OMB Approval 2700-0042

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE	OF	PAGE(S)
	1		168

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
10	See Block 16C		

6. ISSUED BY CODE

National Aeronautics and Space Administration
Goddard Space Flight Center
ATTN: LaShawn Davis, Mail Stop 210.7
Greenbelt, MD 20771

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No. Street, County, State and ZIP: Code)*

All Potential Offerors

CODE FACILITY CODE

(4) X

9A. AMENDMENT OF SOLICITATION NO.
NNG13451284R

9B. DATED *(SEE ITEM 11)*
08/16/2013

10A. MODIFICATION OF CONTRACT/ORDER NO.

10B. DATED *(SEE ITEM 13)*

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 one (1) copy of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATA SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you 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)*

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

(4) 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:

D. OTHER Specify type of modification and authority)

E. **IMPORTANT:** Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

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

The purpose of this amendment is to incorporate a conformed Final Request for Proposal revisions at **Sections 6.2.2, 6.3.2, and 6.4**; update specified exhibits, and revise the proposal due date under the SEWP V solicitation.

A. Revise Proposal Submission Date as follows:
   FROM: December 3, 2013 (2:00PM EST)
   TO: **December 10, 2013** (2:00PM EST)
B. Update RFP Exhibits: EMDF, MMD and PED.
C. Add Exhibits: PEAextended, PEBextended, PECextended, and PEDextended; if required for additional available components.
D. All Other terms and conditions remain unchanged.

(End of Amendment)

Except at 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)*	
		LASHAWN K. DAVIS	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
(Signature of person authorized to sign)		BY LaShawn K. Davis *(Signature of Contracting Officer)*	11/22/2013

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I. CONTRACT TERMS AND CONDITIONS--COMMERCIAL ITEMS (52.212-4) (JUL 2013)

(a) *Inspection/Acceptance*. The Contractor shall only tender for acceptance those items that conform to the requirements of this contract. The Government reserves the right to inspect or test any supplies or services that have been tendered for acceptance. The Government may require repair or replacement of nonconforming supplies or reperformance of nonconforming services at no increase in contract price. If repair/replacement or reperformance will not correct the defects or is not possible, the Government may seek an equitable price reduction or adequate consideration for acceptance of nonconforming supplies or services. The Government must exercise its post-acceptance rights—

(1) Within a reasonable time after the defect was discovered or should have been discovered; and

(2) Before any substantial change occurs in the condition of the item, unless the change is due to the defect in the item.

(b) *Assignment*. The Contractor or its assignee may assign its rights to receive payment due as a result of performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency in accordance with the Assignment of Claims Act (31 U.S.C. 3727). However, when a third party makes payment (*e.g.*, use of the Governmentwide commercial purchase card), the Contractor may not assign its rights to receive payment under this contract.

(c) *Changes*. Changes in the terms and conditions of this contract may be made only by written agreement of the parties.

(d) *Disputes*. This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613). Failure of the parties to this contract to reach agreement on any request for equitable adjustment, claim, appeal or action arising under or relating to this contract shall be a dispute to be resolved in accordance with the clause at FAR 52.233-1, Disputes, which is incorporated herein by reference. The Contractor shall proceed diligently with performance of this contract, pending final resolution of any dispute arising under the contract.

(e) *Definitions*. The clause at FAR 52.202-1, Definitions, is incorporated herein by reference.

(f) *Excusable delays*. The Contractor shall be liable for default unless nonperformance is caused by an occurrence beyond the reasonable control of the Contractor and without its fault or negligence such as, acts of God or the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, unusually severe weather, and delays of common carriers. The Contractor shall notify the Contracting Officer in writing as soon as it is reasonably possible after the commencement of any excusable delay, setting forth the full particulars in connection therewith, shall remedy such occurrence with all reasonable dispatch, and shall promptly give written notice to the Contracting Officer of the cessation of such occurrence.

(g) Invoice.

(1) The Contractor shall submit an original invoice and three copies (or electronic invoice, if authorized) to the address designated in the contract to receive invoices. An invoice must include—

(i) Name and address of the Contractor;

(ii) Invoice date and number;

(iii) Contract number, contract line item number and, if applicable, the order number;

(iv) Description, quantity, unit of measure, unit price and extended price of the items delivered;

(v) Shipping number and date of shipment, including the bill of lading number and weight of shipment if shipped on Government bill of lading;

(vi) Terms of any discount for prompt payment offered;

(vii) Name and address of official to whom payment is to be sent;

(viii) Name, title, and phone number of person to notify in event of defective invoice; and

(ix) Taxpayer Identification Number (TIN). The Contractor shall include its TIN on the invoice only if required elsewhere in this contract.

(x) Electronic funds transfer (EFT) banking information.

(A) The Contractor shall include EFT banking information on the invoice only if required elsewhere in this contract.

(B) If EFT banking information is not required to be on the invoice, in order for the invoice to be a proper invoice, the Contractor shall have submitted correct EFT banking information in accordance with the applicable solicitation provision, contract clause (*e.g.*, 52.232-33, Payment by Electronic Funds Transfer—System for Award Management, or 52.232-34, Payment by Electronic Funds Transfer—Other Than System for Award Management), or applicable agency procedures.

(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

(2) Invoices will be handled in accordance with the Prompt Payment Act (31 U.S.C. 3903) and Office of Management and Budget (OMB) prompt payment regulations at 5 CFR Part 1315.

(h) *Patent indemnity*. The Contractor shall indemnify the Government and its officers, employees and agents against liability, including costs, for actual or alleged direct or contributory infringement of, or inducement to infringe, any United States or foreign patent, trademark or copyright, arising out of the performance of this contract, provided the Contractor is reasonably notified of such claims and proceedings.

(i) Payment.—

(1) *Items accepted*. Payment shall be made for items accepted by the Government that have been delivered to the delivery destinations set forth in this contract.

(2) *Prompt payment*. The Government will make payment in accordance with the Prompt Payment Act (31 U.S.C. 3903) and prompt payment regulations at 5 CFR Part 1315.

(3) *Electronic Funds Transfer (EFT)*. If the Government makes payment by EFT, see 52.212-5(b) for the appropriate EFT clause.

(4) *Discount*. In connection with any discount offered for early payment, time shall be computed from the date of the invoice. For the purpose of computing the discount earned, payment shall be considered to have been made on the date which appears on the payment check or the specified payment date if an electronic funds transfer payment is made.

(5) *Overpayments*. If the Contractor becomes aware of a duplicate contract financing or invoice payment or that the Government has otherwise overpaid on a contract financing or invoice payment, the Contractor shall—

(i) Remit the overpayment amount to the payment office cited in the contract along with a description of the overpayment including the—

(A) Circumstances of the overpayment (*e.g.*, duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);

(B) Affected contract number and delivery order number, if applicable;

(C) Affected contract line item or subline item, if applicable; and

(D) Contractor point of contact.

(ii) Provide a copy of the remittance and supporting documentation to the Contracting Officer.

(6) *Interest*.

(i) All amounts that become payable by the Contractor to the Government under this contract shall bear simple interest from the date due until paid unless paid within 30 days of becoming due. The interest rate shall be the interest rate established by the Secretary of the Treasury as provided in Section 611 of the Contract Disputes Act of 1978 (Public Law 95-563), which is applicable to the period in which the amount becomes due, as provided in (i)(6)(v) of this clause, and then at the rate applicable for each six-month period as fixed by the Secretary until the amount is paid.

(ii) The Government may issue a demand for payment to the Contractor upon finding a debt is due under the contract.

(iii) *Final decisions*. The Contracting Officer will issue a final decision as required by 33.211 if—

(A) The Contracting Officer and the Contractor are unable to reach agreement on the existence or amount of a debt within 30 days;

(B) The Contractor fails to liquidate a debt previously demanded by the Contracting Officer within the timeline specified in the demand for payment unless the amounts were not repaid because the Contractor has requested an installment payment agreement; or

(C) The Contractor requests a deferment of collection on a debt previously demanded by the Contracting Officer (see 32.607-2).

(iv) If a demand for payment was previously issued for the debt, the demand for payment included in the final decision shall identify the same due date as the original demand for payment.

(v) Amounts shall be due at the earliest of the following dates:

(A) The date fixed under this contract.

(B) The date of the first written demand for payment, including any demand for payment resulting from a default termination.

(vi) The interest charge shall be computed for the actual number of calendar days involved beginning on the due date and ending on—

(A) The date on which the designated office receives payment from the Contractor;

(B) The date of issuance of a Government check to the Contractor from which an amount otherwise payable has been withheld as a credit against the contract debt; or

(C) The date on which an amount withheld and applied to the contract debt would otherwise have become payable to the Contractor.

(vii) The interest charge made under this clause may be reduced under the procedures prescribed in 32.608-2 of the Federal Acquisition Regulation in effect on the date of this contract.

(j) *Risk of loss*. Unless the contract specifically provides otherwise, risk of loss or damage to the supplies provided under this contract shall remain with the Contractor until, and shall pass to the Government upon:

(1) Delivery of the supplies to a carrier, if transportation is f.o.b. origin; or

(2) Delivery of the supplies to the Government at the destination specified in the contract, if transportation is f.o.b. destination.

(k) *Taxes*. The contract price includes all applicable Federal, State, and local taxes and duties.

(l) *Termination for the Government's convenience*. The Government reserves the right to terminate this contract, or any part hereof, for its sole convenience. In the event of such termination, the Contractor shall immediately stop all work hereunder and shall immediately cause any and all of its suppliers and subcontractors to cease work. Subject to the terms of this contract, the Contractor shall be paid a percentage of the contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Contractor can demonstrate to the satisfaction of the Government using its standard record keeping system, have resulted from the termination. The Contractor shall not be required to comply with the cost accounting standards or contract cost principles for this purpose. This paragraph does not give the Government any right to audit the Contractor's records. The Contractor shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(m) *Termination for cause*. The Government may terminate this contract, or any part hereof, for cause in the event of any default by the Contractor, or if the Contractor fails to comply with any contract terms and conditions, or fails to provide the Government, upon request, with adequate assurances of future performance. In the event of termination for cause, the Government shall not be liable to the Contractor for any amount for supplies or services not accepted, and the Contractor shall be liable to the Government for any and all rights and remedies provided by law. If it is determined that the Government improperly terminated this contract for default, such termination shall be deemed a termination for convenience.

(n) *Title*. Unless specified elsewhere in this contract, title to items furnished under this contract shall pass to the Government upon acceptance, regardless of when or where the Government takes physical possession.

(o) *Warranty*. The Contractor warrants and implies that the items delivered hereunder are merchantable and fit for use for the particular purpose described in this contract.

(p) *Limitation of liability*. Except as otherwise provided by an express warranty, the Contractor will not be liable to the Government for consequential damages resulting from any defect or deficiencies in accepted items.

(q) *Other compliances*. The Contractor shall comply with all applicable Federal, State and local laws, executive orders, rules and regulations applicable to its performance under this contract.

(r) *Compliance with laws unique to Government contracts.* The Contractor agrees to comply with 31 U.S.C. 1352 relating to limitations on the use of appropriated funds to influence certain Federal contracts; 18 U.S.C. 431 relating to officials not to benefit; 40 U.S.C. 3701, *et seq*., Contract Work Hours and Safety Standards Act; 41 U.S.C. 51-58, Anti-Kickback Act of 1986; 41 U.S.C. 265 and 10 U.S.C. 2409 relating to whistleblower protections; 49 U.S.C. 40118, Fly American; and 41 U.S.C. 423 relating to procurement integrity.

(s) *Order of precedence*. Any inconsistencies in this solicitation or contract shall be resolved by giving precedence in the following order:

(1) The schedule of supplies/services.

(2) The Assignments, Disputes, Payments, Invoice, Other Compliances, Compliance with Laws Unique to Government Contracts, and Unauthorized Obligations paragraphs of this clause;

(3) The clause at 52.212-5.

(4) Addenda to this solicitation or contract, including any license agreements for computer software.

(5) Solicitation provisions if this is a solicitation.

(6) Other paragraphs of this clause.

(7) The Standard Form 1449.

(8) Other documents, exhibits, and attachments.

(9) The specification.

(t) System for Award Management (SAM).

(1) Unless exempted by an addendum to this contract, the Contractor is responsible during performance and through final payment of any contract for the accuracy and completeness of the data within the SAM database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in

the SAM database after the initial registration, the Contractor is required to review and update on an annual basis from the date of initial registration or subsequent updates its information in the SAM database to ensure it is current, accurate and complete. Updating information in the SAM does not alter the terms and conditions of this contract and is not a substitute for a properly executed contractual document.

(2)(i) If a Contractor has legally changed its business name, "doing business as" name, or division name (whichever is shown on the contract), or has transferred the assets used in performing the contract, but has not completed the necessary requirements regarding novation and change-of-name agreements in FAR Subpart 42.12, the Contractor shall provide the responsible Contracting Officer a minimum of one business day's written notification of its intention to (A) change the name in the SAM database; (B) comply with the requirements of Subpart 42.12; and (C) agree in writing to the timeline and procedures specified by the responsible Contracting Officer. The Contractor must provide with the notification sufficient documentation to support the legally changed name.

(ii) If the Contractor fails to comply with the requirements of paragraph (t)(2)(i) of this clause, or fails to perform the agreement at paragraph (t)(2)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the SAM information that shows the Contractor to be other than the Contractor indicated in the contract will be considered to be incorrect information within the meaning of the "Suspension of Payment" paragraph of the electronic funds transfer (EFT) clause of this contract.

(3) The Contractor shall not change the name or address for EFT payments or manual payments, as appropriate, in the SAM record to reflect an assignee for the purpose of assignment of claims (see Subpart 32.8, Assignment of Claims). Assignees shall be separately registered in the SAM database. Information provided to the Contractor's SAM record that indicates payments, including those made by EFT, to an ultimate recipient other than that Contractor will be considered to be incorrect information within the meaning of the "Suspension of payment" paragraph of the EFT clause of this contract.

(4) Offerors and Contractors may obtain information on registration and annual confirmation requirements via SAM accessed through https://www.acquisition.gov.

(u) Unauthorized Obligations

(1) Except as stated in paragraph (u)(2) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any 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:

(i) Any such clause is unenforceable against the Government.

(ii) 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 EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or 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.

(iii) Any such clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or agreement.

(2) Paragraph (u)(1) 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)

Note! All clauses within this contract apply to all Groups unless otherwise specified.

A.1.1. DELIVERABLE REQUIREMENTS (GSFC 52.211-90) (OCT 1988)

The Contractor shall perform and/or deliver the following:

Item	Description	Reference	Schedule	Shipping Classification	Delivery Method/Addressee(s)
01	Annual Self-Certification	Section A.1.19	Annually	IV	SEWP Contracting Officer
02	Small Business Subcontracting Reports - SSR	Section A.1.45	Semiannually-March 31 and September 30	IV	http://esrs.gov
03	Certificate of Maintainability	Section A.1.17	Within 20 calendar days of the issuing Contracting Officer's request	IV	Issuing Contracting Officer
04	Administrative Handling Fee Report	Attachment D (D.6) and Section A.1.27	Quarterly	IV	Electronically to the SEWP Program Management Office (PMO)
05	Small Business Program Representation	Section II: 52.219-28	60 to 120 calendar days prior to the end of the fifth year of the contract	IV	SEWP Contracting Officer
06	Limitations on Subcontracting Certification	Section A.1.41	Annually on October 15	IV	SEWP Contracting Officer
07	IT Security Management Plan (NASA Delivery Orders Only, when applicable)	Section A.1.49	Within 30 calendars days of the issuing Contracting Officer's request	IV	SEWP Contracting Officer

A.1.2. SUPPLIES AND/OR SERVICES TO BE FURNISHED

This information will be removed at contract award:

****
This Request for Proposal (RFP) will result in the award of separate contracts. Therefore, it is necessary to keep this clause generic at this time. At contract award, the proposed equipment will be identified in this clause.
****

The Contractor shall provide all supplies and services in accordance with Attachment C, Statement of Work, and as described in Addendum 1, Attachments A (Technical Specifications) & B (Mandatory Deliverables) herein, at the following prices: (to be completed at time of award)

The contracts will be awarded by both Category and Group as follows:

Category A (Computer Systems/Servers) – NAICS 334111
Group A – Computer Based Systems (Full and Open Competition)

Category B (Complementary Products) – NAICS 541519
Group B – Mass Storage Devices (Service Disabled Veteran-Owned Small Business Set-Aside)
– Mass Storage Devices (Hub-Zone Small Business Set-Aside)
Group C – Server Support Devices / Multi-Functional Devices (Small Business Set-Aside)
Group D – Networking / Security / Video and Conference Tools (Full and Open Competition)

(End of Text)

A.1.3. PROCEDURES FOR ORDERS

Supplies or services to be furnished under this contract shall be specified by the issuance of delivery orders from any Government agency priced in accordance with Clause A.1.7 and Attachment F, Pricing Exhibits as defined in the SEWP database of record. Such orders may be issued from the effective date of the contract through the ordering period. Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order inclusive of all options for up to a period of five years beyond the effective ordering period (See A.1.5(d)). The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after the last date of the last item to be delivered in the issued delivery order schedule**.**

The issuing Contracting Officer may negotiate additional terms and conditions for a specific order. Any additional terms and conditions including licensing agreements proposed by a Contractor must be clearly identified in writing in the quote. All proposed licenses and other terms and conditions must be in accordance with applicable regulations, laws, and policies. The terms and conditions contained in the basic contract shall prevail in the event of conflict with any terms and conditions imposed at the delivery order level. (For example, the ordering Agency IT security policies, procedures and requirements or leasing of SEWP equipment may be included in individual orders.)

Delivery orders will identify the exact destination for shipment and warranties, which may be limited to the United States and its possessions. Shipments to United States Government installations located outside the U.S. and its possessions are per mutual agreement between the ordering Government Agency and Contractor.

The fixed price for each delivery order may not be increased except when authorized by a modification to the delivery order. If the Contractor decreases the price of any item ordered, they shall notify the issuing Contracting Officer via e-mail within 2 business days of the price decrease.

The price of each item in a delivery order shall be no greater than the price in the SEWP database of record on the date the issuing Contracting Officer signs the order or the award date of the order field if the signature date is not present.

Unless an agency receives an exemption from the SEWP Program Management Office (PMO), all delivery orders shall be submitted by the issuing Agency directly to the SEWP PMO whose functions are described in Attachment C, Statement of Work prior to acceptance and processing of the delivery order by the contractor. Submission may be made either via e-mail, fax or other designated electronic commerce methods as defined by the SEWP PMO.

(End of text)

A.1.4. ORDERING (52.216-18) (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from May 1, 2014 – April 30, 2019 (base ordering period) and one option (May 1, 2019- April 30, 2024).

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

**Note: The Small Business Jobs Act of 2010 allows any issuing CO to set aside orders placed against multiple-award contracts for SBCs, including small businesses in the 8(a), HUBZone, SDVOSB, and WOSB Programs.

(End of clause)

A.1.5. INDEFINITE QUANTITY (52.216-22) (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified and effective for the period stated, in the Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not guaranteed to be purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum. The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract beyond five (5) years from the end of the contract’s effective ordering period for those orders placed within the effective ordering period.
.

(End of clause)

A.1.6. MINIMUM AND MAXIMUM QUANTITIES

As referred to in the "Indefinite Quantity" clause of this contract, the minimum amount of supplies or services that shall be ordered during the effective ordering period shall be $25.00 per contract.

The Government guarantees to issue at least one order for a total amount not less than the minimum. There will be no further obligation on the part of the Government to issue additional orders thereafter.

The maximum ordering value of each contract shall not exceed $ 20,000,000,000.

(End of text)

A.1.7. DISCOUNTS FOR TECHNOLOGY EQUIPMENT

The Contractor shall offer a discount which will be applied against its commercial list price, see Attachment F, published in the SEWP database of record. The discount(s) proposed will be applied to all Technology Equipment purchases for the life of the contract(s). The Government requires that all items be available to order throughout the life of this contract, if available from the Original Equipment Manufacturer (OEM).

The price of all CLINs in Attachment F, Pricing Exhibits as defined in the SEWP database of record must be equal to or less than the price for the same offering on the Contractor's current GSA Schedule after discounting for any GSA or other Government fee. If the product is not available on the Contractor's current GSA schedule, then the SEWP contract price must be equal to or less than the same offering on the Contractor's current commercial price list and/or any Contractor's comparable Federal Government contracts unless any pricing difference can be justified. The Contractor shall notify the SEWP Contracting Officer and the ordering Agency Contracting Officer, within seven calendar days, of changes to prices below the offering price listed in this contract. If the Contractor's current GSA Schedule Contract price list after discounting any GSA or other Government fee or the Contractor's current commercial or equivalent Federal Government price list is lower than the above discounted price, the Government retains the right to order at the lesser amount unless justification for the price difference exists.

Pricing must be comparable to that of other SEWP Contractors and similar contract vehicles. Markups above an OEM's wholesale / invoice price list must be reasonable and justified.

The Government may negotiate a lower price on an order-by-order basis.

PRODUCT CLASSIFICATIONS

All items offered under the contract, whether mandatory products, additional technology or available components shall be associated with a Product Classification Group and Classification Description Subgroup. The valid set of Product Classifications is pre-defined as listed in Attachment F, Pricing Exhibits and cannot be added to or deleted from or otherwise changed. One Classification Description Subgroup is predefined with an associated Classification Subgroup Discount of 0%. The Contractor may propose additional Classification Description Subgroups and an associated price discount. The discount for each item on contract will be automatically assigned based on the Product Classification Group and Classification Description Subgroup associated with that item.

These discounts shall remain constant over the life of the contract, and the applicable Classification Subgroup discount shall be used when adding new equipment to the contract.

Training and Documentation
Training and Documentation (both on-line and hardcopy) CLINS may be provided if the training and documentation directly relates to products that are in scope for SEWP as defined in Attachment C, Statement of Work.

Maintenance, Warranty and Licensing
Maintenance, warranty services and product licensing may be provided for any in scope product.

Service Restrictions
Agencies may utilize SEWP contracts to purchase product based services. These services include site planning, installation, integration and product engineering services using the Service CLINs on the contract provided that the services directly support the site planning, installation and implementation of in scope equipment/products. The products may either be purchased separately from SEWP or another means or at the same time as the services.

Labor services and ancillary products other than product training, maintenance, warranty, site planning, installation, integration and product engineering services and products already defined in the Product Classification Groups may be purchased using the Service CLINs on the contract provided that those services/products directly support the associated equipment purchased on that delivery and provided that

these additional services/products do not exceed 5% of the price of the associated equipment/products. These limited services/products shall not be purchased separately from the related product purchase. The 5% restriction does not apply to product training, maintenance, warranty, site planning, installation, integration and product engineering services and products.

The rates for services contained in the contractor's price list applicable to this Contract are reviewed and approved as fair and reasonable. However, for orders with labor services based on labor rates, the issuing CO placing an order against the contract is responsible for considering the labor hours and mix of labor proposed to perform specific task being ordered and for making a determination that the price of those services is fair and reasonable.

(End of text)

A.1.8. ACCEPTANCE--MULTIPLE LOCATIONS (GSFC 52.246-93) (APR 2008)

The issuing Contracting Officer or authorized representative, as identified on the order will accomplish acceptance as specified on each order.

The Contracting Officer reserves the right to designate other Government agents as authorized representatives. The Contractor will be notified by a written notice or by a copy of the delegation letter if other agents are authorized.

If this is a fixed price type contract, acceptance shall be deemed to have occurred constructively--for the sole purpose of computing an interest penalty that might be due the Contractor under the Prompt Payment Act--on the 7th day after the Contractor has delivered the supplies or services in accordance with the terms and conditions of the contract. In the event that actual acceptance occurs within the constructive acceptance period, the determination of an interest penalty shall be based on the date of the actual acceptance.

(End of clause)

A.1.9. MATERIAL INSPECTION AND RECEIVING REPORT (1852.246-72) (AUG 2003)

NOTE: This clause is applicable to GSFC and Wallops delivery orders only.

(a) At the time of each delivery to the Government under this contract, the Contractor shall furnish a Material Inspection and Receiving Report (DD Form 250 series) prepared in an original copy and sufficient other copies to accomplish the following distribution:

(1) Via mail and marked "Advance Copy", one copy each to the Contracting Officer, the Contracting Officer's Technical Representative (if designated in the contract), and to the cognizant Administrative Contracting Officer, if any.

(2) Via mail, the original and 1 copy (unfolded) to the shipment address (delivery point) specified in Section F of this contract. Mark the exterior of the envelope "CONTAINS DD FORM 250". This must arrive prior to the shipment.

(3) With shipment in waterproof envelope (one copy) for the consignee.

(4) If the shipment address is not directly to the Goddard Space Flight Center (Greenbelt) or Goddard Space Flight Center (Wallops) central receiving areas, then one copy of the DD Form 250 must be provided (via mail) to one on the following addresses depending upon whether this contract is with GSFC Greenbelt or GSFC Wallops:

Receiving and Inspection (Code 279), Goddard Space Flight Center, Greenbelt, MD 20771.

Receiving and Inspection (Bldg. F16), Wallops Flight Facility, Wallops Island VA 23337.

(b) The Contractor shall prepare the DD Form 250 in accordance with NASA FAR Supplement 1846.6. The Contractor shall enclose the copies of the DD Form 250 in the package or seal them in a waterproof envelope, which shall be securely attached to the exterior of the package in the most protected location.

(c) When more than one package is involved in a shipment, the Contractor shall list on the DD Form 250, as additional information, the quantity of packages and the package numbers. The Contractor shall forward the DD Form 250 with the lowest numbered package of the shipment and print the words "CONTAINS DD FORM 250" on the package.

(End of clause)

A.1.10. TIME OF DELIVERY

The Government requires delivery to be made in accordance to the following schedule(s):

1. Standard Delivery: Items shall be delivered within 30 calendar days of receipt and processing of the Delivery Order at the SEWP PMO, for non-credit card orders, and within 30 calendar days of placement of credit card orders unless otherwise noted and mutually agreed upon as described below for Expedited and Non-standard Delivery.

2. Expedited Delivery: An expedited delivery schedule of less than 30 calendar days delivery, mutually agreed upon by the Ordering Agency and Contractor, may be added to Delivery Orders.

3. Non-standard Delivery: A delivery schedule other than the 30 calendar day standard delivery time may be proposed on an individual CLIN (item) basis or at the time a quote is provided to the Government

4. If an item cannot be delivered within the delivery time for that item, the Contractor shall notify the issuing Contracting Officer and the SEWP PMO within two business days of receipt of order or notification from the manufacturer of the expected delivery date for the ordered item(s). Upon notification, the Ordering Agency may choose to cancel the order or request due consideration for the delay.

(End of text)

A.1.11. PARTIAL SHIPMENTS

A partial shipment is any shipment that does not include all items specified in the order.

Partial shipments will not be accepted unless authorized on the delivery order or by the issuing Contracting Officer prior to the time of delivery. The Government reserves the right to return partial shipments to the Contractor, transportation charges collect.

(End of text)

A.1.12. INDIVIDUALS AUTHORIZED TO ISSUE ORDERS

Strategic Sourcing Initiatives
The Government reserves the right to utilize the SEWP V contracts to support strategic sourcing initiatives. These initiatives may range from a single facility, an agency, or to the entire Federal Government under the auspices of OMB. Socio-economic considerations and goals may be considered as an integral aspect of strategic sourcing.
Any Government Contracting Officer or duly authorized representative is authorized to place delivery orders against the contract. Credit card orders may be issued by agency designated ordering officials.

Support Service Contractors may be authorized by their Government Contracting Officer to purchase from the SEWP Contracts on behalf of the Government. To authorize a contractor to purchase from the SEWP contracts, the authorizing contracting officer should send a copy of the authorization letter to the SEWP Program Office containing all of the following information:

1. Authorizing Agency Name, Contracting Officer (CO/KO) Name, Mailing Address, Email Address, Phone/FAX number
2. Complete contractor corporate name, division, and address.
3. Contract number and period of performance
4. A statement that the contractor is authorized to purchase from SEWP contracts in support of the above contract.
5. The CO's/KO's signature and date signed.

Note: Local and State Governments, and Federal Tribes are not authorized to issue orders against these contracts.

(End of text)

A.1.13. APPROVAL OF CONTRACT (52.204-1) (DEC 1989)

This contract is subject to the written approval of the Associate Director for Acquisition and shall not be binding until so approved.

(End of clause)

A.1.14. WARRANTY

The Contractor shall provide an extended warranty, which can be purchased and begin at any time during the standard commercial warranty period up to and including the end of the commercial warranty period. Extended warranty packages may be invoiced and paid at the start of the warranty period. This extended warranty shall provide coverage based on the standard commercial warranty.

At the Government’s discretion, the Government may order, at any time during a warranty period, monthly maintenance at a Discounted Monthly Extended Warranty amount in lieu of the extended warranty.

A.1.14.1. SOFTWARE MAINTENANCE / PRODUCT EXTENDED WARRANTY AS A PRODUCT

Product and software maintenance, warranty and licensing shall be treated as a commercial product unless such product is priced on a usage basis; e.g. maintenance on a printer based on usage must be invoiced monthly. Software maintenance as a product includes the publishing of bug/defect fixes via patches and updates/upgrades in function and technology to maintain the operability and usability of the software product. It may also include other no charge support that is included in the purchase price of the product in the commercial marketplace. No

charge support includes items such as user blogs, discussion forums, on-line help libraries and Frequently Asked Questions (FAQ), hosted chat rooms, and limited telephone, email and/or web-based general technical support for users self diagnostics.
Software maintenance as a product does NOT include the creation, design, implementation, integration, etc. of a software package. These examples are considered software maintenance as a service and are to be billed monthly.

(End of text)

A.1.15. ELECTRONIC DATA AND REPORT INTERCHANGE

Electronic Data and Report Interchange shall apply in accordance with Attachment D, Contractor/Government Communication Requirements.

(End of text)

A.1.16. OTHER FEDERAL AGENCY UTILIZATION

Other Federal Agencies, and authorized Contractors, will be allowed to utilize this contract, on a non-mandatory basis.

(End of text)

*****NOTE!** Non-Federal Governments are not authorized to use this contract unless mandated by Congress.

A.1.17. CERTIFICATE OF MAINTAINABILITY

A "Certificate of Maintainability" is not required for equipment acquired and maintained under this contract unless it is specifically requested by the issuing Contracting Officer. If it is requested, the Contractor shall issue the certification within twenty calendar days of the request.

The certificate shall state that at the time of delivery, preventive maintenance in accordance with the specifications of the Original Equipment Manufacturer (OEM) has been performed and that the equipment is performing in accordance with the OEM's specifications such that the OEM (or the OEM's successor in interest, if such exists at the time of the commitment) commits that it would assume maintenance of the equipment (or the OEM certifies that the equipment is eligible for maintenance, including but not limited to repair or inspection charges) if such maintenance were assumed effective the date after the Contractor's performance ceases. The Certificate of Maintainability shall also state that the equipment is at the most current OEM's revision level. The Contractor is responsible for bearing all costs associated with obtaining such certification at no charge to the Government.

If equipment is acquired under this contract without maintenance, at the time of product delivery, the Contractor shall issue a Certificate of Maintainability for such equipment if requested by the issuing Contracting Officer. The certificate shall list each item delivered by a component identification number (i.e. serial number) and state that the equipment is in such condition that the OEM commits that it would assume maintenance of the equipment (or the OEM certifies that the equipment is eligible for maintenance). All charges required to obtain the requisite performance of the equipment, shall be borne by the Contractor. The fact that the equipment may have been acquired with a warranty does not relieve the Contractor of its obligations under this subparagraph.

(End of text)

A.1.18. SUBSTITUTE/ENHANCEMENTS FOR SPECIALIZED EQUIPMENT/SOFTWARE TO ACCOMMODATE USERS WITH DISABILITIES

The Contractor is encouraged to offer equipment or software that becomes available after contract award and offers improvements in technology and that better suits the needs of users with disabilities. If the Government elects to do so, it may evaluate the equipment/software, and substitute the equipment for the equipment covered in the contract

but not yet delivered. Any such proposal should contain the general information required by the "Technology Refreshment" clause A.1.19 in this Section.

When substitution of such specialized technology is made without charge to the Government, or as a planned part of the contract (e.g. planned upgrade), manuals and publications as required by the contract shall be provided to all addresses (in the stated quantities) affected by the change without charge to the Government (unless other payment arrangements are made by the ordering agency).

(End of text)

A.1.19. TECHNOLOGY REFRESHMENT

The Government shall have the right to require, at any time, that the Contractor offer under this contract state-of-the-art versions of hardware and software components that it agrees to offer SEWP customers. In this way the Government seeks to ensure that it can obtain the benefits of new design enhancements and technological updates or advances for equipment currently on the contract. When requested or offered, the Contractor shall provide, within 30 calendar days of receipt of request, a refreshment proposal including the components so identified, at the technology discount as indicated in Clause A.1.7.

In the event that the Contractor is no longer able to provide the products it previously offered (because they are no longer being manufactured, for example), the Contractor may, with the Government's approval, remove the products from the contract. For products in the mandatory deliverable lists, the Contractor shall provide substitute products which shall have the functional capabilities of the products originally provided and shall meet or exceed the original products' rated performance characteristics, at the appropriate discount as indicated in Clause A.1.7.

On an annual basis, the Contractor shall provide the Government either with a self-certification that the mandatory deliverable items currently on the Contract are state-of-the-art technology, or a technology refreshment proposal updating the mandatory deliverable items. The Government will review the Contractor self-certification and/or technology refreshment proposal for acceptability in terms of scope and the current state of technology.

The Government reserves the right to remove any item from the current contract if it deems the item to be out of scope, not reasonably priced, out of date, or missing technical information. Any item on contract for more than 18 months may be considered out of date.

The price on the contract for any CLIN cannot change value within one week of the last update, unless a documented error has been identified and approved. The price on the contract for any CLIN cannot change value within one month of the last update unless prior approval is received from the SEWP PMO.

Any new technology which will upgrade, extend or enhance the components shall be evaluated if the Contractor submits a technology refreshment (TR) proposal outlining the proposed technology. Included in this proposal shall be pricing data (i.e., current published commercial price list) and other technical information as listed below. With the receipt of a proposal from the Contractor, the Government shall have the right to approve any or all of the proposed CLINs and to unilaterally modify the contract to provide for ordering of the new technology. The criteria for acceptance of the new technology proposal are as follows:

1) For mandatory deliverable items, each item must satisfy all original mandatory requirements in the technical specifications of this contract.

2) Each item must correspond with an appropriate existing contract product class code and its corresponding price discount.

At a minimum, the technology proposal shall include the following header information:

- TR Number (unique tracking number)
- Description of the proposed TR
- Contract Number

- Contact Name
- Contact Phone Number
- Contact E-mail address

At a minimum, the technology proposal shall include the following information for each product proposed:

- Contract Line Item Number (CLIN) (unique for this product)
- Name of Original Equipment Manufacturer
- Original Equipment Manufacturer Part Number
- Original Equipment Manufacturer's Model Number / Model Name
- Product Classification Code
- Classification Subgroup
- Base/Mandatory/Available Component Flag
- Full Item Description
- List Price
- SEWP Price
- GSA price (if item is currently on Contractor's GSA contract)

Additionally several line item specific flags must either be set or will have defaulted values assigned to them. These include:

- Trade Act Agreement (TAA):
  - i. C =TAA Compliant
  - ii. NC=Not Compliant (can only be purchased if a FAR exception exists) - Default Flag
  - iii. NA=Not Applicable
- EPEAT
  - i. A = Applicable but no EPEAT compliant product available
  - ii. B = EPEAT certified Bronze
  - iii. G = EPEAT certified Gold
  - iv. NA = Not Applicable
  - v. NC = Non-compliant- Default Flag
  - vi. S = EPEAT certified Silver
  - vii. Y = EPEAT compliant and registered, non-certified Business size
- Energy star compliant
  - i. C = Compliant
  - ii. NA = Not Applicable
  - iii. NC = Not Compliant - Default Flag
- Product Condition
  - i. N = Product is new – Default Flag
  - ii. R = Product is refurbished
  - iii. U = Product is used

All or part of a technology refreshment request may be approved by the Government. All approved items will immediately be added to the electronic SEWP database of record constituting the current data associated with Attachment F of this contract. At that point, the items may be quoted and ordered.

A.1.19.1. SPECIALIZED CONTRACT LINE ITEM NUMBERS

The following CLINs and their descriptions will be added to the Contract to cover non-product line items which have a varying price associated with them:

1) TRAVEL-Z: Travel expenses based on the current Government rates for per diem and transportation. Any other travel cost related to an order fulfillment e.g. installation, shall be negotiated on a per order basis
2) CREDIT-Z: Credit Discount
3) DELIVERY-Z: Delivery Fee

A.1.19.2. BUNDLED LINE ITEMS

The Contractor may propose a single line item which bundles together a number of separate products into one CLIN provided that:

1) each of the products are available as separate CLINs in the Contract prior to addition of the bundled CLIN
2) a spreadsheet listing the items and individual prices is submitted for approval to the SEWP PMO

A.1.19.3. BUILT TO ORDER LINE ITEMS

The Contractor may propose built to order (BTO)/configure to order (CTO) items wherein the exact configuration and pricing is dependent on end user requirements provided that:

1) the base product has been separately added to the contract
2) a spreadsheet listing the items and individual component prices is submitted to the SEWP PMO and referred to in the TR submission
3) each configuration to be quoted is separately listed and priced on the contract using unique CLINs
    a. the quoted configuration must exactly match the configuration on the contract
4) each configuration to be quoted is referenced by the manufacturer part number of the base product

(End of text)

A.1.20. ORDER LIMITATIONS (52.216-19) (OCT 1995)

a) Minimum order – All Groups: When the Government requires supplies or services covered by this contract in an amount of less than $25; the Contractor is not obligated to furnish those supplies or services under the contract.

b) Maximum order : The Contractor is not obligated to honor--

(1) Any order for a single item in excess of $2 million;
(2) Any order for a combination of items in excess of $10 million;
(3) A series of orders from the same ordering office within 30 days that together call for quantities exceeding the limitation in subparagraph (1) or (2) above.

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum order limitations in paragraph (b) above.

(d) Notwithstanding paragraphs (b) and (c) above, the Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within seven (7) days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

(End of clause)

A.1.21. FAIR OPPORTUNITY AND REQUESTS FOR QUOTES

Contractors will be provided fair opportunity at the individual order level as appropriate per FAR Part 16.505(b), including the SEWP RFQ tools. No documentation for the order selection is required to be submitted with the order. All such documentation is to be maintained by the issuing procurement office.

The Contractor shall not market, quote or otherwise offer for sale, under this contract, any products not listed in Attachment F, Pricing Exhibits as defined in the SEWP database of record until the said products are included in the SEWP database, and available to all Government end-users.

If the Government issues a Request For Information (RFI) as part of market research, the Contractor may provide items not yet listed on their SEWP contract as part of a market research quote if:

1. all such items are clearly marked as not yet available on their SEWP contract;
2. the contractor submits a technology refreshment request to add those products to their contract

If the Government issues a Request For Quote (RFQ) or a Market Research Request (MRR), the Contractor may only respond with items available on their Contract. If the Contractor has insufficient items on their contract to fully respond to the Formal RFQ, the Contractor must respond with a No Bid.

Unless the RFQ specifically allows for partial quotes, the Contractor must respond fully to all requirements specified in the RFQ.

When the Contractor markets, quotes or otherwise offers for sale a product under this contract, the price of each item shall be the no greater than the price in Attachment F, Pricing Exhibits as defined in the SEWP database of record at the time the quote is issued.

When submitting a quote to a Government end-user, the contractor must clearly state the length of time the quote is valid. The contractor shall honor any order submitted within the stated time period of a quote.

When responding to an RFQ or MRR issued from the NASA SEWP on-line quoting system, the Contractor must respond as outlined in Attachment D, Section D.1. On-line Quoting.

As a result of the Small Business jobs act, the issuing Contracting Officer can set aside an order for small businesses as long as there are two or more with that designation.

(End of text)

A.1.22. INVOICES – SUBMISSION OF

All invoices shall be submitted to the "Designated Billing Office" and/or "Designated Payment Office" address specified in each delivery order.

