatial activities, projects, services, and technical infrastructure that enable the Agency's geospatial community to do their jobs.

The NCC's Geospatial Support Services are made up of three interwoven functions that work in concert with one another to provide full technical and support coverage for the Geospatial Community and the Agency as a whole.

The contractor shall provide:

a. Support (Geospatial governance, tools, Tier 2 technical support) for geospatial user community. The contractor shall use the WCF Geographic Tools provided through Enterprise Licenses (EG) to facilitate those services.
b. Special project support for customer projects or services via a Task Assignment. This support is currently provided via the WCF Consulting Service (TZ).

The contractor shall serve as the National Geospatial Support (NGS) team. The contractor's objective shall be to provide a better understanding of EPA or external customers' geospatial needs and how various datasets and the shared geospatial infrastructure are used. The contractor shall serve as geospatial software Tier 2 geospatial help desk personnel, as well as implementers and technical experts supporting the full spectrum of Geospatial requirements. The contractor shall maintain and operate the NCC's geospatial infrastructure and support the GIS user community in the proper way to implement GIS solutions throughout the agency. The contractor shall serve as a broad-based and capable team to support the geospatial experts within the Agency and better able to respond to support requests from the Agency's geospatial analysts and solve their technical issues.

The contractor shall provide the EPA with high quality structured support to create standards-based procedures and an integrated geospatial environment for testing, hosting, and sharing of geospatial data and information across the EPA Regions, Laboratories, and Program Offices. In addition, the contractor shall manage the web-enabling geospatial applications, supporting existing geospatial customers, and promoting the use of geospatial technologies and shared infrastructure/resources throughout the Agency.

The contractor shall contribute to EPA's goal of expanding and enhancing the geospatial capabilities available to EPA customers and facilitate and support a collaborative and cooperative development and hosting environment between the OEI, the Regions, Program Offices, and Laboratories. The contractor shall efficiently and effectively support all constituent-driven applications and enhance geospatial service delivery, while performing at an overall reduced cost through unified architecture, server, and storage consolidation, consistent licensing and maintenance services, and systematic collaborative web development.

C.5.6.7.1 SUBTASK 7.1 - GEOSPATIAL USER COMMUNITY SUPPORT UNDER THE GEOGRAPHIC TOOLS - ENTERPRISE LICENSE (EG) SERVICE

The contractor, through the Geographic Tools - Enterprise License (EG) service, shall assist clients with the integration and use of a variety of geospatial technologies including the Environmental Systems Research Institute, Inc. (ESRI) software within the technical infrastructure components of EPA's Enterprise Architecture for Program Offices, Regions, and Laboratories. Through these services, the OITO provides access to the contractor and their extensive expertise with the ESRI software suite and EPA's technical infrastructure. The contractor shall assist with loading, configuring, deploying, and tuning geospatial tools and technologies that can be used to solve mission-critical problems on desktops and servers.

In addition to the ESRI suite of geospatial software, the contractor shall have knowledge of and support JAVA, ColdFusion, ORACLE, SQL Server, PostgreSQL, ENVI, MrSID, Windows, IIS, Tomcat, Xtools Pro, Google, Bing, and the utilization/development of Application Program Interfaces (APIs) to facilitate their geospatial solutions. Additionally, the geospatial tool set is evolving and the contract support staff shall have familiarity with emerging geospatial and related technologies. The contractor shall be familiar with open source technologies that are standards based.

The contractor shall provide technical support for geospatial infrastructure tasks that may include the following:

a. Provide Geospatial expertise to the geospatial user community and EPA.
b. Provide geospatial software review, beta testing, and support for new software releases.
c. Provide technical support including the authoring and development of standard configuration documents and guidelines for hardware and software, system evaluation, software installation support, advanced problem solving/troubleshooting, and beta testing new geospatial software and future releases/upgrades.
d. Provide support to the EPA Geospatial Information Officer (GIO), the OEI Geospatial Team, the GIS Work Group Steering Committee, and other geospatial committees, teams, and workgroups.
e. Conduct technical review and analysis of EPA's Enterprise Architecture efforts and their integration with the Geospatial Program.
f. Assist users with accessing the EPA's shared geospatial infrastructure, to include the EPA GeoPlatform and National Spatial datasets and/or other data sources. This access to data and services includes sources both internal and external to the Agency.
g. Assist users with creating accounts and logging into and utilizing the EPA GeoPlatform.

h. Respond to requests for support and assistance from the Agency's geospatial analysts to solve technical issues, help with software installation and configuration problems, aid with tuning architecture, and assist in accessing specific data sources.
i. Plan and implement spatial data management strategies for storing and retrieving large volumes of spatial data as well as planning for future infrastructure developments in direct support of the Agency's geospatial analysts and managers.
j. Assist in geospatial application development, including integrating geospatial software with major databases and/or web-enabling geospatial data and products.
k. Provide analysis of emerging technologies and document the results in white papers or presentations that support EPA's geospatial community.
l. Deploy and integrate geospatial software products within the existing EPA Enterprise Architecture.
m. Operate and maintain the NGS Support website and the GIS Listserv.
n. Provide assistance/support to the Agency's Georesources website.
o. Provide support to user calls, recording the nature of the support requested, staff responsible, program office/region of the user, time spent on the call, and if the call is part of a TZ project, using the EPA-provided trouble ticket system.
p. Provide a quarterly summary of support activities.
q. Conduct/present briefings and training to the geospatial community.

C.5.6.7.2 SUBTASK 7.2 - GEOSPATIAL TECHNICAL CONSULTING SUPPORT

The Geospatial Consulting Service (TZ) is available to EPA program offices that need dedicated labor and resources for specific requirements defined through the TZ process (Section C.5.4). In 2016, there were 25 Geospatial TZ projects, averaging 920 hours per project. Out of the 25, three to four were considered large projects, with the remainder as small to midsized. The contractor shall perform work defined by the EPA program office within a Task Assignment as defined in the TZ Process in Section C.5.4. More than half of the Geospatial support from the contractor shall perform TZ special projects through the Task Assignment process.

Geospatial Task Assignments may include:

a. Geospatial support for special projects and for developing and deploying geospatial applications and databases.
b. Simple to complex geospatial analysis, creation of enhanced datasets, manipulation of imagery.
c. Data services and metadata creation.
d. Remote Sensing Imagery acquisition, supervised and unsupervised classification, change detection analysis, and feature extraction for digital mapping and database building.
e. Customized geospatial web application development, geospatial map creation for other web applications, interactive image maps, 3D renderings, and metadata services.
f. Customized geospatial training.
    1. Web development support that provides full life-cycle support for internet and intranet web pages and applications that are geospatial in nature.

2. Geodatabase support including design, security, data conversion, testing, deployment, enhancements, monitoring, performance tuning, and problem solving.
3. Requirements analysis, pilot and proof-of-concept projects, data analysis, and research on new and evolving technologies.
4. General geospatial and related technology consulting.

C.5.6.7.3 SUBTASK 7.3 – WEB APPLICATION DEVELOPMENT FOR GEOSPATIAL

The contractor shall develop applications, websites, web pages, web-based applications, and databases, in accordance with EPA policies and related Federal standards and procedures. The contractor shall utilize Agile methodologies where applicable. The contractor shall provide search engine enhancements and support. The contractor shall manage the full lifecycle of application and web projects efficiently and cost effectively. The contractor shall provide requirement analysis, design, development, testing, documentation, and implementation as defined. The contractor shall provide graphic and media support to those customers who require it.

Each application development project is assigned via the TZ process of section C.5.4. The contractor shall deploy all applications through the ADC process and provide the customer with support throughout the engagement.

The contractor shall provide weekly Application Development updates and organize and/or attend meetings as needed. The information shall be reported, such as issues, TA updates, customer budget updates, status of deliverables, progress on tasks, and trip reports.

The Application Development assignments will follow the TZ process described in C.5.4. Historically, there have been 120-130 Web Application Development related Task Assignments per year.

C.5.6.8 SUBTASK 8 - REMOTE SENSING TECHNICAL CONSULTING SUPPORT

C.5.6.8.1 SUBTASK 8.1 - BACKGROUND

The U.S. EPA, OEI requires the contractor to provide operational technical support to EPA Regional Offices for remote sensing and data integration. All Remote Sensing work is done through EPA's Task Assignment Consulting Services (TZ) described in Section 5.4. The contractor shall have access to the EPA Environmental Photographic Interpretation Center's (EPIC) Film Archive, in order to provide support to EPA Regions and Program Offices. The EPIC Archive is currently located in Las Vegas, NV and will require on-site access and support. The EPIC Archive is located at University of Nevada, Las Vegas (UNLV) campus at the Office of Research and Development (ORD) facility and houses the historical imagery, reports, cut frames and library holdings for the imagery analysis service. The contractor shall provide one full-time local employee at the EPIC Archive. The EPIC archive is owned by ORD but is accessed by the Remote Sensing contractors to retrieve and use the historical materials housed in the archive. The contractors need to be able to get into the EPIC archive to do their job when searching for past reports/studies or imagery covering the new project area requested by a customer. The contractor shall provide a wide-range of support for remote sensing technology

related to natural, industrial, and cultural resources identification and mapping, and photographic interpretation which include Hazardous Waste Site Evaluation; Fracture Trace Analysis, Sanborn Maps, Land/Use/Land Cover Evaluation; Aerial Photography and Satellite Imagery Acquisition and Mission Planning and GIS Applications.

All Remote Sensing work (Section C.5.6.8) shall be managed utilizing the Task Assignment process described in Section C.5.4.

Products designated in the Task Assignment shall be sent via mail (e.g., U.S. Postal Service, other commercial carrier) or hand-delivery from the contractor to the EPA TPOC and/or customer for review and then for final delivery. The contractor shall produce and retain a duplicate original quality copy of each product sent to the EPA TPOC and/or customer.

In Fiscal Year 2016, Remote Sensing TZ had six requests, averaging 250 hours for each effort. The two smaller projects were mainly aerial photo acquisitions that were provided to the customer and they chose to perform the analysis themselves or via their own local contract. The one medium project and the two larger projects were full photo acquisition and analysis projects.

The contractor shall support EPA's international activities in the application of remote sensing technology to environmental problems occurring outside the U.S. Historically, international remote sensing support has not been required, but the contractor shall be prepared in case of International emergency.

C.5.6.8.2 SUBTASK 8.2 - REMOTE SENSING

The contractor shall execute remote sensing data collection, processing, interpretation, and digital analysis in support of EPA's mandated regulatory programs. Activities shall include the processing and analysis of imagery from various sensors for inventorying natural and cultural resources and features at both site specific and regional scales. Activities to be accomplished by the contractor shall require state-of-the-art knowledge of emerging remote sensing and mapping technologies and application of these new technologies in support of requests from regional offices.

C.5.6.8.3 SUBTASK 8.3 - AERIAL PHOTOGRAPHY

The contractor shall provide technical support for aerial photography and digital aerial photography as defined below.

The contractor shall perform land use and land cover studies, compliance monitoring, point and nonpoint pollution source inventories, and intensive analysis of specific sites using aerial photographs and collateral information. The contractor shall use the following imagery types: black and white, color, and color infrared photography and digital photography.

As its primary data source, the contractor shall use the available archival aerial photographs from the Imagery Archive that includes conventional nine-inch by nine-inch aerial photographs with color or color infrared transparency films. These media provide enhanced differentiation of subtle characteristics associated with such features as surface leachate, surface water turbidity, soil moisture and vegetation stress, and land cover. The contractor shall also use imagery from various types of aircraft. The contractor shall provide imagery analysis services and shall perform historical analysis of sites using available archival aerial photographs (from EPA and

other sources) and newly acquired digital imagery resources from Federal and private vendors as needed to accomplish assigned tasks. The contractor shall witness testimony relative to their analyses, and shall perform in the capacity of an expert witness when required by work assignment.

The contractor shall provide image analysis support services for four basic types of operational remote sensing tasks using overhead imagery. These support services are as follows:

a. Emergency Response: The highest priority is emergency response under hazardous material release situations requiring rapid assessment of conditions at a location. A response time of 24 hours or less may be required in some instances. When current information is required, the contractor shall acquire new imagery, including those from satellite systems, for the specified purpose.
b. Single Date Analysis: The contractor shall perform single date image analysis on new imagery or on historical imagery taken during a particularly significant period in the history of a site. The contractor shall conduct single analysis on one set of photos/imagery coverage on or around a certain date.
c. Historical Analysis: The contractor shall perform intensive imagery analysis on historical aerial photographs and/or digital imagery to document changing conditions over a period of time using historical or newly acquired hardcopy imagery and/or digital imagery.
d. Inventories: Image analysis inventories (current or historical) or surveys over large areas shall be performed by the contractor to establish a baseline index of potential pollution sources or hazardous waste sites using historical or newly acquired hardcopy imagery and/or digital imagery.

The contractor shall provide/acquire aerial imagery anywhere in the U.S. or its Trust Territories using the services of qualified aerial photographers or digital acquisition firms.

The contractor shall have the capability to scan and process photographic products at resolutions suitable for achieving the original resolution and/or information content of the photographic product, and to produce output products from the scanning process, including, but not limited to, paper plot contacts and enlargements, DVDs, CD-ROMs, flash drives, and other portable storage devices. Any storage media used should be archival quality. The contractor shall have the capability to enhance the digital image data obtained through the scanning process in order to achieve the information content contained in the original photographic (e.g., print, positive or negative transparency) product. For any activity that results in a rectified digital image/product, that image/product shall be submitted to the Image Archive as a record with all required metadata (Federal Geographic Data Committee (FGDC) compliant). All materials checked out from the EPA's Image Archive shall be returned to the Archive in the original condition and in a timely manner. Any original images, documents, or other materials checked out from the EPA's Archive that are damaged or made unusable shall be replaced at the contractor's expense.

C.5.6.8.4 SUBTASK 8.4 - LIGHT DETECTION AND RANGING (LIDAR)

The contractor shall provide technical support for the acquisition and processing of LIDAR remote sensing data. The contractor shall have the ability to perform the following:

a. Acquisition of LIDAR data.

b. Quality assurance of posting data to include an accuracy check of the vertical and horizontal components.
c. Importation of LIDAR ASCII data into the ArcGIS environment.
d. Production of elevation models as Triangulated Irregular Networks (TINs) and interpolated GRID format for GIS software.

C.5.6.8.5 SUBTASK 8.5 - OTHER AERIAL OR SATELLITE REMOTE SENSING IMAGERY

The contractor shall acquire, process, and produce analysis and reports using remote sensor data other than aerial photographs. These include digital and analog remote sensing data using the latest emerging technology available to acquire these services, including, but not limited to, the following:

a. Black and White (panchromatic), color visible and infrared imagery from non-aircraft platforms (i.e., Unmanned Aerial Vehicle (UAV) and Satellite) such as QuickBird, GeoEye, SPOT, IKONOS, and WorldView 1/2/3.
b. Reflective and emissive Infrared imagery and data such as Landsat, Moderate Resolution Imaging Spectroradiometer (MODIS), Advanced Very High Resolution Radiometer (AVHRR), Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER), Thermal Infrared Multispectral Scanner (TIMS), and Forward Looking Infrared (FLIR) systems.
c. Active Sensor Imagery such as Radarsat, Terrasar-X, Phased Array type L-band Synthetic Aperture Rader (PALSAR), Unpiloted Aerial Vehicle Synthetic Aperture Radar (UAVSAR), Japan Earth Resources Satellite (JERS), European Remote Sensing (ERS), and Shuttle Imaging Radar (SIR).
d. Passive Multispectral Imagery such as Landsat, Advanced Land Observation Satellite (ALOS), Indian Remote Sensing-Linear Imaging Self Scanning (IRS-LISS) or MODIS;
e. Hyperspectral Imaging systems such as Airborne Visible/Infrared Imaging Spectrometer (AVIRIS), Hyperion, HyMAP, HyDice, and Compact Airborne Spectrographic Imager (CASI).
f. Experimental sensors (e.g., airborne thermal infrared and hyperspectral sensors).
g. Fluorescence imagery and data.
h. Laboratory and field spectroscopic measurements/libraries and analysis.

This activity shall include analyses of the feasibility of using these types of data for determining landscape features, material identification, physiological and ecological condition, landscape pattern change, accuracy assessments of land use/land cover data, landscape indicators, and other features and conditions of environmental significance.

C.5.6.8.6 SUBTASK 8.6 - GEOGRAPHIC INFORMATION SYSTEMS (GIS) STUDIES/REPORTS SUPPORTING REMOTE SENSING PROJECTS

The contractor shall provide operational GIS data products as needed under Task Assignment requests. In this capacity, the contractor shall perform GIS studies using the data derived from remote sensing analysis and other spatial data sources.

The contractor shall obtain necessary data to support GIS analyses, digitize data or extract it from other sources, perform analysis and mapping tasks, and produce appropriate documents, graphics, and databases. Some of these materials may be in a website-compatible format.

The contractor shall maintain a state-of-the-art capability to provide all GIS products in an ArcGIS or other specified GIS software formats such as Keyhole Markup Language (KML), KMZ (a compressed KML), and Open Geospatial Consortium (OGC). The contractor personnel shall be thoroughly familiar and proficient with GIS software.

In the past years, there were three projects/studies provided per year as deliverables to the customers.

C.5.6.8.7 SUBTASK 8.7 - PHOTOGRAMMETRIC AND CARTOGRAPHIC SUPPORT

The contractor shall support the spatial data needs requirement through the development of photogrammetric and cartographic products, including compiled map products, elevation models, and, ortho-imagery and other such necessary spatial data compatible with GIS functionality. The contractor shall operate standard photogrammetric/cartographic production equipment such as digital “softcopy” photogrammetric workstations and analytical stereo comparators in order to provide image, map, and measurement results in either digital or analog form.

C.5.6.8.8 SUBTASK 8.8 – REMOTE SENSING QUALITY ASSURANCE

The contractor shall utilize EPA’s existing Quality Assurance (QA) procedures and SOPs relating to the functions and operation of EPA’s remote sensing program.

The contractor’s QA procedures/SOPs shall include, but not be limited to, the following:

a. Health and safety
b. Security
c. Data collection
d. Graphics preparation
e. Image analysis and report reproduction

The contractor shall develop and implement new QA procedures as needed. The contractor shall recommend additional new and updated QA plans and SOPs as technology develops. The contractor shall maintain and report proper calibration and servicing of equipment.

The contractor shall follow the Agency-wide QA policy that stipulates every monitoring and measurement project task shall have a written and approved QA Project Plan that presents the policies, organizational structure, objectives, functional activities, and specific QA and quality control (QC) activities designed to achieve the data quality objectives (DQOs) of a specific project. Further guidance for the contractor is provided in the Attachment MM and Attachment NN.

The contractor shall provide or reference each major function required to produce a product containing monitoring and/or measurements. Calibration procedures, frequency of calibration, and the standards to be used in the process shall be documented. Internal QA checks and procedures shall be described for each function. (Examples of functions are data management,

cost estimating, invoicing, data collection/processing, photo lab, graphics, image analyses, GIS, photogrammetric mapping, etc.).

Audits of system and performance functions shall be planned and described in the QA Project Plan developed by the contractor in support of any applicable Work Assignments issued under this TO. The system audit evaluates all components of measurement systems to determine proper selection and use to confirm that QC procedures and documentation are in place. Corrective action procedures shall be described that include the predetermined limits for which corrective actions are required, procedures for corrective action, and responsible individuals for initiating and approving corrective actions. The final Remote Sensing project deliverables shall include a separate QA section that summarizes data quality and analysis information contained in the report.

When given a TZ, the contractor shall develop and implement QA/SOPs for new programs as technology develops. The contractor shall prepare a detailed QA/SOP Project Plan for each support function provided to each work assignment task involving monitoring and/or measurements. The specific information to be included in the QA/SOP Project Plan may be referenced from a detailed Master QA Project Plan and/or SOP. Specifications shall be provided on acceptable products including data collection, data processing, mapping, scales, graphic symbols, and line weight. The QA Project Plan shall be provided with the Technical Work Plan Cost Estimate and Final Report. The final report shall contain a QA section on the accuracy of the products. Additional QA information may be requested by identifying specifics in the work assignment.

Occasionally, the contractor shall be requested by EPA for an audit of QA/QC procedures applied by the contractor to the remote sensing technical support program or to selected remote sensing support project(s). The number of audits requests by the EPA per FY will not exceed four.

The list of references for standards and accuracy are found here:
https://www.fgdc.gov/metadata/geospatial-metadata-standards

Please see Section J, Attachments MM and Attachment NN for an example of Remote Sensing products to be purchased in support of Section C.5.6.8.

C.5.6.9 SUBTASK 9 – APPLICATIONS MARKETING AND OUTREACH SUPPORT

The contractor shall perform marketing and outreach activities, including the creation and distribution of information, to keep the client community informed of all current and upcoming program office or NCC services. The objective is to keep the customer informed of current and up-to-date information and to encourage more visibility and access to pertinent information.

The contractor shall develop, implement, and maintain Application Marketing Materials to keep EPA informed of all program office and NCC services. These materials may include websites, brochures, pamphlets, posters, mailing lists, and other outreach material. The contractor shall continuously seek new information to be used in these materials. The contractor shall provide graphics and technical writing support. The contractor shall design, develop, operate, maintain, and implement listserv and other electronic communications. Support may include posters, signage, on-site support, or other mechanisms identified by the OEI.