(End of text)

A.1.23. UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS (52.232-39) (JUN 2013)

(a) Except as stated in paragraph (b) of this clause, when any supply or service acquired under this contract is subject to any End User License Agreement (EULA), Terms of Service (TOS), or similar legal instrument or agreement, that includes any 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 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 EULA, TOS, or similar legal instrument or agreement. If the EULA, TOS, or similar legal instrument or 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 clause is deemed to be stricken from the EULA, TOS, or similar legal instrument or 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)

A.1.24. F.O.B. DESTINATION (52.247-34) (NOV 1991)

(a) The term "f.o.b. destination," as used in this clause, means--

(1) Free of expense to the Government, on board the carrier's conveyance, at a specified delivery point where the consignee's facility (plant, warehouse, store, lot, or other location to which shipment can be made) is located, and

(2) Supplies shall be delivered to the destination consignee's wharf (if destination is a port city and supplies are for export), warehouse unloading platform, or receiving dock, at the expense of the Contractor. The Government shall not be liable for any delivery, storage, demurrage, accessorial, or other charges involved before the actual delivery (or "constructive placement" as defined in carrier tariffs) of the supplies to the destination, unless such charges are caused by an act or order of the Government acting in its contractual capacity. If rail carrier is used, supplies shall be delivered to the specified unloading platform of the consignee. If motor carrier (including "piggyback") is used, supplies shall be delivered to truck tailgate at the unloading platform of the consignee, except when the supplies delivered meet the requirements of Item 568 of the National Motor Freight Classification for "heavy or bulky freight". When supplies meeting the requirements of the referenced Item 568 are delivered, unloading (including movement to the tailgate) shall be performed by the consignee, with assistance from the truck driver, if requested. If the Contractor uses rail carrier or freight forwarder for less than carload shipments, the Contractor shall ensure that the carrier will furnish tailgate delivery, when required, if transfer to truck is required to complete delivery to consignee.

(b) The Contractor shall--

(1) (i) Pack and mark the shipment to comply with contract specifications; or

(ii) In the absence of specifications, prepare the shipment in conformance with carrier requirements;

(2) Prepare and distribute commercial bills of lading;

(3) Deliver the shipment in good order and condition to the point of delivery specified in the contract;

(4) Be responsible for any loss of and/or damage to the goods occurring before receipt of the shipment by the consignee at the delivery point specified in the contract;

(5) Furnish a delivery schedule and designate the mode of delivering carrier; and

(6) Pay and bear all charges to the specified point of delivery.

(End of clause)

A.1.25. DELIVERY AND OTHER CHARGES

All deliverable line item prices shall be inclusive of all charges that are included in the line item’s commercial list pricing. If the delivery order includes specialized delivery requirements such as OCONUS delivery; expedited delivery; specialized handling; etc, an additional fee using the Contract’s Delivery-Z CLIN may be quoted.

Items returned prior to the Government’s acceptance are not subject to restocking fees or other charges unless the return is due to a Government initiated change.

(End of text)

A.1.26. EXPORT LICENSES (1852.225-70) (FEB 2000)

(a) The Contractor shall comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the Contractor shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data, and software, or for the provision of technical assistance.

(b) The Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at any Government installation, where the foreign person will have access to export-controlled technical data or software.

(c) The Contractor shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.

(d) The Contractor shall be responsible for ensuring that the provisions of this clause apply to its subcontractors.

(End of clause)

A.1.27. CONTRACTOR COLLECTION OF AGENCY ADMINISTRATIVE HANDLING FEE

An Agency Administrative Handling Fee, not to exceed 3/4 % of the total price of the delivery order, shall be applied to all orders under the SEWP V contracts. The SEWP V website will post the Agency Administrative Handling Fee percentage, and the Contractor shall be notified via email by the SEWP PMO. The handling fee's collection shall be done in accordance with the procedures outlined below.

Contractor Responsibilities:

(a) In providing quotations to agencies, the Contractor shall be responsible for including the SEWP fee within the total amount of the quote inclusive of all costs including handling, and travel costs. The fee may be rounded to the nearest whole dollar.

(b) The fee shall NOT be listed separately on quotes or orders. The fee must be included within the price of the quoted offerings.

(c) The fee will apply to all such orders. These include, but are not limited to, original orders, modifications to orders, etc. On modifications that reduce the original price of an order, a credit for the handling fee may be included in the new total amount.

- if a fee cap exists, the cap applies to each order and each separate modification to the original order. This includes any modification that exercises an option or provides additional funding. The fee cap is applied on an individual invoice basis

(d) The Contractor shall invoice the ordering agency for the entire amount of the order (including the handling fee).

(e) Quarterly, the Contractor shall be responsible for sending a payment to NASA/Goddard Space Flight Center, SEWP, Code 700, reflecting the total administrative handling fee collected during that period. The Contractor will be only responsible for forwarding payment on handling fees actually invoiced and collected. The Contractor shall determine the timing of the initial quarterly payment. The payment is to be made via electronic methods payable to NASA/Goddard Space Flight Center, at the following website:
https://www.nssc.nasa.gov/portal/site/customerservice/menuitem.bb29c518138071c056969daf4dd72749/

(f) Coinciding with the payment, the Contractor must send an "Agency Administrative Handling Fees Collected" report electronically to the SEWP Program Office. The report must be an Excel Spreadsheet and include the SEWP Control Number and/or Agency Order number, the Total Order Amount, and the administrative handling fee collected for each order reflected in the total payment. The report must be sorted by SEWP Control Number or by Agency Order number. The report must have totals for the Total Order Amount and the Agency Administrative Handling Fee Collected. This report must be submitted electronically. Reports should be submitted as described in Attachment D, Contractor /Government Communications Requirements, Section D.6.

(End of text)

A.1.28. OMBUDSMAN (1852.215-84) (NOV 2011)--ALTERNATE I (JUNE 2000)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from Offerors, potential Offerors, and contractors during the pre-award and post-award phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the contracting officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the contracting officer for resolution.

(b) If resolution cannot be made by the contracting officer, interested parties may contact the installation ombudsman, whose name, address, telephone number, facsimile number, and e-mail address may be found at: http://prod.nais.nasa.gov/pub/pub_library/Omb.html.

Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the Agency ombudsman identified at the above URL. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Contracting Officer or as specified elsewhere in this document.

(c) If this is a task or delivery order contract, the ombudsman shall review complaints from contractors and ensure they are afforded a fair opportunity to be considered, consistent with the procedures of the contract.

(End of clause)

A.1.29. SAFETY AND HEALTH (SHORT FORM) (1852.223-72) (APR 2002)

(a) Safety is the freedom from those conditions that can cause death, injury, occupational illness; damage to or loss of equipment or property, or damage to the environment. NASA's safety priority is to protect: (1) the public, (2) astronauts and pilots, (3) the NASA workforce (including contractor employees working on NASA contracts), and (4) high-value equipment and property.

(b) The Contractor shall take all reasonable safety and occupational health measures consistent with standard industry practice in performing this contract. The Contractor shall comply with all Federal, State, and local laws applicable to safety and occupational health and with the safety and occupational health standards, specifications, reporting requirements, and any other relevant requirements of this contract.

(c) The Contractor shall take, or cause to be taken, any other safety, and occupational health measures the Contracting Officer may reasonably direct. To the extent that the Contractor may be entitled to an equitable adjustment for those measures under the terms and conditions of this contract, the equitable adjustment shall be determined pursuant to the procedures of the Changes clause of this contract; provided, that no adjustment shall be made under this Safety and Health clause for any change for which an equitable adjustment is expressly provided under any other clause of the contract.

(d) The Contracting Officer may notify the Contractor in writing of any noncompliance with this clause and specify corrective actions to be taken. In situations where the Contracting Officer becomes aware of noncompliance that may pose a serious or imminent danger to safety and health of the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts), or high value mission critical equipment or property, the Contracting Officer shall notify the Contractor orally, with written confirmation. The Contractor shall promptly take and report any necessary corrective action. The Government may pursue appropriate remedies in the event the contractor fails to promptly take the necessary corrective action.

(e) The Contractor (or subcontractor or supplier) shall insert the substance of this clause, including this paragraph (e) and any applicable Schedule provisions, with appropriate changes of designations of the parties, in subcontracts of every tier that exceed the micro-purchase threshold.

(End of clause)

A.1.30. MAJOR BREACH OF SAFETY OR SECURITY (1852.223-75) (FEB 2002)

(a) Safety is the freedom from those conditions that can cause death, injury, occupational illness, damage to or loss of equipment or property, or damage to the environment. Safety is essential to NASA and is a material part of this contract. NASA's safety priority is to protect: (1) the public; (2) astronauts and pilots; (3) the NASA workforce (including contractor employees working on NASA contracts); and (4) high-value equipment and property. A major breach of safety may constitute a breach of contract that entitles the Government to exercise any of its rights and remedies applicable to material parts of this contract, including termination for default. A major breach of safety must be related directly to the work on the contract. A major breach of safety is an act or omission of the Contractor that consists of an accident, incident, or exposure resulting in a fatality or mission failure; or in damage to equipment or property equal to or greater than $1 million; or in any "willful" or "repeat" violation cited by the Occupational Safety and Health Administration (OSHA) or by a state agency operating under an OSHA approved plan.

(b) Security is the condition of safeguarding against espionage, sabotage, crime (including computer crime), or attack. A major breach of security may constitute a breach of contract that entitles the Government to exercise any of its rights and remedies applicable to material parts of this contract, including termination for default. A major breach of security may occur on or off Government installations, but must be related directly to the work on the contract. A major breach of security is an act or omission by the Contractor that results in compromise of classified information; illegal technology transfer; workplace violence resulting in criminal conviction; sabotage; compromise or denial of information technology services; equipment or property damage from vandalism greater than $250,000 or theft greater than $250,000.

(c) In the event of a major breach of safety or security, the Contractor shall report the breach to the Contracting Officer. If directed by the Contracting Officer, the Contractor shall conduct its own investigation and report the results to the Government. The Contractor shall cooperate with the Government investigation, if conducted.

(End of clause)

A.1.31. CONTRACTOR PERFORMANCE

The Contractor's performance under this contract shall be assessed annually in accordance with the requirements of FAR subpart 42.15, and the policy and procedures specified in the NFS subparts 1842.1502 and 1842.1503. End users of products and services shall be periodically contacted to provide input for the annual Contractor Performance Assessment Reporting System (CPARS) evaluation.

In addition, the Contractor will be rated on a continuous basis on their program performance. The ratings will include but not be limited to: Delivery; Customer Satisfaction; Contract Adherence; Information Distribution; and Reporting.

The Government reserves the right to utilize other methodologies to provide performance ratings such as surveys, crowdsourcing, etc.

(End of text)

A.1.32. RELEASE OF SENSITIVE INFORMATION (1852.237-73) (JUNE 2005)

(a) As used in this clause, "sensitive information" refers to information, not currently in the public domain, that the Contractor has developed at private expense, that may embody trade secrets or commercial or financial information, and that may be sensitive or privileged.

(b) In accomplishing management activities and administrative functions, NASA relies heavily on the support of various service providers. To support NASA activities and functions, these service providers, as well as their subcontractors and their individual employees, may need access to sensitive information submitted by the Contractor under this contract. By submitting this proposal or performing this contract, the Contractor agrees that NASA may release to its service providers, their subcontractors, and their individual employees, sensitive information submitted during the course of this procurement, subject to the enumerated protections mandated by the clause at 1852.237-72, Access to Sensitive Information.

(c)(1) The Contractor shall identify any sensitive information submitted in support of this proposal or in performing this contract. For purposes of identifying sensitive information, the Contractor may, in addition to any other notice or legend otherwise required, use a notice similar to the following:

Mark the title page with the following legend:

This proposal or document includes sensitive information that NASA shall not disclose outside the Agency and its service providers that support management activities and administrative functions. To gain access to this sensitive information, a service provider's contract must contain the clause at NFS 1852.237-72, Access to Sensitive Information. Consistent with this clause, the service provider shall not duplicate, use, or disclose the information in whole or in part for any purpose other than to perform the services specified in its contract. This restriction does not limit the Government's right to use this information if it is obtained from another source without restriction. The information subject to this restriction is contained in pages [insert page numbers or other identification of pages].

Mark each page of sensitive information the Contractor wishes to restrict with the following legend:

Use or disclosure of sensitive information contained on this page is subject to the restriction on the title page of this proposal or document.

(2) The Contracting Officer shall evaluate the facts supporting any claim that particular information is "sensitive." This evaluation shall evaluate the time and resources necessary to protect the information in accordance with the detailed safeguards mandated by the clause at 1852.237-72, Access to Sensitive Information. However, unless the Contracting Officer decides, with the advice of Center counsel, that reasonable grounds exist to challenge the Contractor's claim that particular information is sensitive, NASA and its service providers and their employees shall comply with all of the safeguards contained in paragraph (d) of this clause.

(d) To receive access to sensitive information needed to assist NASA in accomplishing management activities and administrative functions, the service provider must be operating under a contract that contains the clause at 1852.237-72, Access to Sensitive Information. This clause obligates the service provider to do the following:

(1) Comply with all specified procedures and obligations, including the Organizational Conflicts of Interest Avoidance Plan, which the contract has incorporated as a compliance document.

(2) Utilize any sensitive information coming into its possession only for the purpose of performing the services specified in its contract.

(3) Safeguard sensitive information coming into its possession from unauthorized use and disclosure.

(4) Allow access to sensitive information only to those employees that need it to perform services under its contract.

(5) Preclude access and disclosure of sensitive information to persons and entities outside of the service provider's organization.

(6) Train employees who may require access to sensitive information about their obligations to utilize it only to perform the services specified in its contract and to safeguard it from unauthorized use and disclosure.

(7) Obtain a written affirmation from each employee that he/she has received and will comply with training on the authorized uses and mandatory protections of sensitive information needed in performing this contract.

(8) Administer a monitoring process to ensure that employees comply with all reasonable security procedures, report any breaches to the Contracting Officer, and implement any necessary corrective actions.

(e) When the service provider will have primary responsibility for operating an information technology system for NASA that contains sensitive information, the service provider's contract shall include the clause at 1852.204-76, Security Requirements for Unclassified Information Technology Resources. The Security Requirements clause requires the service provider to implement an Information Technology Security Plan to protect information processed, stored, or transmitted from unauthorized access, alteration, disclosure, or use. Service provider personnel requiring privileged access or limited privileged access to these information technology systems are subject to screening using the standard National Agency Check (NAC) forms appropriate to the level of risk for adverse impact to NASA missions. The Contracting Officer may allow the service provider to conduct its own screening, provided the service provider employs substantially equivalent screening procedures.

(f) This clause does not affect NASA's responsibilities under the Freedom of Information Act.

(g) The Contractor shall insert this clause, including this paragraph (g), suitably modified to reflect the relationship of the parties, in all subcontracts that may require the furnishing of sensitive information.

(End of clause)

A.1.33. USE OF RURAL AREA SMALL BUSINESSES (1852.219-74) (SEP 1990)

(a) Definitions.

"Rural area" means any county with a population of fewer than twenty thousand individuals.

"Small business concern," as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding under this contract, and qualified as a small business under the criteria and size standards in 13 CFR 121.

(b) NASA prime and subcontractors are encouraged to use their best efforts to award subcontracts to small business concerns located in rural areas.

(c) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as small business concerns located in rural areas.

(d) The Contractor agrees to insert the provisions of this clause, including this paragraph (d), in all subcontracts hereunder that offer subcontracting possibilities.

(End of clause)

A.1.34. NASA 8 PERCENT GOAL (1852.219-76) (JUL 1997)

(a) Definitions.
"Historically Black Colleges or University", as used in this clause means an institution determined by the Secretary of Education to meet the requirements of 34 CFR Section 608.2. The term also includes any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.
"Minority institutions", as used in this clause, means an institution of higher education meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)) which for the purposes of this clause includes a Hispanic-serving institution of higher education as defined in section 316(b)(1) of the Act (20 U.S.C. 1059c(b)(1)).

"Small disadvantaged business concern", as used in this clause, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and (2) has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR 124.
"Women-owned small business concern", as used in this clause, means a small business concern (1) which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women, and (2) whose management and daily business operations are controlled by one or more women.
(b) The NASA Administrator is required by statute to establish annually a goal to make available to small disadvantaged business concerns, Historically Black Colleges and Universities, minority institutions, and women-owned small business concerns, at least 8 percent of NASA's procurement dollars under prime contracts or subcontracts awarded in support of authorized programs, including the space station by the time operational status is obtained.
(c) The contractor hereby agrees to assist NASA in achieving this goal by using its best efforts to award subcontracts to such entities to the fullest extent consistent with efficient contract performance.
(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as small disadvantaged business concerns, Historically Black Colleges and Universities, minority institutions, and women-owned small business concerns.

(End of clause)

A.1.35. NOTICE OF TOTAL SMALL BUSINESS SET_ASIDE- ALT II (52.219-6)(NOV 2011)

(a) *Definition*. “Small business concern,” as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.
(b) *Applicability*. This clause applies only to—
(1) Contracts that have been totally set aside or reserved for small business concerns; and
(2) Orders set aside for small business concerns under multiple-award contracts as described in 8.405-5 and 16.505(b)(2)(i)(F).
c) *General.* (1) Offers are solicited only from small business concerns and Federal Prison Industries, Inc. (FPI). Offers received from concerns that are not small business concerns or FPI shall be considered nonresponsive and will be rejected.
(2) Any award resulting from this solicitation will be made to either a small business concern or FPI.
(d) *Agreement.* A small business concern submitting an offer in its own name shall furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States or its outlying areas. If this procurement is processed under simplified acquisition procedures and the total amount of this contract does not exceed $25,000, a small business concern may furnish the product of any domestic firm. This paragraph does not apply to construction or service contracts.

(End of clause)

A.1.36. UTILIZATION OF SMALL BUSINESS CONCERNS (52.219-8) (JUL 2013)

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

(c) *Definitions*. As used in this contract—

"HUBZone small business concern" means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

"Service-disabled veteran-owned small business concern"—

(1) Means a small business concern—

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

"Small disadvantaged business concern" means a small business concern that represents, as part of its offer that—

(1)(i) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, Subpart B;

(ii) No material change in disadvantaged ownership and control has occurred since its certification;

(iii) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed $750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(iv) It is identified, on the date of its representation, as a certified small disadvantaged business in the Dynamic Small Business Search database maintained by the Small Business Administration, or

(2) It represents in writing that it qualifies as a small disadvantaged business (SDB) for any Federal subcontracting program, and believes in good faith that it is owned and controlled by one or more socially and economically disadvantaged individuals and meets the SDB eligibility criteria of 13 CFR 124.1002.

"Veteran-owned small business concern" means a small business concern—

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned small business concern" means a small business concern—

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d)(1) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a small disadvantaged business concern, or a women-owned small business concern.

(2) The Contractor shall confirm that a subcontractor representing itself as a HUBZone small business concern is certified by SBA as a HUBZone small business concern by accessing the System for Award Management database or by contacting the SBA. Options for contacting the SBA include—

(i) HUBZone small business database search application web page at http://dsbs.sba.gov/dsbs/search/dsp_searchhubzone.cfm; or http://www.sba.gov/hubzone;

(ii) In writing to the Director/HUB, U.S. Small Business Administration, 409 3rd Street, SW., Washington, DC 20416; or

(iii) The SBA HUBZone Help Desk at hubzone@sba.gov.

(End of clause)

A.1.37. NOTICE OF SET-ASIDE OF ORDERS (52.219-13) (NOV 2011)

The Contracting Officer will give notice of the order or orders, if any, to be set aside for small business concerns identified in 19.000(a)(3) and the applicable small business program. This notice, and its restrictions, will apply only to the specific orders that have been set aside for any of the small business concerns identified in 19.000(a)(3).

(End of clause)

A.1.38. NOTICE OF HUBZONE SET-ASIDE OR SOLE SOURCE AWARD (52.219-3) (NOV 2011)

(a) *Definitions*. See 13 CFR 125.6(e) for definitions of terms used in paragraph (c).

(b) *Applicability*. This clause applies only to—

(1) Contracts that have been set aside or reserved for, or awarded on a sole source basis to, HUBZone small business concerns;

(2) Part or parts of a multiple-award contract that have been set aside for HUBZone small business concerns; and

(3) Orders set-aside for HUBZone small business concerns under multiple-award contracts as described in 8.405-5 and 16.505(b)(2)(i)(F).

(c) General.

(1) Offers are solicited only from HUBZone small business concerns. Offers received from concerns that are not HUBZone small business concerns will not be considered.

(2) Any award resulting from this solicitation will be made to a HUBZone small business concern.

(d) *Agreement*. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for—

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than acquisition from a non-manufacturer of the supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction.

(i) At least 15 percent of the cost of contract performance to be incurred for personnel will be spent on the HUBZone prime contractor's employees;

(ii) At least 50 percent of the cost of the contract performance to be incurred for personnel will be spent on the HUBZone prime contractor's employees or on a combination of the HUBZone prime contractor's employees and employees of HUBZone small business concern subcontractors; and

(iii) No more than 50 percent of the cost of contract performance to be incurred for personnel will be subcontracted to concerns that are not HUBZone small business concerns; or

(4) Construction by special trade contractors.

(i) At least 25 percent of the cost of contract performance to be incurred for personnel will be spent on the HUBZone prime contractor's employees;

(ii) At least 50 percent of the cost of the contract performance to be incurred for personnel will be spent on the HUBZone prime contractor's employees or on a combination of the HUBZone prime contractor's employees and employees of HUBZone small business concern subcontractors;

(iii) No more than 50 percent of the cost of contract performance to be incurred for personnel will be subcontracted to concerns that are not HUBZone small business concerns.

(e) A HUBZone joint venture agrees that, in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the aggregate of the HUBZone small business participants.

(f)(1) When the total value of the contract exceeds $25,000, a HUBZone small business concern non-manufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business concern manufacturers.

(2) When the total value of the contract is equal to or less than $25,000, a HUBZone small business concern non-manufacturer may provide end items manufactured by other than a HUBZone small business concern manufacturer provided the end items are produced or manufactured in the United States.

(3) Paragraphs (f)(1) and (f)(2) of this section do not apply in connection with construction or service contracts.

(g) *Notice*. The HUBZone small business offeror acknowledges that a prospective HUBZone awardee must be a HUBZone small business concern at the time of award of this contract. The HUBZone offeror shall provide the Contracting Officer a copy of the notice required by 13 CFR 126.501 if material changes occur before contract award that could affect its HUBZone eligibility. If the apparently successful HUBZone offeror is not a HUBZone small business concern at the time of award of this contract, the Contracting Officer will proceed to award to the next otherwise successful HUBZone small business concern or other offeror.

(End of clause)

A.1.39. NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (52.219-4) (JAN 2011)

(a) *Definitions*. See 13 CFR 125.6(e) for definitions of terms used in paragraph (d).

(b) Evaluation preference.

(1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except—

(i) Offers from HUBZone small business concerns that have not waived the evaluation preference; and

(ii) Otherwise successful offers from small business concerns.

(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.

(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer. These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.

(4) When the two highest rated offerors are a HUBZone small business concern and a large business, and the evaluated offer of the HUBZone small business concern is equal to the evaluated offer of the large business after considering the price evaluation preference, award will be made to the HUBZone small business concern.

(c) *Waiver of evaluation preference*. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraphs (d) and (e) of this clause do not apply if the offeror has waived the evaluation preference.

o Offeror elects to waive the evaluation preference.

(d) *Agreement*. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for—

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;

(2) Supplies (other than procurement from a non-manufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction.

(i) At least 15 percent of the cost of contract performance to be incurred for personnel will be spent on the prime contractor's employees;

(ii) At least 50 percent of the cost of the contract performance to be incurred for personnel will be spent on the prime contractor's employees or on a combination of the prime contractor's employees and employees of HUBZone small business concern subcontractors;

(iii) No more than 50 percent of the cost of contract performance to be incurred for personnel will be subcontracted to concerns that are not HUBZone small business concerns; or

(4) Construction by special trade contractors.

(i) At least 25 percent of the cost of contract performance to be incurred for personnel will be spent on the prime contractor's employees;

(ii) At least 50 percent of the cost of the contract performance to be incurred for personnel will be spent on the prime contractor's employees or on a combination of the prime contractor's employees and employees of HUBZone small business concern subcontractors;

(iii) No more than 50 percent of the cost of contract performance to be incurred for personnel will be subcontracted to concerns that are not HUBZone small business concerns.

(e) A HUBZone joint venture agrees that the aggregate of the HUBZone small business concerns to the joint venture, not each concern separately, will perform the applicable percentage of work requirements.

(f)(1) When the total value of the contract exceeds $25,000, a HUBZone small business concern non-manufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business concern manufacturers.

(2) When the total value of the contract is equal to or less than $25,000, a HUBZone small business concern non-manufacturer may provide end items manufactured by other than a HUBZone small business concern manufacturer provided the end items are produced or manufactured in the United States.

(3) Paragraphs (f)(1) and (f)(2) of this section do not apply in connection with construction or service contracts.

(g) *Notice*. The HUBZone small business offeror acknowledges that a prospective HUBZone awardee must be a HUBZone small business concern at the time of award of this contract. The HUBZone offeror shall provide the Contracting Officer a copy of the notice required by 13 CFR 126.501 if material changes occur before contract award that could affect its HUBZone eligibility. If the apparently successful HUBZone offeror is not a HUBZone small business concern at the time of award of this contract, the Contracting Officer will proceed to award to the next otherwise successful HUBZone small business concern or other offeror.

(End of clause)

A.1.40. SPECIAL 8(A) CONTRACT CONDITIONS (52.219-11) (FEB 1990)

The Small Business Administration (SBA) agrees to the following:

(a) To furnish the supplies or services set forth in this contract according to the specifications and the terms and conditions hereof by subcontracting with an eligible concern pursuant to the provisions of section 8(a) of the Small Business Act, as amended (15 U.S.C. 637(a)).

(b) That in the event SBA does not award a subcontract for all or a part of the work hereunder, this contract may be terminated either in whole or in part without cost to either party.

(c) Except for novation agreements and advance payments, delegate to the _____ [*insert name of contracting agency*] the responsibility for administering the subcontract to be awarded hereunder with complete authority to take any action on behalf of the Government under the terms and conditions of the subcontract; provided, however, that the _____ [*insert name of contracting agency*] shall give advance notice to the SBA before it issues a final notice terminating the right of a subcontractor to proceed with further performance, either in whole or in part, under the subcontract for default or for the convenience of the Government.

(d) That payments to be made under any subcontract awarded under this contract will be made directly to the subcontractor by the _____ [*insert name of contracting agency*].

(e) That the subcontractor awarded a subcontract hereunder shall have the right of appeal from decisions of the Contracting Officer cognizable under the "Disputes" clause of said subcontract.

(f) To notify the _____ [*insert name of contracting agency*] Contracting Officer immediately upon notification by the subcontractor that the owner or owners upon whom 8(a) eligibility was based plan to relinquish ownership or control of the concern.

(End of clause)

A.1.41. LIMITATIONS ON SUBCONTRACTING (52.219-14) (NOV 2011)

(a) This clause does not apply to the unrestricted portion of a partial set-aside.

(b) *Applicability*. This clause applies only to—

(1) Contracts that have been set aside or reserved for small business concerns or 8(a) concerns;

(2) Part or parts of a multiple-award contract that have been set aside for small business concerns or 8(a) concerns; and

(3) Orders set aside for small business or 8(a) concerns under multiple-award contracts as described in 8.405-5 and 16.505(b)(2)(i)(F).

(c) By submission of an offer and execution of a contract, the Offeror/Contractor agrees that in performance of the contract in the case of a contract for—

(1) *Services (except construction)*. At least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees of the concern.

(2) *Supplies (other than procurement from a non-manufacturer of such supplies)*. The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.

(3) *General construction*. The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.

(4) *Construction by special trade contractors*. The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees.

(End of clause)

Note: **Limitations on Subcontracting Certification**
(This clause **applies at the delivery order level**; however, the following reporting requirement applies **at the contract level)**

The contractor shall submit to the SEWP Program Office Contracting Officer an annual certification by October 15 of each year stating whether or not the contractor complied with FAR 52.219-14(c)(1) (Limitations on Subcontracting) for the previous fiscal year.

A.1.42. NOTICE OF SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS SET-ASIDE (52.219-27) (NOV 2011)

(a) *Definition*. "Service-disabled veteran-owned small business concern"—

(1) Means a small business concern—

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) "Service-disabled veteran" means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

(b) *Applicability*. This clause applies only to—

(1) Contracts that have been set aside or reserved for service-disabled veteran-owned small business concerns;

(2) Part or parts of a multiple-award contract that have been set aside for service-disabled veteran-owned small business concerns; and

(3) Orders set aside for service-disabled veteran-owned small business concerns under multiple-award contracts as described in 8.405-5 and 16.505(b)(2)(i)(F).

(c) General.

(1) Offers are solicited only from service-disabled veteran-owned small business concerns. Offers received from concerns that are not service-disabled veteran-owned small business concerns shall not be considered.

(2) Any award resulting from this solicitation will be made to a service-disabled veteran-owned small business concern.

(d) *Agreement*. A service-disabled veteran-owned small business concern agrees that in the performance of the contract, in the case of a contract for—

(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other service-disabled veteran-owned small business concerns;

(2) Supplies (other than acquisition from a non-manufacturer of the supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other service-disabled veteran-owned small business concerns;

(3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other service-disabled veteran-owned small business concerns; or

(4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other service-disabled veteran-owned small business concerns.

(e) A joint venture may be considered a service-disabled veteran owned small business concern if—

(1) At least one member of the joint venture is a service-disabled veteran-owned small business concern, and makes the following representations: That it is a service-disabled veteran-owned small business concern, and that it is a small business concern under the North American Industry Classification Systems (NAICS) code assigned to the procurement;

(2) Each other concern is small under the size standard corresponding to the NAICS code assigned to the procurement; and

(3) The joint venture meets the requirements of paragraph 7 of the explanation of Affiliates in 19.101 of the Federal Acquisition Regulation.

(4) The joint venture meets the requirements of 13 CFR 125.15(b)

(f) Any service-disabled veteran-owned small business concern (non-manufacturer) must meet the requirements in 19.102(f) of the Federal Acquisition Regulation to receive a benefit under this program.

(End of clause)

A.1.43. NOTICE OF SET-ASIDE FOR ECONOMICALLY DISADVANTAGED WOMEN-OWNED SMALL BUSINESS CONCERNS (52.219-29) (JUL 2013)

(a) *Definitions*. "Economically disadvantaged women-owned small business (EDWOSB) concern" means—

A small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States and who are economically disadvantaged in accordance with 13 CFR part 127. It automatically qualifies as a women-owned small business (WOSB) concern eligible under the WOSB Program.

"WOSB Program Repository" means a secure, Web-based application that collects, stores, and disseminates documents to the contracting community and SBA, which verify the eligibility of a business concern for a contract to be awarded under the WOSB Program.

(b) *Applicability*. This clause applies only to—

(1) Contracts that have been set aside or reserved for EDWOSB concerns;

(2) Part or parts of a multiple-award contract that have been set aside for EDWOSB concerns; and

(3) Orders set aside for EDWOSB concerns under multiple-award contracts as described in 8.405-5 and 16.505(b)(2)(i)(F).

(c) General.

(1) Offers are solicited only from EDWOSB concerns. Offers received from concerns that are not EDWOSB concerns will not be considered.

(2) Any award resulting from this solicitation will be made to an EDWOSB concern.

(3) The contracting officer will ensure that the apparent successful offeror has provided all required documents to the WOSB Program Repository. The contract will not be awarded until all required documents are received.

(d) *Agreement*. An EDWOSB concern agrees that in the performance of the contract for—

(1) Services (except construction), the concern will perform at least 50 percent of the cost of the contract incurred for personnel with its own employees;

(2) Supplies or products (other than procurement from a non-manufacturer in such supplies or products), the concern will perform at least 50 percent of the cost of manufacturing the supplies or products (not including the costs of materials);

(3) General construction, the concern will perform at least 15 percent of the cost of the contract with its own employees (not including the costs of materials); and

(4) Construction by special trade contractors, the concern will perform at least 25 percent of the cost of the contract with its own employees (not including the cost of materials).

(e) *Joint Venture*. A joint venture may be considered an EDWOSB concern if—

(1) It meets the applicable size standard corresponding to the NAICS code assigned to the contract, unless an exception to affiliation applies pursuant to 13 CFR 121.103(h)(3);

(2) The EDWOSB participant of the joint venture is designated in the System for Award Management as an EDWOSB concern;

(3) The parties to the joint venture have entered into a written joint venture agreement that contains provisions—

(i) Setting forth the purpose of the joint venture;

(ii) Designating an EDWOSB concern as the managing venturer of the joint venture, and an employee of the managing venturer as the project manager responsible for the performance of the contract;

(iii) Stating that not less than 51 percent of the net profits earned by the joint venture will be distributed to the EDWOSB;

(iv) Specifying the responsibilities of the parties with regard to contract performance, sources of labor, and negotiation of the EDWOSB contract; and

(v) Requiring the final original records be retained by the managing venturer upon completion of the EDWOSB contract performed by the joint venture.

(4) The joint venture performs the applicable percentage of work required in accordance with paragraph (d) above; and

(5) The procuring activity executes the contract in the name of the EDWOSB or joint venture.

(f) *Nonmanufacturer*. An EDWOSB concern that is a non-manufacturer, as defined in 13 CFR 121.406(b) or 19.102(f), may submit an offer on an EDWOSB requirement with a NAICS code for supplies, if it meets the requirements under the non-manufacturer rule set forth in those regulations.

(End of clause)

A.1.44. NOTICE OF SET-ASIDE FOR WOMEN-OWNED SMALL BUSINESS CONCERNS ELIGIBLE UNDER THE WOMEN-OWNED SMALL BUSINESS PROGRAM (52.219-30) (JUL 2013)

(a) *Definitions.* "Women-owned small business (WOSB) concern eligible under the WOSB Program" (in accordance with 13 CFR 127), means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States.

"WOSB Program Repository" means a secure, Web-based application that collects, stores, and disseminates documents to the contracting community and SBA, which verify the eligibility of a business concern for a contract to be awarded under the WOSB Program.

(b) *Applicability*. This clause applies only to—

(1) Contracts that have been set aside or reserved for WOSB concerns eligible under the WOSB Program;

(2) Part or parts of a multiple-award contract that have been set aside for WOSB concerns eligible under the WOSB Program; and

(3) Orders set aside for WOSB concerns eligible under the WOSB Program, under multiple-award contracts as described in8.405-5 and 16.505(b)(2)(i)(F).

(c) General.

(1) Offers are solicited only from WOSB concerns eligible under the WOSB Program. Offers received from concerns that are not WOSB concerns eligible under the WOSB program shall not be considered.

(2) Any award resulting from this solicitation will be made to a WOSB concern eligible under the WOSB Program.

(3) The Contracting Officer will ensure that the apparent successful offeror has provided the required documents to the WOSB Program Repository. The contract shall not be awarded until all required documents are received.

(d) *Agreement*. A WOSB concern eligible under the WOSB Program agrees that in the performance of the contract for—

(1) Services (except construction), the concern will perform at least 50 percent of the cost of the contract incurred for personnel with its own employees;

(2) Supplies or products (other than procurement from a non-manufacturer in such supplies or products), the concern will perform at least 50 percent of the cost of manufacturing the supplies or products (not including the costs of materials);

(3) General construction, the concern will perform at least 15 percent of the cost of the contract with its own employees (not including the costs of materials); and

(4) Construction by special trade contractors, the concern will perform at least 25 percent of the cost of the contract with its own employees (not including cost of materials).

(e) *Joint Venture*. A joint venture may be considered a WOSB concern eligible under the WOSB Program if—

(1) It meets the applicable size standard corresponding to the NAICS code assigned to the contract, unless an exception to affiliation applies pursuant to 13 CFR 121.103(h)(3);

(2) The WOSB participant of the joint venture is designated in the System for Award Management as a WOSB concern;

(3) The parties to the joint venture have entered into a written joint venture agreement that contains provisions-

(i) Setting forth the purpose of the joint venture;

(ii) Designating a WOSB concern eligible under the WOSB Program as the managing venturer of the joint venture, and an employee of the managing venturer as the project manager responsible for the performance of the contract;

(iii) Stating that not less than 51 percent of the net profits earned by the joint venture will be distributed to the WOSB;

(iv) Specifying the responsibilities of the parties with regard to contract performance, sources of labor, and negotiation of the WOSB contract; and

(v) Requiring the final original records be retained by the managing venturer upon completion of the WOSB contract performed by the joint venture.

(4) The joint venture must perform the applicable percentage of work required in accordance with paragraph (d) above; and

(5) The procuring activity executes the contract in the name of the WOSB concern eligible under the WOSB Program or joint venture.

(f) *Nonmanufacturer*. A WOSB concern eligible under the WOSB Program that is a non-manufacturer, as defined in 13 CFR 121.406(b) or 19.102(f), may submit an offer on a WOSB requirement with a NAICS code for supplies, if it meets the requirements under the non-manufacturer rule set forth in those regulations.

(End of clause)

A.1.45. SMALL BUSINESS SUBCONTRACTING PLAN AND REPORTS (GSFC 52.219-90) (JUL 2006)

a. Subcontracting Plan (Contractor)

FAR clause 52.219-9, "Small Business Subcontracting Plan" is included in this contract. The agreed to Subcontracting Plan required by the clause is included as an attachment to the contract.

b. Subcontracting Plan (Subcontractors)

In accordance with FAR clause 52.219-9, the Contractor must require that certain subcontractors adopt a plan similar to the Plan agreed to between the Contractor and the Government.

c. Summary Subcontract Reports (SSRs)

The Contractor shall prepare and submit Summary Subcontract Reports (SSRs)(formerly known as the Standard Form 295), in accordance with the instructions listed in the Electronic Subcontract Reporting System (eSRS), available at http://esrs.gov and in accordance with NASA FAR Supplement clause 1852.219-75, "Small Business Subcontracting Reporting" of this contract.

The SSRs must be submitted electronically in eSRS on a semi-annual basis no later than April 30 and October 30 each year for the reporting periods ending March 31 and September 30, respectively.

d. Subcontractor Reporting

FAR clause 52.219-9 and NASA FAR Supplement clause 1852.219-75 require that the Contractor ensure that SSR reports are submitted by those subcontractors that have been required to adopt a Subcontracting Plan under the terms of the clause. These subcontractor reports must be submitted as required by paragraph (c) above. The reports may be submitted through the Contractor or submitted directly. Regardless, the Contractor is responsible for ensuring proper and timely submittal of the required reports.

(End of clause)

A.1.46. SMALL BUSINESS SUBCONTRACTING REPORTING (1852.219-75) (MAY 1999)

(a) The Contractor shall submit the Summary Subcontract Report semiannually for the reporting periods specified in block 4 of the form. All other instructions for SSR's remain in effect.

(b) The Contractor shall include this clause in all subcontracts that include the clause at FAR 52.219-9.

(End of clause)

A.1.47. TRADE AGREEMENTS CERTIFICATE 52.225-6 (JAN 2005)

(a) The offeror certifies that each end product, except those listed in paragraph (b) of this provision, is a U.S.-made or designated country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(b) The offeror shall list as other end products those supplies that are not U.S.-made or designated country end products.

Other End Products:

LINE ITEM NO.	COUNTRY OF ORIGIN
_____	_____
_____	_____
_____	_____

[*List as necessary*]

(c) The Government will evaluate offers in accordance with the policies and procedures of Part 25 of the Federal Acquisition Regulation. For line items covered by the WTO GPA, the Government will evaluate offers of U.S.-made or designated country end products without regard to the restrictions of the Buy American Act. The Government will consider for award only offers of U.S.-made or designated country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for those products are insufficient to fulfill the requirements of this solicitation.

(End of clause)

A.1.48. SUPPLY CHAIN RISK

(a) *Definition.* "Supply chain risk" means the risk that an adversary may sabotage, maliciously introduce unwanted function, or otherwise subvert the design, integrity, manufacturing, production, distribution, installation, operation, or maintenance of a national security system (as that term is defined at 44 U.S.C. 3542(b)) so as to survey, deny, disrupt, or otherwise degrade the function, use, or operation of such system.

(b) The Contractor shall implement appropriate safeguards and countermeasures in the provision of supplies and services to the Government to minimize supply chain risk.

(c) In order to manage supply chain risk, the Government may use the appropriate authorities (such as those provided by section 806 of Pub. L. 111-383 for Department of Defense orders). In exercising these authorities, the Government may consider information, public and non-public, including all-source intelligence, relating to a Contractor's supply chain.