C.5.7 TASK 7 – CLOUD COMPUTING SUPPORT

In December 2010, OMB published a 25-Point Implementation Plan to Reform Federal Information Technology Management. The Plan mandated a "Cloud First" requirement and laid out a path to improve efficiency, effectiveness, and service delivery for restructuring IT in Government. To meet the objectives of Cloud First, EPA developed a strategy built around three areas of cloud services. These areas include: offering an on-premise internal NCC private cloud to EPA hosting customers, acquiring cloud hosting services from one or more external cloud service providers, and positioning the NCC as a Center of Excellence that offers cloud consulting services.

Under this task, the contractor shall support a portion of the work necessary to meet EPA's cloud strategy objectives. The work performed under this task by the contractor shall include:

a. Supporting the self-service component of EPA's on-site private cloud.
b. Providing technical expertise on NCC's hosting environment to assist with establishing interconnections between EPA and external third-party service providers.
c. Providing cloud application consulting services to application owners.

C.5.7.1 SUBTASK 1 - SELF-SERVICE SERVICE CATALOG DESIGN AND SUPPORT

The contractor shall create and maintain a Service Catalog for services that can be ordered and delivered through the self-service and automation software that supports the NCC private cloud. Virtual machine and other cloud service templates included in the Service Catalog shall meet existing SCD requirements. The contractor shall publish the contents of the Service Catalog in an alternate format useful for briefings, presentations, or customer training. The contractor shall program the automation software (currently vRealize) to incorporate business process workflows into the self-service ordering interface.

The contractor shall perform the following tasks:

a. Develop custom scripts to augment auto-provisioning and workflow features.
b. Manage the logical design of the associated database.
c. Incorporate workflows that support self-service ordering and automation of service delivery.
d. Identify new requirements for self-service and automation features.
e. Develop enhanced reporting capabilities within the auto-provisioning interface.
f. Provide training on how to use the self-service ordering interface.
g. Assist customers in using or troubleshooting workflow problems with the self-service/automation software.

C.5.7.2 SUBTASK 2 - EXTERNAL CLOUD INTEGRATION SERVICES

The contractor shall develop an enterprise architecture identifying solutions to integrate external cloud service providers with the OITO in order to meet EPA's cloud strategy, which will include OITO and potential third party cloud services. The architecture design shall include integration

points such as network connectivity, network services (e.g., Domain Name Services (DNS), IP Addresses, etc.), identity and access solutions, and other technical interfaces.

C.5.7.3 SUBTASK 3 - CLOUD APPLICATION TECHNICAL CONSULTING (TZ)

EPA's cloud strategy calls for the OITO to establish itself as a Center of Excellence that offers consulting services to help application owners determine how to best utilize cloud hosting resources. The contractor shall provide consulting services to assist application owners to determine if their application is cloud ready and/or what cloud architectures are best suited for their application. The Cloud Application assignments will follow the Task Assignment process described in Section C.5.4.

The contractor shall provide the following cloud application technical consulting services:

a. Develop decision criteria for applications owners to use to evaluate NCC internal and external cloud hosting options.
b. Assist application owners to evaluate cloud architectures to determine which one is the best fit for their application.
c. Assist application owners to identify technical hurdles to address when moving an application between the NCC's private cloud, NCC's legacy non-cloud environment, or an NCC-sponsored external service provider.
d. Help application owners assess their application for cloud readiness based upon a set of published cloud-readiness assessment criteria.
e. Assist application owners in adopting cloud-based architectures for their applications.
f. Develop technical reference documents and publish design considerations for hosting applications in EPA's internal private cloud.
g. Provide recommendations to application owners on what changes need to be made to optimize their application to use cloud architectures.

C.5.8 TASK 8 – NETWORK SECURITY OPERATIONS

This task includes the operations and management of DDI services for EPA. DDI includes DNS, Dynamic Host Configuration Protocol (DHCP) and Internet Protocol Address Management (IPAM) functions. Secure DNS (DNSSEC) is considered a component of DNS. Wide Area Network (WAN) monitoring, reporting, and WAN diagnostics using network sniffers, flow analyzers, Simple Network Management Protocol (SNMP) monitoring and similar tools are also included within this task.

Administrative support of the datacenter routers and switches in the following locations is also a necessary and key component of the Task 8 support requirements:

NCC Datacenter (MTIPS circuit termination location)
PYD Datacenter
WJC Computer Room (MTIPS circuit termination location)
Denver CRSSM
Chicago CRSSM
NEIC Colorado Computer Room

Regional closet switches supporting end user devices (desktops and laptops) are not part of the support requirements and therefore out of task order scope.

There are approximately 60 physical L2/L3 router/switch devices located across the various locations identified above. These devices explicitly support datacenter operations and the majority of the devices are located within the NCC Datacenter. The total number of devices are expected to shrink as legacy end of life devices are replaced and consolidated with newer hardware.

Administrative support requirements associated with the router and switch support include:

- Daily O&M of networking devices within the defined datacenters and computer rooms to include:
    - OS administration and patching
    - Creation, monitoring, and deletion of accounts used to access router/switch devices
    - Monitoring of all data center network devices for availability and performance
    - Implementation of changes as required to support data center projects approved by EPA
    - Troubleshooting of issues related to traffic and connectivity within the data center networks

Additional background information is provided in Section J, Attachment GG.

Operations, management, and administration of networking components incorporated into converged infrastructure are within the scope of this task. Current examples of converged networking components included Virtual Desktop Infrastructure (VDI) switches and networking components associated with network attached storage.

C.5.8.1 SUBTASK 1 - MANAGEMENT OF THE EPA NETWORK AND SECURITY OPERATIONS CENTER (NSOC) SUPPORT

The EPA Network and Security Operations Center (NSOC) manages the core technical operations and maintenance components of WAN Operations and Security Operations. NSOC is responsible for the continuous monitoring and oversight of the EPA WAN, network operations and security operations. The contractor shall perform NSOC functions from EPA-provided space within the NCC, RTP, NC. The contractor shall maintain core functional staffing during primary hours (M-F 6:00 AM – 9:00 PM local time). The contractor shall work closely with the EPA CSIRC which is located in the NCC.

The contractor shall manage and maintain network wiring, punch downs, patch panels, and cross-connects within NCC data centers and computer rooms. The contractor shall acquire, at Government discretion, wiring-related items to include patch cables, jumper cables, cable terminators (copper and fiber), fiber, patch panels, and related materials.

EPA cloud environments (private, hybrid, and Cloud Solution Provider (CSP)) that are covered by Agency Certification and Accreditation (C&A) boundary shall be supported by the contractor. Support for secure TIC-compliant connectivity between EPA and the cloud environment, virtual firewalls, virtual networking, and DNS/IPAM components of DDI are expected to be core

components supported under this subtask. EPA expects to have connectivity to our Microsoft Azure commercial instance in place prior to award. This connectivity will utilize AT&T Netbond, Microsoft ExpressRoute and AT&T Network based security services. EPA is actively working to expand the initial cloud connectivity to include Microsoft O365 in FY17.

The contractor shall respond to security audits and Plans of Action and Milestone (POA&Ms) as required. The contractor shall support EPA development and maintenance of the WAN Security Plan which documents processes, procedures, architecture, interdependencies, and assumptions by which the EPA WAN implements, tests, and complies with governing Federal security standards such as under the latest version of the NIST Special Publication (SP) 800-53, Recommended Security Controls for Federal Information Systems and Organizations. EPA currently utilizes Xacta for management and storage of security plan information.

The following documents (Section J, Attachment QQ) provide additional information on SOPs utilized on this task and should be used for reference.

a. EPA-SOP_NSOC_Asset_Management_v1.2
b. EPA-SOP_NSOC_Technical_Service_Request_Management_v1.10
c. EPA-SOP-NSO_Equipment_and_Application_Access_Management_v1.40
d. EPA-SOP-NSO_System_Security_Plan__Review_v1.0
e. EPA-SOP-NSOC_Change_Management_Process_v1.0
f. EPA-SOP-NSOC_Configuration_Management_v1.00
g. EPA-SOP-NSOC_Diagrams_and_Information_List_Management_v1.1
h. EPA-SOP-NSOC_Firewall_Management_v1.20
i. EPA-SOP-NSOC_Incident_Management_v1.00
j. EPA-SOP-NSOC_IPAM_DNS_and_DHCP_Administration_v1.1
k. EPA-SOP-NSOC_Log_Managment_v1.0
l. EPA-SOP-NSOC_Monitoring_v1.00
m. NSOC_WAN2010_Support_Procedures

C.5.8.2 SUBTASK 2 - WAN OPERATIONS

WAN Operations provide day-to-day operations and maintenance for the EPA WAN, connecting the 10 U.S. Regions (including Alaska, Hawaii, and Puerto Rico), research laboratories, Washington, D.C. Headquarters, and RTP sites. The EPA WAN2010 task order, awarded to AT&T under the GSA Networx contract, manages and operates all WAN routers (approximately 120-150) connected to the MPLS backbone.

The contractor shall work in close coordination with the Networx contractor or other providers to properly specify, order, install, and maintain WAN circuits and hardware in operational status. It is the goal of the EPA to keep the WAN operating as close to 100 percent availability as scheduled maintenance and budget allows.

Under this task, the contractor shall provide DDI services for EPA. DDI includes DNS, DNSSEC, DHCP, and IPAM functions. EPA runs a split DNS configuration for segmentation of internal and externally resolvable addresses. WAN monitoring, reporting, and WAN diagnostics using network sniffers and similar tools are also within scope.

EPA currently utilizes Alcatel-Lucent *VitalQIP* for DDI services. The contractor shall manage the operations and maintenance of the proposed DDI solution.

All WAN equipment operated and maintained under this TO shall be operational 24x7x365 to perform the prescribed support services. Primary hours for delivery of services are 6:00 AM - 9:00 PM local time, Monday through Friday.

The contractor shall maintain the task standard maintenance window of Wednesday nights, from 9:00 PM to 4:00 AM Eastern Time or as approved by EPA. The contractor shall utilize EPA's change control process and record all service requests in the EPA-approved tracking system that allows for escalation and workload reporting. The contractor shall respond to outages occurring during core hours within 30 minutes. The contractor shall respond on-site to NCC and D.C., if required to repair a non-business-hour outage, within two hours of notification of an outage. The contractor shall track all open trouble tickets.

The contractor shall manage implementation of new requirements via the present Telecommunication Service Request (TSR) process, operate the RTP-based Network Control Facility (NCF), and provide second level Network Technical Support (NTS). WAN support calls are routed via the EPA Call Center to the NCF, where active monitoring of the network shall be performed by the contractor. The NCF is currently located within the computer room of the NCC. If necessary, the contractor shall escalate troubleshooting to next level of support. The contractor shall support WAN telecommunications operations providing design, installation, upgrade/changes, documentation, reporting, and ongoing maintenance support. The contractor shall manage and coordinate with support Service Providers and telecommunications services Service Providers to provide circuits, services, hardware/software, maintenance, billing/dispute resolution, and problem resolution.

The contractor shall provide the following:

a. Support for WAN operations including moves, additions, and other changes, and network service restoration related to the WAN.
b. Support the Request for Change (RFC)/TSR system to manage incoming WAN work requests. The average number of TSRs processed each year is between 125 and 150.
c. Monitor network devices (e.g., firewalls, IDS, router, switches, servers, etc) servers, and applications using the EPA SNMP monitoring tool (EM7) from ScienceLogic. EM7 is capable of receiving SNMP traps to alert on specific conditions. EM7 is one of the key tools for situational awareness of EPA systems.
d. Operate circuit provisioning and billing/dispute resolution.
e. Manage documentation including network diagrams, procedures, recommendations, problem root cause analysis, reports, inventories, and support for response to audits.
f. Support network design, configuration, operations, and management based on EPA policy, FISMA, NIST, and industry best practice.
g. Create and deliver reports related to WAN as requested by EPA (i.e. reports related to WAN health and circuit utilization).
h. Support Network Access Control (NAC)
    1. NAC is currently implemented for Enterprise wireless access only. EPA utilizes Cisco ISE infrastructure which includes Cisco ISE, Prime and Cisco Wireless

Services Module (WiSM) functions. These tools are used for NAC, monitoring, reporting, rogue access point detection, and securing Enterprise Wireless.

2. The Department of Homeland Security (DHS) Continuous Diagnostics and Mitigation (CDM) project is deploying ForeScout technologies in EPA for NAC functions for wired/wireless connectivity to EPA networks. The EPA Enterprise Network Services (ENS) contract in flux may change the core network infrastructure used by NAC today. The contractor shall manage NAC functions using the tools provided by ENS and CDM.

This contractor service support shall include network Request For Changes (RFCs), currently provided under the TSR process. The RFC encompasses EPA IT customer requested moves, additions, and changes to the WAN including network project management and special projects to support evaluations, cross-task efforts, presentations, exercises, and conferences.

The contractor shall:

a. Facilitate network service restoration with minimal business impact; provide Telecommunications Critical Outage (TCO), Telecom Facility Notification (TFN), and Scheduled Maintenance Activity (SMA) notifications shortly after each unscheduled outage or service degrading incident or prior to a scheduled outage via email.
b. Provide normal service restoration as quickly as possible while minimizing adverse business operations impact.
    1. Escalation to a higher level support group(s) as necessary.
    2. Log, track, and manage the resolution to all WAN-related incidents, end-to-end, as well as handle and coordinate resolution of incidents related to external networks impacting the EPA.
    3. Identify, resolve, and report security-related incidents.
c. Provide and maintain all network documentation and procedures. Update documents as changes occur. The contractor shall create a logical, integrated, easily accessible repository for the task documentation of procedures, scripts, configurations, security changes, project history, and other WAN documentation.
d. Protect sensitive task documentation by appropriate security measures consistent with policy and data sensitivity.
e. Incorporate specific documentation in EPA website(s) in a timely manner, when directed by the task manager(s).
f. Produce TSR Reports with New/Pending status online shortly after TSRs are received, and update as changes occur.

The contractor shall perform Network Problem Management that shall include identifying problems, reporting and tracking problems via the EPA call management system, developing and providing the root cause analysis of incidents, and initiating improvement or corrective actions to prevent incident recurrence.

The contractor shall:

a. Provide and maintain documentation of network assets and configurations, including security configurations (i.e. WAN Security Plan).

b. Provide hardware and software maintenance and support. Coordinate EPA property and loaner equipment movement with the task manager(s), EPA property office(s), and support Service Provider(s), and Service Provider(s) (including maintenance providers) property offices so that property is properly accounted for and the proper groups are notified.
c. Maintain historical property information and otherwise assist EPA in locating EPA equipment including physical inventories of WAN tools, equipment, and software.
d. Provide input to an EPA central Configuration Management Database/System (CMDB) and Definitive Software Library.
e. Properly secure, control, and maintain network periodic inventory reconciliations and produce and deliver reports to auditors as requested (i.e. Hardware and software inventory (to include all capital and non-capital hardware and software procured and maintained under this task area).

The contractor shall manage change management and perform the following:

a. Manage the network additions, modifications, or removals of WAN hardware, software, or circuits.
b. Participate in Change Advisory Board (CAB) and engineering review boards governing network changes.
c. Produce or provide input to a Forward Schedule of Change(s) (FAC) in accordance with EPA guidelines in the EPA system for change management, presently the call management system.
d. Manage RFCs using industry standard Project Management Professional (PMP) principles, guidelines, and rigor.
e. Ensure change back-out plans are provided, tested, and approved prior to scheduled changes.

The contractor shall manage Network Service Levels and perform the following:

a. Monitor and report on SLA performance monthly with Service Providers, such as the WAN 2010 Networx provider. Monitor and report on all WAN performance metrics to continuously improve network performance.
b. Project bandwidth trends and report same monthly with previous month's data included with recommendations for WAN changes.
c. Research, review, analyze, recommend, and initiate RFCs for network changes to improve performance.
d. Provide documentation of these activities, including information papers, decision/recommendation papers, and project plans.

The contractor shall maintain the network maintenance contract records and perform the following:

a. Ensure that maintenance is in place, upon expiration of warranty for new systems, software, and hardware (except "as is" property) that support the task. Advise the task manager(s) so that arrangements may be made to cover the equipment or software with the appropriate maintenance contract.

b. Advise the EPA TPOC when covered items may be safely removed from maintenance and periodically review, in coordination with the task manager(s), maintenance coverage to reduce maintenance costs.
c. Provide assistance to EPA to ensure that maintenance contracts are revised in a timely fashion to account for items swapped out under a maintenance contract so that the old item is removed and the new item is included under maintenance and there is no double coverage of old and new or lapse in coverage.
d. Feed information to RFCs for cost analysis/impact of proposed RFC.
e. Maintain WAN circuit listing, including associated network costs, and update as changes occur. Cost listing should provide meaningful statistics including, but not limited to, identifying the last time the circuit was billed and paid as well as an outstanding balance, and the account summary for each circuit and how many months the billing is in arrears as of the end of the current month.
f. Maintain monthly WAN circuit outage credit report including monetary credits for circuit outages.
g. Provide support for WAN circuits for the EPA including service ordering and implementation of ancillary products and services, billing management, and technical consulting to the EPA.
    1. Monitor an EPA email billing mailbox DAILY that receives invoices for 75 data circuits billed monthly as well as other billing questions that EPA finance may have.
    2. Review 150-200 emails/invoices monthly sent by EPA Finance to the WAN billing mailbox on a daily basis. Duplicates are submitted.
    3. Perform SA role for 25-30 AT&T Business Direct EPA user accounts. Perform less than five password rests per month.
    4. Coordinate and schedule 20-30 site visits per year by telecommunication vendors to EPA sites nationwide.
    5. Review and validate charges on all bills submitted to the EPA WAN billing mailbox within seven calendar days or less once received in the WAN billing mailbox to meet the Government's 30-day Prompt Payment Act requirement.
    6. Monitor/review 90-110 TCO notices sent out per year by the EPA NSOC to determine when to file request outage credits for violation of contractual service SLAs.
    7. Make programming changes as needed in the two databases to support WAN billing validation and historical record keeping.
    8. Research invoice/billing questions from EPA Finance each month that require researching the EPA circuit payment databases and/or researching the EPA financial data warehouse database.
    9. Submit WAN circuit pricing Request for Quotes (RFQs)/questions to multiple telecom vendors with multiple bandwidth options for each one.
    10. Perform an analysis of the alternatives based on the bandwidth received per unit cost, to include necessary equipment, and miscellaneous installation costs and recommend a course of action for each situation to the EPA POC.

11. Continually maintain an accounting of the monthly cost of each individual circuit (210 circuits) to be able to provide calendar year and budget year fiscal projections based on actual and/or projected installation and initiation of billing.

C.5.8.3 SUBTASK 3 - NETWORK SECURITY MANAGEMENT

The objective of security management is to provide adequate logical protection for EPA systems, network-attached resources, and data assets of the Agency. Physical protection is the responsibility of the facilities' management organizations, yet the contractor shall provide possible technical consulting for specialized physical security requirements involving NCC data centers and computer rooms. The contractor shall provide protection of EPA's network security infrastructure devices. Due to the Agency's highly distributed network topology, security management responsibilities are decentralized to some degree. Local SAs and LAN administrators throughout the Agency programs, Regional offices and Laboratories share the security management responsibilities for the logical protection of their locally managed resources.

Security management includes the centralized assets within NCC-managed data centers and computer rooms, EPA network perimeter, the WAN providing connectivity among the distributed sites, and the distributed network routers that mark the connectivity transition between the WAN and the LAN environment at the distributed sites.

The contractor shall operate and maintain EPA's network security infrastructure devices (e.g., firewalls, IDS/IPS sensors, security appliances, security management, and monitoring equipment) for the WAN, NCC data centers and computer rooms and virtual environments. This includes security operations oversight and monitoring, security management and reporting, security assessment and consulting, and security audits support for the WAN, NCC data centers and computer rooms and virtual environments.

EPA-owned formal firewall/Unified Threat Management (UTM) complexes (load balanced with failover capability) are currently located in the NCC and Washington, D.C. Specifically, the contractor shall perform the following functions related to the EPA firewall/UTM system management:

a. Perform administration, management, and support of production firewall clusters and test lab systems.
b. Provide recommendations to NCC Security, as appropriate, to improve EPA's security posture or address a specific situation/incident.
c. Ensure the firewall UTM systems are hardened, monitored, and maintained so as to provide protection against malicious external threats through the inspection of network traffic to and from EPA's security zones (intranet, public access, demilitarized zone (DMZ), Network Extension, etc.).
d. Operate, manage and use the Security Risk Management (SRM) tool. EPA is currently deploying Algosec security appliances. The Algosec Fireflow, Firewall Analyzer and Businessflow components are part of the SRM toolset.
e. Operate and Manage approved UTM functions (web filtering, IDS/IPS, proxy, etc.) within EPA security zones to include firewall Virtual Domains (VDOMs). There are currently 15-20 VDOMs in production.

f. Operate and manage VPNs terminated on firewall/UTM infrastructure.
g. Implement firewall rules approved via FRR process.
    1. Approximately 350 FRRs are processed annually. Firewall rules often have associated Move, Add, Change, Deletes (MACDs) within the AT&T Business Direct portal for applicable MTIPS changes.
h. Implementation of URL filter, IPS/IDS, DNS black hole, and non FRR-related security changes as approved by EPA.
    1. These average five to seven per week but can surge during active incidents. These non FRR related security changes often have associated MACDs within the AT&T Business Direct portal for applicable MTIPS changes.