(d) If the Government exercises the appropriate authority such as that provided in section 806 of Pub. L. 111-383 (for Department of Defense orders) to limit disclosure of information, no action undertaken by the Government

under such authority shall be subject to review in a bid protest before the Government Accountability Office or in any Federal court.
(e) The Contractor shall include the substance of this clause, including this paragraph (e), in all subcontracts involving the development or delivery of any information technology whether acquired as a service or as a supply.

(End of clause)

A.1.49. SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (1852.204-76) (JAN 2011)

(The following reporting requirements do not apply to this contract; however, these requirements apply to applicable NASA Delivery Orders that involve contractor access to federal information or federal information systems)

(a) The contractor shall protect the confidentiality, integrity, and availability of NASA Electronic Information and IT resources and protect NASA Electronic Information from unauthorized disclosure.
(b) This clause is applicable to all NASA contractors and sub-contractors that process, manage, access, or store unclassified electronic information, to include Sensitive But Unclassified (SBU) information, for NASA in support of NASA's missions, programs, projects and/or institutional requirements. Applicable requirements, regulations, policies, and guidelines are identified in the Applicable Documents List (ADL) provided as an attachment to the contract. The documents listed in the ADL can be found at: http://www.nasa.gov/offices/ocio/itsecurity/index.html. For policy information considered sensitive, the documents will be identified as such in the ADL and made available through the Contracting Officer.
(c) Definitions.
(1) IT resources means any hardware or software or interconnected system or subsystem of equipment, that is used to process, manage, access, or store electronic information.
(2) NASA Electronic Information is any data (as defined in the Rights in Data clause of this contract) or information (including information incidental to contract administration, such as
financial, administrative, cost or pricing, or management information) that is processed, managed, accessed or stored on an IT system(s) in the performance of a NASA contract.
(3) IT Security Management Plan--This plan shall describe the processes and procedures that will be followed to ensure appropriate security of IT resources that are developed, processed, or used under this contract. Unlike the IT security plan, which addresses the IT system, the IT Security Management Plan addresses how the contractor will manage personnel and processes associated with IT Security on the instant contract.
(4) IT Security Plan--this is a FISMA requirement; see the ADL for applicable requirements. The IT Security Plan is specific to the IT System and not the contract. Within 30 days after award, the contractor shall develop and deliver an IT Security Management Plan to the Contracting Officer; the approval authority will be included in the ADL. All contractor personnel requiring physical or logical access to NASA IT resources must complete NASA's annual IT Security Awareness training. Refer to the IT Training policy located in the IT Security Web site at https://itsecurity.nasa.gov/policies/index.html.
(d) The contractor shall afford Government access to the Contractor's and subcontractors' facilities, installations, operations, documentation, databases, and personnel used in performance of the contract. Access shall be provided to the extent required to carry out a program of IT inspection (to include vulnerability testing), investigation and audit to safeguard against threats and hazards to the integrity, availability, and confidentiality of NASA Electronic Information or to the function of IT systems operated on behalf of NASA, and to preserve evidence of computer crime.
(e) At the completion of the contract, the contractor shall return all NASA information and IT resources provided to the contractor during the performance of the contract in accordance with
retention documentation available in the ADL. The contractor shall provide a listing of all NASA Electronic information and IT resources generated in performance of the contract. At that time, the contractor shall request disposition instructions from the Contracting Officer. The Contracting Officer will provide disposition instructions within 30 calendar days of the contractor's request. Parts of the clause and referenced ADL may be waived by the contracting officer, if the contractor's ongoing IT security program meets or exceeds the requirements of NASA Procedural Requirements (NPR) 2810.1 in effect at time of award. The current version of NPR 2810.1 is referenced

in the ADL. The contractor shall submit a written waiver request to the Contracting Officer within 30 days of award. The waiver request will be reviewed by the Center IT Security Manager. If approved, the Contractor Officer will notify the contractor, by contract modification, which parts of the clause or provisions of the ADL are waived.

(f) The contractor shall insert this clause, including this paragraph in all subcontracts that process, manage, access or store NASA Electronic Information in support of the mission of the Agency.

(End of clause)

A.1.50. NOTIFICATION PRIOR TO ACQUIRING INFORMATION TECHNOLOGY SYSTEMS FROM ENTITIES OWNED, DIRECTED OR SUBSIDIZED BY THE PEOPLE'S REPUBLIC OF CHINA (1852.225-74) (JUN 2013)(APPLIES TO NASA DELIVERY ORDERS ONLY)

(a) Definitions –

"Acquire" means procure with appropriated funds by and for the use of NASA through purchase or lease.

"Entity owned, directed or subsidized by the People's Republic of China" means any organization incorporated under the laws of the People's Republic of China.

"Information Technology (IT) System" means the combination of hardware components, software, and other equipment to make a system whose core purpose is to accomplish a data processing need such as the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data. IT systems include ground systems in support of flight hardware. IT systems do not include—

(i) Systems acquired by a contractor incidental to a contract;

(ii) Imbedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation, are not information technology systems;

(iii) Services in support of IT systems, such as help desk services; or

(iv) Flight hardware, which includes aircraft, spacecraft, artificial satellites, launch vehicles, balloon systems, sounding rockets, on-board instrument and technology demonstration systems, and equipment operated on the International Space Station; as well as prototypes, and engineering or brass boards created and used to test, troubleshoot, and refine air- and spacecraft hardware, software and procedures.

(b) Section 516 of the Consolidated and Further Continuing Appropriation Act, 2013 (Pub. L.113-6), requires NASA's Office of the Chief Information Officer (OCIO) to assess the risk of cyber-espionage or sabotage of an information technology (IT) system that is produced, manufactured, or assembled by an entity owned, directed or subsidized by the People's Republic of China (PRC). The Government retains the right to reject any IT system tendered for acceptance under this Contract, without any further recourse by, or explanation to, the Contractor, if the Government determines the IT system, in whole or in part, presents an unacceptable risk to national security.

(c) The Contractor shall obtain the approval of the Contracting Officer before acquiring any IT system(s) from entities owned, directed or subsidized by the People's Republic of China under this contract. Any Contractor request to use such items shall include adequate information for Government evaluation of the request, including—

(1) A brief description of the item(s); and

(2) Vendor/manufacturer's company name and address;

(d) The Contracting Officer will provide the information referenced in paragraph (c) to the NASA Office of the Chief Information Officer (OCIO) which will assess the risk of cyber-espionage or sabotage and make a determination if the acquisition of such system is in the national interest. Only items so approved shall be provided under the contract.

(End of clause)

A.1.51. OPTION TO EXTEND THE TERM OF THE CONTRACT (52.217-9)(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 10 years.

(End of clause)

II. CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS--COMMERCIAL ITEMS (52.212-5) (AUG 2013)

((a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.222-50, Combating Trafficking in Persons (Feb 2009) (22 U.S.C. 7104(g)).

___Alternate I (Aug 2007) of 52.222-50 (22 U.S.C. 7104(g)).

(2) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

(3) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004) (Pub. L. 108-77, 108-78).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

X(1) 52.203-6, Restrictions on Subcontractor Sales to the Government (Sept 2006), with Alternate I (Oct 1995) (41 U.S.C. 253g and 10 U.S.C. 2402).

X (2) 52.203-13, Contractor Code of Business Ethics and Conduct (Apr 2010) (Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).

__ (3) 52.203-15, Whistleblower Protections under the American Recovery and Reinvestment Act of 2009 (June 2010) (Section 1553 of Pub. L. 111-5). (Applies to contracts funded by the American Recovery and Reinvestment Act of 2009.)

X (4) 52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards (Jul 2013) (Pub. L. 109-282) (31 U.S.C. 6101 note).

X (5) 52.204-11, American Recovery and Reinvestment Act—Reporting Requirements (Jul 2010) (Pub. L. 111-5).

__ (6) 52.209-6, Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment. (Aug 2013) (31 U.S.C. 6101 note).

__ (7) 52.209-9, Updates of Publicly Available Information Regarding Responsibility Matters (Jul 2013) (41 U.S.C. 2313).

__ (8) 52.209-10, Prohibition on Contracting with Inverted Domestic Corporations (May 2012) (section 738 of Division C of Pub. L. 112-74, section 740 of Division C of Pub. L. 111-117, section 743 of Division D of Pub. L. 111-8, and section 745 of Division D of Pub. L. 110-161).

X (9) 52.219-3, Notice of HUBZone Set-Aside or Sole-Source Award (Nov 2011) (15 U.S.C. 657a).

X (10) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JAN 2011) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

__ (11) [Reserved]

__ (12)(i) 52.219-6, Notice of Total Small Business Set-Aside (Nov 2011) (15 U.S.C. 644).

__ (ii) Alternate I (Nov 2011).

X(iii) Alternate II (Nov 2011).

__ (13)(i) 52.219-7, Notice of Partial Small Business Set-Aside (June 2003) (15 U.S.C. 644).

__ (ii) Alternate I (Oct 1995) of 52.219-7.

__ (iii) Alternate II (Mar 2004) of 52.219-7.

X(14) 52.219-8, Utilization of Small Business Concerns (Jul 2013) (15 U.S.C. 637(d)(2) and (3)).

X(15)(i) 52.219-9, Small Business Subcontracting Plan (Jul 2013) (15 U.S.C. 637(d)(4)).

__ (ii) Alternate I (Oct 2001) of 52.219-9.

X (iii) Alternate II (Oct 2001) of 52.219-9.

__ (iv) Alternate III (Jul 2010) of 52.219-9.

X (16) 52.219-13, Notice of Set-Aside of Orders (Nov 2011)(15 U.S.C. 644(r)).

X (17) 52.219-14, Limitations on Subcontracting (Nov 2011) (15 U.S.C. 637(a)(14)).

__ (18) 52.219-16, Liquidated Damages—Subcon-tracting Plan (Jan 1999) (15 U.S.C. 637(d)(4)(F)(i)).

__ (19)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns (OCT 2008) (10 U.S.C. 2323) (if the offeror elects to waive the adjustment, it shall so indicate in its offer).

__ (ii) Alternate I (June 2003) of 52.219-23.

__ (20) 52.219-25, Small Disadvantaged Business Participation Program—Disadvantaged Status and Reporting (Jul 2013) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

__ (21) 52.219-26, Small Disadvantaged Business Participation Program— Incentive Subcontracting (Oct 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

X (22) 52.219-27, Notice of Service-Disabled Veteran-Owned Small Business Set-Aside (Nov 2011) (15 U.S.C. 657 f).

X(23) 52.219-28, Post Award Small Business Program Rerepresentation (Jul 2013) (15 U.S.C. 632(a)(2)).

__ (24) 52.219-29, Notice of Set-Aside for Economically Disadvantaged Women-Owned Small Business (EDWOSB) Concerns (Jul 2013) (15 U.S.C. 637(m)).

X (25) 52.219-30, Notice of Set-Aside for Women-Owned Small Business (WOSB) Concerns Eligible Under the WOSB Program (Jul 2013) (15 U.S.C. 637(m)).

__ (26) 52.222-3, Convict Labor (June 2003) (E.O. 11755).

X (27) 52.222-19, Child Labor—Cooperation with Authorities and Remedies (Mar 2012) (E.O. 13126).

X (28) 52.222-21, Prohibition of Segregated Facilities (Feb 1999).

X(29) 52.222-26, Equal Opportunity (Mar 2007) (E.O. 11246).

X (30) 52.222-35, Equal Opportunity for Veterans (Sep 2010)(38 U.S.C. 4212).

X (31) 52.222-36, Affirmative Action for Workers with Disabilities (Oct 2010) (29 U.S.C. 793).

X(32) 52.222-37, Employment Reports on Veterans (SEP 2010) (38 U.S.C. 4212).

X (33) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (Dec 2010) (E.O. 13496).

__ (34) 52.222-54, Employment Eligibility Verification (JUL 2012). (Executive Order 12989). (Not applicable to the acquisition of commercially available off-the-shelf items or certain other types of commercial items as prescribed in 22.1803.)

__ (35)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA–Designated Items (May 2008) (42 U.S.C. 6962(c)(3)(A)(ii)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

__ (ii) Alternate I (May 2008) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

X (36) 52.223-15, Energy Efficiency in Energy-Consuming Products (DEC 2007) (42 U.S.C. 8259b).

X(37)(i) 52.223-16, IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products (DEC 2007) (E.O. 13423).

__ (ii) Alternate I (DEC 2007) of 52.223-16.

X (38) 52.223-18, Encouraging Contractor Policies to Ban Text Messaging While Driving (AUG 2011) (E.O. 13513).

__ (39) 52.225-1, Buy American Act—Supplies (Feb 2009) (41 U.S.C. 10a-10d).

__ (40)(i) 52.225-3, Buy American Act—Free Trade Agreements—Israeli Trade Act (Nov 2012) (41 U.S.C. chapter 83, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, 19 U.S.C. 3805 note, 19 U.S.C. 4001 note, Pub. L. 103-182, 108-77, 108-78, 108-286, 108-302, 109-53, 109-169, 109-283, 110-138, 112-41, 112-42, and 112-43).

__ (ii) Alternate I (Mar 2012) of 52.225-3.

__ (iii) Alternate II (Mar 2012) of 52.225-3.

__ (iv) Alternate III (Nov 2012) of 52.225-3.

X (41) 52.225-5, Trade Agreements (NOV 2012) (19 U.S.C. 2501, *et seq*., 19 U.S.C. 3301 note).

X (42) 52.225-13, Restrictions on Certain Foreign Purchases (June 2008) (E.O.'s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).

__ (43) 52.225-26, Contractors Performing Private Security Functions Outside the United States (Jul 2013) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

__ (44) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (Nov 2007) (42 U.S.C. 5150).

__ (45) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (Nov 2007) (42 U.S.C. 5150).

__ (46) 52.232-29, Terms for Financing of Purchases of Commercial Items (Feb 2002) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

__ (47) 52.232-30, Installment Payments for Commercial Items (Oct 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

X(48) 52.232-33, Payment by Electronic Funds Transfer—System for Award Management (Jul 2013) (31 U.S.C. 3332).

__ (49) 52.232-34, Payment by Electronic Funds Transfer—Other than System for Award Management (Jul 2013) (31 U.S.C. 3332).

__ (50) 52.232-36, Payment by Third Party (Jul 2013) (31 U.S.C. 3332).

__ (51) 52.239-1, Privacy or Security Safeguards (Aug 1996) (5 U.S.C. 552a).

__ (52)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) (46 U.S.C. Appx. 1241(b) and 10 U.S.C. 2631).

__ (ii) Alternate I (Apr 2003) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

X (1) 52.222-41, Service Contract Act of 1965 (Nov 2007) (41 U.S.C. 351, *et seq*.).

__ (2) 52.222-42, Statement of Equivalent Rates for Federal Hires (May 1989) (29 U.S.C. 206 and 41 U.S.C. 351, *et seq*.).

__ (3) 52.222-43, Fair Labor Standards Act and Service Contract Act—Price Adjustment (Multiple Year and Option Contracts) (Sep 2009) (29 U.S.C. 206 and 41 U.S.C. 351, *et seq*.).

__ (4) 52.222-44, Fair Labor Standards Act and Service Contract Act—Price Adjustment (Sep 2009) (29 U.S.C. 206 and 41 U.S.C. 351, *et seq*.).

__ (5) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment—Requirements (Nov 2007) (41 351, *et seq*.).

__ (6) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services—Requirements (Feb 2009) (41 U.S.C. 351, *et seq*.).

__ (7) 52.222-17, Nondisplacement of Qualified Workers (JAN 2013) (E.O.13495).

__ (8) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations (Mar 2009) (Pub. L. 110-247).

__ (9) 52.237-11, Accepting and Dispensing of $1 Coin (Sept 2008) (31 U.S.C. 5112(p)(1)).

(d) *Comptroller General Examination of Record*. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records—Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR Subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e)(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in this paragraph (e)(1) in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause—

(i) 52.203-13, Contractor Code of Business Ethics and Conduct (Apr 2010) (Pub. L. 110-252, Title VI, Chapter 1 (41 U.S.C. 251 note)).

(ii) 52.219-8, Utilization of Small Business Concerns (Jul 2013) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds $650,000 ($1.5 million for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(iii) 52.222-17, Nondisplacement of Qualified Workers (JAN 2013) (E.O. 13495). Flow down required in accordance with paragraph (l) of FAR clause 52.222-17.

(iv) 52.222-26, Equal Opportunity (Mar 2007) (E.O. 11246).

(v) 52.222-35, Equal Opportunity for Veterans (Sep 2010) (38 U.S.C. 4212).

(vi) 52.222-36, Affirmative Action for Workers with Disabilities (Oct 2010) (29 U.S.C. 793).

(vii) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (Dec 2010) (E.O. 13496). Flow down required in accordance with paragraph (f) of FAR clause 52.222-40.

(viii) 52.222-41, Service Contract Act of 1965 (Nov 2007) (41 U.S.C. 351, *et seq*.).

(ix) 52.222-50, Combating Trafficking in Persons (Feb 2009) (22 U.S.C. 7104(g)).

___Alternate I (Aug 2007) of 52.222-50 (22 U.S.C. 7104(g)).

(x) 52.222-51, Exemption from Application of the Service Contract Act to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (Nov 2007) (41 U.S.C. 351, *et seq.*).

(xi) 52.222-53, Exemption from Application of the Service Contract Act to Contracts for Certain Services-Requirements (Feb 2009) (41 U.S.C. 351, *et seq.*).

(xii) 52.222-54, Employment Eligibility Verification (JUL 2012).

(xiii) 52.225-26, Contractors Performing Private Security Functions Outside the United States (Jul 2013) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

(xiv) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations (Mar 2009) (Pub. L. 110-247). Flow down required in accordance with paragraph (e) of FAR clause 52.226-6.

(xv) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) (46 U.S.C. Appx. 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the contractor may include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

ADDENDUM 1 - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS

A.2.1. LIST OF ATTACHMENTS

The following attachments constitute part of this contract:

Attachment	Description	Date
A	TECHNICAL SPECIFICATIONS	Aug 2013
B	LIST OF DELIVERABLES	Nov 2013
C	STATEMENT OF WORK	Oct 2013
D	CONTRACTOR/GOVERNMENT COMMUNICATIONS REQUIREMENTS	Oct 2013
E	COMMERCIAL SUBCONTRACTING PLAN	(To be proposed)
F	PRICING EXHIBITS	(To be proposed)
G	IT SECURITY MANAGEMENT PLAN	(To be submitted upon request)
H	IT SECURITY APPLICABLE DOCUMENTS LIST	(To be submitted upon request)

[END OF ADDENDUM 1]

Attachment A Technical Specifications

List of Abbreviations

AC Alternating Current
AD Active Directory
AES Advanced Encryption Standard
ANSI American National Standards Institute
API Application Programming Interface
ASN Abstract Syntax Notation
BIOS Basic Input/Output System
BGP Border Gateway Protocol
BMC Baseboard Management Console
BNC Bayonet Neill–Concelman
CCD Charge Coupled Device
CCMP Counter Cipher Mode with Block Chaining Message Authentication Code Protocol or CCMP (CCM mode Protocol)
CIF Common Image Format
CIFS Common Internet file system
COTS Commercial Off-the-Shelf
CPU Central Processing Unit
CRT Cathode Ray Tube
CWDM Coarse Wavelength Division Multi-plexing
DAT Digital Audio Tape
DBMS DataBase Management System (rdbms for Relational)
DPI Dots per Inch
DS3 Digital Signal (level) 3
DVI Digital Visual Interface
DVR Digital Video Recorder
DWDM Dense Wavelength Division Multi-plexing
EAP Extensible Authentication Protocol
EIA Electronic Industries Association
EPEAT Electronic Product Environmental Assessment Tool
EPO Emergency Power Off
FCoE Fibre Channel over Ethernet
FDR Fourteen Data Rate
FIPS Federal Information Processing Standards
FIT Frame Interline Transfer
FT Frame Transfer
GByte Gigabyte
GbE Gigabit Ethernet (GbE or 1 GigE)
GHz – Gigahertz, 10^9 Hz
GIS Geographic Information System
GPFS General Parallel File System
GPS Global Positioning System
GPU Graphics Processing Unit
GTC Generic Token Card
GUI Graphical User Interface
HDMI High Definition Multi-Media Interface
HDTV High Definition Television
HPGL Hewlett Packard Graphics Language
HSM Hierarchical Storage Management
HTML HyperText Markup Language
HTTP HyperText Transfer Protocol
Hz Hertz (cycles per second)
ICMP Internet Control Message Protocol

IEC International Electrotechnical Commission
IEEE Institute of Electrical and Electronics Engineers
IETF Internet Engineering Task Force
I/O Input/ Output
IP Internet Protocol
IPMI Intelligent Platform Management Interface
IPX Internetwork Packet Exchange
iSCSI Internet Small Computer System Interface
ISO International Standards Organization
ITU International Telecommunications Union
JPEG Joint Photographic Experts Group
KVM (keyboard, video and mouse switch), a hardware device that allows a user to control multiple computers
LAN Local Area Network
LCD Liquid Crystal Display
LDAP Lightweight Directory Access Protocol
LED Light Emitting Diode
LTO Linear Tape Open
MAC Medium Access Control
MByte Megabyte
Mbps Megabits per Second
MIB Management Information Base
MIC Message Integrity Check
MFD Multi-functional device
MFP Multi-functional printer
MMF Multi-Mode Fiber
MOSPF Multicast Open Shortest Path First
msec Milliseconds
MPLS Multi-Protocol Label Switching
NASA National Aeronautics and Space Administration
NEPA National Environmental Policy Act
NFS Network File System
NI Network Interface
NIC Network Interface Card
NIST National Institute of Standards
NTP Network Time Protocol
NTSC National Television Standards Committee
OCR Optical Character Recognition
OEM Original Equipment Manufacturer
OODBMS Object-Oriented Database Management System
OS Operating System
OSI Open System Interconnect
OSPF Open Shortest Path First
Pbyte Petabyte
PC Personal Computer
PCI Peripheral Component Interconnect
PCL Printer Command Language
PDF Portable Document Format
PDU Power Distribution Unit
PEAP Protected Extensible Authentication Protocol
PHY Physical Layer Protocol
PIM Protocol Independent Multi-cast
PIV Personal Identity Verification
PMD Physical Media Device
PNNI Private Network to Network Interface
POP Post Office Protocol

PUE Power Usage Effectiveness
QDR Quad Data Rate
RAID Redundant Array of Independent Disks
RAM Random Access Memory
RDBMS Relational Data Base Management System
RFC Request For Comments
RFP Request For Proposal
RIP Routing Information Protocol
RMON Remote Monitor/Monitoring
RMS Root Mean Squared
RMU Rack Mount Unit
ROM Read-Only Memory
SAC Single Attached Concentrator
SAM-FS Storage Archive Manager File System
SAN Storage Area Network
SAP Service Advertisement Protocol
SAS Single Attached Station
SATA Serial ATA
SCSI Small Computer System Interface
SMP Symmetric Multi-Processing
SNMP Simple Network Management Protocol
SONET Synchronous Optical NETwork
SQL Structured Query Language
SSD Solid State Drive
SSH Secure SHell
TBD To Be Designed/Determined
TByte Terabyte
TCP Transmission Control Protocol
TIFF Tagged Image File Format
TKIP Temporal Key Integrity Protocol
TLS Transport Layer Security
UDP User Datagram Protocol
UPS Uninterruptible Power Supply
USB Universal Serial Bus
VC Virtual Circuit
VGA Video Graphics Array
VHS Video Home System (VCR)
VLAN Virtual Local Area Network
VP View Processor
WAIS Wide Area Information Server
WAN Wide Area Network
WDM Wavelength Division Multi-plexing
WEP Wired Equivalent Privacy
WPA Wi-Fi Protected Access
XNS Xerox Network Systems Protocol

1. Introduction

Section 1 provides a general overview of the structure of these technical specifications.

1.1. Background

The computer facilities at NASA are being systematically enhanced by incorporating the latest in state-of-the-art computer system technologies. These improvements will enable NASA to remain at the leading edge in scientific and engineering processing performance and capabilities and to provide the user community of researchers and engineers with the most advanced and powerful computer tools available. In support of this activity NASA is establishing Indefinite Delivery/Indefinite Quantity contracts of scientific and engineering computer systems and supporting equipment. The computer systems will provide computational and graphics capability to the scientific engineering and other technical disciplines supporting NASA's core missions. The specifications presented in this document represent a comprehensive set of requirements intended to provide a complete environment for computational analysis by NASA engineers and scientists.

1.2. Requirements Structure

The very broad range of NASA's functions in space, earth science, aeronautics, manned flight, mission operations and other activities, results in an equally broad range of computational requirements and consequently a requirement for a broad range of computer systems and support equipment. The requirements are structured in a way that clarifies NASA's needs and categorizes the requirements on the basis of application functions. This structure is defined through two categories: Category A consists of a group of functional computer systems; Category B consists of complementary products and services that enhance and support the computer system functions.
This procurement is for 5 competition areas consisting of one Category A computer system competitions composed of one Group, and 4 Category B supporting equipment competitions composed of 3 Groups. Each of the groups has specific requirements and functional tasks that must be met by the offerings in that group. However, the potential usage of any group is broad and may be based on a variety of applications beyond the specific group definition. The groupings are devised to ensure that the Government has a sufficient set of the best available tools for given tasks. The groupings do not imply either exclusive product offerings by the contractor nor, do they restrict the Government from making best value judgments as to which group to use to meet their specific requirements.

1.2.1. Category A Structure

The prelude to the requirements includes the definitions of the computer system group used to identify the general set of applications or environments that distinguish this group. Group definitions are given in Section 2 of this document.

The computer system group is broad and represents a variety of applications beyond the specific group definition, yet this grouping produces enough commonality of requirements that applications in a group can share the same hardware platform.

This group represents not a single specific computer system, but instead represents a family of systems with a range of capabilities. In order to simplify requirements, the group is represented by three types of base systems. These base systems are generally distinguished by performance, upgradability and growth potential and define the minimum range of family of systems that should be provided on the contract. It is anticipated that systems will be made available on the contract through the Available Components list which are compatible with the base systems but which also both fill in and expand upon the requirements fulfilled through the base systems.
In general, application software such as CAD packages, databases, visualization software, etc. must be supported on the computer systems, but need not be provided (i.e. are not mandatory deliverables) unless specifically noted in the mandatory deliverables list in Attachment B. These are referred to as non-mandatory software.
A set of mandatory add-on equipment and upgrades is identified to allow for system enhancements. An available components list consisting of desirable items and other software and hardware which provides depth and breadth to the vendor's offerings, such as computer systems in ranges of sizing and functions that complement the basic systems and non-mandatory software is also included.

1.2.2. Category B Structure

The Category B groups consist of a set of capabilities that span across all computer systems via three areas: B) Mass Storage Devices, C) Server Support and Multi-Functional Devices, D) Network Devices, Computer Security Tools and Advanced Video and Conference Tools. Each group has a set of mandatory specifications. In addition, each group includes an available components list consisting of desirable items and other software and hardware that provide depth and breadth to the contract.

1.3. Structure of This Document

This section describes the section layouts of the technical specifications.

1.3.1. Category A Computer System Group

The specific requirements associated with Group A and derived from the applications to be supported are presented in Section 3.

1.3.2. Category B Groups

Requirements for this category are described in separate sections. Category A requirements do not apply to these groups. Mass Storage Devices requirements are described in Section 4. Server Support and Multi-Functional Devices requirements are described in Section 5. Network Devices, Computer Security Tools and Advanced Video and Conference Tools requirements are described in Section 6.

1.4. Terminology

Key terms are described in this section.

1.4.1. Provide / Support

Two key terms in the technical specifications are: provide and support. Use of the term “provide” indicates a product, service, or capability that is either a mandatory or, if modified by the term “desirable”, a desirable deliverable item. All mandatory deliverable products, services and capabilities are identified in the Delivery Lists in Attachment B. A mandatory deliverable is either part of the base system, a separate add-on line item, or a separate upgrade line item. If an item is identified in the technical section as needing to be provided and is not listed in Attachment B as a separate add-on or upgrade line item, it is included as part of the Base system.
Note that the term “provide” implies an item is either a part of every delivered base system or is a separately orderable line item. This distinction is made in the Delivery Lists in Attachment B. For example, a C++ compiler must be provided (as indicated in Section 3.1.4.2.). But the Delivery Lists indicate that the C++ compiler is a separately orderable line item and it is estimated that only a certain percentage of the base systems will be purchased with a C++ compiler over the life of the contract.
Use of the term “support” indicates a product, service, or capability that the systems must be capable of fully utilizing, but which are not part of either the mandatory or desirable deliverable list. When support is used in reference to a software product, a version of the product that can execute on the system must be available in the commercial and/or public domain arena. Supported products, services, or capabilities can be part of the available components list.

1.4.2. Deliverables

The delivery lists use abbreviated terminology for clarity in enumerating delivery items. The complete specifications for these delivery items are fully described in Sections 3 through 6. As an example, the delivery list identifies the operating system as a deliverable and the full set of specifications for that operating system is given in Section 3. This includes items such as file system, system administration, shells, etc.
Deliverables are divided into mandatory and non-mandatory categories:

1.4.2.1. Mandatory Deliverables

Each of the separate group specifications produces a separate set of mandatory deliverables for each group. These delivery requirements are specified in Attachment B of this contract. The deliverables are divided into a Base Deliverable, and Add-on / Upgrade Deliverables. The Base Deliverables represent the minimum system configuration to be delivered for each equipment category. Add-on deliverables are mandatory line items that may be added to the Base deliverable at the discretion of the end-user. Upgrade deliverables are mandatory line items that upgrade; the Base deliverables at the discretion of the end-user, e.g. additional disk and/or memory.

1.4.2.2. Non-mandatory Deliverables

Non-mandatory deliverables are items that go beyond the mandatory deliverables. Non-mandatory deliverables are identified through the available components list and include desirable features, additional technology and other software and hardware that provide depth and breadth to the offering.

1.4.3. Minimums / Desirables / Advanced Technology / Additional Technology

All technical specifications fit into one of four categories: minimum mandatory; desirable feature; advanced technology, or additional technology.
If a technical specification is not explicitly identified as advanced technology, additional technology or a desirable feature, it identifies a minimum mandatory that must be met. Alternatively, if a technical specification is identified as advanced technology, additional technology or a desirable feature, it is not a minimum mandatory but a technology, item or feature that the Government deems to have value if available.
If a technical section contains the term “desirable”, then the section identifies a feature that the Government desires but which the vendor is not required to provide or support.
If a technical section contains the term “advanced technology”, then the section identifies advanced capabilities that provide the Government with significant added benefit. These are typically features that are either at the cutting edge of technology or for which standards (industry or de-facto) are still forming.
A technical requirements section may contain the term “additional technology”. This designation identifies a basic capability that is intended to provide the Government with added value if the additional technology is provided in the Available Components list. Typically, “additional technology” indicates broad grouping of technology that, if included in the Contractor’s offerings, will provide the opportunity for one-stop solution shopping. For example, network technology is an additional technology in the Mass Storage Devices group as network products are an integral feature of many mass storage systems.

1.4.4. Authorized Reseller

At the beginning of the mandatory requirements for each Group, a listing is provided of those items for which the offeror must be authorized by the original equipment manufacturer (OEM) to sell as part of their SEWP V proposal. For the purpose of this proposal only, an authorized reseller is defined at a minimum as a company who is known by the OEM and for whom the OEM has approved the proposed mandatory offering(s). For each such identified item, the offeror must provide an OEM point of contact who can verify that information.
If the offeror is the OEM, then that is equivalent to the offeror being an authorized reseller and the POC information should note a POC within that offeror’s company.

1.5. Assistive Technology

All computer systems available and procured through this Contract must be technically capable of supporting commercially available and appropriate technology to ensure that Federal employees with disabilities will have access to and use of that technology unless a department or agency exception to this requirement exists.

1.5.1. Section 508 Information

All IT equipment available through this contract that fit the criteria as electronic and information technology (EIT) as defined in Section 508 of the Rehabilitation Act of 1973 as amended by the Workforce Investment Act of 1999 shall have information available to the Federal Government regarding how that technology meets the applicable Section 508 standards. This will preferably be provided through the applicable Voluntary Product Accessibility Templates (VPATs) or preferably the Government Product Accessibility Template (GPAT) as described on the Section 508 website (www.section508.gov and related sites). The VPATs or similar information may either be provided on the contractor's website, on demand based on request for quotes and/or through link on the SEWP Website. Section C.1.8. outlines the compliance and information requirements associated with the Section 508 standards.

All proposed mandatory products must indicate how applicable 508 requirements are met by either providing a filled-in VPAT, GPAT or other supporting documentation.

1.6. Environmentally Preferable Purchasing Program

All federal procurement officials are required by Executive Order 13101 and Federal Acquisition Regulation (FAR) to assess and give preference to those products and services that are environmentally preferable. Therefore all institutional purchasers who evaluate and select computer desktops, laptops, and monitors available and procured through this Contract should to the greatest extent possible meet the evolving standards associated with the Environmentally Preferable Purchasing Program (EPP) and the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products as described on the website (http://www.epeat.net)). The Contractor shall have the ability to respond to specific requests and requirements centered on the EPP such as requests based on the Electronic Product Environment Assessment Tool (EPEAT) and identifying EPEAT registered products on their contract.

All proposed mandatory products must meet applicable EPEAT and Energy Star requirements where applicable. For purposes of proposing mandatory products only, these standards will be considered to apply if there are 5 or more products that both meet the associated standard and all other minimum mandatory requirements.

1.7. Minimum Mandatory Product Condition

All products proposed to meet the minimum mandatory requirements must be new products; i.e. refurbished and/or used technology cannot be proposed in response to a minimum mandatory requirement. Used and refurbished equipment may be proposed as part of the available components as defined in Section C.1.6. Used Equipment and Materials.

1.8. Definitions

To clarify meaning of some terms used in this specification, some definitions are given here.

508 (Compliance)	Federal agencies are required to make their electronic and information technology accessible to people with disabilities. Section 508 is an amendment to the Rehabilitation Act.

Add-ons:	Add-ons are mandatory line items which may be added to the Base deliverable at the discretion of the end-user.
Additional Technology	A basic capability that is intended to provide the Government with added value if the additional technology is provided in the Available Components list.
Advanced Technology	Advanced capabilities that provide the Government with significant added benefit.
Available Bus Slots:	The number of unused bus slots available for expansion after satisfying the requirements of the minimum mandatory deliverables and the maximum disk storage requirements for the base computer system.
Available Components	Non-mandatory deliverables including desirable features, additional technology and other software and hardware that provide depth and breadth to the offering.
Base Systems	The systems which must meet the minimum mandatory specifications and be provided for on the Contract
Category:	A set of technology based on similar objectives and/or overall structure
Computer Room Environment:	Facilities in which special environmental factors are maintained, such as controlled temperature and humidity, where noise is not limited by office requirements, and in which reliable power systems are available and/or are at levels other than the standard 110 volt, 60 Hz.
Computer System:	A computer workstation or server
Core Specifications	Set of technical specifications that are included in all requirements within the specified category or group
Desirable Feature	A feature that the Government desires but which the vendor is not required to provide or support
Energy Star (Compliant)	Energy Star (TM) is an international standard for energy efficient consumer products originated in the United States of America.
FIPS 140	Federal Information Processing Standards (FIPS) are U.S. government computer security standards that specify requirements for cryptography modules. http://en.wikipedia.org/wiki/FIPS_140
Group:	A grouping of technological requirements based on common functionality
Group Specific Specifications	Set of technical specifications that are specific to the given Group
Infiniband	**InfiniBand** is a switched fabric communications link used in high-performance computing and enterprise data centers. http://en.wikipedia.org/wiki/Infiniband

Mandatory Deliverables	Products that must be included in the Contract in order to meet the mandatory requirements of the group
Mandatory Specifications	Set of technical specifications that must be meet by the mandatory offerings
Non-Mandatory Deliverables	Products that go beyond the mandatory deliverables are identified through the available components list and include desirable features, additional technology and other software and hardware that provide depth and breadth to the offering.
Non-Mandatory Desirable Feature:	A capability that is desired by the Government but not required.
Office Environment:	A human work area providing moderate environmental conditioning but with limited capacity to support or provide unusual power or temperature/humidity requirements, and one that may be easily upset by equipment emitting excessive heat and/or noise.
Open Bus Architecture:	A bus with multivendor support. This means that there is an industry published specification to enable third party connectivity.
Open Systems Environment:	The comprehensive set of interfaces, services, and supporting formats, plus user aspects, for interoperability or for portability of applications, data, or people, as specified by information technology standards and profiles. Source: IEEE P1003.0 POSIX Committee.
Provide:	Indicates a product, service, or capability that is either a mandatory or, if modified by the term “desired”, a desirable deliverable item.
such as:	The term “such as” is used to list example products that are known to meet the stated capability, and for which products that also meet the stated capability may be substituted.
Support	Indicates a product, service, or capability that the systems must be capable of fully utilizing, but which are not part of either the mandatory or desirable deliverable list.
TAA (compliant)	TAA refers to the Trade Agreements Act (19 U.S.C. & 2501-2581), which is intended to foster fair and open international trade. TAA requires that the U.S. Government may acquire only “U.S. – made or designated country end products. This act requires that contractors must certify that each end product meets the applicable requirements. End products are ‘those articles, materials and supplies to be acquired for public use’.” This includes items which have been “substantially transformed” in the United States.
TWAIN	A standard software protocol and applications programming interface (API) that regulates communication between software applications and imaging devices such as scanners and digital cameras. http://en.wikipedia.org/wiki/TWAIN
Upgrades:	Upgrades are mandatory line items that upgrade the Base deliverables at the

	discretion of the end-user; e.g. additional disk and/or memory.
Virtual File System	A virtual file system is an abstraction of a physical file system implementation. It provides a consistent interface to multiple file systems, both local and remote. This consistent interface allows the user to view the directory tree on the running system as a single entity even when the tree is made up of a number of diverse file system types. The interface also allows the logical file system code in the kernel to operate without regard to the type of file system being accessed
Waterless Fire Suppression	E.g. Dupont FM-200 used as a gaseous fire suppression agent. http://en.wikipedia.org/wiki/Heptafluoropropane

2. Contract Definitions

Section 2 provides general paragraph descriptions of the various SEWP Groups.

2.A. Category A: Scalable Computer System Group

This Section provides general paragraph descriptions of the SEWP Group in Category A.
The Computer Systems/Server group of systems and services will be used to provide systems that shall be scalable and applied to meet a wide range of computer and data-intensive requirements. The requirements include compute-intensive traditional optimized applications such as modeling, and mathematical analysis. Applications include, but are not limited to, atmospheric and oceanographic modeling, ocean color or crustal dynamics studies, ozone and sea-ice mapping, radio astronomy, high-energy astrophysics applications, flight dynamics computations, and fluid flow dynamic process modeling. These systems may need Infiniband network interconnects to achieve the very highest performance. These systems may be used in the configuration of highly virtualized arrays of servers, connected together in a super-computer configuration or managed selectively.
These computer systems may also be configured for high performance visual rendering, image analysis and the acceleration of general-purpose scientific and engineering applications. This work is often combined with the highest quality in the visual representation of data to the user.
Typical applications from the Earth and Space science communities are modeling, data assimilation and analysis. Earth and space scientists require the ability to transform volumetric data at high rates to view different perspectives quickly. Additionally, photo realistic representations of data such as the planet Earth with full texture maps are needed to accommodate the overlay of geophysical parameters obtained from spacecraft observations. Three dimensional simulations of the Earth system that generate terabytes of data are performed on high performance systems. Applications from the engineering community include modeling the spacecraft and sensor design. NASA has a critical need to support the real-time modeling of these spacecraft using high speed animation of these vehicles and their antennas (or arms), where the antennas (or arms) move independently of each other. Computer systems must be able to display large numbers of polygons per second to meet the animation needs of the robotics community as well as provide a high degree of graphical representation of the objects displayed.
This Group of computer systems may also be configured to be used to manage large repositories of data ranging up to high-end hierarchical mass storage systems, storing and retrieving hundreds of gigabytes to tens of terabytes of data each day with total archive capacity of Petabytes. Fast networking such as 10-Gigabit Ethernet will be required to access the data from other hosts. Data will be stored initially on high-performing RAIDed disk subsystems and then copied to lower levels in the storage hierarchy. These lower levels must also be high performing and could include solid state disks (SSD) lower-cost disk arrays, massive arrays of idle disks (MAID), tapes or other removable media within robotic libraries. Data is staged back to primary RAIDed disk automatically upon retrieval. Users expect stores and retrieves to be accomplished within seconds. These systems are anticipated to be used in conjunction with mass storage devices as defined in Group B.
Alternatively, these computer systems will be used to house large data volumes and large databases. Applications are typically based on commercial DBMS packages. In addition, these systems would typically provide capability for archival and digital libraries. The critical features of such systems include: high rate of transactions per second, high performance, low latency networks, high volume of network traffic, fast disk access, large amounts of memory (RAM), high volume of memory to disk transfers, and large amounts of secondary storage.
The critical features of this Group are high compute capability, scalability (potentially from a single rack to multiple racks to a series of containers) fast primary storage and network communications, and large data storage capability. 128-bit arithmetic may be needed to support these requirements. This group of system will most likely reside away from the user's work area and be accessed primarily over the network.
This Group will include hardware systems and peripherals, software and software licenses, and hardware and software maintenance services including analyst support.