The contractor shall provide security management using industry best practices and by applying risk management concepts and theories that effectively manage and monitor EPA's IT security infrastructure. The contractor shall provide engineering support in the configuration, management, audit, and operation of security components including, but not limited to, firewalls, IDS/IPS, authentication servers, VPNs, NAC, and server/network vulnerability and assessment tools. EPA firewalls are Next Generation (NG)/UTM devices from Fortinet with traditional firewall, IDS/IPS, web filtering, application filtering, Data Leak Protection (DLP), and proxy functionality. The contractor shall manage Security Technical Operations, which is responsible for, and uses, the FRR process to provide customer support in development and review of firewall rules. The contractor shall ensure that requests are technically correct and accurate and any associated risks are quantified.

The contractor shall support security configuration assessments, operations standards development and implementation, and security measurement and monitoring of technologies including virtualization, Web 2.0 collaboration suites, cloud computing, security zone definition and implementation within the NCC data centers and computer rooms, and the implementation and use of sophisticated security, network, and server monitoring tools (e.g., ArcSight security incident and event management (SIEM), Science Logic's EM7 tool, Symantec Endpoint Protection (SEP), ForeScout CA, Tenable Nessus, and Splunk).

AT&T is responsible for the daily operations and management of MTIPS. Security Technical Operations utilizes AT&T (BusinessDirect) to access data related to the AT&T MTIPS security infrastructure. The contractor shall utilize MACD requests via BusinessDirect for changes to MTIPS enforcement policies, utilization of BusinessDirect tools for monitoring of MTIPS and EPA perimeter risks.

The contractor shall review security plans and security analysis and provide recommendations for proposed EPA initiatives resulting in modifications to infrastructure and/or EPA security posture.

The contractor shall operate the EPA Vulnerability Management (VM) initiative using the McAfee Foundstone tool. EPA currently maintains 5,000 Foundstone licenses. EPA expects the VM tool to migrate to Tenable Nessus Security Center in 2016 as part of the DHS CDM initiative. Processes and procedures related to VM will be updated based on new CDM tool sets and requirements.

The contractor shall perform the following VM functions:

a. Perform Technical Vulnerability Assessments (TVA) and compliance scans as directed by NCC Security.
b. Submit results of scan to SA for port justification and review of vulnerabilities found.
c. Assist SAs with interpreting scan results and remediation efforts.
d. Create final reports at completion of scan and submit to NCC Security.
e. Perform monthly discovery scans for all Internet Protocol (IP)-reachable, network-attached devices and provide in a searchable inventory database (DB). The discover scan process is expected to change in 2017 and utilize data from the CDM ForeScout NAC tool and Tenable Nessus Security Center to determine network attached devices.
f. Perform ad hoc scans as directed by EPA. This includes both credentialed and non-credentialed vulnerability scans.
g. Support and maintain the EPA-purchased VM infrastructure of servers, business process, and knowledge base for VM customer support.
h. Use VM Remediation Module to manage the remediation of Agency servers in concert with responsible SAs and Information Security Officers (ISOs).
i. Produce routine reports reflecting Agency-wide remediation activity by office/region on a monthly basis. Roll-up shall be by OS, site/location/organization, level of risk, etc. The CDM initiative is expected to implement a dashboard function that will be utilized for reporting vulnerabilities in the future.
j. Maintain VM documentation (e.g., processes, SOPs, system documentation, etc.).

The contractor shall provide and support technical implementation, operations, maintenance, and administration of security infrastructure devices used to protect and defend Agency IT resources and data. These devices include, but are not limited to, network monitoring appliances, host monitoring appliances, firewall/UTM appliances, the placement of the appliances, and the controls of the appliances. The contractor shall provide continuous monitoring, as well as analyses of the data observed and reported by these components. The contractor shall also provide technical leadership in the evaluation and decisions regarding distributed network security appliances.

The contractor shall adhere to, and ensure compliance with, all Agency technology standards for configurations, and shall be responsible for all operations procedures and documentation. The NCC currently operates all security infrastructure devices (firewalls/UTM) for protecting the Agency's centralized computing resources and the WAN, including perimeter devices separating the EPA WAN from the internet, firewalls, and sensors protecting public-facing IT resources in a DMZ, and firewalls and sensors protecting EPA's more sensitive intranet resources. AT&T is responsible for O&M of the WAN2010 MTIPS infrastructure. MTIPS infrastructure provides protection at the perimeter between EPA and the internet. EPA provides direction to AT&T on EPA-specific security policies implemented within MTIPS.

As part of the implementation of operation and maintenance activities for new technologies, the contractor shall develop installation instructions, operational security procedures, and other appropriate documentation.

The contractor shall:

a. Assess, recommend, implement, and document all potential changes to EPA's security infrastructure.
b. Consider the security implications and connectivity alternatives available for supporting NCC and WAN customers. (Security Access Management)
c. Provide strategic analyses and vision for Agency security needs compared to emerging technologies and the need for operations changes. (Security Infrastructure Assessment and Planning)
d. Provide security consulting services to NCC customers as requested by EPA.
e. Perform regular, recurring compliance monitoring and reporting, and support special assessment projects that include, but are not limited to, Office of the Inspector General (OIG) audits/reviews, other oversight requirements from internal EPA offices and external entities, risk assessment support for the NCC and WAN environments, and C&A support in accordance with FISMA requirements.
f. Operate and maintain all security infrastructure devices identified by EPA under the scope of this TO at the specified service level.
g. Provide 24x7x365 on-call support to resolve issues with security infrastructure devices.
h. Review and monitor security infrastructure device and firewall logs daily and act on all identified issues.
i. Develop, maintain, and document various scripts for security infrastructure devices and support systems, including monitoring, integrity checking, log rotation and retention, operating system maintenance, and statistics/trending.
j. Support, identify, and plan various security system backup methods and operations.
k. Maintain documentation for system administration, troubleshooting, Graphical User Interface (GUI) access procedures as needed.
l. Implement root/administrator access restriction for security infrastructure devices to EPA approved set of support personnel. The contractor shall maintain a listing of users, their access and permissions, their roles, and security level.
m. Use Agency standard configurations for all security infrastructure devices as available.
n. Provide engineering support for the configuration, management, audit, and operation of EPA's security infrastructure components, including, but not limited to, firewalls/UTM, IDS/IPS, authentication servers, VPNs, NAC and server assessment tools.
o. Provide engineering support for security pilots, technology testing/product assessments, and standards development.
p. Utilize EPA security test-lab environment for purposes of testing the effects and implications of security infrastructure changes, including, but not limited to, hardware and software changes, firewall rule changes, script changes, scanning and monitoring procedures, and parameter changes.
    1. For security management, change management includes required and/or proposed changes to system configurations, and required and/or proposed changes to system security controls. Due to data sensitivity, the NCC Financial Record Review (FRR) process operates independently from the normal operations change management process. The contractor shall manage the FRR workflow, coordinating meetings and FRR development between the various stakeholders,

and ensuring sufficient documentation is present to justify the change. The contractor shall work with customers to develop FRR documentation. While the majority of FRRs will be related to NCC ADC application, the contractor shall also help create FRRs for other customers.

q. Utilize, manage, and oversee a security access management process for requests and requirements from the internet and/or intranet, as well as among diverse security zones within NCC data centers, computer rooms, and virtual environments. The contractor shall be responsible for utilizing Agency-approved security controls and monitoring software tools to perform auditing of security infrastructure system and system file access attempts, failed logon attempts, repeated password changes, attempts to modify or alter the contents, or protection of system files.

r. Review NCC's General Support Systems (GSSs) and Major Application (MA) security plans. Security plans must be checked for compliance with the NIST 800-18, Guide for Developing Security Plans for Federal Information Systems, guidelines and for technical content appropriateness. The contractor shall coordinate with the GSS and MA system owners to ensure that all technical security controls have been tested and perform as required. The contractor shall ensure that documentation is maintained to show evidence of the implementation and successful operation of all technical security controls. The contractor shall also review security plans submitted as part of the ADC workflow process. The contractor may also provide security assessment and planning consulting services on demand to EPA customers of the NCC, under the direction and involvement of the EPA TPOC. These services may take the form of security plan reviews and assessments, security architecture advice, and/or security incident mitigation strategies. Security technologies for evaluation shall be identified by and/or approved by the EPA. Reports shall be generated and presented in NCC-approved formats for either informational purposes or in support of NCC decisions on security technology strategic direction. Historically, Security Plan reviews averaged at one plan review per month.

s. Evaluate new and emerging security technologies to identify security risks and impacts to EPA.

The contractor shall support gathering, review and coordination of data utilized by EPA for quarterly FISMA reporting for identified GSSs and MA. This effort includes the execution of approved Agency compliance tools on a regularly defined schedule, review and assessment of compliance results against approved system configuration and security control policies and procedures, management and oversight of all remediation activities, and the preparation of quarterly reports documenting NCC GSS compliance. Ad hoc compliance testing, assessment, remediation, and reporting are also required as dictated by emergency situations, such as critical system patches and/or system security control changes due to imminent threats. The contractor shall support and participate in external oversight audits as needed, ensuring inquiries and responses are coordinated, documented, and reviewed by the NCC.

C.5.9 TASK 9 – CYBER SECURITY

C.5.9.1 SUBTASK 1 - ENTERPRISE COMPUTER SECURITY INCIDENT RESPONSE CAPABILITY (CSIRC)

The Enterprise CSIRC provides central command distributed 24x7x365 response and incident handling capability. The contractor shall perform CSIRC functions such as preparation, detection and analysis, containment, eradication, recovery, post-incident analysis, and forensics. The Incident Response shall incorporate industry best practices, risk management concepts and theories, and OMB/NIST guidance. The contractor shall coordinate with internal EPA groups and external EPA partners perform in an effective, proactive, and cost-effective manner. The contractor shall incorporate incident-related information obtained from a variety of sources through audit monitoring, network monitoring, physical access monitoring, and user/administrator reports, and lessons learned from ongoing incident handling activities into Enterprise Security Incident Response procedures, training, and testing.

The contractor shall:

a. Manage cyber-related incidents in the Agency-defined Incident Management System.
b. Adhere to Agency and DHS incident response reporting requirements and notification guidelines.
c. Review, update, and make recommendations to the existing Incident Response Plan and related processes and procedures. This shall include inputs from national exercises, lessons learned, after actions, training, and other sources determined by the Government. Create, update, and distribute incident after action and lessons learned report.
d. Update existing recommendations document to increase security posture based on incident analysis and root cause analysis and shall track the recommendations and current status. In collaboration with Federal representatives, the contractor shall reference and align recommendations in a format following NIST 800-61 and the framework for improving critical infrastructure for cyber security.
e. Create, update, coordinate, and track national exercises as agreed upon by the Government. This may include table-top exercises, more robust functional exercises, and scenario-based exercises. NIST SP 800-84 and 800-115 must be utilized as guidance on test, training, and exercise programs for IT plans and capabilities. The electronic log shall include names of participants, information system name(s), type of exercise, and date of completion.
f. Create, update, and maintain security awareness and training materials that may be provided in various forms, including first responder guides, security newsletters, intranet web pages, briefings, incident handling activities, policy, Incident Response (IR) plan, procedures, roles and responsibilities, and instructor led training sessions. NIST SP 800-84 and 800-115 must be utilized as guidance on test, training, and exercise programs for IT plans and capabilities. The electronic log shall include names of participants, information system name(s), type of training, and date of completion. A minimum of eight hours annually of training is required.

C.5.9.2 SUBTASK 2 - SITUATIONAL AWARENESS

Agency senior management requires visibility on the continual status of EPA's cyber security situational awareness. The contractor shall collaborate with the ISO community within the EPA, as well as many different Federal agencies, to gather and disseminate information. Through the situational awareness and support function, the contractor shall perform regular metrics evaluations. In collaboration with Federal staff, the contractor shall identify the key attributes that will be monitored. This includes bringing together information from a large number of information security systems, such as SIEM, IDS/IPS, firewall, content filters, DNS, black-hole reports, endpoint security platforms, patch and vulnerability management systems, penetration testing, cyber threat intelligence, portals, ticketing systems, etc.

The contractor shall:

a. Create, update, and deliver a cyber operations/mission situational awareness report. The contractor shall utilize existing EPA automated tools and/or human interaction.
b. Conduct a periodic situational awareness briefing to the EPA security community virtually, with an approximate average duration of 15 to 30 minutes. (Actual time will depend on content, current threats, and participant questions/comments). The briefing content shall be derived from an aggregate of information from various sources to include, but not limited to, existing EPA tools, cyber industry reports, cyber community alerts, briefings, or notices. The frequency will be determined as needed to address current risks to the Agency and may occur daily or less frequently.
c. Review "as-is" situational awareness reports and provide expertise to propose new ideas and solutions to move situational awareness towards a near real-time solution; the contractor shall remove manual processes while adding further automation and process improvement.

C.5.9.3 SUBTASK 3 - INFRASTRUCTURE MANAGEMENT AND SUPPORT (IMS)

Infrastructure Management and Support provides strategy, design, implementation, configuration, operation, and disposal of tools within the cyber security architecture. The operational lifecycle is key for a successful program. Teamwork across tasks, organizational boundaries (e.g., Helpdesk and Network and Security Operations), and various stakeholders is vital to the success of this subtask. The Government has established and will maintain service and maintenance agreements for hardware and software; however, on-site support is required to implement replacement hardware/software/appliances.

The contractor shall:

a. Enable and support Agency's mission requirements by providing operational lifecycle management. Maintain cyber security hardware and software in order to be operational 24x7x365 to perform the prescribed functions. Full-time on-site support is not required; however, adherence to contingency response plans is necessary to provide expedient resolution to issues or problems. Coordination of all patches, upgrades, and maintenance updates through use of the EPA change management system shall provide visibility into the work being performed.
b. Monitor the health of the enterprise architecture. The contractor shall access, control, configure, receive/retrieve data from architecture components, then analyze, document,

report each architecture component's load capacity, and make recommendations to ensure health of overall enterprise architecture.

c. Troubleshoot. The contractor shall monitor data feeds and tools status to ensure continuous monitoring, interact with vendors to resolve outages, identify/repair configuration issues, perform patch management, and conduct any other resolution action.
d. Document operations and maintenance. The contractor shall identify, create, maintain, review, and validate operational and maintenance documentation for architecture components including an overall picture of the environment as integrated within the EPA infrastructure, including SOPs, SCDs, architecture diagrams, and capability charts to be included in an operations manual. The contractor shall document Agency processes including change management, incident management, problem management, release and deployment management, configuration management, capacity management, availability management, IT service continuity management, service level management, and security management. Ensure compliance with EPA technology patch/revisions policy and service levels to include remaining within one revision/patch update of current release at all times. The management of Task 9 documents and artifacts will be done in accordance with a Document and Artifact Management Plan that is created, updated, and maintained by the contractor.
e. Integrate with other EPA infrastructure hardware/software as necessary, including incorporation of logs for any existing or future devices in the EPA infrastructure which are capable of producing operational logs.
f. Support modernization and enhancement services for each existing system and subsystem as budgets permit. This includes requirements analysis, planning, testing, and deployment of updates to existing systems in response to regulatory and statutory changes.
g. Provide access and maintain accountability to cyber-related tools, in order to maintain an auditable record of access granted to sensitive data. Account management shall adhere to principle of least privilege and need to know.
h. Prepare, conduct, and participate in training on cyber security services for EPA Information Security Personnel via videoconferencing, in-person or as appropriate.

C.5.9.4 SUBTASK 4 - DATA ANALYSIS/TRENDING/ALERTING (DATA)

Please refer to DATA background in Section J, Attachment HH.

The contractor shall:

a. Update, maintain, and disseminate cyber-security reports that provide ongoing analysis of all existing data, identifying trends, creating alerts, tracking notification requirements, metrics, status tracking, and other information as needed with regards to evolving threats that effect EPA's security posture.

b. Analyze as-is state and to-be states and propose innovative solutions that address identified weaknesses in Information Systems and privacy controls, data collection, analysis, visualization, and reporting.

c. Coordinate, create, revise, and maintain ad hoc reports per Government requirements. Some examples include, but are not limited to, Federal Information Systems Management Act (FISMA), Presidential Management Council (PMC), and emergent cybersecurity

focused high-priority efforts. The contractor shall expect to support ongoing related quarterly and annual reports as well.

C.5.9.5 SUBTASK 5 – CONTINUOUS DIAGNOSTIC MITIGATION (CDM) SUPPORT

The tools described in Attachment CC are currently managed under a separate CDM contract. In Option Year 1 of this TO, the tools shall be transitioned, operated, and managed by the contractor.

C.5.9.6 SUBTASK 6 - PENETRATION TESTING

Penetration testing shall be performed by request on an ad-hoc basis. The contractor shall expect to perform approximately six penetration testing requests per year. Penetration capabilities to provide a solution that allows for multiple, simultaneous attacks across various Agency systems to speed the overall testing of existing security controls. With substantial information provided, the contractor shall enable and work collaboratively with the Agency, Federal, and CSIRC personnel to launch attacks on other machines, applications or users residing on the same network to understand the feasibility of a particular set of attack vectors. The contractor shall provide clear and accurate reports and provide options to present relevant, actionable results data to different types of readers. Implementation shall require minimal customization. The Government has established and will maintain service and maintenance agreements for hardware and software; however, on-site support is required to implement replacement hardware/software/appliances. The solution may be managed and operated by the contractor, a third-party provider, or by EPA personnel or existing EPA support contractors.

The contractor shall work collaboratively with Federal representatives to review and establish a solution for conducting penetration tests for the Agency. The contractor shall create, review, and update the following:

a. Process, procedures, and other documentation as required.
b. Penetration Test Plans.
c. Penetration Test Rules of Engagement (ROE). The ROE will be created in accordance with NIST Special Publication (SP) 800-115.
d. Establish typical goals for Penetration Testing to include, but not limited to, the following:
    1. Attempting to access computer systems from inside the EPA network.
    2. Attempting to access computer systems from outside the network.
    3. Attempting to access EPA wireless networking systems and infrastructure.
    4. Performing social engineering, phishing attempts against EPA staff.
    5. Gaining access to sensitive information.
    6. Circumventing access controls and privilege escalation.
    7. Exploiting vulnerabilities to gain access to systems or information.
    8. Confirming that remediated items are no longer a risk.
e. Security Assessment Report to include findings and recommendations.

f. After action and lessons learned report to include recommendations for improvements.

The contractor shall attempt to exploit vulnerabilities and weaknesses throughout an IT system, including physical penetration testing, which shall be identified during scoping sessions and rules of engagement development.

The contractor shall include the types of attacks that are repeatable and present a consistent representation of threats. Penetration tests must include both internal and external attacks that may address the following penetration testing goals: Internal, External, Trusted, and Untrusted users.

The contractor shall work collaboratively with Federal representatives to identify and address attack vectors to review and address during penetration testing. These attack vectors may lead to a degradation of system integrity, confidentiality, and availability.

The contractor shall engage with system owners to determine the scope of the penetration test. During these scoping discussions, system components will be determined in-scope or out-of-scope for the penetration test. Penetration testing must not be performed on assets for which explicit permission has not been granted by the Government.

The contractor shall work collaboratively with Federal representatives to plan, create, and implement a Penetration Methodology and Requirements according to industry best practices and frameworks. Testing must be conducted at least semi-annually. The depth of testing and technologies to be tested is dependent on the penetration test system boundary and system scope. Additional attack vectors may be added when appropriate or suitable for an environment. The contractor shall manage the following:

a. Information Gathering and Discovery
b. Web Application/API Testing
c. Mobile Application Testing
d. Network Testing
e. Social Engineering Testing
f. Simulated Internal Attack Vectors

In defined exploitation scenarios, the contractor shall leverage attack vectors identified during information gathering and discovery to gain access to the target system. The contractor shall conduct unannounced spear phishing exercises on a quarterly basis and record and report statistics on observed click-through rates during the testing exercise.

In defined post-exploitation scenarios involving penetration, the contractor shall attempt to exercise vulnerabilities discovered during exploitation and attempt lateral movement to additional systems or further compromise.

The contractor shall include test plans in the penetration assessment activities, and results shall be documented in a Security Assessment Report (SAR). The contractor shall work in collaboration with Federal representatives to create a SAR reporting template.

The contractor shall provide expertise and guidance into penetration testing policy.

The contractor shall update the existing documentation catalog to track processes, procedures, checklists, diagrams and other documentation deemed necessary for successful operation. The contractor shall review and update all processes, procedures, checklists, and other documentation

defined in controlled document repository catalog while adhering to timeframes stated in documentation catalog.

The contractor shall provide implementation, operation, and maintenance of penetration testing hardware and software.

C.5.10 TASK 10 – END-USER IDENTITY AND ACCESS MANAGEMENT (EIAM) AND ACTIVE DIRECTORY (AD)

The EPA Identity and Access Management environment currently consists of Novell eDirectory/Identity Vault (IDV), Novell Secure Login (NSL), Novell Identity Manager (IDM), Novell IDM Driver (Active Directory/IDV sync), Password Sync Filters, and miscellaneous scripts.

The contractor shall:

a. Manage and administer the EIAM environment using industry best practices, as applicable, while ensuring security compliance with Federal mandates.
b. Ensure services are operational and that users and devices can authenticate to the infrastructure.
c. Continue support of legacy identity-related applications including ActivIdentity ActivClient middleware; NSL desktop single sign-on utility; End-user Password Self Service (PSS) application; and Account System Query (ASQ) PHP web application.
d. Upgrade/configure/patch EIAM environment in accordance with vendor-released updates.
e. Provide troubleshooting guidance and technical support to EPA Administrator community.
f. Enforce strong multi-factor authentication for user and privileged access to EPA workstations/servers using Homeland Security Presidential Directive-12 (HSPD-12) Credentials (e.g., EPA PIV card).
g. Perform annual health checks of EIAM infrastructure and take any necessary corrective actions.
h. Produce reporting to support audits and ad hoc report requests.
i. Update and develop standard technical operational and procedural documents supporting EIAM.