2.B. Category B: Complementary Products Categories

This Section provides general paragraph descriptions of the SEWP Groups in Category B
Category B (Complementary Products)
Group B – Mass Storage Devices

Group C – Server Support and Multi-Functional Device
Group D –Network Devices, Computer Security Tools and Advanced Video and Conference Tools

2.B.1. Group B – Mass Storage Devices

This group consists of storage devices; e.g. Hard disks and removable media systems which can be used by any of the computer systems in Category A along with virtual storage systems (i.e. cloud computing). While it is anticipated that products in this group will be purchased for use with any of the Category A systems, this group is particularly concerned with providing mass storage I/O devices for use with the systems managing large RAID storage, large archives, and other "big data" systems.

2.B.2. Group C – Server Support and Multi-Functional Device

This group includes Input and Output peripherals and other equipment that support and complement the full implementation of computer systems. These items may be purchased by the Government separately from the computer systems but rely on standards and standard interfaces to ensure interoperability with existing computer systems. Included in this group are display terminals and systems and other low-end client systems to allow user connectivity to a full range of computer systems; scanners to allow inputting of information from hard-copy forms; input devices such as sensors directly connected to computer monitoring systems; mobile systems and smart phones to allow mobile access to individual's computing needs.
This group also includes Multi-functional devices (MFD) which are single devices that serve several functions, including printing, scanning, faxing and photocopying.

2.B.3. Group D –Network Devices, Computer Security Tools and Advanced Video and Conference Tool

This group consists of a range of network equipment in support of the full implementation of computer systems in the NASA network environment. These items may be purchased by the Government separately from the computer systems but rely on standards and standard interfaces to ensure interoperability with those systems. Hardware, including hubs, switches, routers, NFS routers, concentrators and diagnostic tools, and software including network management are included in this group. Networking systems also include network communication devices relying on WIFI, radio and related technology.
This group consists of security oriented hardware and software needed to securely support a full implementation of computer systems and infrastructure in the NASA information technology environment. These items may be purchased by the Government separately from the computer, but rely on standards and standard interfaces to ensure interoperability with the computer systems and the supporting networks. Items in this group will include virus and spyware detection tools, two and three factor authentication tools, firewalls, auditing tools, intrusion detection systems, encryption capabilities, monitoring tools, and secure remote access tools. Security hardware products include biometric devices and security related sensors and data input devices.
This group consists of a range of equipment in support of digital television image production and related imaging and display tools. The Government may purchase these items separately from computer systems, but rely on standards and standard interfaces to ensure interoperability with those systems. The hardware in this group includes High Definition (HD) and Standard Definition (SD) Digital TV (DTV) equipment for video acquisition, production, post-production, distribution, and display. Additionally, the increasing complexity and volume of scientific data benefit from paradigms for interaction and visualization that are much closer to normal human interaction in the physical world. These paradigms require immersion and stereoscopic viewing for three-dimensional data, tracked and/or haptic devices with high degrees of freedom, and audio processing systems for data sonification. Where appropriate, these devices may act as input/output peripherals to developmental computer systems.
Elements of the main categories of AV, security and networking can be combined to provide all-in-one solutions. The combination of security and AV technology, for example, allows for security and command and control systems such as video security systems. Networking, communication and AV combine for Videoconferencing solutions.

3. Category A: Group A: Computer System Specifications

Section 3 provides the mandatory technical specifications for Group A: Computer System Class Equipment.

3.1. Core Specifications Introduction

This section provides a general overview of the core specifications.

All proposed mandatory products must meet the following (where applicable):

a. EPEAT certified
b. Energy Star compliance
c. 508 compliance
d. Trade Act (TAA) compliance
e. New Equipment
f. Authorized reseller for the following mandatory products:

- Mid-range cluster
- High-end cluster
- Container based systems

3.1.1. Purpose

The purpose of this section is to define the Core Specification requirements for the mandatory computer systems in Group A

3.1.2. Background

The Core Specifications apply to the base and mandatory products for the mandatory computer systems, unless a deviation to the Core Specifications is noted in the Specific Sections.

3.1.3. Hardware

This section describes the core hardware specifications. The goal of the core system specifications is to ensure system compatibility from low to high end systems where applicable.

3.1.3.1. Data Storage Components

a. Hard disk storage shall be provided with each system. The storage requirements are class specific.
b. All storage devices shall be field installable.
c. All storage devices shall provide hard error detection (resulting in a non-recoverable failure) and all such errors shall be reported to the system logs.
    1. All storage devices shall provide detection of all errors (recoverable and non-recoverable)

3.1.3.2. Communication / Network Interfaces

a. Native support of Internet Protocols (IP) is required for compatibility with existing network and computing platforms.
b. Each computer system shall provide an IEEE 802.3, ISO 8802/3 1000Base-T Ethernet interface in the base systems.
    1. Options for additional physical Ethernet interfaces (desirable)

3.1.4. System Software

This section describes required functions and features that normally are performed by the system software. The operating system software shall support the hardware. The system software shall support a set of development tools and utilities to augment the capabilities of the operating system and the required language processors. These software tools shall provide fast, efficient mechanisms to develop application programs, backup and restore files, debug programs, and supply other useful system functions.

3.1.4.1. Operating System

The operating system (OS) shall be identified in terms of type (e.g. UNIX, Linux, etc), version and any branding certification or other standards covered by the OS

3.1.4.2. Programming Environment

The class 1 and 2 systems shall provide:

a. A C++ compiler which shall include:
   1. run-time libraries.
   2. a C++ source language compatible symbolic debugger with capability to read core dumps. Shall display source code, program variables (including register contents), debugger commands, and debugger output. Display of original names of source code variables.
   3. a single (1) user license
      a. an optional site license (desirable)
   4. compliant C++ compiler (ISO/IEC 14882:2011) (desirable)

b. a Fortran 2008 compiler which shall include:
   1. run-time libraries.
   2. a Fortran source language compatible symbolic debugger with capability to read core dumps. Shall display source code, program variables (including register contents), debugger commands, and debugger output. Display of original names of source code variables.
   3. a single (1) user license
      a. an optional site license (desirable)
   4. compliant Fortran 2008 standard compiler (ISO/IEC 1539-1:2010) (desirable)

3.1.4.3. System Software License

Each computer system in class 1 and 2 shall be a multiuser system. The operating system license shall be available in at least 1 licensing level for all systems:

a. an unlimited license defined as allowing an unlimited number of users to be logged in simultaneously, where 1 or more may be logged in through the console and the rest are connected through a network connection

3.1.5. Documentation

The contractor shall provide access to complete sets of commercially available system and user manuals. All provided documentation shall be available on line.

3.2. Group A: Computer System Class Specific Specifications

For each of the three classes in Group A, contractors are required to meet both the core requirements defined in the "Computer System Core Specification" (Section 3.1) and the additional mandatory requirements defined for that class, provided in each of the subsections that follow, unless otherwise noted.

If there is a conflict in requirements between the Class Specific Specification and the Core Specification, the Class Specific Specification shall always take precedence.

Each class is differentiated by performance and capacity and is intended for use by highly intensive computational and related (mass storage, database, rendering, etc.) operations. Each class is intended to be highly scalable and configurable for redundant and fault-tolerant operation.

3.2.1. Class 1: Mid-Range Cluster

The purpose of this section is to define the specific requirements for a mid-range Cluster System. The following specifications are required of these Class 1 computer systems over and above, or in place of the core specifications defined in Section 3.1.

3.2.1.1. Hardware Configuration

The Mid-Range cluster architecture requires a total of thirty-six (36) nodes. Management nodes shall be connected to two different internal networks: 1GbE for management and a 10GbE for data. Each data node shall be connected to the 1GbE management network. All Class 1 Mid-Range Cluster systems shall provide the following minimum capabilities, unless noted as a desirable:

a. Operate in a computer room environment with raised floors;

b. Either SATA or Near-Line SAS Disk Controllers shall be provided with each node;

c. SmartPDU:

   (1) Sufficient to connect the power supplies of all Nodes, Switches and KVM;

   (2) Cables to fully connect all Nodes, Switches and KVM;

d. Provide 2 Management Nodes, where each Node shall be provided with the following configuration:

   (1) Dual Socket Motherboards;

      i. Oct-Core Intel "SandyBridge" 2.3GHz processors
         1. Oct-Core Intel "SandyBridge" 2.5GHz processor (desirable)
      ii. 32 GB of RAM

   (2) Management Network: Minimum of one (1) GbE on-board Network Interface Card (NIC) with Baseboard Management Console (BMC);
      (a) Must be compatible with IPMI Version 2;

   (3) Local Area Network: 10GbE NIC with optics and 25-meter fibre cables;
      (a) 40GbE NIC with optics and 25-meter fibre cables (desirable);

   (4) Data Storage:
      (a) minimum of 36Terabytes of storage for data;
      (b) hard drives shall be hot-swappable;

   (5) Operating System Drives:
      (a) Dual operating system hard drives with a minimum of RAID0 and RAID1 support;
      (b) 500GB capacity minimum;
      (c) Hot-swappable (desirable);

   (6) Management Nodes shall have redundant power supplies;

   (7) Full cabling shall be provided for all network and power connections;

   (8) Rack rails for all nodes shall be provided.

e. Provide 34 Data Nodes, where each node shall be provided with the following configuration:
   1. Dual socket motherboards:

        i. Oct-Core Intel “SandyBridge” 2.3GHz processors
            1. Oct-Core Intel “SandyBridge” 2.5GHz processor (desirable)
        ii. 32 GB of RAM
    2. Management Network: Minimum of one (1) GbE on-board Network Interface Card (NIC) with Baseboard Management Console (BMC);
        i. Must be compatible with IPMI Version 2;
    3. Data Storage:
        i. minimum of 36Terabytes of storage for data;
        ii. hard drives shall be hot-swappable;
    4. Operating System Drives:
        i. Dual operating system hard drives with a minimum of RAID0 and RAID1 support;
        ii. 500GB capacity minimum;
        iii. Hot-swappable (desirable);
    5. Data Nodes shall have redundant power supplies;
    6. Full cabling shall be provided for all network and power connections;
    7. Rack rails for the switch shall be provided.

f. Provide one (1) Management Network GbE Switch with the following configuration:
    1. 48-port GbE switch;
    2. Hot-swap power supplies and fans;
    3. Switch shall be Layer 2 with support for multiple VLAN and bonding;
    4. Switch shall be provided with all cabling and adapters for console access;
    5. Switch shall be provided with redundant power supplies and power cables to allow the switch to be connected to two different PDUs fed from different circuits within the same rack.

g. Provide racks:
    1. Racks shall be provided to support all nodes, KVM and switches and shall be configured with redundant PDUs;
    2. Power tails shall be IEC60309.

h. Provide a KVM to support all nodes:
    1. All nodes shall have a dedicated KVM network or connection;
    2. Cables and dongles shall be provided to manage all nodes.

i. The following software shall be supported and the names of a sample software package provided:
    1. Software utility that performs remote BIOS updates and modifications across all nodes from a central location:
        i. The utility shall operate under Linux;
        ii. The utility shall enable management of the following for each node:
            1. Power management settings;
            2. C-state settings;
            3. P-state settings;
            4. CPU and Memory performance;
            5. Hyperthreading;
            6. Turboboost;
            7. Serial port settings for console redirection.
    2. Cluster Management software:
        i. Cluster Management shall perform “node provisioning”;
        ii. Cluster Management shall support “versioning” of the software being provisioned to the nodes (Advanced Technology).
    3. Shared File System (Desirable).
    4. Scheduler software (Desirable).

3.2.1.2. Data archive

In some instances, this Class will be configured to host large digital archives or as large file servers. To meet this requirement, storage management systems must be supported. All Class 1 systems shall provide a Hierarchical Mass Storage System that shall support the following minimum capabilities, unless noted as a desirable:

a. This class must provide one of the following storage systems with an initial configuration of at least 10 PB of storage:
    1. IBM TS3500;
    2. SpectraLogic T-finity;
    3. Oracle SL8500;
    4. Or equivalent.
b. The storage library must scale to a minimum of 50 Petabytes;
c. One or more of the following media types must be provided to store 10 Petabytes of uncompressed data:
    1. T10K (or better);
    2. LTO-6 (or better);
    3. IBM 3592 (or better);
    4. Or equivalent.
d. Tape drives to support the provided media:
    1. Fifty tape drives;
    2. Tape SAN switches and cabling (e.g. Brocade) to support the 50 tape drives.
e. Disk cache of 5 Petabytes;
    1. Disk SAN switches and cabling (e.g. Brocade) to support the disk cache.
f. The file management storage system must be hierarchical, such as SAM-FS or Data Migration Facility. The hierarchical storage management system should be scalable up to at least 100 Petabytes, providing the user a way to build up to full use of the archive storage system.
g. Dual (or multiple) tape copies of a file; multiple server capabilities (server functions spread over multiple machines) as described in the IEEE Mass Storage Reference Model; support for higher scalability (e.g. storage capacity up to 50 or more Pbytes) and other advanced functions / capabilities for the hierarchical storage management system (advanced technology).
h. The Hierarchical Mass Storage System Software shall have the ability to at least:
    1. locate, mount, read and write storage media;
    2. support Linux/UNIX native file system user calls and commands, e.g. “ls”, “touch”, etc.;
    3. support access at hard disk storage speed to the most frequently/recently accessed files;
    4. ‘vault’ media and provide a means of notifying the operator to retrieve a ‘vaulted’ (i.e. off-line) media when an ‘old’ file is requested;
    5. employ a ‘nameserver’ and ‘tapeserver’ or similar means for locating files on storage media;
    6. provide utilities for backup and recovery of critical files including the Hierarchical Mass Storage System software;
    7. provide a repack function (repack tapes to remove deleted files);
    8. log major activities of software components for system monitoring;
    9. write multiple media (disk, tape, etc.) copies of a file;
    10. scalable up to at least 50 Pbyte, providing the user a way to build up to full use of the mass storage system.
i. Architectural description of a fully configured HSM system, using the required components listed above with 100 Petabyte capacity, writing 150 Terabytes of new data per day, I/O balance of 75% writes and 25% reads, using a Disk SAN (e.g., Brocade) for the disk cache and a Tape SAN (e.g., Brocade) for the Tape drives (Advanced Technology).

3.2.1.3. Application Software

In some instances, this Class will be configured to host large databases and/or serve as a render farm, host digital archives, perform as large file servers or serve a combination of these functions. To meet this requirement, the Class 1 computer system shall provide the following software:

a. computer graphic design and rendering software including, but not limited to one user license for:
    1. AutoDesk Maya or equivalent
        (i) Include one year Cloud Subscription;
    2. RenderMan Studio 4 or equivalent.
    3. Pixar RenderMan Pro Server 17 or equivalent
b. database libraries including, but not limited to:

1. Oracle Database 11g R2 Standard Edition or equivalent
   (i) One new Unlimited use (processor based) Oracle license. The license should be for one data node in the proposed mid-range cluster

3.2.2. Class 2: High-End Cluster

The purpose of this section is to define the specific requirements for High-End Cluster System. The following specifications are required of these Class 2 computer systems over and above, or in place of the core specifications defined in Section 3.1.

3.2.2.1. Hardware Configuration

This class of system is characterized by system, performance, connectivity, expansion and storage (in-memory and attached) requirements.

The High-End cluster architecture requires two management nodes, two service nodes, sixteen compute nodes with graphical processing units (GPUs) and a total of four hundred and sixty four (464) compute nodes. The two management nodes and two services nodes shall be connected to three different internal networks: 1GbE for management, the 10GbE and the Infiniband network. Each of the 480 compute nodes shall be connected to two different internal networks: 1GbE for management and the Infiniband network for data. All Class 2 High-End Cluster systems shall provide the following minimum capabilities, unless noted as a desirable:

a. Operate in a computer room environment with raised floors;

b. Either SATA or Near-Line SAS Disk Controllers shall be provided with each node;

c. SmartPDU:

   1) Connectivity shall be provided to connect all redundant power connections of all nodes, switches and the KVM;

   2) Cables to connect all nodes, switches and KVM;

d. Provide 2 Management Nodes, where each Node shall be provided with the following configuration:

   1) Dual Socket Motherboards;

   2) Oct-Core Intel “SandyBridge” 2.3GHz processors;

      (a) Next Generation Socket Compatible (Desirable);

      (b) Oct-Core Intel “SandyBridge” 2.5GHz processor (desirable)

   3) 32 GB of RAM;

   4) QDR Infiniband Host Card Adapter (HCA);

      (a) FDR Infiniband (desirable)

   5) Management Network: Minimum of one (1) GbE on-board Network Interface Card (NIC) with Baseboard Management Console (BMC);

      (a) Must be compatible with IPMI Version 2;

   6) Local Area Network: 10GbE NIC with optics and 25-meter fibre cables;

      (a) 40GbE NIC with optics and 25-meter fibre cables (desirable);

   7) Dual 1.0 TB (or greater) capacity 7,200 RPM (or faster) SATA disk drives:

      (a) RAID 0 support;

      (b) RAID 1 support;

      (c) Hot-swappable (desirable);

   8) Management Nodes shall have redundant power supplies;

9) Full cabling enabling all redundant connectivity shall be provided for all network and power connections;

10) Rack rails for all nodes shall be provided;

e. Provide 2 Service Nodes, where each Node shall be completely redundant and may not be contained within a single chassis or share a planar. Each Service Node shall be provided with the following configuration:

1) Dual Socket Motherboards;

2) Oct-Core Intel "SandyBridge" 2.3GHz processors;

(a) Next Generation Socket Compatible (Desirable);

(b) Oct-Core Intel "SandyBridge" 2.5GHz processor (desirable)

3) 32 GB of RAM;

4) QDR Infiniband Host Card Adapter (HCA);

(a) FDR Infiniband (desirable)

5) Management Network: Minimum of one (1) GbE on-board Network Interface Card (NIC) with Baseboard Management Console (BMC);

(a) Must be compatible with IPMI Version 2;

6) Local Area Network: 10GbE NIC with optics and 25-meter fibre cables;

7) Dual 1.0 TB (or greater) capacity 7,200 RPM (or faster) SATA disk drives:

(a) RAID 0 support;

(b) RAID 1 support;

(c) Hot-swappable (desirable);

8) Nodes shall have redundant power supplies;

9) Full cabling enabling all redundant connectivity shall be provided for all network and all power connections;

10) Rack rails for all nodes shall be provided;

f. Provide 464 Compute Nodes and 16 Compute Nodes with GPUs, where each node shall be provided with the following configuration:

1) All Compute nodes shall be interconnected via Infiniband (QDR);

(a) FDR Infiniband Host Card Adapter (HCA) (desirable);

(b) Infiniband switch topology shall be provided that introduces no more than 16 to 1 blocking between any two nodes

(i) Switch topology that introduces no more than 8 to 1 blocking (desirable);

2) All Compute nodes shall be provided with all necessary cables, rack rails, racks, power supplies, power cables, and cable management;

3) All Compute nodes shall have sufficient cooling for full utilization of the entire cluster at maximum sustained processor performance with either:

(a) Rear door heat exchangers with water connections at the bottom of the door; or

(b) Alternate cooling method that provides sufficient cooling capacity for full utilization of the cluster at maximum processor performance.

4) Dual socket motherboards:

(a) Oct-Core Intel "SandyBridge" 2.3GHz processors;

(i) Next-Generation Socket Compatible (desirable);

(ii) Oct-Core Intel "SandyBridge" 2.5GHz processor (desirable)

(b) 32 Gigabytes of RAM.

5) Option for Many Integrated Core (MIC) (aka Intel Knights Corner) (the GPU nodes are excluded from this requirement):

(a) Option for one MIC per Compute Node;

(b) Two MICs per Compute Node (Desirable):

(i) Full PCI bi-section bandwidth to both MICs (desirable).

6) Management Network:

(a) Minimum of one (1) GbE on-board Network Interface Card (NIC) with Baseboard Management Console (BMC);

i. Must be compatible with IPMI Version 2;

7) Data Storage (this is not a requirement for the GPU nodes):

(a) Minimum of 14 Terabytes of storage for data;

i. Minimum of 36 Terabytes of storage for data (desirable)

(b) Hard drives shall be hot-swappable.

8) Operating System Drives:

(a) Dual operating system hard drives with a minimum of RAID0 and RAID1 support;

(b) 7200 RPM (or faster) SATA hard drive;

(c) 500 Gigabytes capacity minimum;

(d) Hot-swappable (desirable).

9) Compute Nodes redundant power supplies (Desirable);

10) Each of the 16 Compute Nodes with GPUs shall be provided with the following configuration:

(a) Sufficient PCI slots and bandwidth to allow for full bandwidth access to all the GPUs attached to the node and the QDR (FDR desirable) Infiniband card. At a minimum, this would require a 1 by 16x PCI-e slot for each GPU and a 1 by 8x PCI-e slot for the QDR (FDR) Infiniband card.

(b) NVidia Tesla K10 or later equivalent version

(c) The GPUs may be housed internal to the node or external to the node as long as the requirement for full bandwidth access between the GPU and the socket is met.

g. Provide a Management Network GbE Switch with the following configuration:

1) Switches shall be provided with sufficient capacity to connect all management, service, and compute nodes, KVM and a minimum of 2 uplinks;
2) Hot-swap power supplies and fans;
3) Switches shall be Layer 2 with support for multiple VLAN and bonding;
4) Switches shall be provided with all cabling and adapters for console access;
5) Switches shall be provided with redundant power supplies and power cables to allow the switch to be connected to two different PDUs fed from different circuits within the same rack.

h. Provide a Local Area Network 10 GbE Switch with the following configuration:

1) Switch shall be provided with sufficient capacity to connect all Management and Service nodes and a minimum of 2 uplinks;
2) Hot-swap power supplies and fans;
3) Switch shall be Layer 2 with support for multiple VLAN and bonding;

4) Switch shall be provided with all cabling and adapters for console access;
5) Switch shall be provided with redundant power supplies and power cables to allow the switch to be connected to two different PDUs fed from different circuits within the same rack.

i. Provide Infiniband Network QDR Switch with the following configuration:

1) Switch(es) shall be provided with sufficient capacity to connect all management, service, and compute nodes and an appropriate number of uplinks in accordance with the blocking factor;
2) Switch(es) shall be fully populated with leaf modules (as necessary);
3) Switch(es) shall have redundant management cards (as necessary);
4) Switch(es) shall have hot-swap power supplies and fans;
5) All IB switch(es) must have redundant power supplies and power cords to allow them to be connected to two different PDUs fed from different circuits within the same rack or nearby racks;
6) Switch(es) shall be provided with all cabling and adapters for console access;
7) FDR Infiniband Switch (desirable);

j. Racks:

1) Racks shall be provided to contain and support all Management, Service and Compute nodes, switches and KVM and shall be configured with redundant PDUs;

2) Power tails shall be IEC309.

k. Cable management for all nodes, switches and KVM:

1) All cables for all nodes, switches and KVM must run either within the rack housing the node or overhead;

2) Overhead cable trays must support and protect the cables;

3) All uplink cables run between the Compute nodes and either the Management network switch or the Infiniband network switch may be run overhead in the cable tray or under raised floor.

l. Provide a KVM capability to support all 484 Management/Service/Compute nodes:

1) Ethernet based (desirable);

2) All nodes shall have a dedicated KVM network or connection;

3) Cables and dongles shall be provided to manage all nodes.

m. Architectural description of a fully configured system, using the required components listed above configured for optimal performance showing both management and IB network topologies and uplinks and including a complete mechanical and electrical description with diagrams (Advanced Technology)

n. The following software shall be supported and the names of a sample software package provided :

1. Software utility performs remote BIOS updates and modifications across all nodes from a central location;

i. The utility shall operate under Linux;

ii. The utility shall enable management of the following for each node:

1. Power management settings;

2. C-state settings;

3. P-state settings;

4. CPU and Memory performance;

5. Hyperthreading;

6. Turboboost;

7. Serial port settings for console redirection.

2. Cluster Management software:

i. Cluster Management shall perform "node provisioning";
ii. Cluster Management shall support "versioning" of the software being provisioned to the nodes (Advanced Technology).

3. Shared File System (Desirable).
4. Scheduler software (Desirable).

3.2.3. Class 3: Container-based Servers

The purpose of this section is to define the specific requirements for the Container-Based Servers. The requirements stated in this section shall be proposed as a completely integrated solution that would be delivered in a container. The following hardware and software specifications are required of these Class 3 computer systems over and above, or in place of the core specifications defined in Section 3.1.

3.2.3.1. Hardware Configurations

This section describes the container system hardware configurations required for Class 3. Two basic configurations are required: a 3/a container and a 3/b container. For this base system, the configuration is for 3 phase power, an input voltage of 220 V and the environment should be considered ideal; i.e. there are no extreme environmental conditions to be considered.

All Class 3 containers (Class 3/a and 3/b) shall provide the following minimum capabilities, unless noted as desirable:

a. Adiabatic/Ambient cooling (i.e., chiller-free);
b. 25kW/rack power consumption (desirable);
c. Uninterruptible Power Supply (UPS) capacity shall be sufficient to handle transient (10 seconds or less) power fluctuations and short-term interruptions without disruptions to the equipment in the container;
d. UPS capacity shall support orderly shutdown of IT equipment and cooling in case of complete (long-term) power disruption. UPS capacity shall support a run-time of a minimum of 6 minutes;
    a. Support a run-time of a minimum of 30 minutes (desirable)
e. Highly energy efficient solution with a PUE of 1.3 or better;
    a. PUE of 1.1 (desirable);
f. Emergency Power Off (EPO);
g. Redundant PDUs;
h. Cooling shall provide "N+1" redundancy with no single points of failure;
i. Security shall provide support for electronic entry with logging;
j. Fire suppression:
    a. Comply with NFPA 2001;
    b. Provide manual activation at each egress door;
        i. Provide abort switches at each egress door (desirable)
k. Air Aspirating Smoke Detection System:
    a. Provide a minimum of four alarm levels with the first three alarm levels providing advance warning of a fire condition;
    b. Provide automatic shutdown of all equipment upon a configurable alarm level (e.g., automatic shutdown activated by a level 2 to level 3 alarm transition);
    c. Activation of the fire suppression system upon a level 4 alarm;
    d. Contain dry contacts to interface with external fire alarm network.
l. Manual "pull station" by each door with weatherproof fire alarm horn and strobe light on the container exterior;
m. Monitoring shall be provided for all container alarms, power, temperature, and humidity and shall be accessible remotely and support alerting/paging functions such as via a Nagios server;
n. Built-in facility and environmental monitoring and controls with programmable interfaces (advanced technology);
o. Remote management capabilities (desirable);
p. Converged networks (desirable);
q. Single point utility connection;
r. Internal lighting shall provide normal and emergency lighting with exit lighting above all egress doors;
    a. In-floor path lighting (desirable);

s. Internal emergency alarms shall provide both sound and light notifications;
t. External lighting with photocell activation above each exterior door (desirable);
u. Exterior painted with rust-inhibiting epoxy paint.

3.2.3.1.1. Class 3/a Container-based Computer Systems

The Class 3/a container shall provide the following minimum capabilities, unless noted as desirable:

a. Capacity for 20 42U racks
b. 10Gbps Ethernet (per port speed);
c. 40Gbps Ethernet (per port speed); (desirable);
d. 100Gbps Ethernet (per port speed); (advanced technology);
e. Compute Requirements:
    1. Intel-based, 64-bit architecture, 2.0+ GHz, 2 to 4 processors, 6 to 10 cores per processor;
    2. 128 GB physical memory
        i. Upgradable to 256 GB;
    3. 500 GB internal storage;
        i. Upgradable to 1 TB
    4. Dual or Quad Ethernet;
    5. QDR Infiniband (for internal interconnect backbone);
    6. 32 nodes
f. Storage Requirements:
    1. Dual Controllers for High Availability;
    2. 1.8 PB raw storage capacity
        i. Upgradable to 3.6 PB raw storage capacity;
    3. Provide SAS, SATA or SSD drives;
    4. Support iSCSI, FCoE, NFS, CIFS.

3.2.3.1.2. Class 3/b Container-based Computer Systems

The Class 3/b container shall provide the following minimum capabilities, unless noted as desirable:

a. Capacity for 10 42U racks;
b. 10Gbps Ethernet;
c. Compute Requirements:
    1. Intel-based, 64-bit architecture, 2.0+ GHz, 2 to 4 processors, 6 to 10 cores per processor;
    2. 64 GB physical memory;
        i. Upgradable to 128GB
    3. 250 GB internal storage;
        i. Upgradable to 500 GB
    4. Dual or Quad Ethernet;
    5. QDR Infiniband (for internal interconnect backbone);
    6. 16 nodes
d. Storage Requirements:
    1. Dual Controllers for High Availability;
    2. 0.9 PB raw storage capacity
        i. Upgradable to 1.8 PB;
    3. Provide SAS, SATA or SSD drives;
    4. Support iSCSI, FCoE, NFS, CIFS.

3.3. Product Based Services Support

To assist in product recommendations, installation, and support of computer systems products the following specialists shall be supported:

a. Operations Systems Security Specialist
   1. Provides technical knowledge and analysis of information assurance, to include applications; operating systems; Internet and Intranet; physical security; networks; risk assessment; critical infrastructure continuity and contingency planning; emergency preparedness; security awareness and training. Provides analysis of existing system's vulnerability to possible intrusions, resource manipulation, resource denial and destruction of resources. Provides technical support and analysis to document organizational information protection framework, and supports policy and procedures preparation and implementation.
   2. Experience Requirements: Seven years of substantial experience in systems operations.

b. Computer Systems Engineer
   1. Tests and analyzes all elements of the computer systems facilities including power, software, mass storage devices, communications devices, computer systems and terminals and for the overall integration of the enterprise network. Responsible for the planning, design, installation, maintenance, management and coordination of the storage systems. Monitors and controls the performance and status of the storage resources. Utilizes software and hardware tools, identifies and diagnoses complex problems and factors affecting storage performance. Maintains technical currency and studies vendor products to determine those which best meet client needs. Provides guidance and direction for less experienced storage support technicians.
   2. Experience Requirements: Seven years of increasingly complex and progressive experience in computer system/network engineering. Includes two years of specialized experience related to the task.

c. Applications Systems Analyst/Programmer
   1. Formulates and defines system scope and objectives. Prepares detailed specifications for programs. Designs, codes, tests, debugs and documents programs. Works at the highest technical level of all phases of applications, systems analysis and programming activities. Provides guidance and training to less experienced analysts/programmers.
   2. Experience Requirements: Seven years of increasingly complex and progressive experience in performing systems analysis, development, and implementation of business, mathematical, or scientific setting using a variety of information technology resources. Has experience with current technologies and, where required for the task, emerging technologies.

4. Category B: Group B: Computer System Storage Devices

This section describes the technical requirements for Storage Devices which complement and support the Computer Systems in Category A.

All proposed mandatory products must meet the following (where applicable):

a. EPEAT certified
b. Energy Star compliant
c. 508 compliant
d. Trade Act (TAA) compliant.
e. New Equipment
f. Authorized reseller for the following mandatory products:
    a. LTO Desktop Library tape system
    b. Large Robotic Device (desirable)
    c. Server UPS

4.1. Single Storage Devices

The following devices must be provided:

a. Blu-ray Disc Player (desirable)
b. Digital Video Recorder (DVR)
    1. Multiple inputs
    2. 1 USB port
        a. 2 USB ports (desirable)
    3. Compression (analog): H.264
    4. Support at least 1 internal SATA HDD
    5. Video format (Analog): NTSC: 352x240 (CIF), 704x240 (Half-D1), 704x480 (D1)
    6. Networking: 10/100 Base-T Ethernet, RJ-45
c. the following single tape devices:
    1. DAT 72;
        a. External Drive
        b. 36GB capacity (native)
        c. Data transfer rate 3 MB/sec native
    2. <Requirement removed>
    3. STK T10000C
        a. Read compatible with STK 10000B and 10000A
        b. 5TB capacity (native)
        c. Data transfer rate 240 MB/sec (uncompressed)
        d. Drive level encryption (desirable)
    4. LTO Ultrium;
        a. External Drive (desirable)
        b. 1.5 TB capacity (native)
        c. Data transfer rate 140 MBps native with Ultrium 5 media
        d. Data transfer rate 160 MBps native with Ultrium 6 media
        e. Drive level encryption (desirable)

4.2. Multiple Storage Devices

This section describes several mandatory storage devices including a core specification that must be met by all proposed mandatory devices in this section

4.2.1. Storage Devices Core Specification

Proposed storage devices shall provide:

a. be attachable to USB, Ultra-SCSI, Fibre Channel, SATA, eSATA, PCI Express, FireWire, InfiniBand, 10GBe, iSCSI or Thunderbolt
b. devices which are upgradeable and flexible in hardware configuration; e.g. standard housings/sleds which can accommodate different drive capacities/types, (advanced technology)
c. shall be field installable including all necessary cabling and documentation for installation.
d. shall provide error detection.
e. shall provide FIPS 140-2 encryption (desirable)

Proposed storage devices shall support:

f. IBM GPFS file system (desirable)
g. at least one of the following UNIX/Linux/Apple OS X computer system platforms: SGI, IBM, HP, Apple, Linux Kernel 2.4.
    1. attachable to other OS's such as Windows 7/8 (desirable)
    2. compatible with VMware ESX (desirable)
h. Support for:
    1. hardware performance enhancements such as controller caching and in-line compression, (advanced technology)

4.2.2. Multiple Storage Device Requirements

a. desktop library systems/Autoloaders which handle the following media and capacity and include all drives and controllers to support the stated capacity:
    1. LTO Ultrium
        a. 40 tape slots
        b. Tape drive
        c. 60 TB capacity (native)
        d. Data transfer rate 140 MBps native with Ultrium 5 media
        e. Library managed encryption (desirable)
b. Enterprise library systems which handle the following media and capacity. The proposed products must include the tape drives, controllers, etc that meet the required capacity:
    1. LTO Ultrium
        a. 200 tape slots
        b. 8 drive bays including drives
        c. 300 TB capacity for Ultrium 5 media(native)
        d. 500 TB capacity for Ultrium 6 media (native)
        e. Aggregate data transfer rate 4.0 TB/hr (native) with 8 Ultrium 5 drives
c. Large robotic device which handle the following media and capacity (uncompressed values). Note: "expandable to" means that a single computer server platform has direct access to the storage device(s) providing the required amount of storage. The expansion can be done through single or multiple enclosures with connections as defined in Section 4.2.1. and must only be supported:
    1. basic configuration of at least 2 PB (native) and 64 drives
    2. expandable to 500 PB (native)
    3. Audit time of under 60 minutes
        a. Audit time of under 40 minutes (desirable)
    4. Average cell to drive time of less than 20 sec
        a. Average cell to drive time of less than 11 sec
    5. Expandable to 640 drives
    6. Non-disruptive serviceability
    7. Configurable to support LTO Ultrium 6/5 drives
        a. Support for STK T10000C/B/A (desirable)
d. at least 2 RAID devices:
    1. Blade array (RAID level 0, 1, 5 and 6):
        a. at least 7 TB (native),
        b. Up to 320 MB/s read and 190 MB/s write (RAID 5)
        c. Continual event monitoring
        d. Major components must be hot-pluggable

1. Major components are hot-swappable (desirable)

2. Scalable RAID (RAID level 5):
   a. at least 6 TB (usable),
   b. expandable to 30 TB (usable)
   c. able to include up to 12 FC interfaces
   d. transfer rate of 200 MB/sec per FC interface
   e. Other RAID levels (desirable)

4.3. Storage Devices Software

The following Storage related software must be provided:

a. Hierarchical Mass Storage Software:
   1. A commercially available software product that provides:
      a. Initial license for up to 1 PB of data
      b. locate, mount, read and write tapes or disks in the jukeboxes.
      c. support UNIX native file system user calls and commands, e.g. “ls”, “touch”, etc.
      d. support access at hard disk storage speed to the most frequently/recently accessed files.
      e. ‘vault’ media and provide a means of notifying the operator to retrieve a ‘vaulted’ media when an ‘old’ file is requested.
      f. employ a ‘nameserver’ and ‘tapeserver’ or similar means for locating files on media.
      g. provide utilities for backup and recovery of critical databases
      h. repack function (repack tapes to remove deleted files)
      i. log major activities of software components for system monitoring.
      j. write multiple tape copies of a file
      k. scale up to at least 500 Pbyte, providing the user a way to build up to full use of the mass storage system
      l. allow for multiple hierarchies based on various file attributes
b. Other software to assist in the storage and retrieval of data (desirable)
c. Other software in support of RAID and DASD technology (advanced technology)

4.4. Virtual Storage Technology

Enterprise-level cloud data storage.

a. Cloud storage services accessible through a web service application programming interface (API), cloud storage gateway or web-based user interface.
b. 10 TB storage
   1. Actual cost based on monthly storage usage
c. Include options for both off-premise and on-premise solutions, or a mixture of the two options (desirable)
d. Highly fault tolerant through redundancy and distribution of data (desirable)
e. Allows creation of versioned copies of files (desirable)
f. Encryption of data during transfer: FIPS 140-2 compliant
g. Encryption of data at rest with encryption keys kept by service user and escrow key available
h. Sharable folders for groups of users (desirable)
i. Integration with active directory (desirable)

4.5. Uninterruptible Power Supply

Two Uninterruptible Power Supply (UPS) units must be provided for small office environment and small computer server room server environments

4.5.1. Small Office Environment

The Small Office Environment Uninterruptible Power Supply (UPS) units must provide:

a. Output power capacity of up to 1000 VA and 600 Watts
b. Nominal output voltage of 120 VAC On line voltage range of +/-20% for nominal voltage at full load

c. Frequency of 60 Hz
d. Runtime at 600 W of 5 minutes
e. Recharge time of <6 hours (to 90% after full discharge)
f. Startup with UPS batteries

4.5.2. Small Server Room Environment

The Small Server Room Environment Uninterruptible Power Supply (UPS) units must provide:

a. Output power capacity of up to 4500 VA and 3500 Watts
b. Nominal output voltage of 120 VAC
c. Frequency of 60 Hz
d. Runtime at 1400 W of 30 minutes
e. Recharge time of <6 hours (to 90% after full discharge)
f. Startup with UPS batteries
g. Hot-swappable batteries

4.6. Data Destruction Services

As part of cradle to grave options, the following data destruction services must be provided and priced per drive / tape:

a. certified e-waste recycler
b. on-site hard drive shredding
c. on-site tape degaussing

4.7. Additional Storage Technology

Basic network equipment in support of SAN and other network storage configurations (additional technology)

Devices running client-oriented OSs to allow direct monitoring of storage configurations (additional technology)

Supporting technology such as printers, audio/visual IT equipment, etc. in support of storage configurations (additional technology)

Systems/storage security technology (additional technology)

Image and display tools in support of storage configurations (additional technology)

4.8. Storage Specialists

To assist in product recommendations, installation, and support of computer systems products the following specialists shall be supported:

a. Information Assurance Storage Specialist
   1. Analyzes general information assurance-related technical problems and provides basic engineering and technical support in solving these problems. Supports the integration of information assurance solutions and technologies into storage equipment and any connected networks with particular attention to protocols, interfaces, and system design. Analyzes and defines security requirements for storage area networks. Designs, develops, engineers, and implements solutions that meet network and storage security requirements. Responsible for integration and implementation of the storage security solution. Performs vulnerability/risk analyses of computer systems and applications during all phases of the system development life cycle. Configures test beds and conducts testing, records and analyzes results, and provides recommendations for improvements for the products/systems under test. Analyzes and defines security requirement for

computer systems which may include mainframes, workstations, and personal computers. Designs, develops, engineers, and implements solutions that meet security requirements. Responsible for integration and implementation of the computer system security solution. Gathers and organizes technical information about an organization's mission goals and needs, existing security products, and ongoing programs in computer security. Performs risk analyses of computer systems and applications during all phases of the system development life cycle. Applies principles, methods, and knowledge of security to specific areas task order requirements. Test developed systems at each point of entry for ease of unregulated entry; systems resources denial; system information corruption; unlawful use of system resources; vulnerability to electronic disruption.

2. Experience Requirements: This position requires a minimum of seven years of substantial experience in system security analysis and implementation; design assurance or testing for information assurance products and systems; integration or testing for information assurance products and systems. Experience in heterogeneous computer networking technology and work in protocol and/or interface standards specification is recommended.

b. Storage/Hardware Engineer
   1. Tests and analyzes all elements of the storage facilities including power, software, mass storage devices, communications devices, computer systems and terminals and for the overall integration of the enterprise network. Responsible for the planning, design, installation, maintenance, management and coordination of the storage systems. Monitors and controls the performance and status of the storage resources. Utilizes software and hardware tools, identifies and diagnoses complex problems and factors affecting storage performance. Maintains technical currency and studies vendor products to determine those which best meet client needs. Provides guidance and direction for less experienced storage support technicians.
   2. Experience Requirements: Seven years of increasingly complex and progressive experience in computer system/network engineering. Includes two years of specialized experience related to the task.

5. Category B: Group C: Server Support and Multi-Functional Devices

This section specifies equipment needed to support a full implementation of computer systems in the NASA network environment. These items may be purchased by the Government separately from the computer systems but rely on standards and standard interfaces to ensure interoperability with the computer systems.

All proposed mandatory products must meet the following (where applicable):

a. EPEAT certified
b. Energy Star compliant
c. 508 compliant
d. Trade Act (TAA) compliant.
e. New Equipment
f. Authorized reseller for the following mandatory products:

- Tablet
- High speed scanner
- Hi Volume Mono MFP
- Medium Volume Color MFP

5.1. Display Devices

Computer display devices are computer peripheral devices capable of showing still or moving images generated by a computer. These devices include but are not limited to desktop LCD monitors, wall-mounted displays, and projector systems onto passive screens and interactive whiteboards.

5.1.1. LCD Display Monitor

A desktop 21 inch LCD monitor shall be provided and must include the following minimum capabilities:

a. Color device supporting 16 million colors
b. 21 inch viewable screen (diagonal)
c. Flat-panel display
d. Anti-glare panel (desirable)
e. Native resolution at least 1920x1080
f. Typical brightness of 250 cd/m^2
g. Image contrast ratio of 450:1
h. VGA video input signal
i. Intel PC and Apple Macintosh compatibility

5.1.2. Portable Projector

A portable projector shall be provided and must include the following minimum capabilities:

a. 1280x800 native resolution
b. DLP or LCD technology
c. Brightness of 2000 lumens (ANSI)
d. Speakers (either internal or included as external)
e. PC and Macintosh compatible (adaptor included, if needed)
f. Aspect Ratio of 16:10 (WXGA)

5.1.3. Manual screen

A manual wall screen shall be provided with the following specifications:

a. 50inches X 50inches screen size
b. Matte white fabric
c. Wall and ceiling mountable

5.1.4. Interactive Whiteboard

An Interactive Whiteboard (a dry-erase whiteboard writing surface which can capture writing electronically and allows interaction with a projected computer image) shall be provided with the following minimum requirements:
The touch-sensitive display connects to your computer and digital projector to show your computer image. You can then control computer applications directly from the display, write notes in digital ink and save your work to share later.

a. 77 inch diagonal active screen area
b. Touch resolution of 4000X4000
c. multiple pen colors (may be electronic selection)
    1. automatic detection of pen in use
d. eraser
e. Software to support:
    1. computer display
    2. note taking
    3. capture and save of all notes / images
f. MS Windows and Macintosh compatible
g. Mobile floor stand (desirable)

5.2. Printers

Three printers shall be offered. Capabilities shall be as specified in the following sections. Each printer shall meet the Core Printer Specification and the unique requirements in the printer specific section.

5.2.1. Core Printer Requirement

Each of the 3 printers shall provide the following capabilities:

a. Adobe Postscript Level 3.0 (emulation and/or equivalent is acceptable) formatted print files.
b. Metric A4-size paper with a usable image area of at least 200mm x 271mm and a usable image area of at least 8” x 10” for American Letter-size (8.5” x 11”).
c. two interfaces: USB 2.0, and 10/100Base-TX Ethernet
    1. simultaneous availability of the two interfaces; e.g. automatic port sensing/switching
d. Simple Network Management Protocol (SNMP) agent [RFC 1157; RFC 1213] for remote monitoring.
e. PCL5 and PCL6 support
f. Duplex by default

5.2.1.1. Monochrome Laser Printer

In addition to the Core Printer Specification, the Monochrome Laser Printer shall also provide:

a. print speed shall be at least 35 pages per minute.
b. resolution of at least 1200x1200 dpi.
c. minimum memory of 32 MBytes,
    1. memory shall be expandable to at least 256 MBytes.
d. a duty cycle of at least 75,000 pages per month.
    1. duty cycle of at least 100,000 pages per month (desirable)
e. at least 130 fonts.
f. support paper sizes from 3”x5” to 8.5”x14” (legal)
g. Standard input capacity of 850 sheets
h. Standard output capacity of 250 sheets
i. Image processing of 400Mhz
j. Automatic duplex printing
k. Clearing/overwriting an image after completion of each job (Compliance with NIST SP800-88 and NIST SP 800-36)

5.2.1.2. High Speed Monochrome Laser Printer

In addition to the Core Printer Specification, the High Speed Monochrome Laser Printer shall also provide:

a. print speed shall be at least 45 pages per minute.
b. resolution of at least 1200x1200 dpi.
c. minimum memory of 500 MB
    1. memory shall be expandable.
d. a duty cycle of at least 200,000 pages per month.
e. at least 130 fonts.
f. support paper sizes from 3”x5” to 8.5”x14” (legal).
g. Standard input capacity of 1000 sheets
h. Standard output capacity of 250 sheets
i. Image processing of 500Mhz
j. optional “B” size (11” x 17”) paper (desirable)
k. UNIX and LINUX OS support (desirable)
l. Enabled card reader for PIV-compliant Smartcards (meets NIST SP 800-96) (desirable)

5.2.1.3. Color Printer

In addition to the Core Printer Specification, the Color Printer shall also provide:

a. print speed shall be at least 30 pages per minute (color)
b. color resolution of at least 600x600 dpi.
c. minimum memory of 1GB,
    1. memory shall be expandable.
d. a duty cycle of at least 150,000 pages per month.
e. at least 130 fonts.
f. support paper sizes from 3.5”x5” to 8.5”x14” (legal)
g. Standard input capacity of 1000 sheets
h. Standard output capacity of 400 sheets
i. optional “B” size (11” x 17”) paper (desirable)
j. UNIX and LINUX OS support (desirable)
k. enabled card reader for PIV-compliant Smartcards (meet NIST SP 800-96) (desirable)

5.3. Plotters

One large-format color plotter shall be offered.

5.3.1. Color Large-Format Plotter

The Color Large-Format Plotter shall provide:

a. 42 inch wide paper
    1. Media rolls up to 300 ft.
    2. manual sheet feed supporting sizes starting from B/A3-size
    3. standard bin holding at least up to 50 E/A0-size prints (desirable)
b. HP-GL/2, HP-RTL and Adobe Postscript Level 3 language support
c. Fast Ethernet (10/100Mbps) connectivity
d. 2400x1200 optimized dpi color
    1. 1200x1200 dpi color on glossy media
e. minimum total memory (including main and imaging or for dynamic assignment) of 512MB
    1. main memory expandable to 1024 Mbytes (desirable).
f. Maximum print length of at least 295 ft.
g. Hard disk drive of at least 40 GB
h. in fast quality mode, the printer should have the ability to run at least 100 D/A1-size prints per hour
i. Automatic cutter
j. Handle the following media types: plain, inkjet, heavyweight coated, super heavyweight coated, semi-gloss, glossy, translucent bond and photo
k. operation in a Windows or Macintosh environment

5.4. Scanners

Two scanners shall be offered. Capabilities shall be as specified in the following sections.

5.4.1. High Speed/High Performance Scanner

The High Speed/High Performance Scanner shall provide:

a. USB 2.0 connectivity
b. scanner speed of 57 pages per minute simplex at 200 dpi resolution for 8.5x11 inch monochrome document in portrait mode
c. at least 600 dpi resolution (color and monochrome)
d. Automatic document feeder
    - 150 page capacity
e. duplex (two sided) scanning
f. monochrome and color mode
    1. 24 bit color
    2. 256 level grey scale
g. document size up to at least 11X17 inches
h. OCR functionality

5.4.2. Large Format Scanner

The Large Format Scanner shall provide:

a. handle up to 42” wide originals
b. up to 1200 dpi resolution (enhanced)
c. ability to scan up to 2mm thick originals (desirable)
d. 24 bit color scan mode
    1. 48 bit color scan mode (desirable)
e. Color scan speed at 400 dpi (turbo) or 200dpi true optical of 3 inches per sec
f. Automated color calibration
g. USB 2.0 connectivity
    1. FireWire (IEEE-1394a) connectivity (desirable)

5.5. Tablet Computing

A tablet computer, or simply tablet, is a one-piece mobile computer, primarily operated by touch screen (the user's finger essentially functions as the mouse and cursor, removing the need for the physical (i.e., mouse and keyboard) hardware components necessary for a desktop or laptop computer; and, an onscreen, hideable virtual keyboard is integrated into the display).

5.5.1. Small format Tablet

a. Color device supporting 16 million colors
b. Optional keyboard (desirable)
c. 7 inch or less viewable screen (desirable)
d. Flat-panel display
e. Anti-glare panel
f. Native resolution at least 1024X600
g. Wireless
    1. 802.11n
    2. Bluetooth
    3. 4G (desirable)

5.6. Computer Peripherals

Peripheral computer component providers are expected to provide fully "Plug & Play solutions". All hardware, connector cables, power cords, software, and enablement cards to make the system fully functional are to be provided.

5.6.1. Mouse

Mouse device will include:

a. designed to fit natural hand position and movements, to reduce discomfort (desirable)
b. Detachable wrist rest (desirable)
c. Options for left or right hand users (desirable)
d. Windows
    a. Macintosh option (desirable)
e. Up to 1000 dpi cursor control
f. USB compatible
g. Cordless option (desirable0

5.6.2. Keyboards

Fully functional keyboard.

a. Contoured split key design (desirable)
b. Integrated trackball and mouse buttons (alternate integrated tracking devices such as touchpad or joystick are acceptable) (desirable)
c. Spill resistant
d. Dual ALT, SHIFT and CONTROL keys
e. Windows
    1. Macintosh option (desirable)
f. Wireless infrared or Bluetooth (desirable)

5.6.3. Data Input Devices

This section provides a mandatory product falling within the general category of sensors and detectors that provide data input into a computer system, tablet, and/or handheld ITC (information technology/communication) device. A complete motion detector solution including sensor and IP communication module must be provided that includes:

a. IP communication module
    1. Send alarm messages and system data to the monitoring center through LAN/WAN network.
    2. Use encryption technology for communication (desirable)
b. Indoor Infrared Motion detector
    1. Low noise, high sensitivity, dual element, rectangular beam
    2. Fire resistant case (desirable)

5.7. Office Video Conferencing

Office video conferencing to include:

a. Inclusive video conferencing system
b. 20 inch LCD Monitor minimum
c. Camera
    1. 50 degree horizontal field of view
d. Microphone
e. All necessary cabling
f. Speakers
g. IP connection with calls up to 2 Mbps
    1. Option for ISDN connection (desirable)
h. CD quality sound

i. Embedded encryption using Advanced Encryption Standard software
j. SNMP support

5.8. Point of Sale All in One System

Point of Sale (POS) to include:

a. Splashproof and/or waterproof All-in-one: Touchscreen / CPU / Card Reader
b. Omnidirectional Barcode Scanner
c. Thermal Receipt Printer
d. Cash Drawer
e. Pole Display
f. POS Software (desirable)

5.9. Multi-functional Devices

This section specifies equipment commonly referred to as multi-functional printers (MFP) or multi-functional devices (MFD) which are single devices that serve several functions, including printing, scanning, faxing and photocopying. This class provides for both purchases of the devices, either singly or in bulk, as well as a servicing structure wherein the devices remain the property of the Contractor with Government payment for the usage, servicing and provisioning of those devices.

The mandatory requirements in this class can be categorized as the following:

- Purchased High volume monochrome MFD with warranty; consumables purchased separately
- Contractor supplied and maintained High volume monochrome MFD with warranty and consumables included (desirable)
- Purchased Medium volume color MFD with warranty; consumables purchased separately
- Contractor supplied and maintained Medium volume color MFD with warranty and consumables included (desirable)
- Consumables such as paper, toner, staplers, etc.

5.9.1. High Volume Monochrome MFD Requirements

The high volume MFD device must meet the following requirements:

a. Fully Automatic Duplexing (1-2, 2-2, and 2-1)
b. Auto Document Feeder (capable of handling up to 11 x 17 paper)
c. Full offset stacking capability (with no sorter bins required) (desirable)
d. Minimum of 1 GB RAM
e. Minimum of two (2) adjustable paper trays with capacity up to 500 sheets each and for various paper sizes (letter, ledger, & 11 x 17)
f. Duty cycle of at least 200,000 sheets per month
g. Recommended print volume of 15,000 sheets per month
    i. Recommended print volume of 30,000 sheets per month (desirable)
h. Finishing - automatic stapling capabilities, that can staple a minimum of 25 sheets of 20 lb. paper
i. Reduction and Enlargement in pre-set and in zoom
j. Image overwrite security features that completely delete all files after printing (desirable)
k. Network Authentication that validates network user names and passwords
l. Standard network connectivity: 10/100/1000BaseTX Ethernet, IPv6

Each MFD must be capable of scanning, copying, faxing and printing as described in the following sections.

5.9.1.1. MFD Monochrome Scanner Functionality

The scanner functionality of the MFD must provide:

a. Resolution –600 X 600 ppi (pixels per inch)

b. Optical Character Recognition (OCR) functionality
c. Scan to desktop, e-mail, or to network folders to formats including but not limited to: TIFF/TIFF-F/Multi-page TIFF/PDF/ JPEG
d. Ability to scan single-sided or duplex originals without intervention.
e. Solution for encrypted point-to-point scanning (printer to desktop).
f. Scans max paper size 11 x 17 at 600 dpi with 256 grayscale increments
g. SMTP
h. TWAIN scanning to provide alternative scanning options for networked users

5.9.1.2. MFD Monochrome Fax Functionality

The fax functionality of the MFD must provide:

a. Fax to Fax
b. Internet faxing (desirable)
c. Group dialing
d. Quick dialing
e. Page by page job status at the machine
f. Transmission confirmation
g. Full Dual Access allows simultaneous document scanning and fax reception
h. Automatically stores incoming faxes in memory in the event paper or toner runs out

5.9.1.3. MFD Monochrome Print Functionality

The print functionality of the MFD must provide:

a. Resolution minimum 1200 X 1200 dpi
b. 136 Postscript fonts
c. 80 PCL fonts
d. Secure print function, which permits the user to print using an identification code/name.
e. Printer language – Adobe PostScript® 3™, PCL® 5c emulation, PCL® 6 emulation
f. Minimum of 55 pages per minute

5.9.2. Medium Volume Color MFD Requirements

The medium volume MFD device must meet the following requirements:

a. Fully Automatic Duplexing (1-2, 2-2, and 2-1)
b. Auto Document Feeder (capable of handling up to 11 x 17 paper)
c. Full offset stacking capability (with no sorter bins required) (desirable)
d. Minimum of 1 GB RAM
e. Minimum of two (2) adjustable paper trays with capacity up to 500 sheets each and for various paper sizes (letter, ledger, & 11 x 17)
f. Duty cycle of at least 30,000 sheets per month
g. Recommended print volume of 5,000 sheets per month
h. Finishing - automatic stapling capabilities, that can staple a minimum of 25 sheets of 20 lb. paper
i. Reduction and Enlargement in pre-set and in zoom
j. Image overwrite security features that completely delete all files after printing (desirable)
k. Network Authentication that validates network user names and passwords
l. Standard network connectivity: 10/100/1000BaseTX Ethernet, IPv6

Each MFD must be capable of scanning, copying, faxing and printing as described in the following sections.

5.9.2.1. MFD Color Scanner Functionality

The scanner functionality of the MFD must provide:

a. Resolution –600 X 600 ppi (pixels per inch)
b. Optical Character Recognition (OCR) functionality
c. Color scan speed: 50 sides per minute

d. Scan to desktop, e-mail, or to network folders to formats including but not limited to: TIFF/TIFF-F/Multi-page TIFF/PDF/ JPEG
e. Ability to scan single-sided or duplex originals without intervention.
f. Solution for encrypted point-to-point scanning (printer to desktop).
g. Scans max paper size 11 x 17 at 600 dpi with 256 grayscale increments
h. SMTP
i. TWAIN scanning to provide alternative scanning options for networked users

5.9.2.2. MFD Color Fax Functionality

The fax functionality of the MFD must provide:

a. Fax to Fax
b. Internet faxing (desirable)
c. Group dialing
d. Quick dialing
e. Page by page job status at the machine
f. Transmission confirmation
g. Full Dual Access allows simultaneous document scanning and fax reception
h. Automatically stores incoming faxes in memory in the event paper or toner runs out

5.9.2.3. MFD Color Print Functionality

The print functionality of the MFD must provide:

a. Resolution minimum 1200 X 1200 dpi
b. 136 Postscript fonts
c. 80 PCL fonts
d. Secure print function, which permits the user to print using an identification code/name.
e. Printer language – Adobe PostScript® 3™, PCL® 5c emulation, PCL® 6 emulation
f. Minimum of 55 pages per minute (Monochrome / letter)
g. Minimum of 45 pages per minute (Color / letter)

5.9.3. MFD Consumables

At a minimum, the following consumables must be provided:

a. Staples – supply for high volume monochrome printer (minimum of 5000)
b. Toner – supply for high volume monochrome printer (minimum replacement of toner initially supplied with system)
c. Paper:
    1. 8.5" x 11" White; 5,000 sheets per case
    2. 11" x 17" White; 2,500 sheets per case

5.10. Additional Support Devices Technology

Basic network equipment in support of supporting systems technology (additional technology)

Basic storage equipment in support of supporting systems technology (additional technology)

Devices running client-oriented OS's such as Windows, Macintosh, etc. to allow direct monitoring of supporting technology (additional technology)

Systems security technology (additional technology)

Image and display tools in support of supporting technology considerations and configurations (additional technology)

5.11. Support Devices Specialists

To assist in product recommendations, installation, and support of computer systems products the following specialists shall be supported:

a. Information Assurance Specialist

1. Analyzes general information assurance-related technical problems and provides basic engineering and technical support in solving these problems. Supports the integration of information assurance solutions and technologies into supporting IT equipment with particular attention to protocols, interfaces, and system design. Analyzes and defines security requirements for supporting IT systems. Designs, develops, engineers, and implements solutions that meet systems security requirements. Responsible for integration and implementation of the security solution. Performs vulnerability/risk analyses of computer systems and applications during all phases of the system development life cycle. Configures test beds and conducts testing, records and analyzes results, and provides recommendations for improvements for the products/systems under test. Analyzes and defines security requirement for computer systems which may include mainframes, workstations, and personal computers. Designs, develops, engineers, and implements solutions that meet security requirements. Responsible for integration and implementation of the computer system security solution. Gathers and organizes technical information about an organization's mission goals and needs, existing security products, and ongoing programs in computer security. Performs risk analyses of computer systems and applications during all phases of the system development life cycle. Applies principles, methods, and knowledge of security to specific areas task order requirements. Test developed systems at each point of entry for ease of unregulated entry; systems resources denial; system information corruption; unlawful use of system resources; vulnerability to electronic disruption.
2. Experience Requirements: This position requires a minimum of seven years of substantial experience in system security analysis and implementation; design assurance or testing for information assurance products and systems; integration or testing for information assurance products and systems. Experience in heterogeneous computer networking technology and work in protocol and/or interface standards specification is recommended.

b. Hardware Engineer

1. Provides functional and empirical analysis related to the design, development, and implementation of hardware for products including, but not limited to, the circuit design of components, development of structure specifications of a personal computer, and the design of a computer display unit. Participates in the development of test strategies, devices, and systems. Possesses and applies a comprehensive knowledge of a particular field of specialization to the completion of significant assignments. Plans and conducts assignments, generally involving the larger and more important projects or more than one project. Evaluates progress and results and recommends major changes in procedures. May lead or direct projects.
2. Experience Requirements: Ten years of intensive and progressive experience in a computer related field including development and design of complex hardware and communications systems.

6. Category B: Group D: Network Devices, Computer Security Tools and Advanced Video and Conference Tools

This section specifies equipment needed to support a full implementation of computer systems in the NASA network environment in terms of networking and computer security along with support of audio-visual related requirements. These items may be purchased by the Government separately from the computer systems but rely on standards and standard interfaces to ensure interoperability with the computer systems.

All proposed mandatory products must meet the following (where applicable):

a. EPEAT certified
b. Energy Star compliant
c. 508 compliant
d. Trade Act (TAA) compliant.
e. New Equipment
f. Authorized reseller for the following mandatory products:
    Wireless Access Point
    High End LAN switch chassis (OEM1)
    High End LAN switch chassis (OEM2)
    Large Network Router
    VPN Appliance

6.1. Network and Communication Devices

This section describes the mandatory requirements for the base network technology including network hardware, software and communication devices. While comprehensive and specific functional and performance specifications do not exist for each supporting network equipment, all equipment must meet the Network Core Specification, unless noted otherwise.

6.1.1. Network Technology Core Specification

All mandatory network equipment must meet or comply with the Network Core Specification in this section. That means that the requirements of this section are additive to (or a clarification of) the requirements stated for each specification of the Supporting Network Equipment.

a. Advanced networking techniques (both hardware and software) to allow connectivity unassociated with physical location; such as wireless technology and applications which allow roaming client computers to connect to networks and people, (advanced technology)
b. The capabilities of the routers, switches, and NIC's in terms of high performance interfaces and high bandwidth implementations (advanced technology).

6.1.1.1. Core Network Technology

The base technologies for building Local Area Networks in NASA are Ethernet and Wireless. Throughout the sections on Network Supporting Equipment, the terms "Ethernet", "Wireless" are used to define the requirements. Unless otherwise specified, the specific meaning of these terms is given here and shall apply throughout Section 6.1.

6.1.1.1.1. Ethernet

Ethernet interfaces shall comply with both Ethernet Specification 2 and IEEE standards [IEEE 802.3; ISO 8802/3].

a. "Ethernet" in this document requires a 10/100/1000 UTP **or** 10/40/100 Gig **or** Fiber port base capability. Additional capability spelled out as required.

6.1.1.1.2. 802.2 Data Link Layer

Ethernet shall include the Data Link Layer protocol providing Logical Link Control [ISO 8802/2; IEEE 802.2].

6.1.1.1.3. Wireless

Wireless interfaces shall comply with the following standards:

a. IEEE 802.11E (desirable)
b. IEEE 802.1x
c. Authentication: 802.1x support, including PEAP-Microsoft Challenge Authentication Protocol Version 2 (PEAP-MSCHAPv2), EAP-Transport Layer Security (EAP-TLS), EAP-Tunneled TLS (EAP-TTLS) and EAP-Subscriber Identity Module (EAP-SIM) to yield mutual authentication and dynamic, per-user, per-session encryption keys (WPA and WPA2), MAC address and standard IEEE 802.11 authentication mechanisms.
d. Encryption: AES-CCMP encryption (WPA2), TKIP encryption enhancements: key hashing (per-packet keying), message integrity check (MIC) and broadcast key rotation via Cisco TKIP or WPA TKIP, support for dynamic IEEE 802.11 WEP keys of 40 bits and 128 bits.
e. Remote configuration support: BOOTP, DHCP, HTTPS, FTP, TFTP, SNMP and ssh (desirable)
f. Support IEEE Standards a//g/n

6.1.1.1.4. Multiprotocol Label Switching (MPLS)

Multiprotocol Label Switching (MPLS) interfaces shall support the following features:

a. MPLS Architecture
    1. RFC 6790 and 6178 (desirable)
b. MPLS Signaling: Label Distribution Protocol (RFC 5036) or RSVP
c. MPLS Traffic Engineering (RFC 2702)
d. MPLS Layer 2 and Layer 3 Virtual Private Networks (VPNs)

6.1.1.2. Network Management

All mandatory network equipment in this solicitation shall provide the management functions in this section.

6.1.1.2.1. Simple Network Management Protocol (SNMP)

Provide an SNMP agent [RFC 1157] for remote network management and monitoring.

a. vendor specific private extensions shall conform with RFC 1155.
b. vendor specific private extensions shall be made available to the Government in ASN format.
c. remote management and control of all unit, card, and port level SNMP configurable parameters.
d. SNMP Version 2c
e. full RMON or RMON II capability (RFC 1757) (desirable)

6.1.1.2.2. Console Management Access

a. Out-of-band management through a console port shall be available for all networking equipment.
b. Multiple levels of management access. Preferably, this includes a minimum of three levels:
    - full read/write,
    - read only of all possible fields except passwords, and
    - limited read only.

6.1.1.2.3. Configuration Recovery

Non-volatile storage shall be provided on all networking equipment for the purposes of maintaining configuration and fault/diagnostic information. Non-volatile storage shall:

a. enable a network device which has lost power to recover fully on power up by restarting and accessing all configuration data required for proper operation in the network.

b. be accessible from the network and from the out-of-band management console port.

6.1.1.2.4. Network Management Software

Network management software, which may consist of multiple applications, for multivendor networks shall be provided with the following characteristics:

a. a consistent user interface and an integrated environment for monitoring, troubleshooting, controlling and measuring performance of network components.
b. be able to discover and display graphically the network components and their relationship.
c. allow a network administrator to make configuration changes, and run diagnostic and performance statistics gathering applications.
d. at least adhere to SNMP and provide MIB and RMON support for various networking technologies (e.g. Ethernet, WDM, etc.).
e. include analysis software which presents the performance and monitoring data in easily comprehensible graphics (viewable on a terminal or a printer).
f. include configuration management software to track changes, modifications and current configuration of network devices
g. Downline loading via the network of software upgrades to all networking equipment (desirable)

6.1.1.3. Equipment Characteristics

This section describes general equipment characteristics

6.1.1.3.1. Physical Configuration

Where appropriate, all equipment shall be mountable in a standard EIA 19” rack. All mounting hardware shall be included with the equipment.

6.1.1.3.2. Operating Environment

a. Where appropriate, all equipment except large network routers shall be capable of operating on line voltage of 108 to 125 volts single-phase at 60 Hz (+/-1%).
b. Large network routers shall be capable of operating on line voltage of either 108 to 125 volts or 216 to 240 volts single-phase at 60 Hz (+/-1%).

6.1.1.4. Documentation

The contractor shall provide access to complete sets of commercially available system and user manuals. All provided documentation shall be available on line.

6.1.1.5. Auto Configuration

In general, no management intervention or software down line loading should be required to become operational (other than the potential manual installation of an IP address). The network equipment shall auto-configure and self initialize at installation (connection and power up) and during operation. That is, it shall be possible to simply connect the network interfaces and apply power for the network equipment to become operational without detrimental impact to the network. Auto-configuration does not apply to routers or ATM switches.

6.1.1.6. Bridging

Bridging is required in all routers and all bridging shall provide the capability for:

a. disabling of any Spanning Tree Algorithm [ISO 8802/1; IEEE 802.1] incorporated within the bridge.
b. Protocol filtering which is based upon user defined filtering masks.
c. interface line speed filtering and 80% of interface line speed forwarding, with minimum data packet sizes applicable to the interface type

6.1.2. Wireless Networking Equipment

The following wireless networking equipment is required.

6.1.2.1. Wireless Access Points

Wireless Access Points such as Cisco Aironet 1600 shall meet the following:

a. Capable of supporting multiple VLANs.
b. Capable of supporting Wireless encryption methods
c. Capable of utilizing external authentication service (RADIUS) in addition to supporting Wireless authentication methods
d. Support 802.11/a/n/g interfaces
e. Powered using Power-over-Ethernet (or 802.3af)
f. Remotely configurable

6.1.2.2. Wireless LAN Manager

Wireless LAN Manager such as the Cisco Prime Infrastructure wired/wireless LAN management solution shall meet the following:

a. Device can monitor, configure and report the status of access points
b. Capable of performing management functions autonomously, based on network conditions or on a scheduled basis
c. Capable of centrally managing at least 250 access points per management device

6.1.2.3. Wireless Bridge

Wireless Bridge such as Cisco Aironet 1552 Wireless Bridge shall meet the following:

a. Capable of bridging two wired LANs using a wireless link.
b. external antenna ports that are compliant with 802.11b/g standards (2.4 GHz)
    1. 802.11n (desirable)

6.1.3. LAN Switches

At least 2 solutions, each from a different OEM, for the High End LAN switch is required. Each interface port shall

a. be an independently switched port capable of supporting a LAN segment or single user connection.
b. support the Spanning Tree Algorithm [ISO 8802/1; IEEE 802.1d].
c. all Ethernet uplink ports and uplink port modules shall be capable of supporting trunking (Spanning Tree disabling and aggregate bandwidth utilization over multiple physical uplink ports).

6.1.3.1. High End LAN Switches

High End LAN switch chassis such as Cisco 6509 shall provide the ability to equip any one of the following configurations:

a. 10/100/1000 UTP Autosensing Ethernet interfaces, at least 18 ports (the proposed mandatory chassis must be fully configured with the appropriate cards, powers, etc. for this configuration).
b. 1000BaseSX capability , at least 4 ports
c. 1000BaseLX capability, at least 4 ports
d. 10 Gigabit (802.3ae) uplink port (desirable)
e. Support for MPLS Interfaces (desirable)

The following is required for installed configurations from the previous list

f. Ability for concurrent configuration of installed interfaces

6.1.4. Network Router

At least 2 solutions, each from a different OEM for Medium Network Router are required. One solution for the Large Network Router from any OEM meeting the mandatory requirements is required. Each size router may but do not have to have different OEMs.

Two network routers are required; a medium format router with an average number of interfaces and expansion capability and a large format router with substantial expansion capability and larger variety of interfaces. The next two subsections describe the overall features of the small, medium and large routers, while the third subsection describes specific requirements that shall apply to all routers.

6.1.4.1. Medium Network Router

A Medium Network Router (single chassis) such as Juniper M10 shall provide the following configuration options; i.e. the chassis shall have the option to be configured in any one of the following ways):

a. 8 or more Ethernet interfaces.
b. 1 or more Gigabit Ethernet interfaces (configured as SX and/or LX) (desirable).
c. Serial interfaces (desirable)

6.1.4.2. Large Network Router

A Large Network Router (single chassis) such as Juniper M20 shall provide the following configuration options; i.e. the chassis shall have the option to be configured in any one of the following ways):

a. 24 or more Ethernet interfaces.
b. 6 or more Gigabit Ethernet interfaces
c. Serial interfaces (desirable)
d. Gigabit Ethernet, LX or SX
e. 10 Gigabit (802.3ae) (desirable)

6.1.4.3. All Network Routers

All network Routers shall provide the following specifications

6.1.4.3.1. General Protocol Requirements

Routers shall provide the following capabilities:

a. simultaneous routing and bridging, selectable by protocol and by port.
b. the Spanning Tree Protocol [ISO 8802/1; IEEE 802.1d] (desirable).
c. Point-to-Point (PPP) Protocol [RFC 1661; 2153; and/or 5342]
    1. PPP RFC 1332 or subsequent version (desirable).
d. Frame Relay Protocols (desirable)

6.1.4.3.2. Routing Protocols

Routers shall provide the following routing protocols and their sub-elements:

a. TCP/IP Internet Protocol
    1. Routing Information Protocol (RIP) [RFC 1058 or subsequent version].
    2. Routing Information Protocol 2 (RIP2) [RFC 2453]
    3. variable length subnet masking.
    4. manual configuration of the broadcast address (i.e. support for all 1's or all 0's).
    5. Border Gateway Protocol (BGP) [RFC 4271]
    6. OSPF version 2 [RFC 2328].
    7. Intermediate System-to-Intermediate System (IS-IS) Protocol [RFC 1195]
    8. IP Multicast
        a. PIM [RFC 4601 and RFC 5059]
        b. MOSPF [RFC 1584] (desirable)

6.1.4.3.3. Network Management

In addition to the Core Network Management requirement (Section 6.1.1.2.), each Network Router shall include the following:

a. NTP version 3 or later, at least in client mode [RFC 5905]

b. Response to ICMP echo request (ping) [RFC 792]
c. Secure Shell (SSH) in server mode for both logins and file transfers
d. SSH in client mode to support logins
e. Support RADIUS [RFC 2865] or TACACS+ for authentication
f. Support SYSLOG [RFC 5424] for remote logging
g. Capability to disable unused or unneeded services
h. Capability to restrict access for enabled services
i. ISIS MIB[RFC 1195]
j. Connectionless Network Protocol MIB [RFC 1238] (desirable)
k. OSPF MIB [RFC 4750] (desirable)
l. MIB extensions for DS1 [RFC 2495; RFC 1239] and DS3 [RFC 3896; RFC 1239] (desirable)

6.1.4.3.4. Ethernet Connectivity

In addition to the Ethernet requirement (Section 6.1.1.1.1.), all network router shall support connectivity with the following:

a. 10/100/1000 BaseT Autosensing
b. 100BaseFX (desirable)
c. Gigabit Ethernet (desirable)

6.1.5. Radio Equipment

Radio equipment shall be provided which at a minimum:

a. 2-way radio with display;
b. Battery offering 14 hrs of Operation; <= 2.5 hours to full charge;
c. 6 channels minimum;
d. Time Out timer;
e. Scan function;
f. Tone Alert; Low Battery Alert; Key Lock and Battery Save;
g. VOX Ready;
h. STD 810 C,D,E & F MIL Standards

6.1.6. Internet Protocol (IP) Telephony System

IP Telephony System. This system in its entirety is desirable. If a system that meets the following functions is included in the available components, the desirable feature will be met:

a. Security: Secure RTP (SRTP)
b. QoS: Traffic classifications (tagging the packets) – both Layer 2 and Layer 3
c. Transport: RTP/UDP
e. Scalable to support at least 25,000 simultaneous users
f. Support for a 5 Digit Dial Plan
g. Features
   - Voice Mail
   - Meet Me
   - Call Detail Record (CDR)
   - Analog Devices
   - Call Groups
   - Call Transfer
   - Call Forwarding
   - Hold
   - Caller ID
   - Call Waiting
   - Park

- Call Pick Up
- Able to program features of IP Phones and IP Softphones from a central location
- Programmable keys

6.1.6.1. VOIP SoftPhones / Software

1. SoftPhones and related Unified Communication technology (advanced technology)

6.1.7. Cell Phone

A cell phone including annual service shall be provided with a minimum:

a. 2GB / month data plan
b. Unlimited talk / text
c. 50 state coverage
d. Phone
   1. Minimum 4 inch screen
   2. Minimum 8 megapixel camera
   3. GPS navigation
   4. Touch screen keypad
   5. Minimum screen resolution: 1130x640
   6. Ambient light sensor
   7. Wireless Connectivity: 3G; 4G; Bluetooth; Wi-Fi
   8. Minimum of 16 GB storage
e. One year service plan;

6.1.8. Network Diagnostic Tools

The following network diagnostic tools are required.

a. Portable Hardware based network protocol analyzer:
   1. Six layer protocol analysis
   2. Active discovery
   3. SNMP device analysis
   4. Traffic analysis
   5. optional WAN and wireless monitoring
b. The following tools are desirable:
   1. Network sniffer tool
   2. Layer 1 test equipment

6.1.9. Network Optimization Support for Core Routing & Switching

This section provides requirements for a product based engineering service to be supported. While this requirement uses generic term of "Network Product", the proposed services shall be tied to a specific brand name product; e.g. Cisco, Juniper, etc.

a. The primary purpose of this "Network Product" service is to provide technical assistance to aid with routing and switching products and technology. The skill set or capabilities of the personnel providing assistance under this service include:
   1. "Network Product" Certified Expert;
   2. In-depth knowledge and experience designing and configuring complex routing and switching networks;
   3. Working knowledge of advanced technologies such as security, voice, and content/data center fields;
   4. Ability to conduct training and one to one mentoring concerning routing and switching technology.

b. Network Optimization Support for Core Routing & Switching shall include but is not limited to the following:

1. Combination of On-Site and Remote Support
    a. Onsite support available 4 days a week
2. Operations Management
    a. Analysis of critical issues / trends
    b. Quarterly reviews
3. Network Improvement Plan Support
    a. Scheduled change network analysis
    b. Review of implementation plans
    c. Assistance with scheduled and unscheduled network hardware, software and configuration issues as necessary
4. Software Strategy and Reporting
    a. Software recommendations
    b. Critical bug analysis
    c. Quarterly reports
5. Performance Engineering and Optimization
    a. Network health checks
    b. "Best practices" comparisons/recommendations
6. Annual Operational Assessment

6.1.10. Advanced Network Technology

Some advanced networking technologies include Satellite Network Communications, Fiber Optic Broadband and Telemetry (remote sensors). Satellite Network Communications provides support for utilization of satellite links for supporting both LANs and WANs. Fiber Optic Broadband provides for fiber optic broadband service as part of a remote access solution. Telemetry supports the transmission of data captured by instrumentation and measuring devices to a remote station, for recording and analysis.

6.2. Computer Security Tools

This section specifies software and equipment needed to support a full implementation of computer systems and infrastructure in the NASA network environment. These items may be purchased by the Government separately from computer systems but rely on standards and standard interfaces to ensure interoperability with the computer systems and the supporting networks.

6.2.1. Security Tools Core Specification

All mandatory security tools must meet the following specifications:

a. Compliance with NIST Federal Information Processing Standards (FIPS) requirements including FIPS 140-2 and FIPS 201, where applicable
b. User extensible features in each software package, such as the ability for a user to add intrusion detection signatures, file signatures and similar features to network monitors (advanced technology)
c. Information technology products which have been evaluated and certified/validated in accordance with the provisions of the NIAP Common Criteria Evaluation and Validation Scheme and the Common Criteria Mutual Recognition Arrangement (CCMRA) and conform to the Common Criteria for IT Security Evaluation (ISO Standard 15408) (advanced technology).