The contractor shall provide additional technical support for the WAM infrastructure as documented below. Specifically, the contractor shall:

a. Provide technical support to developers integrating application with WAM.
b. Provide technical support for SSO for non-portal applications.
c. Provide continued on-going support for existing WAM applications.
d. Provide ongoing support/modifications to the OID.
e. Produce user and application metrics.
f. Support the integration of WAM with the OITO Identity and Access Management (IAM) initiative.

C.5.10.1 SUBTASK 1 – WEB ACCESS MANAGEMENT (WAM)

Additional background information related to Task 10 is in Section J, Attachment II.

The contractor shall provide operations and maintenance of Web Access Management (WAM) and SecureAuth as well as providing general consulting services including integration with Juniper network devices for remote access to the EPA. All WAM Documentation shall be in line with Sections C.5.1.9. SCDs shall be kept current with all service packs, patches, anti-virus updates, and hot-fixes.

C.5.10.1.1 SUBTASK 1.1 – WAM OPERATIONS

The contractor shall:

a. Install, connect, configure, upgrade, and patch server software in accordance with EPA standards and vendor recommendations
b. Operate and manage the server and systems in accordance with EPA policies and procedures
c. Support continuous operation of the environments with the exception of planned maintenance windows
d. Improve the efficiency of, and minimize the resources required for ongoing operations of the environments
e. Utilize EPA change management procedures for all planned changes and emergency changes
f. Manage user access by adding, expiring, removing, and assigning access privileges for user accounts
g. Provide system access to customers as requested by EPA
h. Improve the knowledge and skills of the system administrators through ongoing training

C.5.10.1.2 SUBTASK 1.2 – WAM MONITORING

The contractor shall:

a. Monitor trends, aiding in the identification of problems
b. Track environment capacity and performance
c. Manage security alerts through defined escalation and change management procedures
d. Monitor & alerting of system issues through 24/7 monitoring systems
e. Escalation management following defined procedures
f. Monitor work-flow and data/user processing
g. Provide continuous hardware and operating system monitoring
h. Notify appropriate Systems Administrators of problems detected
i. Utilize OITO Incident Management/Ticketing system (Currently Remedy) for problem resolution as appropriate
j. Provide 24/7 pager or cellular phone support for production systems
k. In the event of a outage, perform an initial assessment and communicate status following the established escalation procedures

C.5.10.1.3 SUBTASK 1.3 – WAM VENDOR SUPPORT

The contractor shall:

a. When authorized by EPA TPOC, the contractor shall work with other contractor teams to coordinate and oversee all vendor-related technical activities including patching, incident response, and enhancement requests where appropriate
b. When an incident (problem) needs to be escalated to the vendor community, the contractor team shall follow existing EPA policies and procedures for allowing vendor access to system components

C.5.10.1.4 SUBTASK 1.4 – WAM SECURITY

The contractor shall:

a. Configure, implement, and maintain security of the environments in accordance with EPA security policy including configuration, patches, and access control
b. Maintain systems in compliance with Agency-approved scanning tools including BindView, Patchlink (BigFix), and the Foundstone Vulnerability Management Tool
c. Facilitate Technical Vulnerability Assessment (TVA) scans by outside parties, such as OITO/Technology & Information Security Staff (TISS), staff or other contractors
d. Respond to scans and TVAs by writing point by point responses to scan findings and the remediation of any vulnerabilities found
e. Coordinate and track responses to alerts issued by EPA's Computer Incident Security Response Capability (CSIRC)
f. Report all security incidents to CSIRC in accordance with existing EPA security procedures
g. Capture, rotate, and review system activity logs daily (weekend logs reviewed the following Monday) to identify and investigate unusual and/or unauthorized use
h. Conduct Access Control List checks on a scheduled basis

C.5.10.1.5 SUBTASK 1.5 – WAM BACKUP AND FAIL-OVER/RECOVERY

The contractor shall:

a. Regularly review and validate backup logs and produce backup reports
b. Maintain continuity of operations and failover capability consistent with the specific requirements of the EPA systems
c. Document and maintain an on-line backup schedule
d. Implement and manage fail-over systems located at the alternate EPA data center in DC
e. Execute contingency plan tests and exercises

C.5.10.1.6 SUBTASK 1.6 – WAM SUPPORT DESK/OUTREACH SUPPORT

The contractor shall:

a. Provide level 2 and 3 customer technical support
b. Respond to customer requests for information, support, and problem resolution
c. Work with the designated Call Center/Service Desk in promptly responding to customer requests for information and support
    1. Requests shall be tracked as tickets and subjected to service levels for response and resolution times based on ticket priority

d. Support mobile device, MAC and PC application for the SecureAuth OTP tool, as well as general access requests

C.5.10.2 SUBTASK 2 – ENTERPRISE ACTIVE DIRECTORY (AD)

The EPA uses MS AD services to manage users, groups of users, computer systems, and services. AD is installed on Windows Server 2008 R2 Standard and Windows Server 20012 R2 Enterprise Editions throughout the environment. AD provides a data store for objects, which typically includes user accounts, computer accounts, volumes, servers, printers, and organizational units. Data store information is replicated and stored on domain controllers, providing access to network applications and services. AD provides LDAP directory services, Kerberos authentication services, DNS naming, and secure access to resources.

At the enterprise level, the contractor shall engineer, design, and provide enterprise support for the EPA AD domain infrastructure and its subcomponents. The contractor shall maintain the health of the AD infrastructure to include the AD forest, domain controls, and the Organizational Unit (OU) while enforcing and adopting Federal mandates and policies and providing Tier 3 Support to SAs across the agency.

The current environment includes the following:

a. **Forest and Domains:**
    1. Two domains: an empty parent root with a single child domain. The child domain is used for authentication and resources domain.
    2. Two domains, one AD Forest, and 33 OUs for each Regional and Program Office.
    3. The AD environment has 10,000 plus OUs.
b. **Forest Functional Level:**
    1. Windows Server 2008 R2 Native Mode
c. **OU Structure:**
    1. Distributed throughout the Agency and based on three top level OU's for Programs, Regions, and Managed Desktop Services (MDS) offices.
d. **Domain Controllers:**
    1. Primary Servers are located at the NCC in RTP and PY data centers with failover location in Denver, Colorado.
    2. Environment consists of MS Windows Server 2008 R2 /2012 R2 Domain Controllers.
    3. 36 plus Domain Controllers reside throughout the continental U.S. at EPA locations.
        i. Total Hardware – 36 Domain Controllers
        ii. Empty forest root – 3 Domain Controllers
    4. Majority of Domain Controllers are virtual servers hosted on a VSphere environment.

The Government reserves the right to modify or update the environment data provided within the Performance Work Statement.

C.5.10.2.1 SUBTASK 2.1 – AD OPERATIONS

The contractor shall design, manage, and maintain the EPA AD domain environment using industry best practices, as applicable, while ensuring security compliance with Federal mandates. The contractor shall serve as the Agency Enterprise and Domain Administrators for AD and research and recommend new AD features released by the vendor. After gaining EPA TPOC approval, the contractor shall adopt vendor upgrades.

The contractor shall:

a. Ensure services are operational and that users and devices can authenticate to the infrastructure for accessing resources.
b. Install/upgrade/configure/manage Domain Controllers and File Servers
    1. Establish configuration baselines for all server and service components and document baseline as well as any subsequent changes. (Service Provider is responsible for AD infrastructure (server hardware, OS)).
    2. Conduct performance tuning as part of routine maintenance.
    3. Address and remediate any vulnerabilities.
c. Create/manage/apply global and root AD policies.
    1. Report and remediate deviations; document exceptions.
d. Create/manage/apply secure configuration standard checklist for all domain controllers.
    1. Support DNS and integrate with third-party DNS to host AD domains.
        i. Establish Memorandum Of Understanding (MOU) and business processes between the vendor and the supporting Agency DNS.
e. Maintain/update scheme, creation, and management of the forest.
f. Create and manage the directory infrastructure (Flexible Single Master Operations (FSMO) roles, trust relationships, replication topology).
g. Create top level OU hierarchies and security permissions.
h. Provide Tier 3 support to OU Administrators and integration support to customers.
i. Comply with server operating systems SCDs and Agency standards and policies.
j. Implement and support an AD Bridge to domain join non-MS-based systems (workstations and servers) to the production domain; this would include MAC OS and Linux based system when applicable.
    1. Provide market research and recommendations on tool selection. (The procurement of the tool is outside the scope of this TO.)
    2. Provide project implementation plan, test plan, and necessary communication to IT management and LAN administrator community,
    3. Build out infrastructure (lab/production), and lead pilot to Agency IT Administrators
    4. Provide documentation to include SCD, and administer user guides
k. Provide support to MS Azure Government and Office365 clouds that are currently used at the Agency. Azure Government has not been fully adopted and is used on limited capacity (less than two hosted applications). Office 365 is fully implemented at the G3

license level. This task shall provide support for access and authorization to these clouds services:

1. SharePoint Support
    i. Support dual purpose access groups (security and mail enabled) and establish standards for the Agency.
2. Active Directory Federations Services
    i. Support and administer SSO authentication from EPA On Premises environment to MS Government Cloud.
3. Azure Active Directory
    i. Cloud administration support and expertise as the Agency adopts cloud solution and Azure services, currently supporting EPMLive in the Government cloud.
4. Azure Active Directory Sync (AADS)
    i. Support and administer AADS servers that are being leveraged to sync user identities to MS Cloud; address sync errors and conflicts to resolution.
5. Azure Rights Management Services (RMS)
    i. Support shall include installation and configuration of the RMS connectors and working with the email team on setting up the approved templates for File Servers.

C.5.10.2.2 SUBTASK 2.2 - DESIGN, CAPACITY AND SCALABILITY

The contractor shall:

a. Prevent degraded performances by defining subnets and managing sites and services.
b. Provide capacity planning as new sites and organization are stood up.
c. Review usage patterns to identify capacity trending and implement changes based on identified trends.

C.5.10.2.3 SUBTASK 2.3 - DISASTER RECOVERY (DR), CONTINGENCIES, AND BACKUPS

The contractor shall create and maintain AD DR and contingency planning. The DR plan shall include, at a minimum, defined procedures and checklists for disaster recovery and common scenarios.

The contractor shall also:

a. Test DR scenarios annually in a lab environment.
    1. Document and share test results with the FEDSIM COR.
b. Test the data restore process on a quarterly basis.
c. Define business requirements to plan backup processes.
    1. Define backup retention periods based on the Agency business requirements.
d. Back up the AD environment, and verify backups have succeeded.

1. Includes AD system state backups and restores.

C.5.10.2.4 SUBTASK 2.4 - HEALTH CHECKS AND RISK ASSESSMENTS

The contractor shall:

a. Perform an MS AD Risk Assessment Program (RAP) annually and address findings to closure.
b. Perform twice yearly heath and security checks of the AD infrastructure and take corrective actions based on findings.

C.5.10.2.5 SUBTASK 2.5 - ACTIVE DIRECTORY (AD) ORGANIZATIONAL UNIT (OU) STANDARDIZATIONS AND OVERSIGHT

The contractor shall:

a. Create and maintain the AD Admin Operating Procedures that are leveraged across the Agency to define AD roles, processes, and standards to be followed by AD SAs.
b. Provide standardization oversight and remediation of delegated OUs and subsiding objects, which will include Users, Groups, Computer Objects, and Group Policy Object (GPO).
c. Establish procedures for GPO management to include Tier 3 support to OU Administrators and SAs as well as integration support.

C.5.10.2.6 SUBTASK 2.6 - COMPLIANCE MONITORING AND AUDITING FOR ACTIVE DIRECTORY (AD)

The contractor shall provide for the successful operation, maintenance, management, and enhancement of the defined tools and their predecessors for monitoring and administrating the EPA AD environment to meet regulatory mandates.

The current environment includes the following technologies, which the contractor shall support/maintain:

a. MS System Center Operations Manager: used as a monitoring and administering solution for its AD and Windows Server Public Key Infrastructure (PKI) environments and all COTS enterprise servers.
b. Dell Intrust: used to collect, store, report, and alert on event dates.
c. Dell Change Auditor: used to track changes in real-time and provides intelligence of the changes made within AD.
d. Dell Recovery Manager: provides quick recovery or roll-back of objects deleted from the AD database.

The contractor shall:

a. Maintain the AD administrative tools and applications, including patch and version upgrades that reside on the servers.
b. Research and resolve software integration and compatibility issues allowing migration and upgrade to new products and releases.

c. Maintain a test environment to test new releases before conducting upgrades, which shall include a detailed test plan.
d. Ensure that the delivery of all reports is in accordance with EPA Information Security Policy and Federal standards.
e. Ensure monitoring of EPA critical services using System Center Operations Manager (SCOM) or equivalent tool.
    1. Active Directory Infrastructure
    2. Office 365 services
    3. PKI Environment and certificates services
f. Establish reporting requirements and templates based on FISMA compliance or other regulatory mandates.
g. Ensure that reports and logs are readily available to support audits and ad hoc report requests.
h. Train and assist administrators with reports and make reports available through various interfaces as directed by the FEDSIM COR (e.g., SharePoint, website, Sql Server Reporting Service (SSRS))

The contractor shall implement and maintain a National Locator file including email addresses, physical locations, office information, phone numbers and support both the EPA intranet-based National Locator and the internet-based EPA Headquarters Telephone Directory, implementation and operation by completing programming and data format adjustments required for the distribution of the information.

The contractor shall support the established data collection and publication cycle for the EPA National Locator system, which includes at a minimum, monthly updates for all locations and weekly updates for the Headquarters and RTP locations.

In all National Locator development work, the contractor shall include alphabetical, organizational, and subject listings, synchronization of the locator and electronic mail directories and information on hires, transfers and separations, and uses of the National Locator in Government wide and public access servers.

C.5.10.3 SUBTASK 3 - PUBLIC KEY INFRASTRUCTURE (PKI)

Background information related to PKI is in Section J, Attachment JJ. The purpose of this sub-task is to continue to implement, support, and manage an internal certificate management infrastructure in support of current and future EPA initiatives.

C.5.10.3.1 SUBTASK 3.1 - OPERATIONS

The contractor shall be responsible for the following:

a. Provide support of EPA PKI and Hardware Security Modules. The contractor shall be responsible for design changes, implementation, and upgrades as needed and/or as the technology changes.
b. Provide certificate services support for the Agency (user, devices, appliances, etc.).

c. Provide escalation support for certificate issues (e.g., wireless LAN, remote access) and resolution using the approved ticketing system.
d. Maintain and update as needed the certificate management documentation.
e. Support the EPA badging office EPA Personnel Access and Security System (EPASS).
    1. (Physical/Log Access) office.
f. Key management:
    1. Document and update the Key Management Plan.
g. Certificate renewal/revocation:
    1. Issue renewal notifications by sending a notice that a certificate is about to expire and needs to be renewed.
    2. Process the verification and renewal of certificates.
    3. Revoke or suspend certificates that have been compromised and/or process certificate revocation requests.
    4. Establish a process to provide status updates on issued, expired, and about-to-expire certificates.
h. Guarantee 99.9 percent uptime overall for critical PKI services.
i. Document the procedure of handing over the private key(s) of the CA to the approved official.
j. Provide support for private key protection and backup.
k. Develop certificate renewal/revocation specifications.
l. Develop and document PKI security, policy, and procedures.

C.5.10.4 SUBTASK 4 - END USER IDENTITY - ENTERPRISE IDENTITY ACCESS MANAGEMENT (EIAM)

OEI seeks to unify the identity management solutions under development or in production at EPA today. Users of this Enterprise Identity Access Management (EIAM) solution include all EPA employees, EPA contractors, and others who regularly access EPA facilities or EPA systems. This consolidated EIAM solution shall operate and support the following:

a. Credential Management –OARM within EPA is responsible for physical access solutions including issuing PIV cards. OEI is responsible for leading the aspects of EIAM implementation related to logical access. So while OEI is not directly responsible for credential production/issuance, EIAM solution shall correlate and synchronize identity data from all authoritative sources, including but not limited to, Federal and contractor employee enrollment systems, OARM PIV certificate and credentialing systems, etc.
b. Identity Management - Identity management technologies to include, but not limited to, identity repositories, directory/identity integration and synchronization, user provisioning/de-provisioning, and user management.
c. Access Management - Strong multi-factor user and privileged account authentication and management, authorization, access management, and policy management.

d. Identity Federation – Transfer and acceptance of identity attributes from one trusted identifying and authenticating entity to another for authentication and authorization to an application/system.

Without a coordinated EIAM program that crosses the different business organizations and technologies, each IT system must manage its own identity management, authentication, and access management functions internally. Systems of tables, encrypted data files, access control code, assertion functions, and related system attributes must be developed by each system owner. The high-level objective of this task is to strengthen identity, authentication, and access management and ultimately move all EPA applications and infrastructure to common enterprise identity and access management services.

The current environment includes the following technologies: Active Directory Federated Services (ADFS), Dir SyncAzure Active Directory Sync (AADS; eDirectory/Novell Identity Vault (IDV)); Novell Secure Login (NSL); ActivIdentity ActivClient; Novell Identity Manager Password Sync Filters; Novell Identity Manager Drivers; and miscellaneous scripts. The contractor shall be responsible for operations of the current environment as well as implementation/operation of an EIAM solution. The contractor shall also identify new and emerging technologies and test for applicability within the EPA environment. For example, test new or updated versions of hardware and software that are not formally adopted as the Agency national standard. The contractor shall perform annual technology reviews. Investigation and testing of new technology or products shall be required of new technologies, and the contractor shall make recommendations on how new products may best fit EPA's business and technical requirement.

C.5.10.4.1 SUBTASK 4.1 - OPERATIONS

The contractor shall implement/support directory integration of:

a. PeoplePlus HR System (Federal employees)
b. OARM Enrollment System (contractors)
c. Physical Security Badging System
d. MS Active Directory/O365
e. Oracle Internet Directory and/or Oracle Access Manager
f. Legacy Novell IDV
g. Legacy Lotus Domino Directory
h. eBusiness Ordering
i. SecureAuth
j. Avaya
k. Other Agency Authoritative Directories or Identity Stores on premise and in the cloud

The contractor shall also support the following user management activities:

a. Enrollment, identity creation, and lifecycle management of identity.
b. Creation and maintenance of user attributes and entitlements.
c. Creation and management of resources according to business/security policies.
d. Delegated administration.

e. Self-service administration (e.g., password resets, user profile maintenance, registration/subscription services).

The contractor shall correlate and integrate user data, which includes, but is not limited to, the following:

a. Basic user information.
b. Passwords and other encrypted information.
c. Entitlements, roles, groups, and group membership.
d. Specific access rights.

The contractor shall provide authentication and access control services to support:

a. EPA employees/contractors with HSPD-12 Credentials (e.g., EPASS badge, derived credentials) for logon across various EPA platforms (e.g., Windows, VPN, VSphere, etc.) – including mobile devices.
b. Enforce strong multi-factor authentication for user and privileged access to EPA infrastructure and applications.
c. Leverage existing automated tools for managing, maintaining, auditing, and reporting on multifactor authentication, privileged access, and other configurable key events.
d. Make recommendations for other automated tools to manage, maintain, audit, and report on multifactor authentication, privileged access, and other configurable key events.
e. Develop and implement procedures for managing, maintaining, auditing, and reporting on multifactor authentication, privileged access, and other configurable key events.
f. Conduct periodic, systematic reviews of procedures to improve processes for administrative privileges to limit the possibility of a vulnerability.

The contractor shall automate provisioning/de-provisioning, to include:

a. Automating account creation/revocation.
b. Automating workflow.
c. Request-driven provisioning and de-provisioning.
d. Synchronizing data across systems.

The contractor shall centralize access control functions by implementing SSO, to include:

a. SSO to all EPA applications and web systems, internal and external.
b. Synchronizing passwords across systems.
c. Enforcing a sufficiently strong password authentication.
d. Self-service password recovery (implementing password reset/retrieval through a self-service portal).

The contractor shall implement/support identity federation, to include:

a. Transfer and accept external identity assertions from other Federal agencies and business partners (states, tribes, etc.).

The centralized EIAM system shall align and comply with the following:

a. EPA policies
b. OMB Mandates

c. Federal Information Processing Standards (FIPS) HSPD-12
d. NIST 800-53
e. NIST 800-63
f. U.S. Federal Identity, Credential, and Access Management (FICAM) Guidance
g. Federal PKI
h. Federal Bridge Standards

C.5.10.5 SUBTASK 5 – REMOTE ACCESS MANAGEMENT

The purpose of this task is to manage the technology and support required for EPA Remote Access. There are several ways to connect to EPA networks remotely, using either Government Furnished Equipment (GFE) or non-Government Furnished Equipment (non-GFE). GFE can connect through SecureAuth or Pulse Secure. Non-GFE can connect through VDI.

The method of dual authentication is currently provided by Active Directory and Secure Auth Onetime Password (OTP) for EPA and Contractor employees. Business Partners are those contractors who support EPA Program Offices' applications and who may require remote access. This is known as the BP process; there are approximately 900 BPs currently. BPs will use SecureAuth OTP.

EPA requires full enterprise-wide architectural and operational support for its remote access infrastructure technologies, encompassing a virtualized desktop, application, and VPN solution. The existing environment consists of VMWare View, Citrix Xenapp, and Cisco VPN. EPA currently supports all three modes of remote access to allow EPA employees to telework. EPA is a leader in the Federal space on the use of telework, virtual employee environments and overall employee mobility to enhance employee productivity. The contractor shall provide, operate, and enhance the existing remote access offerings.

Remote Access service is offered 24x7, 365 days/year. When users require support, all requests are serviced through the EPA service desk and routed to the Contractor.

The EPA requires a remote access solution, inclusive but not limited to provisioning software (i.e., maintaining updates to software), accounts management as well as troubleshooting issues. For FY15, there were ~2,900 registered RSA tokens with ~3,200 RSA token connections monthly. Additionally, there were ~12,778 Juniper users with an average of 41,234 connections monthly. Over the past six months, the Remote Access Management subtask has addressed a total of 1,029 Tier 3 help desk ticket requests.

The contractor shall provide Remote Access end-user support to all EPA-approved users:

a. Support remote access users who are connecting to the EPA network in other than their primary business location. If hardware at the end point is GFE-furnished devices (usually laptops with MS Windows), Contractor will be required to assist users in getting access into the appropriate EPA network. The user is responsible for configuring their approved devices as appropriate and directed by the Service Desk. The Bomgar application is used for Remote Assistance for GFE.

b. Address and resolve tickets that are routed to the Remote Access queue per the SLAs. Historically, this subtask has received an average of 16 tickets per week. Remote access provides Tier 2 and 3 support.

The contractor shall provide support for the Business Partner (BP) process as follows:

a. Collect, review and validate, and coordinate information that will be presented through the remote access process. This is about 16 hours of work per week.
b. Ensure all BP forms are complete with the necessary and correct information and forward to appropriate EPA staff for approval.
c. Forward the needed IP and port information to the EPAs Firewall Team and the National Network Team located in RTP.
d. Record and document the request as appropriate or directed for this remote process.
e. The remote access process will identify and determine for the Contractor what forms will be completed and for accuracy, then forwarded to EPA for review and authorization.
f. Maintain the records in a database with monthly reviews of BP's contact information (e.g., name, email, address, etc.), applications used, and EPA sponsor information. The Contractor will work with the BP sponsors to verify this information on a semi-annual basis.

The contractor shall provide support for the AAA Server Rules request process as follows:

a. Collect, review and process the registration and certifications forms for Remote Access server requests.
b. The information submitted will be evaluated for compliance with EPA security policies, and a decision will be returned to the requestor.
c. Initiate the vulnerability scan for server with the appropriate vendor.
d. Once remediations are addressed, coordinate a rescan.
e. Process the AAA registration and certification document to NCC Security for approval.
f. Server Rule and Ports are then added to the AAA Rule Set.

As part of mobility support services, the contractor shall:

a. Monitor, operate, maintain, and troubleshoot agency-wide, day-to-day Remote Access technologies to include, Virtualized Applications, Virtualized Desktop, and Virtual Private Networking. Current vendors are Citrix, VM Ware Horizon View, and Cisco, as well each of their supporting clients/plugins, central processing unit load, available disk space, along with remote access service availability must be tracked and alerts sent out to appropriate staff via email or other agreed upon escalation process when configured thresholds are exceeded. The contractor shall troubleshoot outages and service interruptions, conduct a root cause analysis, and prepare an Action Plan to prevent the outage in the future.
b. Provide Tier 3 subject matter expertise in Remote Access connectivity products/services (listed above), which includes, but is not limited to, system architecture, system administration, and system troubleshooting issues with Citrix Xenapp, Citrix Netscaler, Cisco Anyconnect client-based Secure Sockets Layer (SSL) VPN, and VMWare Horizon View Virtual Desktop Infrastructure (VDI) systems, end to end issues, from the backend server/appliance to the installed user client, including middleware supporting appliances. Current vendors are F5 (load balancing routers) and Cisco Whiptail storage.

c. Provide and maintain infrastructure documentation to include logical schematics and process flow of each remote access method in use. This documentation will be kept current at all times, and updated as situations warrant.
d. Assist in the engineering, planning, design, configuration, installation, maintenance, troubleshooting, monitoring, security, project management, documentation, testing, and support of EPA's Remote Access technologies.
e. Provide architecture optimizations/innovation options to help drive the future of remote access within EPA. It is expected for the contractor to regularly review the remote access industry 'landscape' and provide suggestions for refinements, new solutions, and technologies to help better enable EPA's desire for employee mobility.
f. Enable access to the EPA information infrastructure from anywhere at any time from any device.

C.5.10.5.1 SUBTASK 5.1 – APPLICATION SUPPORT

The contractor shall also support applications, such as Bomgar and Pulse as follows.
Bomgar provides remote assistance service that provides administrators, tech support, and help desk technicians the ability to remotely assist a user via screen sharing. The Contractor shall:

a. Manage and administer the Bomgar application in production and test environment.
b. Provide support to Admins and users using the tool via help desk tickets.
c. Support configuration and user guide documentation.

The contractor shall manage Pulse as follows:

a. Provide management, configuration support, user support, and documentation.
b. Support all user help desk tickets.

The contractor shall provide remote access management for application software administration, maintenance, and monitoring. Remote access is a managed service, and the Contractor shall coordinate administration and configuration of the devices with the managed Juniper service currently AT&T. This shall include:

a. Test remote access applications and tools using the test Juniper server, or other EPA-designated server, before being placed on the production Juniper server, or other EPA-designated server, and when approved by the Operational Lead.
b. Run pilot projects of configurations and test on the Remote Access Test Server. Provide results of testing for review and approval of the EPA Operational Lead. This will be performed approximately 3 times a year and historically has taken approximately 4 hours to complete.
c. On a monthly basis, conduct a review to determine if remote access intranet site updates are required. The review shall also include a determination of the accuracy of the information relative to all forms, information, and documentation made available for viewing. This should be presented to the Operational Lead prior to updating. The Contractor shall provide a review of documentation on Intranet.epa.gov supporting the Remote Access Service. Standard Operating Procedure, including web sites and business practices, will be updated as needed. All Standard Operating Procedures and business process must be documented and stored in the Document Library.

d. Submit change requests for any updates of the systems to the Operational Lead for approval, then the Contractor will provide to the Change Control Board (CCB).
e. The contractor shall also coordinate with AT&T to verify that the RTP and HQ Juniper servers, or other EPA-designated servers, are identical/redundant. The Contractor will coordinate with network teams to ensure the Remote Access service is load balanced between the two datacenters.
f. The contractor shall provide weekly reports on the usage of all licenses and connections.
g. The contractor shall collect, review and validate, and coordinate information that will be presented through the remote access process. This has historically taken approximately 16 hours of work per week.

The contractor shall manage configuration of the remote access policies, including integration with external services, such as identity management, Active Directory, Firewall, SecureAuth OTP, etc.

a. The contractor shall work with the network team to test the remote access failover capabilities to ensure availability and reliability.
b. The contractor shall provide an initial benchmark of the existing system and ensure each month that the system does not exceed these benchmark thresholds as specified by the Operational Lead. The "system" includes throughput, latency, availability, and reliability.
c. The contractor shall work with the AT&T subcontractor (GTT) Juniper vendor, or other EPA-designated vendor for EPA-designated server, to monitor reliability, stability and availability, providing logs to the EPA Operational Lead and in the repository specified in the SLAs and deliverables.

C.5.11 TASK 11 – NATIONAL VOICE OPERATIONS

The National Voice Operations (NVO) task supports voice communication facilities and programs enterprise-wide for EPA which is used by over 25,000 EPA employees, contractors, consultants, and grantees throughout the United States. Current voice carriers in use at the EPA include AT&T, Verizon, and Sprint. About 25 percent of the customers reside in the Washington, D.C., area with a second concentration in the Raleigh-Durham area of North Carolina, which is the seat for much of the Agency's computing power and national telecommunication network. This task provides support to the EPA National Voice Operations through messaging, networking, and reporting. Historically, there has been an average of 40 problem tickets related to the National Voice Messaging Broadcast per year.

The contractor shall provide research and analysis.

The contractor shall:

a. Monitor NVMG and to ensure proper operation, message flow, and backup support is functioning as needed.
b. Create and document the NVMBenterprise lists that support the National Broadcast, which may be sent by the Office of the Administrator (OA) or Office of Environmental Information (OEI).
c. Provide notification of any changes affecting EPA voice messaging.
d. Escalate technical or operation issues to the current Enterprise Voice Services managed service provider to resolve technical or operational issues.

e. Coordinate with the EPA NCC computer room hosting staff on issues such as power outages, as required and as directed by the Operational Lead.

C.5.11.1 SUBTASK 11.1 – INTEGRATION TO TELECOMMUNICATIONS VENDOR

The contractor shall support EPA's combined Local PSTN services bundled with Long Distance service, which is acquired through the GSA Networx program (AT&T is the current Network vendor). The contractor shall support Carrier Services Ordering to provide communications to EPA locations.

The contractor shall:

a. Receive information on EPA switched voice circuit(s) and service requirements from sites.
b. Draft orders for telecommunications services.
c. Track orders for local exchange carrier services billed to EPA and discuss at weekly meetings with AT&T.
d. Document services to EPA.
e. Analyze Carrier Services to EPA and project costs of these services for use by EPA management and the Operational Lead.
f. Act as the liaison for addressing issues between the carriers based services and the EPA voice systems.
g. Manage the cutover process, including scheduling and coordinating necessary resources to assist support staff with successful connectivity and functionality.
h. Ensure all required numbers are ported with the new Combined Services.
i. Provide circuit information, including circuit ID(s) to newly installed Combined Services location site support staff along with vendor escalation information.
j. Update the LF registration ID in eBusiness with circuit information, including circuit ID(s) and all DID numbers ported.
k. With proper confirmation from newly installed locations, and EPA approval, submit orders to disconnect previous services and assist local support staff with disconnection of Local Primary-Rate Interface's (PRIs).
l. Research and analyze which carrier will meet the needs of a particular customer/location. (The actual charges accruing from the carriers/vendors may vary according to the network components employed for any given call service as well as the location the service resides).

C.5.11.2 SUBTASK 11.2 – ADMINISTRATION AND BILLING

The contractor shall support Networx service billing. The shall monitor and disseminate billing information, identify billing discrepancies, provide network usage trends to maximize cost effectiveness on an Agency-wide basis, and prepare standard call tracking and usage information reports for use by EPA officials who evaluate calling practices and patterns.

The contractor shall:

a. Maintain a flexible registration system using eBusiness.

b. Maintain detailed knowledge of carrier offerings and options.
c. Be aware of the impact of carrier options on agency infrastructure.
d. Provide budgetary and planning support and respond to information requests with regard to the nature of services provided and billing disputes.
e. Establish the approximate value of monthly disputed GSA invoices.

The contractor shall administer and track EPA's Networx service orders. The contractor shall provide customer assistance to enhance service selection, training, quality assurance, and cost savings, and notify customers of service due dates and completion dates. The contractor shall assist field sites with trouble escalation, service selection, interpretation of billing information, and technical information on Networx offerings. The contractor shall take the appropriate action to escalate major Networx outages to GSA, or the appropriate vendor, to expedite resolution and track resolution to ensure timely completion.

C.5.11.3 SUBTASK 11.3 – WORKING CAPITAL FUND (WCF) SERVICES

The contractor shall support the following Working Capital Fund services:

Special Voice Services
Toll Free Services (TFS) provides in-bound calls to agency phones from phones anywhere; Combined Services (CS) provides connection to the Public Switched Telephone Network (PSTN) via ISDN PRI circuits supporting local and long distance calling; Provides an eBusiness support service offering that allows Regions and Program Offices to purchase lines, support, upgrades and related services and to prepare workload files as required. Note: The Toll Free service (or the so-called 800 service), is a stand-alone service used by the general public who may access certain agency program information resources. This also includes AT&T Combined Services under Networx and Avaya Hardware/Software support procured through the Enterprise Voice Services contractor for the EPA sites nationwide.

Workload Data
The contractor shall collect and process workload data and convert it into a form suitable for final reporting to the WCF. Upon completion of the workload preparation process, the contractor shall deliver the workload data to the Operational Lead and FEDSIM COR for subsequent review, approval, and forward to the WCF staff. The following shall be included: "name of service," "Workload Unit of Measure," "Special Voice Services," "Cost of service option."

eBusiness Ordering System
The contractor shall:

a. Record and track Registration ID's created through eBusiness.
b. Generate workload data for submission to the WCF accounting system at the National Computer Center (NCC) Workload generation is dependent upon receipt of carrier billing in a timely manner.
c. Analyze the GSA call data into a consolidated billing statement. This Monthly Statement of Accounts will be provided to the Operational Lead one month in arrears for currently provided as consolidated billing statements are received from GSA one month in arrears. In order to accurately do the billing comparison, all GSA billing must be received and accounted for. All efforts will be made to provide this in the timeliest manner possible.

d. Maintain detailed knowledge of carrier offerings and options. The contractor shall meet with the Networx carriers and ensure that a current list of services is obtained and kept up to date.
e. Be aware of the impact of carrier options on agency infrastructure. The contractor shall proactively evaluate new services offerings in the context of EPA's Enterprise Architecture and make recommendations for any changes that would possibly impact the functioning of EPA's voice telecommunication infrastructure.
f. Provide budgetary and planning support and respond to information requests with regard to services provided and billing disputes.
g. Manage the WCF registration process to ensure assignment of Registration ID's for LF customer orders.

Ordering
The Contractor shall assist with ordering LF services, including *Networx* orders under AT&T Combined Services, and assist with transition meetings, completing the appropriate paperwork; and advise the Designated Agency Representative (DAR)/Designated Agency Representative Administrator (DARA) as necessary to support customers in the EPA migrating to AT&T Combined Services. Contractor support shall include:

a. Creating and maintaining all service catalogs and service order forms for Enhanced Voice Services, International Direct Dial, and Long Distance as required in eBusiness to allow for customers to order services electronically.
b. Coordinating with technical support staff, and facilitating kickoff meetings to discuss site requirements and specifics related to the order of Combined Services, to include the location of equipment, the numbers to be ported, and site contacts.
c. Providing updated inventory information to customers.
d. Drafting WCF billing utilizing eBusiness Registration ID's to allow for OEI charge back to customers.
e. Providing requirements to EPA, including request for additional test numbers to the Agency DAR/FEDSIM COR for submission to AT&T.

Workload and Reporting
The contractor shall:

a. Gather data and populate the data for the WCF Workload reporting systems to accurately reflect the monthly WCF workload for each of the WCF service centers.
b. Provide routine and ad-hoc analysis of the Workload data to the WCF SM, and confirm that accurate and timely workload data is submitted to the WCF Business Office and the customer.
c. Follow the WCF workload process:
    1. Generate workload data for submission either by directly uploading into eBusiness or provide an acceptable file with the workload to the OITO WCF Business Office according to WCF eBusiness specifications;
    2. Upload LF WCF workload in a compatible format, as defined by the eBusiness Office. The contractor shall interface with other EPA contractors who oversee the development and implementation of the eBusiness Registration System for EPA.
    3. Submit WCF workload reports/data files.

4. Email the WCF workload to the Service Manager (copy the FEDSIM COR and Operational Lead) and upload the workload files into eBusiness after sending the files.
5. Notify the billing vendor of any discrepancies and report the problem to the vendor for correction and resubmission into eBusiness.

The contractor shall use the following service areas and related workload reporting measures:

Workload Unit of Measure Table

Code	Name of Service	Workload Unit of Measure
LF	Dial 800 Service	Number of minutes used
LF	Dial 800 Maintenance	Number of accounts
LF	Enhanced Voice Services	Cost of service option

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E.1 PLACE OF INSPECTION AND ACCEPTANCE

Inspection and acceptance of all work performance, reports, and other deliverables under this TO will be performed by the FEDSIM COR and the EPA TPOC. The Place of Inspection and Acceptance is Research Triangle Park, NC or designated secondary location, if applicable.

E.2 SCOPE OF INSPECTION

All deliverables will be inspected for content, completeness, accuracy, and conformance to TO requirements by the FEDSIM COR and/or EPA TPOC. Inspection may include validation of information or software through the use of automated tools, testing, or inspections of the deliverables, as specified in the TO. The scope and nature of this inspection will be sufficiently comprehensive to ensure the completeness, quality, and adequacy of all deliverables.

E.3 BASIS OF ACCEPTANCE

The basis for acceptance shall be in compliance with the requirements set forth in the TO, the contractor's proposal, and relevant terms and conditions of the contract. Deliverable items rejected shall be corrected in accordance with the applicable clauses.

The final acceptance will occur when all discrepancies, errors, or other deficiencies identified in writing by the Government have been resolved, through documentation updates, program correction, or other mutually agreeable methods.

Reports, documents, and narrative-type deliverables will be accepted when all discrepancies, errors, or other deficiencies identified in writing by the Government have been corrected.

If the draft deliverable is adequate, the Government may accept the draft and provide comments for incorporation into the final version.

All of the Government's comments on deliverables shall either be incorporated in the succeeding version of the deliverable, or the contractor shall explain to the Government's satisfaction why such comments should not be incorporated.

If the Government finds that a draft or final deliverable contains spelling errors, grammatical errors, or improper format, or otherwise does not conform to the quality assurance requirements stated within this TO, the document may be rejected without further review and returned to the contractor for correction and resubmission. If the contractor requires additional Government guidance to produce an acceptable draft, the contractor shall arrange a meeting with the COR.

All deliverables provided to the Government over an MSR reporting period shall be listed, by full name, in the MSR that follows that period. The MSR will be used as the acceptance instrument for all deliverables listed in the MSR. Any exceptions or rejections to any deliverables or their content will be provided to the EPA TPOC so that they can be disclosed when MSR approval is requested by the COR. The EPA Technical Performance Monitors will convene each month after delivery of the MSR and this forum will be used as a "last call" for any deliverable rejections with justification. If there are no causes for rejection against any deliverables listed in the MSR, to include the MSR, then the TPOC will provide written

acceptance to the FEDSIM COR of MSR. Any exceptions or rejections (with specific cause) are to be provided to the TPOC prior to TPOC acceptance of the MSR, no later than three business days after the Technical Monitor's meeting for that month. Exceptions or rejection of any deliverables will be handled IAW TO requirements.

E.4 WRITTEN ACCEPTANCE/REJECTION BY THE GOVERNMENT

The FEDSIM CO/COR will provide written notification of acceptance or rejection (Section J, Attachment J) of all final deliverables within 15 workdays (unless specified otherwise in Section F). All notifications of rejection will be accompanied with an explanation of the specific deficiencies causing the rejection.

E.5 NON-CONFORMING PRODUCTS OR SERVICES

Non-conforming products or services will be rejected. Deficiencies shall be corrected, by the contractor, within ten workdays of the rejection notice. If the deficiencies cannot be corrected within ten workdays, the contractor shall immediately notify the FEDSIM COR of the reason for the delay and provide a proposed corrective action plan within ten workdays.

F.1 PERIOD OF PERFORMANCE

The period of performance for this TO is a one-year base period and four, one-year options.

F.2 PLACE OF PERFORMANCE

The primary Places of Performance are at the contractor's site and EPA's NCC Building located in RTP, in the Raleigh-Durham area in NC. Secondary locations include the Potomac Yard Facility in the Washington, D.C. area (which will move to Lakewood, CO no later than OY2), the William Jefferson Clinton building in Washington, D.C. and the EPIC Archive in Las Vegas, NV. Approximately 25% of the work shall be performed on-site at RTP, based on space availability.

Long Distance Travel may be required during the performance of this TO.

It is the Government's intent to provide Government-furnished space in EPA's NCC building to a portion of the staff assigned to this TO. The Government may at any time during the period of performance of this contract increase or decrease the Government-furnished space assigned to contractor staff with appropriate advance notice.

Subject matter experts (SMEs) with specific areas of expertise may be needed to staff special projects and may only be needed intermittently. The contractor shall consider the economics of options that include remote support and long-distance travel, both of which are possible under the TO, when staffing specialized and/or intermittent requirements.

F.3 TASK ORDER SCHEDULE AND MILESTONE DATES

The following schedule of milestones will be used by the FEDSIM COR to monitor timely progress under this TO. The following abbreviations are used in this schedule:

DEL: Deliverable
IAW: In Accordance With
NLT: No Later Than
TOA: Task Order Award
N/A: Not Applicable
CD; Calendar Day
MSR: Monthly Status Report
PMP: Project Management Plan
PS: Project Start
UR: Unlimited Rights, per FAR 52.227-14(c)(1)
All references to days: Government Workdays

Deliverables are due the next Government workday if the due date falls on a holiday or weekend.