6.2.2. Anti-spam Appliance

At least 2 solutions, each from a different OEM, for the following anti-spam appliance is required. Anti-spam appliance, such as Barracuda Spam Firewall, shall be provided which at a minimum:

a. Self-contained hardware appliance
b. Support at least 10,000 active e-mail users
c. Capacity of 10 million e-mails / day
d. Handle up to 5,000 domains
e. 72 GB of quarantine storage
f. Compatible with Microsoft Exchange, and Lotus e-mail servers
g. Gigabit Ethernet connectivity

h. Web-based interface
i. Variety of protections supported:
   - Spam filter
   - Virus Filter
   - Anti-spoofing
   - Anti-phishing
   - Anti-spyware
   - Denial of Service
   - Outbound e-mail filtering
j. Spam filter functionality including:
   - Content-based
   - Intent analysis
   - Keyword Blocking
   - Multi-national
   - Rate control
   - Rule-based scoring
   - SPF and Sender-ID
k. E-mail tagging, quarantine and blocking
l. Whitelists and blacklists (both global and user configurable)

6.2.3. Anti-spyware Software

Anti-spyware software which detects and removes Spyware from systems running Windows shall be provided with the following minimum specifications:

a. Protection against DLL injection
b. Protection against 3rd party uninstall
c. Automated definitions file update
d. Automated operation
e. Automated scanning
f. Quarantine support
g. Real-time monitor
h. Registry protection
i. Executable file extension protection
j. Printable reports
k. Centrally managed Enterprise-based version
   1. 25 client seats
   2. Help desk support

6.2.4. Server Level Intrusion Protection and Detection Software

Server level intrusion protection and detection software for Windows servers such as ISS's RealSecure Server, shall be provided with the following minimum specifications:

a. Automatically detect and block malicious activities
   1. monitor all inbound and outbound traffic
b. Multi-level protection
c. Automatic, instantaneous user alerts of threats
d. Intruder data collection including IP address and
   1. data collection including hardware address in at least 1 solution (desirable)
e. System logging of all illicit activity
f. Automatic notification of updates
g. 25 server license

6.2.5. Vulnerability Assessment Software

Vulnerability assessment software, such as ISS Internet Scanner, that scans networked devices for vulnerabilities shall be provided which at a minimum:

a. scan an entire domain, subnetwork or system to detect security vulnerabilities
b. scan a minimum of 2500 seats
c. Details of specific scanning capabilities is Advanced Technology

6.2.6. Virtual Private Networking Appliance

Remote access Secure Sockets Layer (SSL) Virtual private network (VPN) appliance shall be provided which at a minimum:

a. provide a secure end-to-end private data network over a public network infrastructure
b. license for at least 1,000 concurrent HTTP clients and 100 non-HTTP clients
c. support connections using Internet Explorer and Apple's Safari and Mozilla Firefox browsers
d. support for web applications including:
   - ActiveX
   - Java applets
   - JavaScript
   - Flash
   - HTML
   - JavaScript
   - VBScript
   - Web e-mail via Lotus Notes and Outlook Web Access
e. Terminal Services including:
   - Citrix Metaframe
   - Microsoft Terminal Server
   - X11
f. Client support non-HTTP applications including:
   - ActiveX
   - Java applet
g. SSL tunneling
   a. support TCP/UDP
h. support SMB/CIFS file sharing;
i. support the following authentication methods: local user ID/password, LDAP, Active Directory, ActivCard ActivPack, RADIUS, Windows NT Domain and RSA SecurID, X.509 digital certificates
j. granular access control and authorization:
   a. user- and group-based memberships,
   b. role-based access,
   c. LDAP/AD attributes,
k. Three 10/100/1000 Base-T Ethernet ports
l. support for Apple, Linux and Microsoft Windows client OS
m. FIPS 140-2 compliance
n. Central administration, monitoring and reporting
o. Load balancing options

6.2.8. Biometric Scanning Devices

Biometric scanning devices to provide fingerprint-based secure access to computer systems shall be provided which at a minimum:

a. Compliant with SP 800-73 (data APIs) and SP 800-76 (biometric data specification) (desirable)
b. USB connectivity
c. portable
d. integrated finger guide
e. optical or capacitive sensor
f. latent print image removal

g. encryption of fingerprint templates
h. 500 dpi resolution
i. Verification time of less than 1 sec
j. Software to allow fingerprint based logon and file encryption
k. Windows support
    1. Linux support (desirable)
    2. Apple Mac OS X support (desirable)
l. Fingerprint-based scanner for access to facilities, computer rooms, etc (desirable)
m. Retina and iris scanning devices and other forms of biometric scanning devices (advanced technology)

6.2.9. Smart Card Readers

Smart card reader devices to provide smart card secure access to computer systems shall be provided which at a minimum:

a. Compliant with SP 800-73 (data APIs) and SP 800-78 (card specification) (desirable)
b. USB connectivity
c. portable
d. T=0, T=1 Protocol support
e. 344,000 bps speed
f. Support ISO 7816 Class A and AB smart card
g. Windows, MAC OS, and Linux OS support
h. Readers for access to facilities, computer rooms, etc (desirable)

6.3. Advanced Video and Conference Tools

This section describes the requirements for a set of mandatory products related to audio-visual technology.

6.3.1. Video Acquisition Devices

The following video acquisition devices shall be provided:

a. HDTV Studio Camera Systems including:
    1. Three 2/3-inch type 16:9 FT or FIT CMOS or CCD imagers
    2. 34 or 38-bit digital signal processing resolution
    3. HD images in both 1080i and 720p formats
    4. 1920 x 1080 effective pixels
    5. Signal-to-noise ratio of 54dB (typical)
    6. F10 Sensitivity
    7. HDTV viewfinder.
b. Professional Digital Single Lens Reflex (SLR) Camera such as the Canon Eos 7D with the following minimum specifications:
    1. High-sensitivity, High-resolution, Single-plate CMOS Sensor
    2. 17.9 megapixels
    3. 3:2 (Horizontal:Vertical) Aspect Ratio
    4. support for the following optional file types / sizes
        - Large: 17.9 Megapixels
        - Medium: 8.0 Megapixels
        - Small: 4.5 Megapixels
        - RAW: 10.1 Megapixels
    5. Combination of preset and user-defined picture style function with individual adjustments for sharpness, contrast, saturation and color tone
    6. Video mode with sound: 1920X1080 file size in full HD mode
    7. USB 2.0 interface

8. Focusing modes of: Autofocus, and Manual Focus
9. Exposure Control Systems
10. ISO Speed ranges: Equivalent to ISO 100-6400 (in 1/3-stop increments)
11. Shutter Speeds of 1/8000 to 30 sec. (1/3-stop increments)
12. Self timer shutter release with option of 2 sec. or 10 sec timing delay
13. Focusing options: Quick mode, Face detection, Manual
14. Built in autoflash
15. Camera bag
16. Lens

c. Conference room double bay multimedia lectern with semi-recessed (up to 18 inch) LCD flat panel display
   1. height adjustable monitor support
   2. storage area with locking doors
   3. remote-switched, surge-protected 6-outlet power strip
   4. Pullout platform for keyboard / mouse
   5. Approximate size of 54X26X42 inches **(**Width **x** Depth **x** Height**)**

d. 750 Watt Studio light bulb with Medium Bi-Pin (G9.5)

f. High-output dynamic vocal microphone:
   1. frequency response: 50 to 15,000 Hz
   2. Rated low impedance of 50-1,000 ohms
   3. Dynamic range: 120 dB
   4. adjustable slip stand adaptor
   5. supercardioid or hypercardoid

6.3.2. Audio Video Monitor and Display Devices

The following Audio Video Monitor and Display Devices must be provided:

a. Stereo speakers
   1. 2 speakers including tweeter and woofer
   2. Impedance : at least 6 ohms nominal
   3. Sensitivity: in the range of 85-90 db at 1 meter
   4. Frequency response: at least a range of 50 Hz - 20 kHz (desirable)

b. Wall mountable 46” Wide LED TV
   1. 46 inch diagonal screen size
   2. Native resolution at least 1920X1080p
   3. Multiple aspect ratios including at least 16:**9** and 4:3
   4. Wall mount hardware

c. 42 inch digital signage monitor
   1. 1080p panel
   2. <requirement removed>
   3. 7 day on/off scheduling
   4. Speakers (built-in or separately attachable)
   5. Remote and panel control lockout (desirable)
   6. RS-232 daisy-chain capable
   7. Screen saver/image sticking protection (desirable)
   8. VGA and DVI inputs for connectivity and control
      a. VGA and DVI outputs (desirable)
   9. Stand-alone license for a signage software package that provides display management including scheduling and distribution of pre-scheduled information

d. Document Kiosk
   1. 19" LCD Monitor
   2. Full Metal sealed keyboard
   3. Printer with Paper Tray.
   4. Computer: minimum of 1.6 GHz Dual Core Processor; 2 GB RAM; 64.0 Gig SS HD
   5. Surge protection for all electronics

6. Kiosk Software/interface:
    a. Touch Screen Keyboard
    b. Basic Lock Down Software
    c. Remote Access Software
7. Heavy duty Metal Enclosure
8. 2 External USB Ports
9. Internal cooling system

6.3.3 Virtual Environment Devices

The following Virtual Environment Devices must be provided:

a. Tactile glove haptic device such as the CyberGlove Systems CyberGlove II with minimum specifications of:
    1. Number of sensors: 5
    2. Sensor Resolution: < 1 degree
    3. Sensor Repeatability: 3 degrees
    4. Sensor Linearity: 0.6% maximum nonlinearity over full joint range
    5. Sensor Data Rate: 90 records/sec (typical)
    6. Wireless Technology: 2.4 GHz
    7. Operating Range: 30 ft radius from USB port

6.4. Racks / Enclosures / Carts

The following Racks and related products must be provided:

a. Medical Exam Station
    1. Lightweight and Transportable Medical Exam Station
    2. Wireless Tablet Computer Enterprise Router with Mobile3G, Ethernet Port and VPN
    3. IP Stethoscope
    4. USB Video Otoscope w/5 Specula
    5. Rolling Travel Case with Extendable Handles
    6. Video examination camera
        i. HD video examination camera (desirable)
b. Medical grade computer carts:
    1. Antimicrobial Contact Surfaces
    2. Smart Control Panel
    3. Work Light with Auto Shut-off
    4. Negative-tilt Keyboard System
    5. Mousing Surface: Left/Right Mouse Tray
    6. Ergonomic Grip Front Handle
    7. Ergonomic Grip Height Adjustment Lever
    8. 3 port USB Hub
    9. Internal Cable Management
    10. Ethernet Ready
    11. 4 durable precision casters (2 locking)
    12. Hospital Grade Spiral Power Cord
    13. Keyed Lock Security
    14. Software
        a. Battery Alert
        b. Remote PC Reboot Button
    15. LCD Height Adjustment: simple landscape to portrait adjustment
    16. Integrated Power Conditioning System
c. Cable trays and related items:
    1. Cable Tray straight sections
        a. grid pattern of 2 inches x 2 inches

b. width/length/height = 4 inches X 2 feet X 2inches

2. Hardware for installation
   a. Ratchet
   b. Cable Tray Cutter

d. Computer Rack Enclosure:
   1. Enclosure frame with two pair of coated, universal M6 mounting rails and package of M6 hardware
   2. Top Panel fan(s)
   3. Front Door with locking handle
   4. Rear Contour Mesh Door with locking handle
   5. Pair of solid side panels
   6. Minimum size of 84"H x 24"W x 48"D

6.5. Additional Technology

Devices running client-oriented OSs to allow running of security, network, image and display related tools (additional technology)

Basic storage equipment in support of security, network, image and display related tools (additional technology)

Supporting technology such as printers, scanners, etc. in support of security, network, image and display related tools (additional technology)

Security certification and accreditation services (additional technology)

6.6. Specialists

To assist in product recommendations, installation, and support of computer systems products the following specialists shall be supported:

a. Information Assurance Network Specialist
   1. Analyzes general information assurance-related technical problems and provides basic engineering and technical support in solving these problems. Supports the integration of information assurance solutions and technologies into networks with particular attention to protocols, interfaces, and system design. Analyzes and defines security requirements for local and wide area networks. Designs, develops, engineers, and implements solutions that meet network security requirements. Responsible for integration and implementation of the network security solution. Performs vulnerability/risk analyses of computer systems and applications during all phases of the system development life cycle. Configures test beds and conducts testing, records and analyzes results, and provides recommendations for improvements for the products/systems under test. Analyzes and defines security requirement for computer systems which may include mainframes, workstations, and personal computers. Designs, develops, engineers, and implements solutions that meet security requirements. Responsible for integration and implementation of the computer system security solution. Gathers and organizes technical information about an organization's mission goals and needs, existing security products, and ongoing programs in computer security. Performs risk analyses of computer systems and applications during all phases of the system development life cycle. Applies principles, methods, and knowledge of security to specific areas task order requirements. Test developed systems at each point of entry for ease of unregulated entry; systems resources denial; system information corruption; unlawful use of system resources; vulnerability to electronic disruption.
   2. Experience Requirements: This position requires a minimum of seven years of substantial experience in system security analysis and implementation; design assurance or testing for information assurance products and systems; integration or testing for information assurance products and systems. Experience in heterogeneous computer networking technology and work in protocol and/or interface standards specification is recommended.

b. Network Engineer

1. Tests and analyzes all elements of the network facilities including power, software, communications devices, lines, modems and terminals and for the overall integration of the enterprise network. Responsible for the planning, design, installation, maintenance, management and coordination of the network. Monitors and controls the performance and status of the network resources. Utilizes software and hardware tools, identifies and diagnoses complex problems and factors affecting network performance. Maintains technical currency and studies vendor products to determine those which best meet client needs. Provides guidance and direction for less experienced network support technicians
2. Experience Requirements: Seven years of increasingly complex and progressive experience in computer system/network engineering. Includes two years of specialized experience related to the task.

7. References

ANSI INCITS 362-2002 SCSI Parallel Interface-4 (SPI-4)
ANSI X3.64-1979/R1990 Keyboard encoding standard
ANSI T1.606 Frame Relay Protocols with LMI Extensions
ANSI T1.601-1992 ISDN U Interface
ANSI T1.605.1992 ISDN ST Interface
ANSI X3.253:1998 SCSI-3 Parallel Interface (SPI)

EIA RS-232-C Interface between Data Terminal Equipment and Data Communication Equipment

IEEE 754 Floating Point Format (32 and 64 bit)
IEEE 754-1985(R1990) IEEE Standard for Binary Floating-Point Arithmetic
IEEE 802.11 Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY)
IEEE 802.11b Higher speed Physical Layer (PHY) extension in the 2.4 GHz band
IEEE 802.1c LAN/MAN Management (15802-2-1995)
IEEE 802.11p Wireless Access for the Vehicular Environment (WAVE)
IEEE 802.1x Port Based Network Access Control
IEEE 802.3 Ethernet Specification
IEEE 1394 and IEEE 1394a Firewire interface
IEEE 1284 Standard Signaling Method for Bi-directional Parallel Peripheral Interface for Personal Computers
IEEE 1003.1-1990 Portable Operating System Interface Exchange (POSIX) Full Use Interface Definition

ISO/IEC 14882:1998 C++ compiler
ISO/IEC 1539-1:1997 Fortran 95 compiler
ISO 7816 Contact smart card
ISO 8802/1 LAN/MAN Management
ISO 8802/2 Logical Link Control Type 1 (LLC1)
ISO 8802/3 Ethernet Specification
ISO 15408 Common Criteria for IT Security Evaluation

RFC 768 User Datagram Protocol (UDP)
RFC 791 Internet Protocol (IP)
RFC 792 Internet Control Message Protocol
RFC 793 Transmission Control Protocol (TCP)
RFC 821 Simple Mail Transport Protocol (SMTP)
RFC 826 Address Resolution Protocol (ARP)
RFC 854 TELNET Virtual Terminal Protocol
RFC 904 Exterior Gateway Protocol (EGP) (Historic)
RFC 950 Internet Control Message Protocol (ICMP)
RFC 959 File Transfer Protocol (FTP) (Updated by RFC2228, RFC2640)
RFC 1058 Routing Information Protocol (RIP)
RFC 1075 Distance Vector Multicast Routing Protocol
RFC 1112 IP multicasting (Updated by RFC2236)
RFC 1155 Structure and identification of Management Information for TCP/IP-based internets (MIB)
RFC 1157 Simple Network Management Protocol (SNMP)
RFC 1195 Integrated IS-IS: Use of OSI IS-IS for routing in TCP/IP and dual environments
RFC 1213 Management Information Base for network management of TCP-IP-based Internets: MIB II
RFC 1238 Connectionless Network Protocol MIB
RFC 1239 Reassignment of experimental MIB's to standard MIB's
RFC 1271 Remote Network Monitoring Management Information Base
RFC 1305 Network Time Protocol (Version 3) Specification, Implementation
RFC 1323 TCP extensions for high performance \
RFC 1332 Point-to-Point Protocol (PPP) Initial Configuration Options
RFC 1406 Definitions of Managed Objects for the DS1 and E1 Interface Types
RFC 1584 Multicast Extensions to OSPF
RFC 1661/1662 PPP

RFC 1663 PPP Reliable Transmission
RFC 1723 RIP Version 2 - Carrying Additional Information
RFC 1742 AppleTalk Management Information Base II
RFC 1771-1774 Border Gateway Protocol (BGP)
RFC 1813 Network File System (NFS) Version 3
RFC 1850 OSPF Version 2 Management Information Base
RFC 2046 Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types
RFC 2328 OSPF version 2
RFC 2362 Protocol Independent Multicast-Sparse Mode (PIM-SM): Protocol Specification
RFC 2496 Definitions of Managed Object for the DS3/E3 Interface Type
RFC 2702 Requirements for Traffic Engineering Over MPLS
RFC 2865 Remote Authentication Dial In User Service (RADIUS)
RFC 3164 The BSD Syslog Protocol
RFC 3031 Multiprotocol Label Switching Architecture
RFC 3036 LDP Specification
RFC 3569 Source-Specific Multicast (SSM)
RFC 3530 Network File System (NFS) version 4 Protocol

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Attachment B Mandatory Deliverables

The following list of deliverables provides a description of each Mandatory Deliverable line item as identified in Attachment A: Technical Specifications.

Items which are listed under Mandatory Add-ons are mandatory deliverable items which the technical specifications indicate must be provided on the contract, but which may be separately orderable from the required base systems.

Group A (Computer Servers) deliverable items

Note: pricing shall be inclusive of all necessary cabling, trays, enclosures, racks, cooling, etc. to provide for a fully operational system. The container based systems must include all required items listed in 3.2.3. as part of a fully enclosed system.

36 node mid-range cluster: 2 Head Nodes; 34 Data Nodes with all necessary cables and racks, OS Drives, Storage, etc.
C++ compiler - mid-range cluster
Fortran 2008 compiler - mid-range cluster
Unlimited OS license - - mid-range cluster
Smart PDU- mid-range cluster
Management Network GbE switch- mid-range cluster
KVM implementation capable of supporting 36 nodes - mid-range cluster
Storage system / media for 10 PB
HMS software
AutoDesk Maya (or equivalent)
RenderMan Studio 4 (or equivalent)
RenderMan Pro Server (or equivalent)
Oracle database server (or equivalent)
484 node high end cluster - 2 Management Nodes, 2 Service Nodes, 480 Compute Nodes with all necessary cables and racks, NIC, motherboards, processors, RAM, cooling, disk controller, HCA, OS drives, disk storage, etc
C++ compiler - hi end cluster
Fortran 2008 compiler - hi end cluster
Unlimited OS license - hi end cluster
Smart PDU - hi end cluster
Management Network GbE - hi end cluster
LAN 10 GbE switch - hi end cluster
Infiniband Network QDR GbE switch - hi end cluster
KVM implementation capable of supporting 484 nodes - hi end cluster
Class 3a container system – 32 nodes
Class 3b container system – 16 nodes

Class 3a: – upgrade to 256 GB memory
Class 3a: – upgrade to 1 TB internal storage
Class 3a: – upgrade to 3.6 PB storage
Class 3b: – upgrade to 128 GB memory
Class 3b: – upgrade to 500 GB internal storage
Class 3b: – upgrade to 1.8 PB storage

Group B (Mass Storage Devices) deliverable items

DVR
DAT 72 external drive
STK T10000C external drive
LTO Ultrium drive
40 slot / tape drive LTO Ultrium desktop library system
200 slot / 8 drive LTO Ultrium enterprise library system
2 PB Large robotic device (64 drives)
7 TB RAID Blade array
6 TB Scalable RAID
HSM Software – 1 PB
10 TB Virtual Storage (monthly rate)
Small Office UPS
Small Server Room UPS
On-site disk drive destruction
On-site tape degaussing

Group C (Server Support and Multi-Functional Devices) deliverable items

21 inch LCD Monitor
Portable Projector
Manual Screen
Interactive Whiteboard
Monochrome Laser Printer
High Speed Monochrome Printer
Color Printer
Color Large-Format Plotter
High Speed/High Performance Scanner
Large Format Scanner
Small format tablet
Mouse
Keyboard
Motion detector solution
All-inclusive Office Video Conferencing
Point of Sale System
High volume monochrome MFD
Medium volume color MFD
5,000 Staples
Toner – supply for medium volume monochrome printer
Case of 5,000 sheets - 8x11” White
Case of 2,500 sheets - 11x17” White

Group D (Network Devices, Computer Security Tools and Advanced Video and Conference Tools) deliverable items

NOTE: where OEM 1, OEM 2 are noted the equipment must be from 2 different OEMs; but the same OEM may have proposed equipment in other groupings. Groupings are separated by '***'

Network management software
Wireless Access Point
Wireless LAN Manager
Wireless Bridge
***
High End LAN switch chassis (OEM 1)
High End LAN switch chassis (OEM 2)
***
Medium Network Router (OEM 1)
Medium Network Router (OEM 2)
***
Large Network Router
2- Way Radio
IP Telephony System
Cell Phone
Portable Hardware based network protocol analyzer
***
Anti-spam appliance (OEM 1)
Anti-spam appliance (OEM 2)
***
Anti-spyware software (Windows PC) – enterprise based, 25 clients
Server level intrusion protection and detection software – 25 servers
Vulnerability assessment software – 2500 seats
VPN Appliance – unlimited client
Fingerprint based biometric scanning device
Smart card reader
HD Studio Camera System
Digital Single Lens Reflex (SLR) Camera with bag
Conference room double bay multimedia lectern
Studio lighting - 750 watts of high impact strobe
High-output dynamic vocal microphone
Stereo Speakers
Wall mountable 46” Wide LED Display
42” digital signage monitor
Document Kiosk
Tactile glove haptic device
Medical Exam Station
Medical grade computer carts
Cable Tray straight sections
Ratchet
Cable Tray Cutter
Computer Rack Enclosure

ATTACHMENT C STATEMENT OF WORK

C.1. STATEMENT OF WORK

C.1.1. OBJECTIVES

C.1.1.1. BACKGROUND

This procurement is open to all of NASA including its Contractors as authorized by their Contracting Officer. This includes the NASA centers: NASA Headquarters, Ames Research Center, Dryden Flight Research Center, Goddard Space Flight Center, Johnson Space Center, Kennedy Space Center, Langley Research Center, Glenn Research Center, Marshall Space Flight Center, Stennis Space Center, Jet Propulsion Lab and related facilities (e.g. Goddard Institute for Space Studies, Wallops Flight Facility, White Sands Test Facility, Independent Verification and Validation Facility, etc.) and the NASA Shared Services Center. These contracts will also be available for use by other Federal Agencies and their Contractors as authorized by their Contracting Officer.

Information technology and information processing resources management permeates almost every element of NASA. Data rates from NASA missions are significant and increasing rapidly along with the complexity of data relationships and information extraction. Accessibility, presentation quality and data formatting are increasingly important in a world of more and more intensive computation, analysis and sophisticated graphics. The need for efficient and powerful software and hardware geared towards the various information processing tasks extends from end users' tools to high end compute, storage, archive and analysis servers.

NASA's mission and analysis requirements in all areas of science and engineering are becoming increasingly complex and more demanding in terms of their computational and data requirements. Some applications generate data volumes reaching hundreds of terabytes and even petabytes. Many of NASA's scientific applications are data intensive and present significant challenges in the management of data resources and dataflow between the storage and compute resources. NASA's data intensive computing requirements are particularly acute in the areas of analysis, visualization and accessibility.

One of NASA's goals is to optimize the productivity of the individual through the utilization of consistently more powerful computers utilizing the latest in supporting peripherals combined with higher level and more user friendly software on standardized but customizable systems.

Computer facilities throughout NASA are being continuously enhanced by incorporating evolving improvements in state-of-the-art computer system technologies to maintain NASA at the forefront of scientific and engineering processing performance and capabilities and to provide the user community of researchers and engineers with the most sophisticated and powerful computer tools available. The original SEWP contracts helped establish UNIX as the unifying computer system within NASA's scientific and engineering environment. In continuing support of the activities that utilize these computer systems NASA is implementing Indefinite Delivery/Indefinite Quantity (IDIQ) contracts of the latest computer system technologies. These standard based computer systems will continue to enhance and unify computational and graphics capabilities to the scientific and engineering community supporting NASA missions.

C.1.1.2. APPLICATION AND COMPUTATIONAL ENVIRONMENT

In the accomplishment of its mission, NASA utilizes a wide diversity of general and special purpose digital computers ranging from Compute Clusters, High Speed Specialized Processors, Scalable Parallel Processors and High End Storage systems to wide array of desktop and portable tools. These systems, while diverse in capability, are functionally interoperable through their support of IP networking and interoperability standards. These systems provide interoperability and portability through their implementation of IT standards. They

allow users to move between machines in a heterogeneous networked environment while maintaining an interoperable user environment.

NASA's mission, for example, in the Geodynamics, Geophysics, Earth Resources, and Hydrological Sciences areas of investigation, is based on programs of basic and applied research as well as data analysis and interpretation and is conducted to span virtually the entire breadth of terrestrial utilization of space-acquired data. These include investigative studies of the Earth's gravitational and magnetic fields, crustal differentiation, surveying and mapping of crustal magnetic anomalies, computing general ocean circulation and major currents, determination of tectonic plate motion, and monitoring and predicting atmospheric circulation. In the resource observation areas, specific topics being investigated include mapping of geobotanical anomalies; crop, forest, and rangeland mensuration and classification; and determination of soil moisture - vegetation relationships. Ice and snow pack properties and surface imperviousness - water runoff relationships are also studied. These investigations include the study of future systems involving advanced higher resolution multi-element sensors.

NASA’s requirements for computing resources will continue to increase dramatically for all types of systems and tools, and for a wide range of power and capacity. A family of scientific and engineering computer systems along with alternate, standards-based operating systems and supporting equipment and software will provide a wide diversity of interoperable functions within NASA and ensure the availability of the best tools for all of the core competencies at NASA.

Computer networking is a key element of the computer system environment. NASA maintains an extensive network environment with tens of thousands of active network nodes in dozens of domains. The NASA environment is primarily Ethernet based, and NASA is continually researching emerging technologies to supplement the existing infrastructures where needed. Computer systems will need to support the current highest performance network technologies. NASA aggressively deploys network technology that capitalizes on its existing investment while promising long-range viability. This includes extending the reach of NASA’s services both internally and to external service providers including those that are Cloud based.

Cloud computing and the related X As A Service (e.g. Software As A Service) are increasingly important to NASA and the Federal Government. Private Clouds (e.g., containers); Public Cloud Services (used, for example, to offload data, storage and/or respond to computational capacity), Community Clouds (used, for example, to consolidate similar requirements throughout a Center or Agency) along with the many variations of Cloud Services are prevalent in new and emerging requirements and therefore are an important aspect of the SEWP V offerings.

C.1.1.3. ACQUISITION OBJECTIVES

This acquisition's first objective is to have hardware and software available to address an increasingly difficult, complex, and changing set of NASA-specific scientific and engineering problems while also providing IT product-based solutions to assist all Federal Agencies in meeting their IT needs. For example, problems such as the design and development of complex instrumentation, correlative data analysis between multiple data sources and high-resolution display and animation of complex three-dimensional objects stress the resources of today's most powerful scientific and engineering computer systems and high-speed networks**.** Yet each of these problems requires computational platforms that are highly extensible in different key areas of computer system technology. In addition increased requirements for distributed computing and sharing of resources and data have created a data and network-intensive computational environment while the need for efficiency and cost savings has resulted in a need for consolidation and cloud-based services. Ideally this first objective would be met with hardware and software that provide flexibility, functionality, high-speed connectivity and a performance growth path that can address NASA’s technical and interoperability requirements as our science and engineering requirements continue to expand. Additionally the need for facility consolidation and cloud-first solutions necessitates an acquisition strategy inclusive of hardware, software and services that can leverage virtualization, public and private cloud services and facilities and software-as-a-service along with related cloud-based products and services.

This acquisition’s second objective is to assist the Government in minimizing incompatibilities and maximizing strategic decision making across the IT infrastructure. This objective is met firstly by focusing on commercial and standards based technology and acquisition practices. Secondly, information flow between industry and the Government end-user is paramount in providing the Government with the knowledge to make informed

decisions. It is therefore a goal of this contract to not only provide basic technical information but to also facilitate information related to a variety of topics including but not limited to supply chain management, energy savings and accessibility features, and program and past performance. With a full suite of standardized products and ready access to key data, it is anticipated that NASA and other Federal Agencies will have the ability to use these contracts for strategic IT purchases.

A third objective is to provide NASA with a wide range of IT, communications, audio-visual and related hardware, software and product based services to support, interconnect, and enhance NASA's scientific and engineering capabilities. To support the variety of systems and computing related needs and continue to promote and stimulate vendor competitiveness, contractors associated must include access and/or support to the widest possible variety of appropriate companies. In addition, these systems must include enhancements that provide leading edge technology to the computer system group. This objective is met in part through the technology refreshment process to add new companies and technology to make enhanced new technical capabilities available.

Finally, it is imperative that SEWP embraces innovative procurement transactions and processes. This objective is to facilitate processes that will place a minimal administrative burden on the customer, contractor, and the Government. The Government believes that this can only be accomplished through electronic and automated means. Hence every effort will be made to utilize automated processes for order processing, tracking, delivery, invoicing, and payment. The Government envisions a virtual system in which the customer is empowered to choose what goods and services they need to accomplish their mission, order them (if within their authority) receive them directly, and authorize payment. This empowerment of the customer necessitates the continued enhancement and automation of today's conventional procurement processes. At a minimum this will require standardized electronic communication processes for order processing, pricing exhibits, and management reporting. Further, this system will continue to evolve as standards mature and enabling technologies become available. It is expected that the Government and industry will partner together in this effort.

While the goal of this SEWP RFP is to provide the widest range of IT product solutions through a competed set of contract awards, a post-award plan is to determine if a small group of non-competed set-aside contracts would be beneficial to the Government to fill in any additional related capabilities.

Overall, this consolidated effort will provide the Government with hardware, software, Audio-Visual products and related services that represent the best overall value to the Government in fulfilling its mission. Further, this effort will minimize the Government's administrative costs, and provide the ability to fulfill our users' needs in a timely manner.

Because the scientific and engineering requirements depend on interoperability and standards, combined with the broad base of commonality among requirements, functions, and available COTS solutions, it is assumed that overlap will exist between contracts and across groups. Additionally, any overlap will ensure that end-users will have access to appropriate and complete solutions to meet their varied requirements. Therefore, no single contract will have exclusive rights to provide any given technology nor will end-users be confined in their choice of contracts they utilize. The end-user's decisions will be based on a Best Value and Fair Opportunity determination as required in FAR 16.505(b).

<u>Scope</u>

NASA implements many different missions and projects to meet a wide range of requirements. In addition, other Government agencies will utilize any resultant contract if they determine the available hardware, software, and related products and services meets their technical requirements and represent a Best Value to that organization. As such it is intended that deliverables under this contract may be utilized by: Government civil servants, Government on-site (or near-site) contractors, Government off-site contractors, Principal investigators, or Universities through grants or cooperative agreements and Government-Owner Contractor-Operated (GOCO) organizations. Therefore, deliverables under the contract are not limited to NASA-specific requirements, although any such deliverable will be available for NASA's usage. While SEWP Contractors are required to provide CONUS delivery, Federal Agencies with OCONUS locations may utilize the SEWP contracts based on mutually agreed upon delivery arrangements.

Regardless of the mandatory items defined, proposed and provided by each class, the scope of all contracts is the same – Information and Communications Technology (ICT) and Audio Visual (AV) products including

hardware; software; maintenance; warranty; product based engineering, installation and implementation services; and product training.

C.1.2. GOVERNMENT'S OPERATING PLAN

There will be a SEWP Program Management Office (PMO) staffed by Government, and NASA support service contract personnel. The PMO will be located at NASA Goddard Space Flight Center (GSFC) and will serve four main functions: contract management, technical oversight, administrative support, and customer support. The full NASA SEWP Team will consist of the SEWP Executive Committee, SEWP Contracting Officer(s), the SEWP Contracting Officer's Representative (COR), SEWP Technical Specialists, and NASA SEWP Program Manager and Deputy Program Manager.

The SEWP PMO will be the focal point for SEWP Contractors and customers by serving as a clearinghouse of information and services relevant to the SEWP contracts. The SEWP PMO is not responsible for promoting the Contractor's products or for conducting market research for the Contractor's products.

C.1.2.1. Executive Committee, CO(s), COR, Technical Specialists

The SEWP Executive Committee will oversee and direct the management of the SEWP contracts. The SEWP Contracting Officer(s) will perform functions normally associated with such position(s). The SEWP COR will conduct post award implementation and administration. Technical Specialists may be appointed by the Executive Committee to assist the COR in reviewing and approving all Technology Refreshment proposals from the Contractor to ensure appropriate scope and conformance with SEWP objectives. The COR will maintain a close working relationship with the Contractor regarding current and future technology and the technical breadth and depth of the contract. The Executive Committee, Contracting Officer(s) and COR will be located at GSFC. The Technical Specialists may be located at various NASA Centers and other agencies.

C.1.2.2. SEWP POCs

SEWP Point of Contact (POC) serves two main functions within their respective agencies:

1. Contact person within their agency to answer questions and provide guidance to Government and Contractor employees interested in using SEWP;
2. Person to serve as a liaison between the NASA SEWP Office and their agency, providing feedback and receiving updates to/from the NASA SEWP office on current issues and future goals of SEWP

Agencies may have multiple POCs. A POC can be identified as a Contracting POC, a Technical POC, or both. Agencies are not required to identify a POC in order to utilize the SEWP contracts.

C.1.2.3. SEWP PMO Management Services

The SEWP PMO will maintain a database containing all information relevant to order and contract monitoring. The SEWP database will be the official repository for pricing exhibits, electronic reports, summaries of purchase orders, and other contract related information. The SEWP PMO will validate orders to ensure orders are from a federal agency or authorized federal contractor and that the orders include a valid contract number, a signature and date, and a total dollar amount. As detailed in Attachment D, all orders, except for direct credit card orders, will be routed through the SEWP PMO office prior to issuance to the Contractor to ensure that appropriate scope, pricing, authorization limits, and other contract and program requirements are monitored at all times. Pricing information will be remotely accessible by Contractors and customers in order to facilitate the generation of contractually correct orders. The database will be populated via electronic processes as defined in Attachment D.

Contractor information systems for order processing and quote generation must be populated with pricing data synchronized with the SEWP database. This will ensure consistency between the Contractor information systems and the SEWP database of record. The data relevant to each Contractor's SEWP contract will be

available for access and downloadable by the Contractor on a 24 hours a day, 7 days a week basis. Each time a change is made in the SEWP database relative to a Contractor's offerings, the new data must be updated in the Contractor's order processing and quote generation systems by the Contractor.

The SEWP PMO will be responsible for supporting Points of Contacts (POCs) and customers at NASA field centers and other federal agencies.

The SEWP PMO will monitor and facilitate the processing of SEWP orders. These services include problem determination, escalation and resolution, and other front line support services for SEWP customers, Contractors and POCs.

C.1.2.4. SEWP PMO Automation Services

The SEWP PMO will maintain a Web home page containing pricing, order status, promotional and technical support information and other information deemed relevant to the support of the SEWP contracts. The SEWP home page will be accessible to all SEWP customers, POCs and Contractors. It will include product and manufacturer search capability along with on-line Request for Quote tools that may be used by SEWP customers to request and verify quotes from the Contractor.

The SEWP PMO will implement electronic services to facilitate the paperless processing of SEWP orders, reports, pricing exhibits and other relevant business documents. The implementation will be in accordance with the SEWP e-reporting architecture, as described in Attachment D.

C.1.2.5. PMO Technical Services

The SEWP COR and/or the Technical Specialists, assisted by the SEWP PMO, will research emerging technologies and assess their applicability to the SEWP contracts regarding price, performance, interoperability, standards, and comprehensive functional capabilities. The SEWP PMO will refer customers requesting requirements analysis information and services to assist in determining the optimal use of products offered on the SEWP contracts to the Contractors most appropriate for resolving the customer's needs.

The SEWP home page will maintain links, documents and software relevant to the technical support needs of SEWP customers. A link to the Contractors SEWP Web site will be provided through SEWP's Website.

C.1.3. CONTRACTOR RESPONSIBILITIES

C.1.3.1. TECHNICAL SERVICES

C.1.3.1.1. World Wide Web Services

The Contractor shall maintain a public website for publishing a full complement of contract related resources to the SEWP PMO, SEWP POCs, and SEWP customers. These resources shall include but not be limited to:

1) A soft copy ordering guide (see section C.1.3.3 for ordering guide specifications) suitable for downloading and printing by SEWP customers.

2) Identification of the Contract as part of a multi-award Government-Wide Acquisition Contract (GWAC) with accurate and clearly stated posting of the Fair Opportunity Clause found within the body of the Contract

3) On line program support information including:

    a) How to obtain a quote for hardware, software, or services, including names, telephone numbers and email addresses of appropriate sales representatives.

b) Policy and procedural information regarding installation, basic warranty, extended warranty, technical support, software support, and other post delivery issues. This will include the names, telephone numbers and email addresses of appropriate support staff.

c) How to troubleshoot a problematic order including names, telephone numbers and email addresses of appropriate support staff.

4) Links to related Web resources such as corporate home pages and the SEWP home page

The Contractor shall provide these SEWP-specific Web capabilities within one month of contract award.

The Contractor's SEWP related Web pages shall comply with all applicable Government Access Standards for Electronic and Information Technology including such standards based on Section 508 of the Rehabilitation Act Amendments.

C.1.3.1.2. Systems for Operational Capability Demonstration

If the Government determines a need to verify the technical capabilities or otherwise demonstrate required functionality of mandatory products, the contractor shall provide proof of the indicated functionalities for those products prior to placement of the first delivery order after contract award. The method for providing that proof will be negotiated between the Government and the contractor. Similarly, if the contractor submits a technology refreshment proposal for a mandatory item, the Contractor shall, upon Government request, provide proof of the ability for the updated item to meet or exceed the mandatory requirements..

If the Government determines a need to verify the technical capabilities or otherwise demonstrate required functionality of items to be purchased via credit card or delivery order, the contractor and Government shall negotiate an appropriate methodology including but not limited to an operational capability demonstration (OCD).

C.1.3.1.3. SEWP Technical Support

The contractor shall provide to the SEWP, at no additional expense, a full complement of technical support services including:

1) Timely nondisclosure briefings on emerging technologies relevant to SEWP.

2) Commercially available technical specifications, either on-line or in hard-copy form, for all base system components, with such documents for all products available on the Contractor's SEWP contract available by request.

3) Continuous adherence to any relevant Government, NASA, and Goddard security requirements.

C.1.3.2. PROGRAM OFFICE SUPPORT

The Contractor shall staff a program office that will facilitate communications, electronic reports, order processing and troubleshooting, customer support services, contract modifications, process improvements, technical support services, and any other services deemed necessary to the success of the Contractor's SEWP contract.

The Contractor Program Office will consist of at least a designated Program Manager. The Contractor Program Manager will serve as the main Point of Contact between the Contractor and the SEWP PMO and is responsible for ensuring all contractual and program requirements are fulfilled. The Contractor's Program Manager's full contact information must be provided and maintained on the SEWP Home website and at the SEWP PMO.

The Contractor Program Manger must be dedicated solely to a single Contractor.

Other Contractor staff, such as Deputy Program Manager, sales lead, technical support, contract support, etc. providing support for the SEWP Contract must be identified to the SEWP PMO.

C.1.3.2.1. Communication Services

The Contractor shall have the ability to communicate with the SEWP PMO and Government customers via telephone, facsimile, and e- mail. Communication will include technical, administrative, contract management, and customer support issues.

C.1.3.2.2. Customer Support Services

The Contractor shall provide, free of charge to SEWP customers, the following customer support services:

1) Timely and accurate sales quotes based on current SEWP offerings and prices.
2) Timely dispatch of up-to-date hard and soft copy ordering guides.
3) Commercially available technical specifications, either on-line or in hard-copy form, for any product available on the Contractor's SEWP contract, per a customer's request.
4) Configuration analysis to determine the suitability, correctness and availability of a Contractor's offerings to the customer's requirements.

C.1.3.2.3. Program Manager Meetings

The Contractor shall meet regularly with the SEWP PMO to review the state of the Contractor's SEWP contract, to discuss improvements to technical and administrative processes, and to incorporate customer feedback into the SEWP processes. There will be 2 to 4 mandatory Program Manager Meetings annually inclusive of the SEWP Annual Meeting. Except for the Annual Meeting, the meetings will be held at or near GSFC.

Each Contractor Program Manager will meet annually on a one-on-one basis with a SEWP Contract Holder Relationship Manager

C.1.3.2.4. Sales and Program Training

The SEWP PMO shall provide, free of charge to the contractor, the following training services:

1) Within 6 months of contract award, the contractor will arrange for at least 1 SEWP Contract and Program training session. The training will be provided either at the contractor's facility or a mutually agreed upon site. The training will be free of charge and presented by the SEWP PMO and is a 2-hour session. Through this initial required session and any necessary follow-ons, it is expected that all sales agents and other contractor staff associated with this contract will attend at least one such session.
2) Periodically, throughout the contract period of performance, courses for new employees and/or refresher courses for current employees will be arranged with the SEWP PMO. If major changes or issues arise either directly with the contractor or with the SEWP Program as a whole, follow-up training sessions may be made mandatory at NASA SEWP Program Manager's discretion.