DEL. #	MILESTONE/DELIVERABLE	TOR REF.	DATE OF COMPLETION/DELIVERY	GOV'T RIGHTS
Task 1 – Program Management				
01	Project Start (PS)	N/A	At TOA	N/A
02	Project Kick-Off Meeting	C.5.1.1	NLT 5 Workdays after TOA	N/A
03	Required Submission for Project Kick-Off Meeting	C.5.1.1	Due by Kick-Off Meeting	UR
04	Copy of TO (Proposed redaction of initial award and all modifications)	F.4	Within 10 Workdays of TOA	N/A
05	* MSR	C.5.1.2	Monthly, by 15th CD of the Next Month	UR
06	Technical Status Meeting (MSR and Financial Review)	C.5.1.3	Monthly	N/A
07	DELETED			
08	* Final Project Management Plan (PMP)	C.5.1.4	Final PMP within 2 Weeks of Government Comments on Draft	UR
09	* PMP Update	C.5.1.4.1	Annually Each April	UR
10	* Quality Control Plan (QCP)	C.5.1.4	Annually Each April	UR
11	Travel Authorization Request (TAR)	H.10.2	As Required	UR
12	Trip Report	C.5.1.5	NLT 5 Calendar Days after Trip Completion (if requested)	UR
13	* QCP Final/Update	C5.1.6	Periodically per Changes in Program Processes	UR
14	* Budgetary Briefings	C.5.1.8	As Identified by EPA TPOC	UR
15	Training Manuals and Technical User Guides	C.5.1.9	IAW the PMP	UR

16	Updates to Standard Operating Procedures (SOPs) and System Documentation	C.5.1.9	Annually Each April	UR
17	Workflow Process Information	C.5.1.9	IAW the PMP	UR
18	Commercial off-the-Shelf (COTS) Updates/Modification Plans	C.5.1.9	IAW the PMP	UR
Task 2 – Transition-In				
19	* Updated Transition In Plan	C.5.2	NLT 5 workdays after Project Kick-off Meeting	UR
Task 3 – Transition-Out				
20	* Transition Out Plan	C.5.3	NLT 120 Calendar Days Prior to Expiration of TO	UR
Task 4 – Task Assignment Process Administration				
21	* Project Plan and Cost Estimate	C.5.4	As Needed Per Each Task	UR
22	REPLACED Burn Rate Report	C.5.4	Weekly First Tuesday of Following Week, on All Active TZ Open Working Capital Funds (WCF) Registrations	UR
23	Detailed Billing Analysis	C.5.4	Upon Request	UR
Task 5 – Infrastructure Hosting				
24	Root Cause Analysis	C.5.5.1	IAW the PMP	UR
25	* Technical Planning Project Plan	C.5.5.2	Prior to Installation of Any New System	UR
26	Infrastructure as a Service (IaaS) Templates	C.5.5.3	IAW the PMP	UR
27	Regular Patch Management Schedule	C.5.5.3	IAW the PMP	UR

28	* Disaster Recovery and Continuity of Operations (COOP) Procedures	C.5.5.3	IAW the PMP	UR
29	Operation Model	C.5.5.3	IAW the PMP	UR
30	“To Be” Roadmap	C.5.5.3	IAW the PMP	UR
31	DELETED			
32	Processes and Procedures	C.5.5.4	IAW the PMP	UR
33	Operational Procedures	C.5.5.4	IAW the PMP	UR
34	Operators’ Guides	C.5.5.4	IAW the PMP	UR
35	Disaster Recovery Procedures	C.5.5.4	IAW the PMP	UR
36	Contingency Plans	C.5.5.4	IAW the PMP	UR
37	System Runbooks	C.5.5.4	IAW the PMP	UR
38	DELETED			
39	* Patch Management Strategy	C.5.5.4	IAW the PMP	UR
40	* System Security Plan	C.5.5.5	Annually Each April	UR
41	* Post-Exercise Report (COOP)	C.5.5.7	Within 72 Hours after Event or Exercise Ends	UR

42	Meeting Agenda, Meeting Minutes, Meeting Artifacts (Disaster Recovery Services)	C.5.5.8	IAW the PMP	UR
43	Meeting Minutes, Meeting Artifacts (Distributed Systems Support Service)	C.5.5.10	IAW the PMP	UR
44	Draft Standard Configuration Document (SCD)	C.5.5.11	Within Three Weeks upon Request	UR
45	* Final SCD	C.5.5.11	Within Five Workdays upon Draft Approval	UR
46	Final SCD Posted to DSS Website	C.5.5.11	Within Three Workdays upon Final Approval	UR
Task 6 – Middleware and Applications Management				
47	* Middleware Platform Operations and Management Report	C.5.6.1	IAW the PMP	UR
48	* Standard Configuration Documents	C.5.6.1	IAW the PMP	UR
49	DELETED			
50	DELETED			
51	Application Deployment and Support Checklist	C.5.6.2	IAW the PMP	UR
52	DELETED			
53	DELETED			
54	DELETED			
55	DELETED			
56	DELETED			
57	DELETED			

58	DELETED			
59	DELETED			
60	DELETED			
61	DELETED			
62	DELETED			
63	DELETED			
64	DELETED			
65	DELETED			
66	DELETED			
67	Standard Configuration Documents and Guidelines (Geospatial Infrastructure)	C5.6.7.1	IAW the PMP	UR
68	Summary of Support Activities (Geospatial Infrastructure)	C5.6.7.1	Quarterly	UR
69	DELETED			
70	Analysis and Report (Other Aerial and Satellite Remote Sensing Imagery)	C.5.6.8.5	IAW the PMP	UR
71	Operational GIS Data Products	C.5.6.8.6	IAW the PMP	UR
72	Applications Marketing Materials	C.5.6.9	IAW the PMP	UR
Task 7 – Cloud Computing Support				
73	* Service Catalog	C.5.7.1	IAW the PMP	UR
74	Technical Reference Document	C.5.7.3	IAW the PMP	UR
75	Design Considerations	C.5.7.3	IAW the PMP	UR

Task 8 – Network Security Operations				
76	DELETED			
77	DELETED			
78	TSR Report	C.5.8.2	IAW the PMP	UR
79	Network Assets and Configurations Documentation	C.5.8.2	IAW the PMP	UR
80	* REPLACED Hardware and Software Maintenance and Support	C.5.8.2	IAW the PMP	UR
81	* REPLACED Hardware and Software Inventory (to include all capital and non-capital h/w and s/w procured and maintained under Task 8	C.5.8.2	IAW the PMP	UR
82	Forward Schedule of Change (FAC)	C.5.8.2	IAW the PMP	UR
83	DELETED			
84	Request for Change (RFC) for Network Changes	C.5.8.2	IAW the PMP	UR
85	Reserved			
86	* WAN Circuit Outage Credit Report	C.5.8.2	Monthly	UR
87	REPLACED WAN Circuit Pricing Requests	C.5.8.2	Monthly	UR
88	Recommended Course of Action for Bandwidth Options	C.5.8.2	IAW the PMP	UR
89	NCC Security Recommendations	C.5.8.3	IAW the PMP	UR
90	Infrastructure and/or EPA Security Recommendations	C.5.8.3	IAW the PMP	UR
91	DELETED			

g92	Remediation Report	C.5.8.3	Monthly	UR
93	VM Documentation	C.5.8.3	IAW the PMP	UR
94	DELETED			
95	REPLACED Firewall Rule Requests (FRRs)	C.5.8.3	IAW the PMP	UR
96	DELETED			
Task 9 – Cyber Security				
97	* Incident Response Plan	C.5.9.1	Annually, Each August	UR
98	Incident After Action and Lessons Learned Report	C.5.9.1	IAW the PMP	UR
99	Recommendations Document Update	C.5.9.1	Annually, Each May	UR
100	Security Awareness and Training Materials, including Role-Based Training Plan	C.5.9.1	Annually, Each June	UR
101	DELETED			
102	REPLACED Operations Status Report	C.5.9.3	Weekly, By Wednesday	UR
103	REPLACED Document and Artifact Management Plan	C.5.9.3	Annually, Each April	UR
104	REPLACED Capabilities Improvement Action Plan/Roadmap	C.5.9.1	Annually, Each May	UR
105	*Cyber Security Report	C.5.9.4	NLT 5th Business Day of Each Month	UR
106	Ad Hoc Reports	C.5.9.4	IAW the PMP	UR
107	DELETED			

108	DELETED			
109	Penetration Test Report	C.5.9.6	IAW the PMP	UR
110	Penetration Test Plan	C.5.9.6	IAW the PMP	UR
111	Penetration Test Rules of Engagement (ROE)	C.5.9.6	IAW the PMP	UR
112	Penetration Test Security Assessment Report	C.5.9.6	IAW the PMP	UR
113	Penetration Test After Action and Lessons Learned Report	C.5.9.6	IAW the PMP	UR
114	Penetration Methodology and Requirements	C.5.9.6	IAW the PMP	UR
Task 10 – EIAM and AD				
115	Ad Hoc Report for EIAM and AD	C.5.10	IAW the PMP	UR
116	WAM Backup Report	C.5.10.1.5	Quarterly, 20th Day of Following Month	UR
117	*AD DR and Contingency Planning	C.5.10.2.3	Annually Each March	UR
118	*AD Admin Operating Procedures	C.5.10.2.5	Quarterly, 20th Day of Following Month	UR
119	DELETED			
120	Compliance Reporting Requirements and Templates	C.5.10.2.6	Monthly, 5th Business Day of Following Month	UR
121	Certificate Management Documentation	C.5.10.3.1	IAW the PMP	UR
122	Key Management Plan	C.5.10.3.1	Annually Each March	UR
123	Procedure of Handling over the Private Key(s)	C.5.10.3.1	Annually Each March	UR

124	REPLACED Health and Security Check Of The AD Infrastructure	C.5.10.3.1	Annually Each March	UR
Task 11 – National Voice Operations				
125	NVMBEnterprise Lists	C.5.11	IAW the PMP	UR
126	Reserved			
127	Workload Data Report Form	C.5.11.3	IAW the PMP	UR
128	Workload Data	C.5.11.3	IAW the PMP	UR
129	DELETED			
130	Service Catalogs and Service Order Forms for Enhanced Voice Services, International Direct Dial, and Long Distance	C.5.11.3	IAW the PMP	UR
131	Reserved			
132	* Routine and Ad-Hoc Analysis of the Workload Data	C.5.11.3	IAW the PMP	UR
133	WCF Workload Reports /Data Files	C.5.11.3	IAW the PMP	UR
134	DELETED			

The contractor shall mark all deliverables listed in the above table to indicate authorship by contractor (i.e., non-Government) personnel; provided, however, that no deliverable shall contain any proprietary markings inconsistent with the Government's data rights set forth in this TO. The Government reserves the right to treat non-conforming markings in accordance with subparagraphs (e) and (f) of the FAR clause at 52.227-14. All deliverables are to be delivered in accordance with the above table, but may be accepted with the MSR for each applicable month (Deliverable 5), as described in Section E.3.

Deliverables annotated with a "*" in the "Milestone/Deliverable" column of the deliverable table is Section F.3 of the task order are considered hard (or core) deliverables where formal delivery and acceptance as outlined in Sections E.1 through E.5 and F.3 is to be followed. In addition, these core deliverables, once final, are to be maintained in a repository so that the EPA can access these documents as necessary. The current repository of record for EPA deliverables is the Service Tracking and Reporting (STAR) workflow tool. Deliverables without an "*" are considered non-core deliverables and shall be delivered in accordance with Section F; however these deliverables will adhere to the specific protocol for inspection and acceptance of non-core

deliverables as defined in the Project Management Plan in lieu of the protocol for inspection and acceptance of deliverables outlined in Sections E.1 through E.5. These non-core deliverables should still be cited in the MSR.

F.4 PUBLIC RELEASE OF CONTRACT DOCUMENTS REQUIREMENT

The contractor agrees to submit, within ten workdays from the date of the FEDSIM CO's execution of the initial TO, or any modification to the TO (exclusive of Saturdays, Sundays, and Federal holidays), a portable document format (PDF) file of the fully executed document with all proposed necessary redactions, including redactions of any trade secrets or any commercial or financial information that it believes to be privileged or confidential business information, for the purpose of public disclosure at the sole discretion of GSA (Section F, Deliverable #04). The contractor agrees to provide a detailed written statement specifying the basis for each of its proposed redactions, including the applicable exemption under the Freedom of Information Act (FOIA), 5 United States Code (U.S.C.) § 552, and, in the case of FOIA Exemption 4, 5 U.S.C. § 552(b)(4), shall explain why the information is considered to be a trade secret or commercial or financial information that is privileged or confidential. Information provided by the contractor in response to the contract requirement may itself be subject to disclosure under the FOIA. Submission of the proposed redactions constitutes concurrence of release under FOIA.

GSA will carefully consider all of the contractor's proposed redactions and associated grounds for nondisclosure prior to making a final determination as to what information in such executed documents may be properly withheld.

F.5 DELIVERABLES MEDIA

The contractor shall deliver all electronic versions by electronic mail (email) and removable electronic media, as well as by placing in the EPA's designated repository. The following are the required electronic formats, whose versions must be compatible with the latest version in use at the EPA at the time of delivery.

a.	Text	MS Word
b.	Spreadsheets	MS Excel
c.	Briefings	MS PowerPoint
d.	Drawings	MS Visio
e.	Schedules	MS Project

The contractor shall deliver software and data deliverables in formats and media appropriate to the technical environments of their origin and use, and as jointly agreed by the contractor and Government.

F.6 PLACE(S) OF DELIVERY

Copies of all deliverables shall be delivered to the FEDSIM COR at the following address:

Primary Contracting Officer's Representative:
Elizabeth Moody, Primary COR
GSA FAS AAS FEDSIM (QF0B)
1800 F Street, NW

Washington, D.C. 20405
Telephone: (202) 320-0892
Email: elizabeth.moody@gsa.gov

Copies of all deliverables shall also be delivered to the EPA TPOC. The TPOC name, address, and contact information will be provided at award.

F.7 NOTICE REGARDING LATE DELIVERY/PROBLEM NOTIFICATION REPORT (PNR)

The contractor shall notify the FEDSIM COR via a Problem Notification Report (PNR) (Section J, Attachment I) as soon as it becomes apparent to the contractor that a scheduled delivery will be late. The contractor shall include in the PNR the rationale for late delivery, the expected date for the delivery, and the project impact of the late delivery. The COR will review the new schedule and provide guidance to the contractor. Such notification in no way limits any Government contractual rights or remedies including, but not limited to, termination.

G.1 CONTRACTING OFFICER'S REPRESENTATIVE (COR)

The FEDSIM Contracting Officer (CO) appointed a FEDSIM COR in writing through a COR Appointment Letter (Section J, Attachment A). The FEDSIM COR will receive, for the Government, all work called for by the TO and will represent the FEDSIM CO in the technical phases of the work. The FEDSIM COR will provide no supervisory or instructional assistance to contractor personnel.

The FEDSIM COR is not authorized to change any of the terms and conditions, scope, schedule, and price of the Contract or the TO. Changes in the scope of work will be made only by the FEDSIM CO by properly executed modifications to the Contract or the TO.

G.1.1 CONTRACT ADMINISTRATION

Contracting Officer:

Bryan Davis Keith, CO
GSA FAS AAS FEDSIM (QF0B)
1800 F Street, NW
Washington, D.C. 20405
Telephone: (703) 605-9283
Email: bryan.keith@gsa.gov

Primary Contracting Officer's Representative:

Elizabeth Moody, Primary COR
GSA FAS AAS FEDSIM (QF0B)
1800 F Street, NW
Washington, D.C. 20405
Telephone: (202) 320-0892
Email: elizabeth.moody@gsa.gov

Alternate Contracting Officer's Representative:

Kent Taylor, Alternate COR
GSA FAS AAS FEDSIM (QF0B)
1800 F Street, NW
Washington, D.C. 20405
Telephone: (202) 480-7302
Email: kent.taylor@gsa.gov

Primary Technical Point of Contact:

William Lominack
EPA Office of Information Technology Operations, RTP
National Computer Center
109 T.W. Alexander Drive
Mail Code: N276-01
Research Triangle Park, NC 27709
Telephone: (919) - 541-5461

Email: lominack.william@epa.gov

Alternate Technical Point of Contact:
Ronald Crouse
EPA Office of Information Technology Operations, RTP
National Computer Center
109 T.W. Alexander Drive
Mail Code: N276-01
Research Triangle Park, NC 27709
Telephone: (919) 541-4124
Email: crouse.ronald@epa.gov

G.2 INVOICE SUBMISSION

The contractor shall submit Requests for Payments IAW the format contained in General Services Administration Acquisition Manual (GSAM) 552.232-25, PROMPT PAYMENT (NOV 2009), to be considered proper for payment. In addition, the following data elements shall be included on each invoice:

Task Order Number: (from GSA Form 300, Block 2)
Paying Number: (ACT/DAC NO.) (From GSA Form 300, Block 4)
FEDSIM Project Number: EP00807
Project Title: Infrastructure Support and Application Hosting

The contractor shall certify with a signed and dated statement that the invoice is correct and proper for payment.

The contractor shall provide invoice backup data IAW the contract type, including detail such as labor categories, rates, and quantities of labor hours per labor category.

The contractor shall submit invoices as follows:

The contractor shall utilize FEDSIM's electronic Assisted Services Shared Information SysTem (ASSIST) to submit invoices. The contractor shall manually enter CLIN charges into Central Invoice Services (CIS) in the ASSIST Portal. Summary charges on invoices shall match the charges listed in CIS for all CLINs. The contractor shall submit invoices electronically by logging onto the following link (requires Internet Explorer to access the link):

https://portal.fas.gsa.gov

Log in using your assigned ID and password, navigate to the order against which you want to invoice, click the Invoices and Acceptance Reports link in the left navigator, and then click the *Create New Invoice* button. By utilizing this method, no paper copy of the invoice shall be submitted to GSA FEDSIM or the GSA Finance Center. The contractor shall provide invoice backup data, as an attachment to the invoice, in accordance with the contract type, including detail such as labor categories, rates, and quantities of labor hours per labor category. The FEDSIM COR may require the contractor to submit a written "hardcopy" invoice with the client's certification prior to invoice payment. A paper copy of the invoice is required for a credit.

The contractor is certifying, by submission of an invoice in the CIS, that the invoice is correct and proper for payment.

If there are any issues submitting an invoice, contact the Assisted Acquisition Services Business Systems (AASBS) Help Desk for support at 877-472-4877 (toll free) or by email at AASBS.helpdesk@gsa.gov.

G.3 INVOICE REQUIREMENTS

The contractor shall submit a draft copy of an invoice to the EPA TPOC for review prior to its submission to GSA. The draft invoice shall not be construed as a proper invoice in accordance with FAR 32.9 and GSAM 532.9. The contractor shall submit simultaneous copies of the invoice to both GSA and the EPA TPOC. Receipts are provided on an as requested basis.

Regardless of contract type, the contractor shall report the following:

a. GWAC Contract Number
b. Task Order Award Number
c. Contractor Invoice Number
d. Current period of performance
e. Amount of invoice that was subcontracted
f. Amount of invoice that was subcontracted to a small business

G.3.1 COST-PLUS-AWARD-FEE (CPAF) CLINs (for LABOR)

The contractor may invoice monthly on the basis of cost incurred for the CPAF CLINs. The invoice shall include the period of performance covered by the invoice (all current charges shall be within the active period of performance) and the CLIN number and title. All hours and costs shall be reported by CLIN element (as shown in Section B), by contractor employee, and shall be provided for the current billing month and in total from project inception to date. The contractor shall provide the invoice data in spreadsheet form with the following detailed information. The listing shall include separate columns and totals for the current invoice period and the project to date.

a. Employee name (current and past employees).
b. Employee company.
c. Exempt or non-exempt designation.
d. Employee Alliant labor category.
e. Current monthly and total cumulative hours worked.
f. Direct Labor Rate.
g. Effective hourly rate (e.g., cumulative costs/cumulative hours).
h. Current approved billing rate percentages in support of costs billed.
i. Itemization of cost centers applied to each individual invoiced.
j. Itemized breakout of indirect costs (e.g., Fringe, Overhead (OH), General and Administrative (G&A) burdened costs for each individual invoiced (rollups are unacceptable)).

k. Any cost incurred not billed by CLIN (e.g., lagging costs).
l. Labor adjustments from any previous months (e.g., timesheet corrections).
m. Provide comments for deviation outside of a 10% variance.

G.3.2 FIRM-FIXED-PRICE (FFP) CLINs

The contractor may invoice as stated in Section B for the FFP CLINs. The invoice shall include the period of performance covered by the invoice and the CLIN number and title. All prices shall be reported by CLIN element (as shown in Section B) and shall be provided for the current invoice and in total from project inception to date. The contractor shall provide the invoice data in spreadsheet form with the following detailed information. The listing shall include separate columns and totals for the current invoice period and the project to date.

a. FFP period of performance as stated in Section B
b. Total Amount Paid (Lump Sum) by CLIN

G.3.3 ANCILLARY PRODUCTS AND SERVICES CLINs

The contractor may invoice monthly on the basis of cost incurred for the Ancillary Products and Services CLINs. The invoice shall include the period of performance covered by the invoice and the CLIN number and title. In addition, the contractor shall provide the following detailed information for each invoice submitted, as applicable. Spreadsheet submissions are required.

a. Ancillary Products and Services purchased
b. RIP number or identifier, number or identifier in the event that the contractor temporarily loses approval of the purchasing system.
c. Date accepted by the Government
d. Associated CLIN
e. Project-to-date totals by CLIN
f. Cost incurred not billed
g. Remaining balance of the CLIN

All cost presentations provided by the contractor shall also include Overhead charges, General and Administrative charges and Fee in accordance with the contractor's Defense Contract Audit Agency (DCAA) cost disclosure statement.

G.3.3.1 TZ ANCILLARY PRODUCTS AND SERVICES

Each Cost Reimbursable Ancillary Products/Services invoice that includes expenses for WCF projects shall be accompanied by backup documents showing the same information as above, as well as Assignment Number, Service Code and WCF Project Code in the Assignment Process for Tasks. The backup documents shall also show Overhead charges, General and Administrative charges and Fee by Assignment Number, Service Code and WCF Project Code. This information pertains to EPA's internal project tracking and is not part of the CLIN-level invoice that the contractor submits and GSA FEDSIM pays.