C.1.3.3. ORDERING GUIDES

The Contractor shall publish an electronic ordering guide suitable for downloading and printing by SEWP customers. The guide shall be available prior to placement of the first delivery order after contract award. Updated versions shall be available no later than 10 business days following each contract modification. The ordering guides should contain the following components:

1) Program support information including:
    a) How to obtain a quote for hardware, software, or services, including names, telephone numbers and email addresses of appropriate sales representatives.
    b) Policy and procedural information regarding installation, basic warranty, extended warranty, technical support, software support, and other post delivery issues. This will include the names, telephone numbers and email addresses of appropriate support staff.
    c) How to troubleshoot a problematic order including names, telephone numbers and email addresses of appropriate support staff.
2) Overview information about the Contractor and the SEWP contracts.

C.1.3.4. ELECTRONIC PROCESSES

The Contractor must be able to automatically transmit, receive and process information to and from the SEWP PMO via electronic means as identified in Attachment D. General policies and procedures shall be established and published (Attachment D) by the SEWP PMO to be followed by the Contractor when using electronic methods for transmitting, receiving, and processing business documents. The Contractor must comply with these policies and procedures.

It is the goal of this procurement to utilize the Internet for the exchange of all relevant business documents. It is also desirable to accommodate a broad and diverse customer base. Where a customer is not yet able to transmit electronic documents, it may be necessary for the Contractor to process traditional paper documents. It is not the policy of this procurement to encourage paper orders, merely to accommodate them where electronic ordering is not yet possible.

For order processing, at a minimum, the Contractor shall be able to process the following electronic documents:

1) Delivery Order
2) Order Status Reports
3) Post Order Reports
4) Administrative Handling Fee Reports

For technology refreshment and contract modifications, at a minimum, the Contractor shall be able to process the following electronic documents:

1. Technology Refreshment Requests

C.1.3.5. TECHNOLOGY REFRESHMENT PROPOSALS

The SEWP Technology Refreshment (TR) process is the method by which contractors shall update offerings on their SEWP contracts. TRs shall be initiated by the Contractors, evaluated by a SEWP Technical Specialist or COR to ensure price and scope compliance, if approved added to the SEWP database of record, and then forwarded to the SEWP Contracting Officer for contract modification.

Approved TRs shall be reviewed by the SEWP Technical Specialist or COR on a timely basis. TRs including only price decreases and/or administrative changes will be automatically approved and may be submitted as often as necessary. While there is no limit to TR submittals per contractor, contractors are expected to keep their TR submittals at a reasonable level

All pricing exhibits and pricing information relevant to the TR will be submitted to the SEWP PMO as described in Attachment D.

C.1.3.6. MANUFACTURER / RESELLER REQUIREMENTS

These Contracts require the establishment of Manufacturer / Reseller relationships with as large and as inclusive as possible a set of major manufacturers. This is to provide adequate coverage of the breadth of the requirements for NASA, and fosters a competitive environment for the various types of equipment.

Due to the large dependency on manufacturers for providing the required products in these categories, the contractor must continuously demonstrate the ability to negotiate with the wide range of contractors to obtain the appropriate product based solution services, support, materials, and pricing structure.

C.1.3.7. SUPPLY CHAIN MANAGEMENT

To assist the Government in assessing the security and risks associated with supply chain management, the contractor must supply the following information:

1) Prior to requesting the addition of an item, the contractor must indicate the relationship between the contractor and manufacturer as one of the following:
    a. The contractor is the manufacturer
    b. The contractor is an authorized reseller (i.e. the manufacturer has a direct relationship with the contractor and is officially identified as a reseller for that manufacturer) for all items produced by that manufacturer
    c. The contractor is an authorized reseller (i.e. the manufacturer has a direct relationship with the contractor and is officially identified as a reseller for that manufacturer) for a subset of items produced by that manufacturer. The product lines the contractor is an authorized reseller for must be identified
    d. The contractor obtains the manufacturer's items through either an authorized partner or distributor. The authorized partner/distributor must be identified
    e. The contractor obtains the items through an unknown/unidentified source
2) When submitting an item to be reviewed for addition to their contract, the contractor must provide one of the following
    a. If the contractor is the manufacturer or has previously identified themselves as an authorized reseller, then nothing further is needed at the item level
    b. If the contractor is not the manufacturer and/or has not identified themselves as an authorized reseller, they can either leave the item identified as coming from a third party or unknown source or provide item level information on the provenance or product level authorization that mitigates supply chain risk

When the contractor states that they are an authorized reseller for a manufacturer, they:

1) Must provide a point of contact (POC) at that manufacturer who will verify that statement
2) May identify standards/certifications held by the manufacturer that mitigate, reduce or eliminate supply chain and related security issues. Example standards / certifications include the Open Trusted Technology Provider Standard (O-TTPS) and Common Criteria (CC)

C.1.4. GENERAL CONTRACT REQUIREMENTS

C.1.4.1 SOFTWARE LICENSING

The contractor shall, wherever possible, provide software licensing and/or maintenance arrangements with either site-wide, contract-wide, bulk purchase discounts or credits, or other structures to provide competitive software pricing and availability.

C.1.4.2. MANUALS AND PUBLICATIONS

The contractor shall furnish the most current version of ordered documentation to the end user.

C.1.4.3. COMPLIANCE WITH FIP STANDARDS

All equipment and software acquired under this acquisition must conform to specified applicable Federal Information Processing Standards Publications (FIPS PUBS).

C.1.4.4. CABLING

The contractor shall provide all cables, cable connectors and termination needed for installation and operation of the equipment, as a standalone system unless otherwise stated by the Government.

C.1.5. WARRANTY

At anytime during the standard commercial warranty period, the Government shall have the option of purchasing extended warranty. The Government shall additionally have the option to purchase mission critical warranty uplift to provide greater coverage than provided by the extended warranty where such mission critical warranty is commercially available. This section describes the terms for coverage under basic warranty, extended warranty and, where noted, the enhanced coverage for mission critical warranty uplift.

C.1.5.1. RESPONSIBILITIES OF THE GOVERNMENT

Government personnel will not perform maintenance or attempt repairs to equipment while such equipment is under warranty unless agreed to by the parties via modification to a Delivery Order.

Subject to security regulations, the Government will permit access to the equipment that is to be under warranty.

The Government will provide time for contractor-sponsored modifications within a reasonable time after being notified by the contractor that the modification is ready to be made. The modification will be made outside the normal principal period of service unless another mutually agreeable time is decided upon.

The Government will maintain site requirements in accordance with the equipment environmental specifications furnished by the manufacturer and agreed to at time of award.

C.1.5.2. RESPONSIBILITIES OF THE CONTRACTOR

When on-site warranty service is purchased, the contractor shall provide on-site warranty service, labor and parts. Warranty service does not include electrical work external to the equipment, the furnishing of supplies, and adding or removing accessories, attachments, or other devices. It does not include repair of damage resulting from accident; transportation between Government sites; neglect; misuse; failure of electrical power, air conditioning, humidity control; or causes other than ordinary use.

All products purchased from this contractor must be fully warrantable by the original equipment manufacturer (OEM) unless the contractor has clearly identified on their quote an alternative method (e.g. third party) is available or else that no warranty is available for this product. If the Government requires OEM warranty, it is fully the contractor’s responsibility to work with the OEM to provide that warranty.

While the contractor's personnel are at the Government facility, the contractor is responsible for compliance with all laws, rules and regulations governing conduct with respect to health and safety - not only as they relate (i) to its employees and agents, but (ii) also to other personnel and to property at the site regardless of ownership. While on Government premises and in possession of Government property, the contractor is responsible for such property and any damages thereto.

Should the Government make alterations or install attachments that affect the service of this system, the continuation of warranty service on the system shall be subject to mutual agreement. Should the alterations or attachments increase or decrease the service costs to the contractor, adjustment to service charges shall be made on an individual installation basis. If such alterations or attachments create a safety hazard, the contractor may discontinue warranty service on the hazardous equipment.

Contractor-sponsored alterations or attachments to the system shall be made only with the consent of the Government.

The Contractor shall take full responsibility for providing all diagnostic software programs that are utilized during service of the applicable systems. The Contractor shall maintain the diagnostic routines so that they are compatible with the revision levels of the computer components.

C.1.5.3. COMMERCIAL WARRANTY

The Contractor shall provide the Government with warranty equivalent to their commercial warranty offerings in terms of response time, principal period of service. In lieu of a commercial warranty, at a minimum, warranty shall be offered in one year increments with the following coverage: five days a week (Monday through Friday) and for eight (8) hours a day during business hours, with a next day response time.

C.1.5.4. PREVENTIVE MAINTENANCE

For large computer systems and other products that require periodic preventive maintenance, the contractor shall specify in writing the frequency, duration, and quality of preventive maintenance provided to purchasers of basic and extended warranty. The quality of the preventive maintenance shall be equivalent to that provided by the contractor for leased equipment. Preventive maintenance shall be performed during 8 a.m. to 5 p.m. local time, or outside that time period upon mutual agreement between the contractor and Government. The Government has the right to defer scheduled PM at its own discretion.

C.1.5.5. QUALITY OF REPAIR SERVICE

The following sections describe the quality of repair services.

C.1.5.5.1. Level of Parts Replacement

The level of replacement of worn or defective parts shall be consistent with the original manufacturer's design of the equipment. Field maintenance technicians shall not try to repair faulty modules on-site if the equipment was designed for the replacement of modules. The Contractor has responsibility for repair or replacement of all faulty equipment of the system including cables, cabinets, power supplies, or other items necessary to return the system to operational status.

C.1.5.5.2. Quality of Parts

Only new standard parts or parts equivalent to new parts in performance shall be used in effecting repairs. Parts that have been replaced shall become the property of the Contractor. Any parts that are not new must be identified during the quoting period.

C.1.5.5.3. Field Engineering Changes

The Contractor shall install all required field engineering changes within 30 days (based on reasonable access to the place of performance) after Original Equipment Manufacturer (OEM) availability of the change. Concurrence of the Government shall be required prior to the installation of the field engineering changes and they shall be installed at no additional cost to the Government during the basic or extended warranty period.

C.1.5.5.4. Spare Parts Inventories

The Government does not require that the contractor keep spare parts needed to complete repairs in the local area. If the contractor chooses to keep spare parts locally in order to expedite repairs then title to such spare parts, unless installed in Government owned equipment, shall remain with the Contractor.

C.1.5.5.5. Pre-maintenance Inspection

If extended warranty is purchased for equipment for which basic warranty has previously expired, the Contractor is entitled to perform, at no charge to the Government, within 15 days from the receipt of the

Delivery Order requesting extended warranty, a pre-maintenance inspection in order to certify that at the time the contractor commences extended warranty coverage the equipment meets current OEM specifications. If any equipment is not up to current OEM Revision levels by OEM standards, the Contractor shall submit an estimate, within the 15 day period. The estimate shall detail the price of labor and parts to be performed to bring that equipment up to the OEM maintenance level. The Government may choose to accept the Contractor's estimate or to have the OEM, a third party, or previous contractor, perform the upgrade. If the Government chooses not to have the piece of equipment or a system brought up to OEM maintenance level, the Contractor is not obligated to maintain that piece of equipment or that system.

C.1.5.6. TEMPORARY OFF-SITE REMOVAL OF EQUIPMENT FOR SERVICING

Prior to the removal of any equipment the Contractor shall comply with all local Government property management policies.

C.1.6. USED EQUIPMENT AND MATERIALS

Used and refurbished equipment may be added to the non-mandatory (available component) list.

Equipment and materials must be identified at the time of inclusion in the SEWP database of record and at the quote level as used and/or reconditioned/refurbished and must be warranted with the same terms as new materials and with the warranty length as per current commercial practice of the original equipment manufacturer.

C.1.7. INSTALLATION

The Government may order computer systems, software, components and other equipment with no installation. However, the contractor shall offer installation of all system hardware, system software, and cabling. This does not need to include attachment to a network or configuration of network parameters.

C.1.7.1. Site Preparation

Where required, the Government will provide the Contractor access to sites for the purpose of evaluating environment, power, and safety requirements prior to a scheduled installation date. The Government must authorize all new electrical and LAN installations. If power changes or alterations are required for installation, all such alterations will be performed by the Government. The Contractor should make every effort to place equipment that requires the standard 115-120V capacities for CONUS installations unless otherwise requested by the Government.

C.1.8. REHABILITATION ACT AMENDMENTS OF 1998 – SECTION 508 APPLICABILITY

All items which are identified as EIT in terms of Section 508 (Accessibility) requirements must be noted by the contractor as compliant, non-compliant, or requiring Agency Review based on how the equipment meets or does not meet the applicable standards for that technology.

EIT is information technology (IT), as defined at FAR 2.101, and any equipment or interconnected system or subsystem of equipment, which is used in the creation, conversion, or duplication of data or information. EIT includes:

- telecommunication products, such as telephones;
- information kiosks;
- transaction machines;
- World Wide Web sites;
- Software and Operating Systems
- Computers
- multimedia (including recordable media); and
- office equipment, such as copiers and fax machines.

EIT is defined by the Access Board at 36 CFR 1194.4 and in the FAR at 2.101.

C.1.8.1. Applicable Standards

One or more of the following 508 standards apply to all SEWP EIT line items

- Software Applications and Operating Systems (1194.21)
- Web-based Intranet and Internet Information and Applications(1194.22)
- Telecommunications Products (1194.23)
- Video and Multimedia Products (1194.24)
- Self Contained, Closed Products (1194.25)
- Desktop and Portable Computers (1194.26)
- *Subpart C -- Functional Performance Criteria*
  § 1194.31 Functional performance criteria (If none of the technical standards of Subpart B applies, then Subpart C applies)

The contractor must comply with these technical standards at 36 CFR 1194. The contractor must provide a completed Government Product Assessment Template (GPAT) and/or document how each product was tested for Section 508 conformance. All Section 508 standards will be complied with in performing this contract.

C.1.8.2. Manufacturer's 508 Compliance

Whenever the contractor requests a new manufacturer to be added to the available SEWP manufacturer's list per Section D.3.1. Manufacturer Request, one or more of the following must be provided concerning the applicability, compliance and available information with regard to 508 compliance:

- indicate that the manufacturer has no EIT applicable products; or
- provide a link to the manufacturer's 508 VPAT/GPAT information for applicable EIT equipment; or
- provide a link to other documentation on how each product from the manufacturer was tested for 508 compliance; or
- provide the SEWP PMO with all applicable GPAT's and/or other documentation on how each product from the manufacturer was tested for 508 compliance; or
- indicate that 508 applicable information is available on a per item basis by contacting the contractor

C.2. STATEMENT OF WORK FOR CONTRACTOR SUPPLIED PRODUCTS

While the SEWP contracts are primarily used as a purchase vehicle for the Federal Government, the Government may utilize the contracts as a basis for contractor-supplied products and services that include but are not limited to contractor-supplied Multi-functional devices (MFDs), managed services, cloud services, etc.

An example of this type of arrangement would be a set of multi-functional printers located at Goddard Space Flight Center which will remain the Contractor's property, but fully accessible by Goddard employees.

Note that the requirements in this section are only in effect if specifically stated at the delivery order level. Additional terms and conditions may be added by the Government on a given delivery order.

C.2.1. Supplies for On-Site Contractor-supplied Products

The Contractor shall supply all consumable supplies required for full operations of the supplied products. For example this would include toner, paper and all other printer related consumables for an MFP solution.

C.2.2. Payment for Contractor-supplied Products

Unless otherwise stated at the delivery order level, payment will be based on a firm fixed unit price (e.g. cost per number of copies for an MFP) that is metered, invoiced and paid on a monthly basis.

Attachment D Contractor / Government Communication Requirements

One of the Acquisition Objectives of SEWP is to promote and utilize electronic based methods and practices. While commonly placed under the e-Commerce umbrella, SEWP recognizes the need to provide for a variety of electronic-based procedures some of which do not traditionally fall within the e-Commerce realm; e.g. Fax image files, e-mail text files, etc. There are also many legacy systems and unplanned occurrences which require a flexible system capable of handling both electronic and paper processes. Neither Industry nor Government has concurred on a single solution that is capable of covering all Industry and Government needs. It is, therefore, the Government's intention to work with Contractors and Government Agencies to accept and deliver information such as orders, status reports, contract refreshments, etc. in mutually agreed upon formats. This addenda, therefore, provides only a basic outline of the types of electronic reports, including required data, which must be accepted and/or provided by the Contractor to the SEWP PMO. Actual implementations of the reports will be finalized and tested prior to placement of the first delivery order after the signing of the Contract. Where encryption is indicated, the Contractor and SEWP PMO will mutually agree upon the methodology.

D.1. On-Line Quoting

When a Market Research Request (MRR) or Request for Quote (RFQ) is issued using the NASA SEWP on-line Quote Request system, the Contractor must respond either

- by sending the following files to the SEWP PMO via the Contract Holder Only Page (CHOP) website:

1) the Contractor-generated quote in an image file, MS Word or Excel document or a mutually agreed upon format.

2) a verification file listing the CLINs included in the quote either as a text file, MS Word or Excel document or a mutually agreed upon format.

- Or by sending a “No Bid” response.

The SEWP PMO will ensure all responses are immediately forwarded to the original MRR/RFQ requestor. Note that the contractor may not send a quote directly to the requestor when the NASA on-line Quote Request tool has been utilized. All quotes must be routed through the SEWP PMO.

D.2. Ordering

As described below, all SEWP orders must be assigned a SEWP Order tracking number in order to be considered a valid order. All Delivery Orders regardless of order value and credit card orders over the micro-purchase limit must be sent, processed, and assigned an Order tracking number prior to being processed by the contractor. If the SEWP COR has authorized the contractor to accept micro purchase credit card orders directly, then credit card orders under the micro purchase limit may be processed immediately upon receipt by the Contractor as described in Section D.2.2. Credit Card Order Processing.

D.2.1. Delivery Order Processing

The following methods / paths will be available to Government entities for transferring Delivery Orders to the SEWP PMO:

1) Fax
2) E-mail Attachment in one of the following formats
    a) Plain text
    b) PDF
    c) HTML
    d) JPEG
    e) TIFF
    g) Gif
    h) Microsoft Excel
    i) Microsoft Word
    j) Other mutually agreed upon format
3) Paper copy sent via US Mail or private courier
4) Other Electronic format mutually agreed upon by the Government entity and the SEWP PMO

Regardless of the method and format which the Delivery Order is sent to the SEWP PMO, all Delivery Orders will be transferred to the contractor as an attachment to an e-mail. The attachment will be in one of the following formats:

1) Plain text
2) PDF
3) HTML
4) JPEG
5) TIFF
6) Gif
7) Microsoft Excel
8) Microsoft Word
9) Other mutually agreed upon format

The SEWP contractor must demonstrate their ability to accept at least the formats listed above prior to the issuance of the first Delivery Order against their contract.

D.2.1.1. Delivery Order Information

Regardless of the path used by the Government entity to create a SEWP delivery order and the method by which the Contractor accepts the order, the following information must be present in each delivery order:

1. Date of order
2. Signature (direct, electronic, or implied through pre-approved method) of authorized Government Ordering Official;
    a. Contracting Officer for Purchase/Delivery Order
    b. Credit Card Holder Name for credit card orders
3. Name and phone number of authorized Government Ordering Official
4. Name of Issuing Agency
5. Name of Ordering Agency (if different from Issuing Agency)
6. Order Number
    a. Unique order number for the Ordering Government entity - Ordering Agency determines the Order Number
7. Contractor Name and SEWP Contract Number
8. Appropriation and accounting data
9. Billing and Invoice Address
10. Shipping Address
11. SEWP CLINs (Contract Line Item Numbers) and product descriptions to be delivered
12. Total order amount
13. Additional mutually agreed upon Terms and Conditions, Statement of Work, etc.
14. Period of performance for any associated services

Additionally, after an order is processed at the SEWP PMO, either electronically or manually, a unique tracking number, referred to as the SEWP Tracking Number (STN), will be assigned by the SEWP PMO.

D.2.2. Credit Card Orders

Contractors may be authorized to directly accept credit card orders over the telephone and/or through a Website or other electronic means from a Government entity without first passing the order through the SEWP PMO based on the following requirements:

1) For orders under the micro-purchase limit, the requirements are:
    a. within one business week of receipt of the order, the contractor must send to the SEWP PMO either by fax or e-mail a credit card order report in a mutually agreed upon format containing at least the following information:
        i. Date of order
        ii. Name and phone number of card holder
        iii. Agency name and site address including zip code of card holder
        iv. Unique tracking number
        v. Contractor name and SEWP contract number
        vi. SEWP CLINs (Contract Line Item numbers) and/or manufacturer part numbers of items on the order
        vii. CLIN Descriptions
        viii. Total dollar amount of order
    b. Upon receipt of a credit card order report, the SEWP PMO will review and process the order and assign an STN tracking number and report the information to the Contractor

2) For orders over the micro-purchase limit, the requirements are:
    a. prior to processing the order, within one business day of receipt of the order, the contractor must send to the SEWP PMO either by fax or e-mail a credit card order form in a mutually agreed upon format containing at least the following information:
        i. Date of order
        ii. Name and phone number of card holder
        iii. Agency name and site address including zip code of card holder
        iv. Unique tracking number
        v. Contractor name and SEWP contract number
        vi. SEWP CLINs (Contract Line Item numbers) and/or manufacturer part numbers of items on the order
        vii. CLIN Descriptions
        viii. CLIN prices and quantity
        ix. Total dollar amount of order
        x. Additional Terms and Conditions associated with the order
    b. Upon receipt of a credit card order form, the SEWP PMO will review and process the order and assign an STN tracking number and report the information to the Contractor
    c. After the Contractor receives the assigned STN tracking number, the Contractor may process the order

3) the contractor must demonstrate to the SEWP COR the process used to ensure that all credit card orders accepted directly by the contractor will be reported to the SEWP PMO per the above requirements

Note that Delivery Orders paid with a Government credit card are considered to be Delivery Orders and not credit card orders and, must, therefore be sent to the SEWP PMO per Section D.2.1. Delivery Order Processing

D.3. CLIN Verification Reports

Prior to the assignment of an STN and therefore prior to the contractor processing an order, Contractors are required to supply to the SEWP PMO a CLIN Verification file that matches the product and price information on the order and/or mod. The following information is required in the verification file:

a. Unique identifier (if the verification file is associated with a quote provided in the SEWP Quote Request Tool, this will be the SEWP RFQ Number)

b. For each item ordered: CLIN; quantity; unit price

The total of the items listed in the verification file must equal the total amount of the order.

For order mods/updates, a new verification file must be provided that includes all information associated with the original order and all subsequent mods to date.

To avoid delays, contractors can submit verification files at the time of a quote, even if the quote is provided outside the SEWP on-line Quote Request Tool.

If a contractor has not provided a verification file or the total in the verification file does not equal the order amount, the order will not be assigned an STN and cannot be processed until a verification file that matches the order is provided. Any resultant delay will count against the contractor's delivery performance if the reason for the delay is caused by the contractor.

D.4. Technology Refreshment Requests

The manufacturer request and technology refreshment (TR) reports may be utilized by the contractor to request addition of new technology and either price and/or informational changes to existing technology.

D.4.1 Manufacturer Request

Prior to requesting the addition of a technology to a contract, the original manufacturer of that technology must first be authorized by the SEWP COR or his/her Technical Specialist.

1) if the manufacturer is not on the currently approved SEWP manufacturer list, the contractor must request approval of the manufacturer using the SEWP provided Manufacturer Request tool available at the SEWP Contractor-only website. At a minimum, the manufacturer request will include:
    a. Manufacturer name
    b. Manufacturer description
    c. Manufacturer business size
    d. URL of Manufacturer's website (if it exists)
    e. Product category(ies); e.g. Servers; Input Devices; etc.
    f. Flag indicating if contractor is an authorized reseller. If the contractor is an authorized reseller, the following Manufacturer contact information will also need to be included:
        i. Contact name
        ii. Contact phone number
        iii. Contact e-mail address
    g. If the manufacturer has any EIT products, one or more of the following must be flagged:
        i. indicate that the manufacturer has no EIT applicable products; or
        ii. provide a link to the manufacturer's 508 VPAT information for applicable EIT equipment; or
        iii. provide a link to other documentation on how each product from the manufacturer was tested for 508 compliance; or
        iv. provide the SEWP Program Office with all applicable VPAT's and/or other documentation on how each product from the manufacturer was tested for 508 compliance; or
        v. indicate that 508 applicable information is available on a per item basis by contacting the contractor
    h. the following information may be included:
        i. Alias for the manufacturer name
2) if the manufacturer is on the currently approved SEWP manufacturer list, then the contractor may provide the following information:
    a. Flag indicating if contractor is an authorized reseller. If the contractor is an authorized reseller, the following Manufacturer contact information will also need to be included:
        i. Contact name
        ii. Contact phone number

iii. Contact e-mail address

b. Optionally, the following information may be included:

i. URL for 508-related information for this manufacturer's products

ii. Alias for the manufacturer name

Upon receipt of a manufacturer request, the SEWP COR or his/her designated Technical Specialist will review the submitted information for accuracy and to ensure the company is the originator of technology within the contract's scope.

D.4.2. Technology Refreshment Request

In order to provide technology refreshments to the Contract, the Contractor must be able to provide a technology refreshment report. The technology refreshment report will be provided via:

1) An email with the technology refreshment request in textual format. The text must follow a keyword - value format with predefined keywords. The keywords and values must be separated by an agreed upon delimiter;

2) Other mutually agreed upon electronic format

All TR requests shall include the information defined in A.1.19. TECHNOLOGY REFRESHMENT

Upon receipt of a valid TR, the SEWP COR or his/her Technical Specialist will review the TR for scope and verify pricing information. At that time, either the TR may be accepted in its entirety, rejected in its entirety, or accepted with some CLINs disallowed. A detailed report indicating the outcome of each TR will be forwarded to the contractor.

D.5. Order Status Report

Contractors are required to supply to the SEWP PMO an order status report within two business days of a status change to an order. Status changes include, at least, the following changes:

a. Update to expected delivery date

b. Ship date

The order status report must contain at least the following information in a format mutually agreed upon by the Contractor and the SEWP PMO:

a. Date of order

b. Issuing Agency Order Number or unique credit card tracking number and/or SEWP Tracking Number (STN)

c. Status

d. Status date

The order status report may be provided either via:

a. an email with the order status report in textual format. The text must follow a keyword - value format with predefined keywords. The keywords and values must be separated by an agreed upon delimiter;

b. Other mutually agreed upon electronic format

D.6. Administrative Handling Fee Report

Contractors are required to supply to the SEWP PMO an Administrative Handling Fee report when submitting their Quarterly Administrative Handling Fee check. The report must be in electronic format mutually agreed upon by the Contractor and the SEWP PMO and contain at least the following information for all orders for which an Administrative Handling Fee was paid in the associated check:

a. Issuing Agency Order Number or unique credit card tracking number and/or SEWP Tracking Number (STN)

b. Total dollar amount of Agency's Invoice

c. Administrative Handling Fee amount paid

If the Administrative Handling Fee payment for a delivery order is spread over several payments, the Administrative Handling Fee report shall either collapse the payment information into a single entry, or provide a mechanism to identify each of the payments as partial.

D.7. Order modifications

Order modification requests are handled the same as the original Delivery Order as described in Section D.2. Ordering and Section D.3. CLIN Verification Reports.

III. INSTRUCTIONS TO OFFERORS—COMMERCIAL ITEMS (52.212-1) (JUL 2013)

(a) *North American Industry Classification System (NAICS) code and small business size standard*. The NAICS code and small business size standard for this acquisition appear in Block 10 of the solicitation cover sheet (SF 1449). However, the small business size standard for a concern which submits an offer in its own name, but which proposes to furnish an item which it did not itself manufacture, is 500 employees.

(b) *Submission of offers*. Submit signed and dated offers to the office specified in this solicitation at or before the exact time specified in this solicitation. Offers may be submitted on the SF 1449, letterhead stationery, or as otherwise specified in the solicitation. As a minimum, offers must show—

(1) The solicitation number;

(2) The time specified in the solicitation for receipt of offers;

(3) The name, address, and telephone number of the offeror;

(4) A technical description of the items being offered in sufficient detail to evaluate compliance with the requirements in the solicitation. This may include product literature, or other documents, if necessary;

(5) Terms of any express warranty;

(6) Price and any discount terms;

(7) "Remit to" address, if different than mailing address;

(8) A completed copy of the representations and certifications at FAR 52.212-3 (see FAR 52.212-3(b) for those representations and certifications that the offeror shall complete electronically);

(9) Acknowledgment of Solicitation Amendments;

(10) Past performance information, when included as an evaluation factor, to include recent and relevant contracts for the same or similar items and other references (including contract numbers, points of contact with telephone numbers and other relevant information); and

(11) If the offer is not submitted on the SF 1449, include a statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation. Offers that fail to furnish required representations or information, or reject the terms and conditions of the solicitation may be excluded from consideration.

(c) *Period for acceptance of offers*. The offeror agrees to hold the prices in its offer firm for 30 calendar days from the date specified for receipt of offers, unless another time period is specified in an addendum to the solicitation.

(d) *Product samples*. When required by the solicitation, product samples shall be submitted at or prior to the time specified for receipt of offers. Unless otherwise specified in this solicitation, these samples shall be submitted at no expense to the Government, and returned at the sender's request and expense, unless they are destroyed during preaward testing.

(e) *Multiple offers*. Offerors are encouraged to submit multiple offers presenting alternative terms and conditions or commercial items for satisfying the requirements of this solicitation. Each offer submitted will be evaluated separately.

(f) Late submissions, modifications, revisions, and withdrawals of offers.

(1) Offerors are responsible for submitting offers, and any modifications, revisions, or withdrawals, so as to reach the Government office designated in the solicitation by the time specified in the solicitation. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office on the date that offers or revisions are due.

(2)(i) Any offer, modification, revision, or withdrawal of an offer received at the Government office designated in the solicitation after the exact time specified for receipt of offers is "late" and will not be considered unless it is received before award is made, the Contracting Officer determines that accepting the late offer would not unduly delay the acquisition; and—

(A) If it was transmitted through an electronic commerce method authorized by the solicitation, it was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of offers; or

(B) There is acceptable evidence to establish that it was received at the Government installation designated for receipt of offers and was under the Government's control prior to the time set for receipt of offers; or

(C) If this solicitation is a request for proposals, it was the only proposal received.

(ii) However, a late modification of an otherwise successful offer, that makes its terms more favorable to the Government, will be considered at any time it is received and may be accepted.

(3) Acceptable evidence to establish the time of receipt at the Government installation includes the time/date stamp of that installation on the offer wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

(4) If an emergency or unanticipated event interrupts normal Government processes so that offers cannot be received at the Government office designated for receipt of offers by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation or other notice of an extension of the closing date, the time specified for receipt of offers will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume.

(5) Offers may be withdrawn by written notice received at any time before the exact time set for receipt of offers. Oral offers in response to oral solicitations may be withdrawn orally. If the solicitation authorizes facsimile offers, offers may be withdrawn via facsimile received at any time before the exact time set for receipt of offers, subject to the conditions specified in the solicitation concerning facsimile offers. An offer may be withdrawn in person by an offeror or its authorized representative if, before the exact time set for receipt of offers, the identity of the person requesting withdrawal is established and the person signs a receipt for the offer.

(g) *Contract award (not applicable to Invitation for Bids*). The Government intends to evaluate offers and award a contract without discussions with offerors. Therefore, the offeror's initial offer should contain the offeror's best terms from a price and technical standpoint. However, the Government reserves the right to conduct discussions if later determined by the Contracting Officer to be necessary. The Government may reject any or all offers if such action is in the public interest; accept other than the lowest offer; and waive informalities and minor irregularities in offers received.

(h) *Multiple awards*. The Government may accept any item or group of items of an offer, unless the offeror qualifies the offer by specific limitations. Unless otherwise provided in the Schedule, offers may not be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit prices offered, unless the offeror specifies otherwise in the offer.

(i) Availability of requirements documents cited in the solicitation.

(1)(i) The GSA Index of Federal Specifications, Standards and Commercial Item Descriptions, FPMR Part 101-29, and copies of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained for a fee by submitting a request to—

GSA Federal Supply Service Specifications Section
Suite 8100
470 East L'Enfant Plaza, SW
Washington, DC 20407

Telephone (202) 619-8925
Facsimile (202) 619-8978.

(ii) If the General Services Administration, Department of Agriculture, or Department of Veterans Affairs issued this solicitation, a single copy of specifications, standards, and commercial item descriptions cited in this solicitation may be obtained free of charge by submitting a request to the addressee in paragraph (i)(1)(i) of this provision. Additional copies will be issued for a fee.

(2) Most unclassified Defense specifications and standards may be downloaded from the following ASSIST websites:

(i) ASSIST (http://assist.daps.dla.mil).

(ii) Quick Search (http://assist.daps.dla.mil/quicksearch).

(iii) ASSISTdocs.com (http://assistdocs.com).

(3) Documents not available from ASSIST may be ordered from the Department of Defense Single Stock Point (DoDSSP) by—

(i) Using the ASSIST Shopping Wizard (http://assist.daps.dla.mil/wizard);

(ii) Phoning the DoDSSP Customer Service Desk (215) 697-2179, Mon-Fri, 0730 to 1600 EST; or

(iii) Ordering from DoDSSP, Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2667/2179, Facsimile (215) 697-1462.

(4) Nongovernment (voluntary) standards must be obtained from the organization responsible for their preparation, publication, or maintenance.

(j) *Data Universal Numbering System (DUNS) Number*. (Applies to all offers exceeding $3,000, and offers of $3,000 or less if the solicitation requires the Contractor to be registered in the System for Award Management

(SAM) database.) The offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation "DUNS" or "DUNS+4" followed by the DUNS or DUNS+4 number that identifies the offeror's name and address. The DUNS+4 is the DUNS number plus a 4-character suffix that may be assigned at the discretion of the offeror to establish additional SAM records for identifying alternative Electronic Funds Transfer (EFT) accounts (see FAR Subpart 32.11) for the same concern. If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. An offeror within the United States may contact Dun and Bradstreet by calling 1-866-705-5711 or via the internet at http://fedgov.dnb.com/webform. An offeror located outside the United States must contact the local Dun and Bradstreet office for a DUNS number. The offeror should indicate that it is an offeror for a Government contract when contacting the local Dun and Bradstreet office.

(k) *System for Award Management*. Unless exempted by an addendum to this solicitation, by submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the SAM database prior to award, during performance and through final payment of any contract resulting from this solicitation. If the Offeror does not become registered in the SAM database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror. Offerors may obtain information on registration and annual confirmation requirements via the SAM database accessed through https://www.acquisition.gov.

(l) *Debriefing*. If a post-award debriefing is given to requesting offerors, the Government shall disclose the following information, if applicable:

(1) The agency's evaluation of the significant weak or deficient factors in the debriefed offeror's offer.

(2) The overall evaluated cost or price and technical rating of the successful and the debriefed offeror and past performance information on the debriefed offeror.

(3) The overall ranking of all offerors, when any ranking was developed by the agency during source selection.

(4) A summary of the rationale for award;

(5) For acquisitions of commercial items, the make and model of the item to be delivered by the successful offeror.

(6) Reasonable responses to relevant questions posed by the debriefed offeror as to whether source-selection procedures set forth in the solicitation, applicable regulations, and other applicable authorities were followed by the agency.

(End of provision)

A.3.1. COMMUNICATIONS REGARDING THIS SOLICITATION (GSFC 52.215-96) (AUG 2000)

Any questions or comments regarding this solicitation shall cite the solicitation number and be directed to the following Government representative:

Name: LaShawn Davis
E-mail: sewp5@sewp.nasa.gov
Phone: 301-614-7100 –(Collect calls not accepted)
FAX: 301-614-7134

*Address: NASA/Goddard Space Flight Center
8800 Greenbelt Road
Mail Stop: 210
Attention: LaShawn Davis
Greenbelt, MD 20771

The Government will answer relevant and appropriate questions regarding this solicitation. Any offeror questions should be submitted as soon as possible.

(End of provision)

A.3.2. OFFER ACCEPTANCE PERIOD

The offeror's proposal shall remain valid for a period of not less than **180 calendar days**.

(End of text)

A.3.3. TYPE OF CONTRACT (52.216-1) (APR 1984)

The Government contemplates awarding multiple firm-fixed price (FFP), indefinite delivery/indefinite quantity (IDIQ) contracts resulting from this solicitation.

(End of provision)

A.3.4 SERVICE OF PROTEST (52.233-2) (SEP 2006)

(a) Protests, as defined in section 31.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from:

Dock Master
Goddard Space Flight Center
Greenbelt, MD 20771
Building 35—Shipping and Receiving Dock

Prominently mark the envelope or package as follows:

Protest: Solicitation Number (NNG13451284R)
Attn: LaShawn Davis
Contracting Officer Phone No. 301-614-7100
Fax No. 301-614-7134

Note: The Building 35 Shipping and Receiving dock is open from 7:30AM to 3:30PM, Monday through Friday, except Government holidays. Contractor personnel conduct the GSFC receiving function, which includes mailroom operations. Protests will be marked with the date and time of receipt, subjected to security screening, secured, and delivered unopened to the Contracting Officer.

There is public access to the Building 35 Shipping and Receiving Dock. GSFC passes, badges, escorts, etc. are not required for access to the receiving dock.

c) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

(End of provision)

A.3.5. PROPOSALS REQUESTED

Only one proposal for each group per offeror will be accepted. Should a particular offeror wish to propose on more than one group, that offeror shall submit a complete and separate proposal for each group. The proposal shall be based on the effort described or estimated in the proposed contract schedule.

(End of text)

A.3.6. PROPOSAL PREPARATION—GENERAL INSTRUCTIONS

It is NASA's intent, by providing the instructions set forth below, to solicit information that will demonstrate the offeror's competence to successfully complete the requirements specified in the Statement of Work (SOW), Attachment C. Generally, the proposal should:

- Demonstrate understanding of the overall and specific requirements of the proposed contract.
- Convey the company's capabilities for transforming understanding into accomplishment.
- Present in detail, the plans and methods for so doing.
- Present the costs associated with so doing.

In the event that other organizations are proposed as being involved in conducting this work, their relationships during the effort shall be explained and their proposed contributions shall be identified and integrated into each part of the proposal, as appropriate.

(a) PROPOSAL FORMAT AND ORGANZATION

(1) Offerors shall submit proposals in four volumes as specified below:

Volume	**Title**	**Copies**
I	Offer Volume	Original plus four Hard Copies and two electronic copies
II	Management/Technical Approach Volume	Original plus four Hard Copies and two electronic copies.
III	Price Volume	Two electronic copies
IV	Past Performance Volume	Original plus four Hard Copies and two electronic copies

(2) All pages of Volumes I, II, III, and IV shall be numbered and identified with the offeror's name, RFP number and date. Subsequent revisions, if requested, shall be similarly identified to show revision number and date. A table of contents shall be provided with figures and tables listed separately.

(3) Two electronic copies of the offeror's proposal, designating one as "back-up," shall be submitted (in addition to the hardcopies specified above). All volumes shall be prepared using either Microsoft Word (with backwards compatibility for Microsoft Word 2007) or a searchable Portable Document Format (PDF) compatible with Adobe Reader 9. Cost proposal charts shall use Microsoft Excel (with backwards compatibility for Microsoft Excel 2007). Formulas, not values should be used in Excel spreadsheets, unless otherwise directed in the cost model instructions, where amounts are calculated in electronic versions. DO NOT compress any electronic files. DO NOT password protect any portion of your electronic submission.

Electronic files of Volumes I, II, III, and IV shall be on virus free CD-ROM (CD-R format) discs with an external label indicating: (1) the name of the offeror, (2) the RFP number, (3) the format and software versions used, (4) a list of the files contained on the disk and (5) date of the information**.** In the event of any inconsistency between data provided on electronic media and hard copies, the hard copy data will be considered to be correct.

(4) The format for each proposal volume shall parallel, to the greatest extent possible, the format of the evaluation factors and subfactors contained in Section III of this solicitation. The proposal content shall

provide a basis for evaluation against the requirements of this solicitation, which will be evaluated in accordance with Section IV. The proposal content shall provide a basis for evaluation against the requirements of the solicitation. Each volume of the proposal shall specify the relevant evaluation criteria being addressed, if appropriate.