G.3.4 TRAVEL

Contractor costs for travel will be reimbursed at the limits set in the following regulations (see FAR 31.205-46):

a. Joint Travel Regulation (JTR) - prescribed by the GSA, for travel in the contiguous U.S.

b. Federal Travel Regulation (FTR) Volume 2, Department of Defense (DoD) Civilian Personnel, Appendix A - prescribed by the DoD, for travel in Alaska, Hawaii, and outlying areas of the U.S.

The contractor may invoice monthly on the basis of cost incurred for cost of travel comparable with the JTR/FTR. The invoice shall include the period of performance covered by the invoice, the CLIN number and title. Separate worksheets, in MS Excel format, shall be submitted for travel.

CLIN Total Travel: This invoice information shall identify all cumulative travel costs billed by CLIN. The current invoice period's travel details shall include separate columns and totals and include the following:

a. Travel Authorization Request number or identifier, approver name, and approval date
b. Current invoice period
c. Names of persons traveling
d. Number of travel days
e. Dates of travel
f. Number of days per diem charged
g. Per diem rate used
h. Total per diem charged
i. Transportation costs
j. Total charges
k. Explanation of variances exceeding ten percent of the approved versus actual costs
l. Indirect handling rate

All cost presentations provided by the contractor shall also include Overhead charges and General and Administrative charges in accordance with the contractor's DCAA cost disclosure statement.

G.4 TASK ORDER CLOSEOUT

The Government will unilaterally close out the TO six years after the end of the TO period of performance.

H.1 KEY PERSONNEL

The following are the minimum personnel who shall be designated as "Key." The Government does not intend to dictate the composition of the ideal team to perform this TO. Therefore, the Government encourages and will evaluate additional Key Personnel as proposed by the contractor.

a. Program Manager
b. Infrastructure Hosting Manager
c. Middleware/Applications Manager
d. Telecommunications Manager
e. Cyber Security Expert

The Government desires that Key Personnel be assigned for the duration of the TO. It is not mandatory for Key Personnel to be assigned full time for the duration. Key Personnel may be replaced or removed subject to Section H.1.6, Key Personnel Substitution.

The Government desires that Key Personnel have excellent oral and written communication skills and experience in presenting plans and status to senior management and Government officials.

H.1.1 PROGRAM MANAGER (PM)

The contractor shall identify a full-time, single Program Manager (PM) to serve as the Government's primary POC and to provide overall leadership and guidance for all contractor personnel assigned to the TO. The PM shall be ultimately responsible for the quality and efficiency of the TO, to include both technical issues and business processes. The PM shall be an employee of the prime contractor. This PM shall have the authority to commit the contractor's organization and make decisions for the contractor's organization in response to Government issues, concerns, or problems. This person shall be readily available to respond to Government questions, concerns, and comments, as well as be proactive in alerting the Government to potential contractual or programmatic issues, including situations that may comprise the contractor's ability to provide services.

It is required that the PM has the following qualifications:

a. Certified Project Management Professional Certification (Project Management Professional) or Program Management Professional (PgMP)
b. A minimum of 10 years of experience with the management of an enterprise IT service delivery and management program similar in size, scope, and complexity to the requirements of this TOR.

It is desirable that the PM has the following qualifications:

a. Experience with the management, manpower utilization, and supervision of employees (including subcontractors) of various labor categories and skills in projects similar in size and scope as proposed for this TOR.
b. Experience managing a dispersed, cross-functional IT project.
c. Familiarity with the administration of cost-plus-award-fee (CPAF) type contracts.

H.1.2 INFRASTRUCTURE HOSTING MANAGER

The Infrastructure Hosting Manager shall provide technical expertise to translate business requirements into value added services and cost-efficient IT infrastructure hosting solutions across multiple technologies and ensure effective operations of EPA's IT infrastructure hosting to meet the demands of the EPA systems and workforce.

It is desired that the Infrastructure Hosting has the following qualifications:

a. Experience planning, designing, and upgrading complex IT infrastructure environments similar in size and scope as referenced in this TOR.
b. Demonstrated experience working collaboratively with customer stakeholders to operate and enhance IT infrastructure to align with client business portfolios and service-level requirements.
c. Demonstrated experience managing complex IT infrastructure and developing scalable enterprise technology strategies across multiple platforms.
d. Demonstrated experience with IT infrastructure technologies, including but not limited to, Windows and Linux operating systems and associated technologies, storage systems, server hardware, monitoring tools, and virtualization platforms. Knowledge and experience with client server and cloud computing (private, public, and hybrid).

H.1.3 MIDDLEWARE/APPLICATIONS MANAGER

The Middleware/Applications Manager shall serve as the technical expert of NCC's application platform and development solutions across multiple technologies. The Middleware/Applications Manager shall manage effective operations to meet the demands of the EPA systems and workforce.

It is desired that the Middleware/Applications Manager has the following qualifications:

a. Experience managing and upgrading complex IT application platforms similar in size and scope as Task 6 of the TOR.
b. Demonstrated experience working collaboratively with customer stakeholders to operate and enhance application management to align with client business portfolios and service-level requirements.
c. Demonstrated experience managing complex application platforms and developing scalable enterprise technology strategies.
d. Demonstrated experience with Agile development methodologies.
e. Familiarity with geospatial and remote sensing applications.

H.1.4 TELECOMMUNICATIONS MANAGER

The Telecommunications Manager shall provide technical expertise regarding EPA network and security requirements for WAN and security services.

It is required that the Telecommunications Manager has the following qualifications:

a. "Secret" Security Clearance

It is desired that the Telecommunications Manager has the following qualifications:

a. Experience managing complex WAN communication environments similar in size and scope as referenced in Task 8 of the TOR.
b. Cisco Certified Internetwork Expert (CCIE) and Cisco Certified Network Professional (CCNP) professional certifications.
c. Demonstrated experience operating and designing a network using routing protocols MPLS and MTIPS, IPSEC VPN.
d. Demonstrated experience performing compliance and vulnerability testing.
e. Demonstrated experience making recommendations for leveraging network installations and reducing operation costs.

H.1.5 CYBER SECURITY EXPERT

It is required that the Cyber Security Expert has the following qualifications:

a. An active Certified Information Systems Security Professional (CISSP) certification.
b. "Secret" Security Clearance

It is desired that the Cyber Security Expert has the following qualifications:

a. Demonstrated Cyber Security Experience in an environment similar in size and scope as referenced in the TOR.
b. Demonstrated experience with SIEM, malware identification and analysis, and digital forensics techniques and products.
c. Knowledge of, and experience with, Transmission Control Protocol (TCP)/IP protocol and network/packet analysis.
d. Five years of experience developing and documenting processes to comply with NIST 800-53 security controls.
e. Demonstrated experience with FISMA and Health Insurance Portability and Accountability Act (HIPAA) computer security laws.
f. Three years of experience recommending security architecture and security monitoring improvements.
g. Familiarity with automating security-related tasks to support continuous monitoring, including administration, detection, and metrics.
h. Demonstrated experience with the following tools: ArcSight, FireEye, Encase and Cyber, SANS Sift kit, SNORT, Suricata, Core Impact, and Nessus.

H.1.6 KEY PERSONNEL SUBSTITUTION

The contractor shall not replace any personnel designated as Key Personnel without the written concurrence of the FEDSIM CO. Prior to using other than personnel specified in proposals in response to a TOR, the contractor shall notify the FEDSIM CO and FEDSIM COR of the existing TO. This notification shall be no later than ten calendar days in advance of any proposed substitution and shall include justification (including the Key Personnel Qualification Matrix and labor category of proposed substitution(s)) in sufficient detail to permit evaluation of the impact on TO performance.

Substitute personnel qualifications shall be equal to, or greater than, those of the person being substituted. If the FEDSIM CO and FEDSIM COR determine that a proposed substitute person is unacceptable, or that the reduction of effort would be so substantial as to impair the successful performance of the work under the TO, the contractor may be subject to default action as prescribed by Federal Acquisition Regulation (FAR) 52.249-6 Termination (Cost Reimbursement).

H.2 GOVERNMENT-FURNISHED PROPERTY (GFP)

The GFP is listed in Section J, Attachment T, Attachment V, Attachment W, and Attachment Y.

H.3 GOVERNMENT-FURNISHED INFORMATION (GFI)

The GFI is listed in Section J Attachment AA, Attachment CC, Attachment LL, Attachment N, and Attachment X.

H.4 SECURITY REQUIREMENTS

Work cannot begin on a contract requiring unescorted physical access to an EPA-controlled office or facility until after the contractor employee investigation process has been initiated. Prior to starting work at an EPA facility, contractors must submit all applicable paperwork, as identified in the contract, and have that paperwork reviewed and approved by the EPA Personnel Security Branch (PSB). In addition, contractor employees must be fingerprinted by the EPA and receive favorable results. Once these requirements have been met, contractor employees may begin work while OPM conducts the background investigation.

TPOCs are the focal point for processing contractor security applications and are responsible for ensuring the investigative process is initiated in a timely manner. Prior to implementation, PSB will provide TPOCs with training materials and detailed instructions.

The following are basic steps for the investigative process:

a. Contractor company point of contact logs onto the secure EPA-identified portal iBOARD, creates an account, and submits complete employee information (name, Social Security Number, date of birth, citizenship, etc.). The processing time will vary depending on the number of employees the contractor submits.
b. TPOC reviews and approves the data using the iBOARD utility in EPASS. Again, the amount of processing time necessary will vary depending on the number of employees submitted.
c. TPOC completes risk designation by answering five questions in EPASS. Based on the answers to the questions, a risk designation is automatically assigned.
d. Local/regional security representative approves or changes the position’s risk designation. On average, this could take up to three business days.
e. PSB performs a reciprocity check for prior investigations. Equivalent background checks from other agencies are considered acceptable. On average, this could take up to two business days.

f. Contractor personnel access OPM's Electronic Questionnaires for Investigations Processing (e-QIP) system to complete required standard investigative forms. This is only necessary for contractor employees who need access for more than six months.
g. All contractor employees must be fingerprinted and provide two forms of ID, at a time and location to be specified by Security Management Division (SMD). Those needing access for more than six months must also be photographed. CORs will be copied on all notifications sent to contractor employees. The amount of processing time necessary will vary depending on the location. At headquarters, fingerprinting can be done without an appointment during normal business hours. Security offices collecting electronic fingerprints, like headquarters, can expect results in two to three business days. Collecting fingerprints on paper can take five or more business days.

H.4.1 INFORMATION ASSURANCE

The contractor may have access to sensitive (to include privileged and confidential) data, information, and materials of the U.S. Government. These printed and electronic documents are for internal use only and remain the sole property of the U.S. Government. Some of these materials are protected by the Privacy Act of 1974 (AMENDED) and other applicable laws. .

H.4.1.1 SAFEGUARDING SENSITIVE DATA AND INFORMATION TECHNOLOGY RESOURCES

During the course of performing the work stated within this SOW, contractor employees and staff may come in contact with Confidential Business Information (CBI), Law Enforcement information or other information considered sensitive. Examples of sensitive information include the following:

a. Identity of product inert ingredients.
b. Identity of product ingredient sources.
    1. Description of manufacturing or quality control processes and corresponding impurities.
c. Product chemistry registration data.
d. Information about pending registration actions.
e. Sales, production or other commercial or financial information. The contractor shall protect all sensitive information from unauthorized disclosure. Neither the contractor nor any of its employees or affiliates shall disclose or disseminate any sensitive information that could result in, or increase the likelihood or possibility of, a breach of EPA's policies regarding its handling. The contractor shall ensure all sensitive information it comes in contact with during the performance of this Task Order is handled in accordance with EPA policy and procedures relating to sensitive information and the National Environmental Information Systems Engineering Center (NEISEC) security plan as it relates to the handling of sensitive information. Even if the COR decides no confidential information will be accessed on this TO, the contractor must ensure all Agency information is safeguarded during the performance of this project in accordance with EPA information security policy and procedures, the security plan for this TO, and the NEISEC security plan as it relates to protecting EPA information resources. The

contractor shall also adhere to all physical and logical security requirements as identified in EPA Order 3210 - Physical Security Program. This requirement includes dissemination of information that might result in a negative impact to the Government's reputation.

The following EPA policies must be followed. These policies can be found at: https://www.epa.gov/irmpoli8/current-information-directives

a. CIO 2104.0 Software Management and Piracy Policy
b. CIO 2130.1 Section 508: Accessible Electronic and Information Technology
c. CIO 2134.0 Information Collection Policy
d. CIO 2135.0 Enterprise Information Management Policy (EIMP)
e. CIO 2150.1 Interim Agency Network Security Policy
f. CIO 2150.3 Environmental Protection Agency Information Security Policy
g. CIO 2150.4 Mobile Computing Policy
h. CIO 2151.1 Privacy Policy
i. CIO 2155.1 Records Management Policy
j. CIO 2171.0 Information Access Policy
k. CIO 2180.1 Web Governance and Management
l. CIO 2181.0 Posting Copyrighted Works on EPA Web Site
m. CIO 2184.0 Social Media Policy

H.4.2 SECURITY CLEARANCES

All contractor personnel participating in the design, development, operation, and/or maintenance of sensitive systems/applications, or having access to sensitive information are required to have an appropriate level of background screening. The contractor must follow the procedures to obtain local access badges and/or EPA Personnel Access and Security System (EPASS) badges.

The level of screening required under OMB Circular A-130 varies from minimal checks (SF 85P, Questionnaire for Public Trust Positions) to full background investigations (SF 86, Questionnaire for National Security Positions depending on the sensitivity of the information to be handled, and the risk and magnitude of loss or harm that could be caused by the individual.

The contractor's Information Security Office (ISO) shall review all SF 85, for Public Trust positions or SF 86, National Security Positions for accuracy and completeness and deliver these form(s) to EPA's Technical Information Security Staff, OTOP, OEI within 10 workdays after award of the TO or change in personnel. The contractor shall identify those individuals with a change in status (i.e., transferred, terminated, resigned, etc., within 10 workdays to the COR. The contractor shall identify those individuals not specifically identified by the SOW, if needed, (i.e., Human Resources representative), and request their background investigations be adjudicated. Additional background checks (SF 86s) will be performed on all contractor and subcontractor employees who have access to Confidential Business Information (CBI, EPA financial data, (e. g., payroll) and data related to FIFRA, TSCA, and RCRA CBI. Upon completion of the investigations, the TJSS shall provide written authorization to the contractor authorizing contractor and/or subcontractor employees' access to sensitive information, including CBI via the contractor's ISO.

Costs for conducting the required personnel investigations will be paid by EPA. Investigations will be conducted in accordance with Office of Personnel Management minimum investigations requirements.

Homeland Security Presidential Directive 12 (HSPD-12), entitled "Policy for a Common Identification Standard for Federal Employees and Contractors," calls for a mandatory, government-wide standard for the issuance of secure and reliable forms of identification to executive branch employees and employees of federal contractors for access to federally-controlled facilities and networks. Consequently, EPA initiated the EPASS project to meet the objectives and requirements of HSPD-12, as well as to ensure the security of EPA employees and personnel, facilities, and systems.

EPAAG Appendix 4.13.1-A entitled, "Agency Access Badge Requirements for On-site Contractor Personnel," shall be included in all new contracts, that require contractor employees to have unescorted on-site access to an EPA-controlled facility, awarded on December 1, 2011 and after (including simplified acquisition purchase orders, orders placed against General Services Administration Multiple Award Schedule Contracts, Government-Wide Acquisition Contracts, and Multi-Agency Contracts).

DD254 REQUIREMENTS

A Department of Defense Contract Security Classification Specification Form 254 is required for this TO. All Contractor facility clearance/level of safeguarding shall be indicated on the form DD254. The Contractor's cognizant Security Officer (SO) shall work in conjunction with the geographically corresponding Defense Security Service (DSS) office listed on the DD254 with respect to all Contractor clearance processing.

Note: The Contractor shall adhere to the DD254 requirements concerning EPA's progressive adoption of HSPD-12 requirements. See **Section J, Attachment FG** for the Form DD254.

H.5 ORGANIZATIONAL CONFLICT OF INTEREST AND NON-DISCLOSURE REQUIREMENTS

a. If a contractor is currently performing work, has performed or anticipates performing work that creates or represents an actual or potential organizational conflict of interest (OCI), the contractor shall immediately disclose this actual or potential OCI to GSA in accordance with FAR Subpart 9.5. The nature of the OCI may involve the prime contractor, subcontractors of any tier, or teaming partners.

b. The contractor is required to complete and sign an OCI Statement (see Section J, Attachment FF. The contractor must represent either that (1) It is not aware of any facts which create any actual or potential OCI relating to the award of this contract, or (2) It has included information in its proposal, providing all current information bearing on the existence of any actual or potential OCI and has included a mitigation plan in accordance with paragraph (c) below.

c. If the contractor with an actual or potential OCI believes the conflict can be avoided, neutralized, or mitigated, the contractor shall submit a mitigation plan to the Government for review.

d. In addition to the mitigation plan, the FEDSIM CO may require further information from the contractor. The FEDSIM CO will use all information submitted by the contractor, and any other relevant information known to the Government, to determine whether an award to the contractor may take place, and whether the mitigation plan adequately avoids, neutralizes, or mitigates the OCI.

e. If any such conflict of interest is found to exist, the FEDSIM CO may determine that the conflict cannot be avoided, neutralized, mitigated or otherwise resolved to the satisfaction of the Government and the contractor may be found ineligible for award. Alternatively, the FEDSIM CO may determine that it is otherwise in the best interest of the United States to contract with the contractor and include the appropriate provisions to avoid neutralize, mitigate, or waive such conflict in the contract awarded.

H.5.1 NON-DISCLOSURE REQUIREMENTS

If the contractor acts on behalf of, or provides advice with respect to any phase of an agency procurement, as defined in FAR 3.104-4, then the contractor shall execute and submit a Corporate Non-Disclosure Agreement (NDA) Form (Section J, Attachment G) and ensure that all its personnel (to include subcontractors, teaming partners, and consultants) who will be personally and substantially involved in the performance of the TO:

a. Are listed on a signed Addendum to Corporate Non-Disclosure Agreement (NDA) Form (Section J, Attachment G prior to the commencement of any work on the TO.
b. Are instructed in the FAR 3.104 requirements for disclosure, protection, and marking of contractor bid or proposal information, or source selection information.
c. Are instructed in FAR Part 9 for third-party disclosures when acting in an advisory capacity.

All proposed replacement contractor personnel also must be listed on a signed Addendum to Corporate NDA and be instructed in the requirements of FAR 3.104. Any information provided by contractors in the performance of this TO or obtained from the Government is only to be used in the performance of the TO. The contractor shall put in place appropriate procedures for the protection of such information and shall be liable to the Government for any misuse or unauthorized disclosure of such information by its personnel, as defined above.

H.6 SECTION 508 COMPLIANCE REQUIREMENTS

Unless the Government invokes an exemption, all Electronic and Information Technology (EIT) products and services proposed shall fully comply with Section 508 of the Rehabilitation Act of 1973, per the 1998 Amendments, 29 United States Code (U.S.C.) 794d, and the Architectural and Transportation Barriers Compliance Board's Electronic and Information Technology Accessibility Standards at 36 Code of Federal Regulations (CFR) 1194. The contractor shall identify all EIT products and services provided, identify the technical standards applicable to all products and services provided, and state the degree of compliance with the applicable standards. Additionally, the contractor must clearly indicate where the information pertaining to Section 508 compliance can be found (e.g., Vendor's or other exact web page location). The contractor must ensure that the list is easily accessible by typical users beginning at time of award.

H.7 SECTION 504 COMPLIANCE REQUIREMENTS

Unless the Government invokes an exemption, Section 504 requires agencies to provide individuals with disabilities an equal opportunity to participate in their programs and benefit from their services, including the provision of information to employees and members of the public. Agencies must provide appropriate auxiliary aids where necessary to ensure an equal opportunity. Types of auxiliary aids may include brailed or large print versions of materials, electronic diskettes, audiotapes, qualified interpreters or readers, telecommunications devices for deaf persons (TDDs), captioning of video, and other methods of making information available and accessible to persons with disabilities. In considering what type of auxiliary aid to provide, agencies must give primary consideration to the request of the individual with a disability and shall honor that request, unless it can demonstrate that another effective means of communication exists. All products and services proposed shall fully comply with Section 504, and the contractor must ensure that the auxiliary aids are accessible by typical users beginning at time of award.

H.8 COST ACCOUNTING SYSTEM

The adequacy of the contractor's accounting system and its associated internal control system, as well as contractor compliance with the Cost Accounting Standards (CAS); affect the quality and validity of the contractor data upon which the Government must rely for its management oversight of the contractor and contract performance. The contractor's cost accounting system shall be adequate during the entire period of performance and shall permit timely development of all necessary cost data in the form required by the contract.

H.9 PURCHASING SYSTEMS

The objective of a contractor purchasing system assessment is to confirm it is a Government-approved purchasing system and evaluate the efficiency and effectiveness with which the contractor spends Government funds and complies with Government policy with subcontracting. A Government audited and approved purchasing system (e.g. approved by DCAA or DCMA) is mandatory for the prime contractor. If the Prime is a Joint Venture, the possession of an approved purchasing system by one of the individual members of the Joint Venture or team is acceptable, provided that the firm possessing the approved purchasing system is actually being proposed, at a minimum, to provide such purchasing services under this acquisition.

When and if reviews are conducted of the purchasing system, the contractor shall provide the results of the review to the FEDSIM CO within ten workdays from the date the results are known to the contractor.

H.10 TRAVEL

H.10.1 TRAVEL REGULATIONS

Contractor costs for travel will be reimbursed at the limits set in the following regulations (see FAR 31.205-46):

a. Federal Travel Regulations (FTR) - prescribed by the GSA, for travel in the contiguous U.S.
b. Department of State Standardized Regulations (DSSR) (Government Civilians, Foreign Areas), Section 925, "Maximum Travel Per Diem Allowances for Foreign Areas" - prescribed by the Department of State, for travel in areas not covered in the FTR.

H.10.2 TRAVEL AUTHORIZATION REQUESTS (TAR)

Before undertaking travel to any Government site or any other site in performance of this TO, the contractor shall have this travel approved by, and coordinated with, the FEDSIM COR during Technical Status Meeting or earlier depending on the need. Notification shall include, at a minimum, the number of persons in the party, traveler name, destination, duration of stay, purpose, and estimated cost. Prior to any long-distance travel, the contractor shall prepare a TAR (Section J, Attachment C) for Government review and approval. Long-distance travel will be reimbursed for cost of travel comparable with the FTR.

Requests for travel approval shall:

a. Be prepared in a legible manner.
b. Include a description of the travel proposed including a statement as to purpose.
c. Be summarized by traveler.
d. Identify the TO number.
e. Identify the CLIN associated with the travel.
f. Be submitted in advance of the travel with sufficient time to permit review and approval.

The contractor shall use only the minimum number of travelers and rental cars needed to accomplish the task(s). Travel shall be scheduled during normal duty hours whenever possible.

H.11 ANCILLARY PRODUCTS AND SERVICES

The Government may require the contractor to purchase hardware, software, and related supplies critical and related to the services being acquired under the TO. Such requirements will be identified at the time a TOR is issued or may be identified during the course of a TO by the Government or the contractor. If the contractor initiates a purchase within the scope of this TO and the prime contractor has an approved purchasing system, the contractor shall submit to the FEDSIM COR a Request to Initiate Purchase (RIP). If the prime contractor is to lose an approved purchasing system during the period of performance, the contractor shall submit to the CO a Consent to Purchase (CTP). The RIP (Section J, Attachment E) shall include the purpose, specific items, estimated cost, cost comparison, and rationale. The contractor shall not make any purchases without an approved RIP from the COR or an approved CTP from the CO and without complying with the requirements of Section H.12, Commercial Supplier Agreements.

H.12 COMMERCIAL SUPPLIER AGREEMENTS

H.12.1 The Government understands that commercial software tools that may be purchased in furtherance of this TO as described in Section C.5.1.7 and as contemplated in the Ancillary Supplies and Services Tools CLIN in Section B (included with final TOR) may be subject to

commercial agreements which may take a variety of forms, including without limitation licensing agreements, terms of service, maintenance agreements, and the like, whether existing in hard copy or in an electronic or online format such as "clickwrap" or "browsewrap" (collectively, "Supplier Agreements"). For purposes of this TO, the Supplier Agreements are "collateral agreements" within the meaning of the FAR clause at 52.227-14(c)(2).

H.12.2 The contractor shall ensure that any proposed Supplier Agreements allow the associated software and services to be used as necessary to achieve the objectives of this TO. The contractor shall provide all applicable Supplier Agreements to the FEDSIM CO prior to purchase and shall cooperate with the Government, including negotiations with the licensor as appropriate, to ensure compliance with this Section. Without limiting the generality of the foregoing, a compliant Supplier Agreement shall permit all of the following at no extra charge to the Government: (a) access and use by support contractors, including a successor contractor upon termination or expiration of this TO; (b) transfer to a different data center and/or a successor contractor's cloud; and (c) the creation of derivative works that shall be subject to at least the same rights as set forth in subparagraphs (a) through (c) above. The above rights constitute "other rights and limitations" as contemplated in subparagraph (d) of the FAR clause at 52.227-14, Rights In Data – General (May 2014), Alternate III (Dec 2007).

H.12.3 FREE AND OPEN SOURCE SOFTWARE (SW)

H.12.3.1 COMMERCIAL OPEN SOURCE SW

For the purposes of this TO, open source software sold as a commercial product, such as open source software bundled with priced technical support services, is considered a commercial software tool and subject to the terms of H.12.1 and H.12.2 (as well as the GSAM FAR 552.212-4 Deviation. Section I will be provided with the TOR).

Freeware, including open source and proprietary software that is not priced or sold, is not considered commercial software for the purposes of this TO.

H.12.3.2 FREE OPEN SOURCE SOFTWARE

The EPA currently uses numerous free, open source software tools. It is permissible for the contractor to use free, open source software tools, provided that the EPA TPOC and FEDSIM COR approve this use in each case. The need for Government approval applies to both tools already in use by the EPA as well as tools newly proffered for use by the contractor. The terms of licenses for free, open source software must not be substantially more restrictive than the terms of Sections H.12.1 and H.12.2.

H.12.3.3 FREE PROPRIETARY SOFTWARE

Proprietary software that the contractor initially proffers for use in this TO for free is also subject to Government approval. The contractor shall demonstrate that such software is adequately documented and supported technically for both the short and long term. Proprietary software that may in the future become priced or from which support may be withdrawn will be subject to the Government's disapproval and cannot be licensed for EPA use under this TO. The contractor may use free or priced (i.e., commercial) proprietary software during the TO Period of

Performance (PoP), but is subject to Government evaluation if proffered in the Technical Proposal, and is subject to ATO evaluation if installed on EPA computers.

H.12.4 LICENSE TRANSFER

The contractor shall ensure that any warranty, maintenance, or other software technical support services in effect as the end of the TO PoP approaches is either already provided directly to the Government or else transferred to the Government at the end of the PoP.

H.13 NEWS RELEASE

The offeror shall not make any news release pertaining to this procurement without prior Government approval and only in coordination with the FEDSIM CO.

H.14 INTELLECTUAL PROPERTY RIGHTS

The existence of any patent, patent application, or other intellectual property right that encumbers any deliverable must be disclosed in writing on the cover letter that accompanies the delivery. If no such disclosures are provided, the data rights provisions in FAR 52.227-14 apply.

H.15 COOPERATION WITH OTHER SUPPORT CONTRACTORS

When EPA awards or administers other contracts at its facilities, the contractor shall: (1) fully cooperate with other contractors and Government employees, and (2) carefully fit its own work to such other additional contracted work as directed by the FEDSIM COR or FEDSIM CO. The contractor shall not commit or permit any act that will interfere with the work awarded to other contractors. If the contractor interferes with any work under another contract, the contractor shall restore such work to its previous condition and obtain the FEDSIM COR's satisfaction of its efforts at no cost to the Government.

I.1 TASK ORDER CLAUSES

All applicable and required provisions/clauses set forth in FAR 52.301automatically flow down to all Alliant TOs, based on their specific contract type (e.g., cost, fixed-price, etc.), statement of work, competition requirements, commercial or not commercial, and dollar value as of the date the TO solicitation is issued.

I.1.1 FAR 52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This TO incorporates one or more clauses by reference with the same force and effect as if they were given in full text. Upon request the FEDSIM CO will make their full text available. Also, the full text of a provision may be accessed electronically at the FAR website:

http://www.acquisition.gov/far/

FAR Part 12 commercial clauses do not apply to this TO.

FAR	TITLE	DATE
52.203-14	Display of Hotline Poster(s) (https://www.epa.gov/office-inspector-general/poster-report-fraud-waste-and-abuse-epa-oig-hotline)	OCT 2015
52.204-13	System for Award Management Maintenance	OCT 2016
52.204-14	Service Contract Reporting Requirements	OCT 2016
52.204-21	Basic Safeguarding of Covered Contractor Information Systems	JUN 2016
52.204-23	Prohibition on Contracting for Hardware, Software, and Services Developed or Provided by Kaspersky Lab and Other Covered Entities	JUL 2018
52.204-25	Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment	AUG 2019
52.215-21	Requirements for Certified Cost or Pricing Data and Data Other than Certified Cost or Pricing Data – Modifications	OCT 2010
52.216-7	Allowable Cost and Payment Fill-in: (30th)	JUN 2013
52.227-14	Rights in Data – General	MAY 2014
52.227-14	Rights In Data – General Alternate II and III	DEC 2007
52.227-15	Representation of Limited Rights Data and Restricted Computer Software	DEC 2007
52.227-21	Technical Data Declaration Revision and Withholding of Payment – Major Systems	MAY 2014
52.232-20	Limitation of Cost	APR 1984
52.232-22	Limitation of Funds	APR 1984

FAR	TITLE	DATE
52.232-40	Providing Accelerated Payments to Small Business Subcontractors	DEC 2013
52.243-2	Changes – Cost-Reimbursement	AUG 1987
52.246-5	Inspection of Services—Cost-Reimbursement	APR 1984
52.247-14	Contractor Responsibility for Receipt of Shipment	APR 1984
52.247-67	Submission of Transportation Documents for Audit Fill-in: COR, see Section G	FEB 2006

I.1.2 CLAUSES INCORPORATED BY FULL TEXT

52.217-7 OPTION FOR INCREASED QUANTITY – SEPARATELY PRICED LINE ITEM (MAR 1989)

The Government may require the delivery of the numbered line item, identified in the Schedule as an option item, in the quantity and at the price stated in the Schedule. The Contracting Officer may exercise the option by written notice to the Contractor within 30 days. Delivery of added items shall continue at the same rate that like items are called for under the contract, unless the parties otherwise agree.

(End of clause)

52.217-8 OPTION TO EXTEND SERVICES (NOV 1999)

The Government may require continued performance of any services within the limits and at the rates specified in the contract. These rates may be adjusted only as a result of revisions to prevailing labor rates provided by the Secretary of Labor. The option provision may be exercised more than once, but the total extension of performance hereunder shall not exceed 6 months. The Contracting Officer may exercise the option by written notice to the contractor within 30 days of the end of the period of performance.

(End of clause)

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

a. The Government may extend the term of this contract by written notice to the contractor within 30 days; provided that the Government gives the contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.
b. If the Government exercises this option, the extended contract shall be considered to include this option clause.
c. The total duration of this contract, including the exercise of any options under this clause, shall not exceed 66 months.

(End of clause)

I.2 GENERAL SERVICES ADMINISTRATION ACQUISITION MANUAL (GSAM), CLAUSES INCORPORATED BY REFERENCE

The full text of a provision may be accessed electronically at the GSAM website:

https://www.acquisition.gov/gsam/gsam.html/

GSAM	TITLE	DATE
552.204-9	Personal Identity Verification Requirements	OCT 2012
552.232.25	Prompt Payment	NOV 2009
552.239-70	Information Technology Security Plan and Security Authorization	JUN 2011
552.239-71	Security Requirements for Unclassified Information Technology Resources	JAN 2012

I.2.1 GSAM CLAUSES INCORPORATED BY FULL TEXT

GSAM 552.232-39 UNFORCEABILITY OF UNAUTHORIZED OBLIGATIONS (FAR DEVIATION) (JUL 2015)

a. Except as stated in paragraph (b) of this clause, when any supply or service acquired under this contract is subject to any [commercial supplier agreement (as defined in 502.101)] that includes any [language, provision, or] clause requiring the Government to indemnify the Contractor or any person or entity for damages, costs, fees, or any other loss or liability that would create an Anti-Deficiency Act violation (31 U.S.C. 1341), the following shall govern:
    1. Any such [language, provision, or] clause is unenforceable against the Government.
    2. Neither the Government nor any Government authorized end user shall be deemed to have agreed to such clause by virtue of it appearing in the [commercial supplier agreement. If the commercial supplier agreement] is invoked through an "I agree" click box or other comparable mechanism (e.g., "click-wrap" or "browse-wrap" agreements), execution does not bind the Government or any Government authorized end user to such clause.
    3. Any such [language, provision, or] clause is deemed to be stricken from the [commercial supplier agreement].

b. Paragraph a of this clause does not apply to indemnification by the Government that is expressly authorized by statute and specifically authorized under applicable agency regulations and procedures.

(End of clause)

GSAM 552.232-78 COMMERCIAL SUPPLIER AGREEMENTS – UNENFORCEABLE CLAUSES (JUL 2015)

a. When any supply or service acquired under this contract is subject to a commercial supplier agreement, the following language shall be deemed incorporated into the

commercial supplier agreement. As used herein, "this agreement" means the commercial supplier agreement:

1. Notwithstanding any other provision of this agreement, when the end user is an agency or instrumentality of the U.S. Government, the following shall apply:
    i. Applicability. This agreement is part of a contract between the commercial supplier and the U.S. Government for the acquisition of the supply or service that necessitates a license (including all contracts, task orders, and delivery orders not using FAR Part 12).
    ii. End user. This agreement shall bind the ordering activity as end user but shall not operate to bind a Government employee or person acting on behalf of the Government in his or her personal capacity.
    iii. Law and disputes. This agreement is governed by Federal law. (A) Any language purporting to subject the U.S. Government to the laws of a U.S. state, U.S. territory, district, or municipality, or foreign nation, except where Federal law expressly provides for the application of such laws, is hereby deleted. (B) Any language requiring dispute resolution in a specific forum or venue that is different from that prescribed by applicable Federal law is hereby deleted. (C) Any language prescribing a different time period for bringing an action than that prescribed by applicable Federal law in relation to a dispute is hereby deleted.
    iv. Continued performance. If the supplier or licensor believes the ordering activity to be in breach of the agreement, it shall pursue its rights under the Contract Disputes Act or other applicable Federal statute while continuing performance as set forth in 52.233-1 Disputes.
    v. Arbitration; equitable or injunctive relief. In the event of a claim or dispute arising under or relating to this agreement, (A) binding arbitration shall not be used unless specifically authorized by agency guidance, and (B) equitable or injunctive relief, including the award of attorney fees, costs or interest, may be awarded against the U.S. Government only when explicitly provided by statute (e.g., Prompt Payment Act or Equal Access to Justice Act).
    vi. Additional terms.
        a. This commercial supplier agreement may unilaterally incorporate additional terms by reference. Terms may be included by reference using electronic means (e.g., via web links, click and accept, etc.). Such terms shall be enforceable only to the extent that:
            1. When included by reference using electronic means, the terms are readily available at referenced locations; and
            2. Terms do not materially change Government obligations; and
            3. Terms do not increase Government prices; and
            4. Terms do not decrease overall level of service; and
            5. Terms do not limit any other Government right addressed elsewhere in this contract.

b. The order of precedence clause of this contract notwithstanding, any software license terms unilaterally revised subsequent to award that is inconsistent with any material term or provision of this contract is not enforceable against the Government.

vii. No automatic renewals. If any license or service tied to periodic payment is provided under this agreement (e.g., annual software maintenance or annual lease term), such license or service shall not renew automatically upon expiration of its current term without prior express Government approval.

viii. Indemnification. Any clause of this agreement requiring the commercial supplier or licensor to defend or indemnify the end user is hereby amended to provide that the U.S. Department of Justice has the sole right to represent the United States in any such action, in accordance with 28 U.S.C. 516.

ix. Audits. Any clause of this agreement permitting the commercial supplier or licensor to audit the end user's compliance with this agreement is hereby amended as follows: (A) Discrepancies found in an audit may result in a charge by the commercial supplier or licensor to the ordering activity. Any resulting invoice must comply with the proper invoicing requirements specified in the underlying Government contract or order. (B) This charge, if disputed by the ordering activity, will be resolved through the Disputes clause at 52.233-1; no payment obligation shall arise on the part of the ordering activity until the conclusion of the dispute process. (C) Any audit requested by the contractor will be performed at the contractor's expense, without reimbursement by the Government.

x. Taxes or surcharges. Any taxes or surcharges which the commercial supplier or licensor seeks to pass along to the Government as end user will be governed by the terms of the underlying Government contract or order and, in any event, must be submitted to the Contracting Officer for a determination of applicability prior to invoicing unless specifically agreed to otherwise in the Government contract.

xi. Non-assignment. This agreement may not be assigned, nor may any rights or obligations thereunder be delegated, without the Government's prior approval, except as expressly permitted under the clause at 52.232-23, Assignment of Claims.

xii. Confidential information. If this agreement includes confidentiality clause, such clause is hereby amended to state that neither the agreement nor the Federal Supply Schedule price list shall be deemed "confidential information." Issues regarding release of "unit pricing" will be resolved consistent with the Freedom of Information Act. Notwithstanding anything in this agreement to the contrary, the Government may retain any confidential information as required by law, regulation or its internal document retention procedures for legal, regulatory or compliance purposes; provided, however, that all such retained confidential

information will continue to be subject to the confidentiality obligations of this agreement.

2. If any provision of this agreement conflicts or is inconsistent with the preceding subparagraph (a)(1), the provisions of subparagraph (a)(1) shall prevail to the extent of such inconsistency.

(End of clause)

I.3 ENVIRONMENTAL PROTECTION AGENCY (EPA) ACQUISITION REGULATION (EPAAR) CLAUSES INCORPORATED BY REFERENCE

The full text of a provision may be accessed electronically at EPAAR website:

EPAAR	TITLE	DATE
1552.203-71	Display of EPA Office of Inspector General Hotline poster. (https://www.epa.gov/office-inspector-general/poster-report-fraud-waste-and-abuse-epa-oig-hotline)	JUL 2016
1552.235-76	Toxic Substances Control Act Confidential Business Information (TSCA)	APR 1996
1552.235-78	Data Security for Toxic Substances Control Act Confidential Business Information	DEC 1997
1552.235-80	Access to Confidential Business Information	OCT 2000

J.1 LIST OF ATTACHMENTS

The following attachments are attached, either in full text or electronically at the end of the TOR.

Attachment	Title
A/A1	COR Appointment (Elizabeth Moody COR/Kent Taylor ACOR)
B	MSR
C	Travel Authorization Request (TAR) Template
D	Reserved
E	RIP Template
F	Corporate NDA
G	Incremental Funding Chart
H	Problem Notification Report (PNR)
I	Deliverable Acceptance-Rejection Report
J	Government Furnished Information – IP version 6 Tools
K	EPA OEI and OITO Organizational Chart
L	NSOC WAN2010 Support Procedures
M	ADC Process
N	Server Growth Example
O	Government Furnished Property – Server Inventory EDSD
P	Acronym List
Q	Government Furnished Property – Server Inventory NCC
R	Government Furnished Property – Server Inventory Network
S	Government Furnished Information – Server Inventory Security
T	Government Furnished Property – Storage Inventory NCC
U	90 Day Incidents
V	Government Furnished Information – Software Inventory
W	Government Furnished Property – Software Versions
X	Government Furnished Information – CDM Tools Inventory
Y	Background for Task 8 – Network Security Operations
Z	Background for Task 9 Subtask 4 – DATA
AA	Background for Task 10 Subtask 1 Web Access Management
BB	Background for Task 10 Subtask 3 PKI
CC	Award Fee Determination Plan (AFDP)
DD	Government Furnished Information – Cyber Asset Management
EE	Consent to Purchase (CTP) Template
FF	Service Level Agreements (SLAs)
FG	DOD Contract Security Classification Specification Form DD254
FH	TSCA CBI Contractor Access Instructions and Forms
FI	Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment

CLIN	CLIN TYPE	ESTIMATED COST	ESTIMATED AWARD FEE	TOTAL ESTIMATED	FUNDED COST	FUNDED AWARD FEE	TOTAL FUNDED
0001	FFP LABOR	(b) (4)					
0002	CPAF LABOR						
0003	TRAVEL	$ 100,000		$ 100,000	(b) (4)	(b) (4)	
0004	ANCILLARY	$ 5,000,000		$ 5,000,000			
0005	CAF	$ 100,000		$ 100,000			
SUB				35,505,601		(b) (4)	$ 35,308,613
1001	FFP LABOR	(b) (4)	(b) (4)		(b) (4)		
1002	CPAF LABOR						
1003	TRAVEL	$ 100,000		$ 100,000			
1004	ANCILLARY	$ 5,000,000		$ 5,000,000			
1005	CAF	$ 100,000		$ 100,000			
SUB				49,967,842		(b) (4)	$ 46,517,536
2001	FFP LABOR	(b) (4)	(b) (4)		(b) (4)		
2002	CPAF LABOR						
2003	TRAVEL	$ 100,000		$ 100,000			
2004	ANCILLARY	$ 5,700,000		$ 5,700,000			
2005	CAF	$ 100,000		$ 100,000		(b) (4)	
SUB				56,859,881			$ 53,514,035
3001	FFP LABOR	(b) (4)	(b) (4)				$
3002	CPAF LABOR						
3003	TRAVEL	$ 100,000		$ 100,000		(b) (4)	
3004	ANCILLARY	$ 8,750,000		$ 8,750,000			
3005	CAF	$ 100,000		$ 100,000			
SUB		(b) (4)		$ 71,504,468		(b) (4)	$ 44,253,558
4001	FFP LABOR				$ -		$ -
4002	CPAF LABOR	(b) (4)			$ -	$ -	$ -
4003	TRAVEL	$ 100,000		$ 100,000	$ -		$ -
4004	ANCILLARY	$ 550,000		$ 550,000	$ -		$ -
4005	CAF	$ 100,000		$ 100,000			
SUB					$ -	$ -	$ -
TOTAL		(b) (4)		$ 266,832,932	(b) (4)		$ 179,593,742