(5) Information shall be precise, factual, detailed and complete. Offerors shall not assume that the evaluation team is aware of company abilities, capabilities, plans, facilities, organization or any other pertinent fact that is important to accomplishment of the work as specified in the SOW. The evaluation will be based primarily on the information presented in the written proposal. The proposal shall specifically address each listed evaluation factor and subfactor.

(b) PROPOSAL CONTENT AND PAGE LIMITATIONS

(1) The following table contains the page limitations for each portion of the proposal submitted in response to this solicitation. Additional instructions for each component of the proposal are located in the contract provision noted under the Reference heading.

Proposal Component	**Volume**	**Page Limitations**
Offer Volume	**I**	**None**
Management/Technical Approach Volume	**II**	**90 Pages**
(a) Cover Page, Indices,		Excluded
(b) Deviations and Exceptions		Excluded
(c) Tab 1 and Tab 3		Excluded
Price Volume	**III**	**None**
(a) Price Exhibits		Excluded
(b) Deviations and Exceptions		Excluded
Past Performance Volume	**IV**	
(a) Information from the Offeror		**10 Pages**
(b) Cover Page, Indices, Customer Evaluations, and Termination/Descope information		Excluded
(c) Deviations and Exceptions		Excluded

(2)A page is defined as one side of a sheet, 8-1/2" x 11", with at least one inch margins on all sides, using not smaller than 12 point type Times New Roman font. Line spacing or the amount of vertical space between lines of text shall not be less than single line (Microsoft Word's default line spacing). Character spacing shall be "Normal", not "Expanded" or "Condensed." The margins may contain headers and footers, but shall not contain any proposal content to be evaluated. Foldouts count as an equivalent number of 8-1/2" x 11" pages. The metric standard format most closely approximating the described standard 8-1/2" x 11" size may also be used.

Volumes I, II, and IV shall be submitted in separate ringed (or similarly bound) binders. Diagrams, tables, artwork, and photographs may be reduced and, if necessary, run landscape or folded to eliminate oversize pages. Text in Diagrams, schedules, charts, tables, artwork, and photographs shall be no smaller than 10 point. Diagrams, tables, artwork, and photographs shall not be used to circumvent the text size limitations of the proposal.

(3) Title pages, tabs, and tables of contents are excluded from the page counts specified in paragraph (1) of this provision (as well as other documents specified in table (b) (1) above). In addition, the Price volume of your proposal is not page limited. However, this volume is to be strictly limited to price information. Information that can be construed as belonging in one of the other volumes of the proposal will be so construed and counted against that volume's page limitation.

(4) The Government intends to evaluate proposals and award contract(s) without discussions with offerors (except clarifications as described in FAR 15.306(a)). Therefore, the offeror's initial proposal should contain the offeror's

best terms from a price and technical standpoint. The Government reserves the right to conduct discussions if the Contracting Officer later determines them to be necessary. If discussions are held and final proposal revisions are requested, the Government will specify separate page limitations in its request for that submission.

(5) Pages submitted in excess of the limitations specified in this provision will not be evaluated by the Government and will be returned to the offeror in accordance with NFS 1815.204-70(b).

(End of provision)

A.3.7. PROPOSAL VOLUMES

1. Proposal volumes I, II and IV are to be submitted in a hard copy format. In addition to the hard copy format, a CD ROM is required for the Offer Volume, Management/Technical Approach Volume, Price Volume and the Past Performance Volume. The offeror's proposal shall consist of the following physically separate volumes:
Volume I - Offer Volume (as described in Sections A.3.8. and A.3.9.)
Volume II - Management/Technical Approach Volume (Tabs 1 through 8)
Volume III - Price Volume
Volume IV - Past Performance Volume

2. Management/Technical Approach Tab Description

Executive Summary
TAB 1 - Minimum Mandatory Specifications/ 508 Documentation
TAB 2 - Proposed Systems
TAB 3 - Available Components
TAB 4 - Exceeding the Minimum / Desirable Features
TAB 5 - Other Features
TAB 6 - **Commitment to Supply Chain Management and Supply Diversity**
TAB 7 - Post Award Support and Service
TAB 8 - Management Plan

Please Note: 508 Documentation may be provided electronically, on CD ROM.

(End of text)

A.3.8. INSTRUCTIONS FOR OFFER VOLUME INCLUDING EXECUTED STANDARD FORM 1449, AND REPRESENTATIONS AND CERTIFICATIONS

SF 1449 – The offeror shall appropriately complete Blocks 12, 17, and 30 and return the completed SF 1449, signed by a duly authorized individual.

Offeror Representations and Certifications – the offeror shall appropriately complete and return.
Offeror Representations and Certifications—Commercial Items (52-212-3).State any deviations/exceptions taken to the required Offeror Representations and Certifications and include the reason for the deviation/exception.

The offeror shall sign four original SF 1449s and return with your offer. The offeror shall sign one original SF30 of all amendments issued. Parts I and II become the Model Contract after award.

Commercial Small Business Subcontracting Plan – In accordance with FAR 52.219-9 Small Business Subcontracting Plan—Alternate II, contained in this solicitation, all offerors, that are not small businesses, must submit a Small Business Subcontracting Commercial Plan. Failure to submit a Small Business Subcontracting Plan shall make the offeror ineligible for award of a contract.

Contact Information: All Offeror's shall provide the names, email addresses, and phone numbers of persons to be contacted for clarification of questions of a technical and business nature.

Information concerning Responsibility: All Offeror's shall provide information addressing all of the elements under FAR 9.104 to demonstrate responsibility.

The offeror shall submit the list of Acronyms, which applies to the entire proposal submission.

NOTE: The Government does not intend to accept proposals with alternate terms and conditions.

(End of text)

A.3.9. SUMMARY OF EXCEPTIONS

Include a statement of acceptance of the anticipated contract provisions and proposed contract schedule, or list all specific exceptions to the terms, conditions, and requirements of Addenda I and II of this solicitation, to the Representations and Certifications (Addendum V) or to the information requested in Addendum III. Include the reason for the exception, or refer to where the reason is addressed in the proposal. This list must include all exceptions, both "business" and "technical".

Include any new terms, conditions, or clauses proposed by the offeror which are of benefit to the Government. Discuss the benefit to the Government in Volume I, II, III, or IV as appropriate.

Offerors are cautioned that exceptions may result in a determination of proposal unacceptability (NFS 1815.305-70), may preclude award to an offeror if award is made without discussions, or may otherwise affect an offeror's competitive standing.

(End of text)

A.3.10. GENERAL MANAGEMENT/TECHNICAL APPROACH PROPOSAL INSTRUCTIONS

This section describes the overall guidelines and specifications for preparing the Management/Technical Approach volume.

A.3.10.1. General Guidelines in Preparing the Management/Technical Approach Proposal

The Management/Technical Approach Proposal must specifically state for which group the offeror is proposing.

The Management/Technical Approach Proposal shall be completely separate and apart from the Offer Proposal, Past Performance Proposal and the Price Proposal. All information submitted in the Management/Technical Approach Proposal shall be current as of the month of submission of the proposal and shall be specific, complete, and meet the minimum requirements of this RFP.

A.3.10.2. Structure and Content of the Management/Technical Approach Proposal

The offeror shall structure the Management/Technical Approach Proposal with multiple sections. Each section shall be sequentially tabbed with the title indicated on the tab. The titles shall correspond to the tabs listed in paragraph 2 of A.3.7. and provide the information requested below.

In addition, the offeror shall provide the Management/Technical Approach Proposal in both a hard copy and machine readable Windows format on a CD ROM. The Government will use a PC with Microsoft Windows 7 Operating System, and Office 2007 (Word/Excel).
Two copies of the CD(s) shall be submitted with one copy identified as the backup. In the case of any inconsistency between the hardcopy and CD format, the hardcopy version will prevail.

A.3.10.3. Clarity and Completeness

The proposal shall clearly and fully demonstrate the offeror's capability, knowledge, and experience in regard to the technical requirements of this RFP. The offeror shall fill in appropriate Technical Exhibits, entering only Yes/No or, where requested, succinctly describing how it meets the requirement.

If any reference to documentation is made by the offeror such documentation shall be cited at the page, section, and paragraph level. The cited offeror documentation shall be included in the proposal and counts against the page count as defined in A.3.6. Offerors are required to follow the instructions regarding the organization and content of the proposals.

A.3.10.4. Summary of Deviations\Exceptions (Management/Technical Approach Proposal)

Identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to these Management/Technical Approach proposal instructions or to any of the technical requirements of this solicitation, such as the Statement of Work and related specifications. Offerors are cautioned that exceptions may result in a determination of proposal unacceptability (NFS 1815.305-70), may preclude award to an offeror if award is made without discussions, or may otherwise affect an offeror’s competitive standing.

(End of text)

A.3.11. COMPLIANCE WITH MINIMUM MANDATORY SPECIFICATIONS (Tab 1)

The following sections provide instructions on how to prepare the minimum mandatory aspects of the offeror's proposal. The Minimum Mandatory Specifications (Tab 1) are minimum requirements. Proposals will not be evaluated further and/or considered for award if they do not meet the minimum mandatory specifications.

A.3.11.1. Instructions for TAB 1

The offeror shall fill in every row in the appropriate group-specific Minimum Mandatory Specification Matrix Exhibit (Exhibits MMA through MMD) and submit it under TAB 1 in the Management/Technical Approach proposal.
This exhibit as completed by the offeror shall not count in the page total.
The extent to which the proposal exceeds the minimum mandatory specifications or provides desirable features shall not be discussed in this section. How a proposal exceeds the minimum and provides desirable features should be identified in later sections.

TAB 1 shall also contain any Section 508 Voluntary Product Accessibility Templates or other supporting documentation as to how the proposed mandatory items meet applicable 508 standards.

Information contained in TAB 1 will be used solely to determine if the proposed mandatory items meet all mandatory requirements. Information contained in TAB 1 will not be reviewed during the proposal evaluation.

(End of text)

A.3.12. MANAGEMENT/TECHNICAL APPROACH PROPOSAL SUBFACTORS (Tab's 2-8)

The Management/Technical Approach proposal shall address Management/Technical Approach subfactors. There are three Management/Technical Approach subfactors as follows:

Excellence of Proposed Systems (Subfactor A)

Offeror's Support and Commitment (Subfactor B)

Management Plan (Subfactor C)

Offerors shall address risk probability, impact, severity, timeframe, and alternatives available to reduce risks, and offeror’s proposed solutions and approach to managing these risks. This information shall be provided for each of the three subfactors, as applicable under Management/Technical Approach.

The headers/paragraph titles used below within any subfactor should not be construed as any indication of priority, weight or emphasis, or as any establishment of evaluation sub- elements or criteria. The headers are provided for clarity and ease of reading only.

A.3.12.1 Excellence of Proposed Systems (Subfactor A)

This subfactor addresses the excellence of the Technical Approach proposal regarding the proposed technology in providing the required functionality and in meeting the Acquisition Objectives in Addendum 1, Attachment C, Statement of Work. The paragraphs below describe the sections to be referenced.

Proposed Systems
In this section, TAB 2 in the Management/Technical Approach proposal, the offeror is to provide a concise yet comprehensive narrative technical description of the proposed hardware, software, product-based services and other proposed technology.

The offeror shall describe how the proposed technology, including available components, relate to the state-of-the-art, represent advanced technology, promote portability and interoperability and incorporate and integrate emerging technologies in their product line, particularly in relation to the proposed group. If the proposed technology refers to advanced technology identified in Addendum 1, Attachment A, Technical Specifications, then the offeror shall cite the section.

The offeror shall identify and describe how the implementation of advanced architectural features provides the Government with added benefit through improved interoperability, interconnectivity and productivity. The description of the collection of such features should in particular point out the synergistic effects of the overall architectural design.

These descriptions shall include the overall system design, how effectively the system components have been designed, engineered and integrated into a balanced system, the innovative characteristics of the proposed equipment and software, the integrity, reliability, maintainability and modularity of the proposed configuration, the ability of the proposed equipment to support emerging technologies, the advanced I/O (Input/Output) capabilities and the advanced networking capabilities in supporting the first acquisition objective in Attachment C, Statement of Work. The offeror shall describe their product based solution services and how the proposed architectural features provide technological leadership in preparing the way for the next generation of technology.

Available Components / Instructions

This shall be TAB 3 in the Management/Technical Approach proposal.

Include the list of available hardware and software components beyond the mandatory deliverables including additional technology and product based services that further enhance and broaden the offeror's proposal with respect to the third Acquisition Objectives in Attachment C, Statement of Work.

This section will not count in the page total and shall be identical to the price proposal, only without pricing. This section shall not include technical specifications or other documentation.

If no available components are offered, only a TAB page shall be provided with no additional content.

The Available Components list should be supplied in electronic form only.

Exceeding the Minimum and Desirable Features / Instructions

The offeror shall fill in the appropriate group-specific Exceeding the Minimum / Desirable Features Matrix Exhibit (Exhibits EMDFA through EMDFD) and submit it under TAB 4 in the Management/Technical Approach proposal and shall be submitted in Excel format.

This section shall identify elements of the proposed system that exceed the Minimum Mandatory Specifications (in TAB 1) in sufficient detail for the Government to understand how the proposed features exceed the Government minimum specifications. The offeror shall fill in the appropriate Exhibit to describe these elements and shall only address the Exceeding the Minimum criteria specified within the class-specific exhibit.

This section shall indicate all items identified in the Technical Specifications as Desirable Features that the offeror chooses to provide. The offeror shall fill in the appropriate Exhibit to either indicate if the proposed system meets the Desirable Feature (if a Yes/No response is required) or describe the salient characteristics in sufficient detail for the Government to determine whether the proposed features correspond to the Government-identified desirable features (if a Description is required). The offeror shall only address the Desirable Features specified within the group specific exhibit.

This Exhibit shall count in the page total.

Other Features / Instructions

This shall be TAB 5 in the Management/Technical Approach proposal.

In this section, the offeror shall identify additional capabilities or features of the proposed system that enhance the suitability for the proposed workstation class or supporting equipment.

The offeror shall describe those capabilities that satisfy the requirements of Section 1.5. Assistive Technology in Attachment A, Technical Specifications, along with other capabilities that enhance or facilitate access by users that are disadvantaged with regard to their ability to use the standard keyboard, screen and other interfaces to the systems proposed. Capabilities or features that aid in moderating the stress of interface use shall also be described. These shall include, but not be limited to, speech recognition, Braille terminals, split keyboards, or other devices. The capability and plans for the Contractor to provide information relevant to Section 508 of the Rehabilitation Act of 1973 either through tools such as the Voluntary Product Accessibility Template (VPAT) or other similar means shall be described.
The offeror shall describe those capabilities that satisfy the requirements of Section 1.6 (Environmentally Preferable Purchasing Program (EPP)) in Attachment A, Technical Specifications, along with products and services that are environmentally preferable and support energy conservation. The capability and plans for the Contractor to provide information relevant to the environmental aspects of their products and services either through tools such as the Electronic Product Environment Assessment Tool (EPEAT) or other similar means shall be described.

In addressing the next 2 paragraphs only, hardware and software shall refer only to mandatory hardware and software:

The offeror shall describe whether the hardware and software proposed are the manufacturer's most recent offerings, i.e. current technology, and when in terms of time these components fit in the manufacturer's line. The offeror shall document when the hardware and software were announced, the average product life-cycle for each (how often the offeror has released a new version of the software or replaced it), and how often new hardware has been announced.

If any equipment (both hardware and software) to be provided is no longer in current production by the manufacturer at the time of proposal, the offeror shall identify why it is advantageous for the Government to utilize out-of-production equipment.

The offeror shall discuss the range and types of third party software products available in the commercial marketplace which run on and/or complement the proposed technology and augment the required class specific functionality.

The offeror shall describe in detail the types of documentation to be delivered with the hardware and software proposed, including any ease-of-use features of the documentation.

A.3.12.2. Offeror's Support and Commitment (Subfactor B)

This subfactor addresses the offeror's support and commitment as defined in Attachment C, Statement of Work. The paragraphs below describe the sections to be referenced.

Commitment to Supply Chain Management and Supply Diversity / Instructions

This shall be TAB 6 in the Management/Technical Approach proposal.
In this section, the offeror shall demonstrate how its internal policies would further the second and third Acquisition Objectives identified in the Attachment C, Statement of Work, particularly in reference to Supply Chain topics.

The offeror shall address Statement of Work, Section C.1.3.6. MANUFACTURER/RESELLER REQUIREMENTS. The offeror shall describe their teaming relationships with other vendors and manufacturers such that the Government can assess the extent to which a wide variety of interoperable hardware and software is proposed and will be maintained, that will support, interconnect and enhance the full range of products in scope for SEWP. The offeror shall describe their corporate policies and resources that will affect the addition of new vendors for the purpose of enhancing the technology available to the Government. Information concerning how those policies will allow for continued and increased availability and competitiveness of products through the life of the contract shall be provided.

The offeror shall address Statement of Work, Section C.1.3.7. SUPPLY CHAIN MANAGEMENT. The offeror shall indicate the corporate policies and procedures in place to reduce the risk of counterfeiting, tainting, product substitution, and other risks related to supply chain management. The ability to provide authorized and certified products and properly track and identify the provenance of products to be offered on this contract should be described. Information related to how the vendor is participating in supply chain risk management activities, or at a minimum how the company is kept abreast of and is addressing such activities should be detailed. These activities include, but are not limited to, the standards work of the Open Group Open Trusted Technology Forum; the Notional Supply Chain Risk Management Practices for Federal Information Systems (NIST IR 7622) - http://nvlpubs.nist.gov/nistpubs/ir/2012/NIST.IR.7622.pdf ; and other Government and Industry activities centered on Supply Chain Risk Management.

Post Award Support and Service / Instructions

This shall be TAB 7 in the Management/Technical Approach proposal.

In this section the offeror shall concisely describe its post award support and service through a point-by-point response to the Statement of Work sections described below. The responses shall be descriptive and narrative and not simply a re-statement of the RFP text.

The offeror shall address its plan for providing technical services as defined in Statement of Work, Section C.1.3.1.3. SEWP Technical Support. The offeror shall, through a response to Section C.1.5 Warranty, describe their proposed approach to providing maintenance and warranty to the Government. The offeror shall, through a response to Section C.1.4.1. Software licensing, identify how the offeror shall provide software support.

The offeror may provide other narrative information regarding their post award support and service plans.

A.3.12.3. Management Plan (Subfactor C)

This shall be TAB 8 in the Management/Technical Approach proposal and requires the Offeror to address how it proposes to handle the administrative aspects for SEWP V.

Program Management / Instructions

In this section the offeror shall concisely describe its planned management approach to the contract through a point-by-point response to the Sections described below. The responses shall be descriptive and narrative and not simply a re-statement of the provided section text.

Anticipated problems related to the contract shall be described, as well as the proposed resolution of such problems. The offeror shall discuss its management chain of command, with particular reference to the contract management functions at each management level. The principal support office under the contract shall be named and described. The offeror shall also discuss: the organization to be established that will comply with the requirements of A.1.19. TECHNOLOGY REFRESHMENT, A.1.21. FAIR OPPORTUNITY AND REQUESTS FOR QUOTES and A.1.27. CONTRACTOR COLLECTION OF AGENCY ADMINISTRATIVE HANDLING FEE and how that organization will be support a quality assurance program; ensure the SEWP database will serve as the definitive pricing source for the preparation of quotes, execute of orders, provide for billing and payment of invoices; and resolve customer problems. The objective is to demonstrate that the offeror understands the peculiarities of this type of contract and will be able to operate effectively within the framework proposed. The offeror shall provide a point-by-point response to Attachment C, Statement of Work, Sections C.1.3.2. Program Office Support, and C.1.3.3. Ordering Guides.

The offeror shall provide details relating to their management and program experience in Indefinite Delivery Indefinite Quantity (IDIQ) and Government Wide Acquisition Contracts (GWACs) contracts of similar scope and magnitude.

Data Interchange / Instructions

In this section, the offeror shall provide a point-by-point response to Attachment C, Statement of Work, Section C.1.3.4. Electronic Processes, C.1.3.5. Technology Refreshment Proposals and Attachment D, Contractor / Government Communication Requirements. The offeror shall address their ability to respond to innovative procurement transactions and processes particularly as it pertains to electronic interchange, social media type functionality, and customer service interactions. The offeror shall address their ability to implement and utilize automated processes for order processing, tracking, delivery, invoicing and payment, which minimize human intervention. The offeror shall describe their corporate electronic interchange, and e-Commerce strategy and corporate resources devoted to electronic interchange, EDI, and e-Commerce. The offeror shall indicate their preferred method and format for providing the electronic-based procedures described in Attachment D.

The offeror shall provide a point-by-point response to Attachment C, Statement of Work, Section C.1.3.1.1. World Wide Web Services. This shall include the method for HTML authoring and the mechanism for maintaining data integrity between the offeror's database of SEWP products and the WWW ordering guide.

(End of text)

A.3.13. PAST PERFORMANCE VOLUME

An Offeror's past performance record indicates the relevant quantitative and qualitative aspects of performing services or delivering products similar in content and scope to the requirements of this acquisition.

The Offeror shall provide, at a minimum, the following information in support of its proposal to facilitate the evaluation of the offeror's past performance as related to the requirements of the proposed contract.

(a) *INFORMATION FROM THE OFFEROR*

Prime Offerors shall furnish the information requested below for up to five of your most recent similar contracts that are completed or ongoing, within three years of the solicitation due date. Indicate which contracts are most related and how they are related to the proposed effort in content and scope, as well as which contracts were performed by the division of your company (if applicable) that will perform the proposed contract/subcontract. No information is required for proposed subcontractors. Subcontractor information will not be evaluated.

If applicable, Offerors may provide the experience or past performance of its parent or affiliated or predecessor company where the Offeror's proposal demonstrates that the resources of the parent or affiliate or predecessor will affect the performance of the prime Offeror. The Offeror shall demonstrate that the resources of the parent or affiliate or predecessor company (its workforce, management, facilities or other resources) shall be provided or relied upon for contract performance such that the parent or affiliate or predecessor will have meaningful involvement in contract performance.

The offeror shall provide the following information on all past/current contract references that meet the above criteria for the prime offeror or its parent or affiliated or predecessor company:

- Customer's name, telephone number, and e-mail address of both the lead contractual and technical personnel most familiar with the offeror's performance record. Please verify that the information is current and correct. The Government may contact prior customers for telephone interviews and/or completion of written past performance feedback.

- Cage Code and/or DUNS Number of the contractor performing the work.

- Contract number, type, and total original and present or final contract value.

- Date of contract, place(s) of performance, and delivery dates or period of performance.

- Brief description of contract work and comparability to the proposed effort in terms of content, i.e., similarity of requirements and specifications and/or level and type of effort. It is not sufficient to state that it is comparable in content and scope. Rationale must be provided to demonstrate that it is comparable.

- Identify and explain major technical problems and how they were overcome. List any major deviations or waivers to technical requirements that were granted by the customer.

- Identify and explain completion successes and delays, including adherence to program schedules. Provide an assessment of the performance (technical and schedule) on these past programs and support these assessments with metrics such as award or incentive fees earned.

- Average number of personnel on the contract per year.

- Recent customer evaluations of past performance including Award Fee Evaluation results, Fee Determination Official letters, Annual Performance Evaluation Forms, or any other written performance feedback. (Excluded

from the page limitation).

- List any contracts terminated (partial or complete) within the past three years and basis for termination (convenience or default). Include the contract number, name, and the telephone number and e-mail address of the terminating officer (please verify information). Include contracts that were "de-scoped" by the customer because of performance or cost problems. (Excluded from the page limitation).

(b) SUMMARY OF DEVIATIONS/EXCEPTIONS (PAST PERFORMANCE PROPOSAL)

Identify and explain the reason for any deviations, exceptions, or conditional assumptions taken with respect to these Past Performance Proposal instructions.

(End of provision)

A.3.14. INSTRUCTIONS FOR PRICE PROPOSAL VOLUME

This section contains instructions for the Price Proposal Volume.

Please note that Offerors may propose on any single group, combination of groups, or all groups. There is an ALL or NONE requirement within each group. If an offeror only proposes the partial list of deliverables within a group, that proposal will be excluded from competition and will not be given further consideration, nor will an offeror be given an opportunity to offer pricing for items the offeror may have excluded at the time of proposal submission.

All items offered shall be listed in the enclosed price exhibits which are identified in A.3.17, List of Exhibits. Please note that all items shall be either priced, or marked as "no charge" or "included" and that items contained within each group cannot be left un-priced/unmarked as this is an ALL OR NONE requirement at the group level.

Items which are offered at no additional charge or are included should be priced as $0. All discounts must be priced with the formulas in the exhibits to calculate with the provided Government's Evaluation Quantities. If no discount is proposed for a product, Offerors should fill in "0" in the appropriate % discount column.

A Pricing Exhibit shall be submitted for each group using the exhibit corresponding to the group being proposed as listed in A.3.17, List of Exhibits.
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A.3.14.1. Electronic Availability of Pricing Exhibits

Pricing exhibits will be made available electronically through the World Wide Web. The pricing exhibits may be obtained from ~~the NASA Acquisition Internet System (NAIS) and~~ the SEWP V RFP WWW server located at www.sewp.nasa.gov/sewpv. The files located on the SEWP V RFP server are available to registered users of the SEWP V RFP WWW server. The login id (Last Name) and Password entered at the SEWP IV Registration page is used to access the pricing exhibits. These exhibits will be in Excel 2007. In addition to the pricing exhibit instructions in the RFP, a README text file for the Pricing Exhibits and will be available.

The offeror need only use the pricing exhibits for the group(s) to which they are going to respond.

Attachment F, including pricing exhibits, will be incorporated into any resulting contract. Contractors' list prices for SEWP will be made publicly available to SEWP customers through the on-line SEWP Database of Record, after contract award.

A.3.14.2. Structure and Content of Price Proposal

The offeror shall submit their price proposal on a CD ROM. The offeror shall also submit an electronic copy of their published price catalog or published schedule of list prices as back up for list price information supplied in the pricing exhibits (see A.3.14.3).

The offeror shall submit all completed price exhibits on a CD ROM in Microsoft Excel 2007. It should be noted that the spreadsheets contain macros that may not work properly in other spreadsheets.

A.3.14.3 Required Commercial Price Data

The Contracting Officer requires additional supporting documentation. This documentation shall be recorded in a form regularly maintained by the manufacturer or offeror. This form may be a catalog, price list, schedule, or other verifiable and established record. The record shall (i) be published or otherwise available for customer inspection and (ii) state current or last sales prices to a significant number of buyers constituting the General Public. An electronic copy of the current verifiable and established record shall accompany the price proposal. This submission is in addition to the list price information submitted in the pricing exhibits and shall not be used as a substitute for the requirement for the price exhibits. The commercial price data will be used to validate any of the list pricing provided in the Price Proposal that does not appear accurate.

A.3.14.4. Pricing Calculation (Base Systems and Mandatory Add-ons)

There is an ALL OR NONE requirement within each group. If an offeror only proposes the partial list of deliverables within a group, that proposal will be excluded from competition and will not be given further consideration.

For evaluation purposes only, the Government will assume an estimated quantity for each mandatory item that will be purchased. The Contractor's SEWP price will be derived from the list price times the proposed discount for each mandatory add-on. The SEWP price for each Base System will then be applied against the Government quantities.

A.3.14.5. Warranty Pricing

Instructions for preparing warranty pricing are contained in the following sections.

Warranty pricing for the mandatory items should be based on the following coverage: five days a week (Monday through Friday) and for eight (8) hours a day during business hours, with a next day response time.

A.3.14.5.1. Pricing for Extended Warranty

The price for all mandatory items is based on a 3 year (36 month) life cycle cost comprised of the price of the item inclusive of any initial warranty packaged with the initial purchase, plus the warranty cost to cover the item through the 36 month life cycle. The offeror shall provide pricing for 36 months of extended warranty by completing the "Warranty" columns in the Class Database Worksheet of the Pricing Exhibit for the Class being proposed. The "Discounted Monthly Extended Warranty" is automatically calculated by multiplying the "Proposed Discount" times the "List Price Monthly Extended Warranty". The "Adjusted 36 Month Warranty Package" automatically adjusts for the number of months warranty included in the Base Price as identified in the "# of months included in Base Price" column. This adjusted price is then multiplied by a Government provided estimated quantity to arrive at the 36 month warranty "Proposed Price".

For example, if an item has a 3 month commercial warranty included in the purchase price of the item and the cost to purchase a warranty after the 3 month period is $10 a month list and the vendor is proposing a 10% discount, then the offeror would enter the following values in the Base System Worksheet:
"# of months included in Base Price": 3
"List Price Monthly Extended Warranty": 10
"Proposed Discount": 10

A. 3.14.6. Pricing for Non-Mandatory Available Components

Evaluation of pricing for Non-Mandatory Available Components is based upon the proposed discount off the total category of available components:

Product Classification
Computer System
Storage Device
Software
Communication Devices
Power Related Technology
Input/Output device
Networking Equipment
Computer Security Technology
Cabinets / enclosures
Data Acquisition Technology
Digital Image Tools
Video Conferencing Tools
Cables / Wiring
Maintenance / Warranty
System Service Fee (internal use only)
Documentation
Training
Analysts
Installation

(End of text)

A.3.15 PRICING EXHIBITS

Each of the 4 groups has a Microsoft Excel Workbook price exhibit for that group. Each workbook is comprised of named spreadsheets on tabs located at the bottom of the workbook. The first 3 worksheets are to be filled in by the Offeror: (1) Vendor ID (2) Class Database (3) Product Classifications. The offeror shall add in the proposed available components list into each of the worksheets for the Product Classification of those offerings. For example, all maintenance CLINs beyond the mandatory line items shall be listed in the Maintenance/Warranty worksheet; all computers beyond any mandatory items shall be listed in the Computer System worksheet; etc. The remaining worksheets are filled in automatically using information derived from the Class Database and Product Classifications worksheets: Mandatory Items, Available Components and Summary. Along with information provided in this section, there are embedded "notes" within the spreadsheets to assist the offeror, and an electronic README.DOC text file is supplied. Each offer shall fill in the required information in the pricing exhibits. A separate and complete pricing exhibit is required for each class proposed.
Note: The Proposal Total in the Summary Worksheet is the Price information which will be used for pricing evaluation. If the Proposal Total does not have a valid, positive numeric entry, the proposal will not be evaluated. A non-numeric or negative value in the Proposal Total field is likely the result of either attempting to cut or paste worksheets from the provided downloaded files and/or attempting to alter protected fields.

A.3.15.1. Contract Line Item Number (CLIN) Structure

The offeror may utilize either their part number, product number, or created number, provided the following conditions are met:

1) The number, as associated with a specific product, remains unique throughout the contract life; and
2) The Contractor provides the logic for development of the number

If the Contractor is offering a product that is manufactured by another Contractor, i.e., Original Equipment Manufacturer (OEM), the Column entitled "Model Number" in the Class Database Worksheet must be the full OEM product number inclusive of any feature codes.

A.3.15.2. Group Database Worksheet

The group Database is a listing of all proposed base systems, base products, mandatory add-ons and upgrades, and available components.

The offeror shall provide the information required for product identification numbers, model numbers, and product category description for each proposed item. Offerors shall fill in the Commercial Price for each offering and provide a discount for each item or range of computer systems as required. Pricing for the 36 month extended warranty should be in accordance with the instructions in A.3.14.6, Warranty Pricing. Information provided in this spreadsheet (Group Database Worksheet) will automatically flow through to the other sheets in the pricing exhibit.

A.3.15.3. Mandatory Items Worksheet

This Worksheet is filled in automatically. The offeror shall not directly enter or change any information or formulas. The pricing in the Mandatory Items Worksheet is automatically calculated from the Group Database Worksheet. The discounts proposed for the categories shall apply throughout the life of the contract.

The total proposed price for the base systems supporting equipment and for each mandatory add-on is automatically calculated by multiplying the discounted price by the Government's Evaluation Quantity. The sum of all base and mandatory items is automatically calculated in the Mandatory Items Worksheet and listed in that Worksheet in the Total Mandatory Add-Ons value row.

A.3.15.4. Product Classification Worksheet

The Product Classifications Worksheet provides the list product classifications as described in A.1.7.

For all Product Classifications, one Classification Description Subgroup (beginning “Miscellaneous …”) with a Classification Subgroup Discount of 0% is already included and cannot be altered. The offeror may propose other subgroups with a proposed classification subgroup discount, provided:

1) the Classification Description Subgroup relates directly to the Product Classification. For example: the offeror may add a row to the Product Classification of “Input/Output” with the Classification Description Subgroup of “All Printers” or “All Scanners” or “HP Color Printers”, etc. However those subgroup descriptions cannot be placed in the Storage Media Product Classification rows.
2) for each Classification Description Subgroup added, a positive discount between 0 and 100 is added in the Classification Discount Column. For example, the offeror may add a row to the Product Classification of “Input/Output” with the Classification Description Subgroup of “All Printers” and a discount of 10 (10%)

3) at least one item in the associated <Classification> Worksheet must be associated with the proposed Classification Description Subgroup and Classification Discount. For example, if the offeror adds a row to the Product Classification of "Input/Output" with the Classification Description Subgroup of "All Printers" and a discount of 10 (10%), then the Input/Output Worksheet must contain at least one printer. In the Input/Output Worksheet the row with that printer must have "All Printers" in the Product Category Description column and a value of 10 in the Proposed Discount % column.
4) all items provided in the various <Classification> Worksheets which fall within the Classification Description Subgroup must be placed in the correct Worksheet and identified correctly in the Product Category Description columns; and the Proposed Discount % must match the associated Discount in the Product Classification Worksheet. For example, if the offeror adds a row to the Product Classification of "Input/Output" with the Classification Description Subgroup of "All Printers" and a discount of 10 (10%), then all printers proposed in the Input/Output Worksheet must have "All Printers" in the Product Category Description column and a value of 10 in the Proposed Discount % column.
5) all items proposed as part of a technology refreshment during the life of a contract must be identified correctly with the associated Product Classification and Product Category Description columns and the Proposed Discount % must match or be greater than the associated Discount in the Product Classification Worksheet. For example, if the offeror adds a row to the Product Classification of "Input/Output" with the Classification Description Subgroup of "All Printers" and a discount of 10 (10%), then all printers added to the contract through a technology refreshment request during the life of the contract must have a Product Classification of "Input/Output" a Product Category Description of "All Printers" and discount at or above 10%.

Note that the offeror may choose to add as many or as few rows as they want to each Product Classification. The offeror may also choose to use very generic descriptions like "All Printers" or very specific descriptions like "HP Color Printers" or a combination of generic and specific descriptions. In either case, actual products proposed in the various <Classification> Worksheets should be grouped within a smaller set of Classification Description Subgroups. It is not necessary to have a row added in the Product Classification Worksheet for every item in the <Classification> Worksheets and in fact, the spreadsheet and evaluation are optimized for having many rows in the <Classification> Worksheets mapped to a much smaller number of rows in the Product Classification Worksheet.

A.3.15.4.1. <Classification> Worksheets

There is a worksheet for each Product Classification to be used to enter the proposed available components list. Each item proposed must be listed in the corresponding Worksheet – e.g., Printers should be listed in the Input/Output Worksheet.

Offerors may propose additional components and desirables, not identified as mandatory deliverables, under each general category of additional components listed by adding rows, as needed, to the associated <Classification> worksheets. The list of items in each of the worksheets should be the same list as provided (without pricing) under TAB 3 of the Management/Technical Approach Proposal.

The values in Column H – Classification Subgroup Discount – must match the proposed discounts for the associated Classification Description Subgroup (Column F) from the Product Classifications Worksheet. For example, if under Input/Output Product Classification, the offeror proposes a discount of 10% for Printers; then every Printer in the Input/Output Worksheet must have a 10% discount.

A list of available components that enhance and broaden the offeror's proposal with respect to the first two Acquisition Objectives in Attachment C shall be offered. For evaluation purposes, the summary sheet will calculate the overall discount proposed for all proposed available components. However the specific discounts for the proposed items will be applied for contract purposes.

The Proposed Price column in the Available Components Worksheet is automatically calculated by summing the list prices (Column G) and calculated SEWP prices (Column I) in the various <Classification> Worksheets to calculate the overall proposed discounts for each Product Classification and then multiplying that computed discount by a Government Evaluation dollar value associated with that Product Classification. The value derived for each Product Classification is then summed to obtain the Total Available Components value.

A.3.15.5. Summary Worksheet

The Summary Worksheet automatically calculates the Proposal Total. This calculation is a sum of the calculated Total Mandatory value from the Mandatory Items Worksheet as described in Section A.3.15.3. plus the calculated Total Product Classification value as described in Section A.3.15.4.1.

A.3.15.6. Summary of Deviations/Exceptions (Price Proposal)

Identify and explain the reason for any exceptions to or deviations from these price proposal instructions

(End of text)

A.3.16. PROPOSAL MARKING AND DELIVERY

A.3.16.1. Receiving Office

The designated receiving office for proposals is the Shipping and Receiving Dock, Building 35, Goddard Space Flight Center, which must be accessed from Soil Conservation Road, North from Greenbelt Road. Proposals must be received by the date and time stated on the solicitation face page.

The Building 35 Shipping and Receiving Dock is open from 7:30AM to 3:30PM, Monday through Friday, except Government holidays. Contractor personnel conduct the GSFC receiving function, which includes mailroom operations. Proposals will be marked with the date and time of receipt, subjected to security screening, secured, and delivered unopened to the Contracting Officer.

There is a public access to the Building 35 Shipping and Receiving Dock. GSFC passes, badges, escorts, etc. are not required for access to the receiving dock.

A.3.16.2. External Marking and Delivery

All proposal packages must be closed and sealed.

The required mailing address and external marking for proposals is as follows:

Goddard Space Flight Center
Greenbelt, MD 20771
Building 35-Shipping and Receiving
Solicitation Number NNG13451284R
Attention: LaShawn Davis
BIDDING ON GROUP_____
PROPOSAL--DELIVER UNOPENED"

A.3.17. LIST OF EXHIBITS

Technical Exhibits:

The following exhibits will be provided with the official RFP:
Exhibit MMA Group A Minimum Mandatory Specification Matrix (TAB 1)
Exhibit MMB Group B Minimum Mandatory Specification Matrix (TAB 1)
Exhibit MMC Group C Minimum Mandatory Specification Matrix (TAB 1)
Exhibit MMD Group D Minimum Mandatory Specification Matrix (TAB 1)

Exhibit EMDFA Group A Exceeding the Minimum/ Desirable Features Matrix (TAB 4)
Exhibit EMDFB Group B Exceeding the Minimum/ Desirable Features Matrix (TAB 4)
Exhibit EMDFC Group C Exceeding the Minimum/ Desirable Features Matrix (TAB 4)

Exhibit EMDFD Group D Exceeding the Minimum/ Desirable Features Matrix (TAB 4)

Price Exhibits:
Exhibit PA Group A Price Exhibit
Exhibit PB Group B Price Exhibit
Exhibit PC Group C Price Exhibit
Exhibit PD Group D Price Exhibit

A.3.18. SINGLE OR MULTIPLE AWARDS (52.216-27) (OCT 1995)

The Government may elect to award a single delivery order contract or task order contract or to award multiple delivery order or task order contracts for the same or similar supplies or services to two or more sources under this solicitation. The government intends to award multiple awards to each Group if possible. The number of awards will be based on the number of the most highly competitive proposals that meet the solicitation requirements.

(End of provision)

IV. EVALUATION-COMMERCIAL ITEMS (52.212-2) (JAN 1999)(Modified)

A.4.1. EVALUATION PROCEDURES AND FACTORS- GENERAL

A.4.1.1. Source Selection

This competitive negotiated acquisition shall be conducted in accordance with FAR 15.3, "Source Selection", and NASA FAR Supplement (NFS) 1815.3, same subject. The Source Evaluation Board procedures at NFS 1815.370, "NASA formal source selection" will apply.

The attention of Offerors is particularly directed to NFS 1815.305, "Proposal Evaluation" and to NFS 1815.305-70, "Identification of Unacceptable Proposals".

A trade-off process, as described at FAR 15.101-1, will be used in making source selection. To be acceptable and eligible for evaluation, proposals shall: 1) meet all the minimum mandatory specifications set forth in this Solicitation Document. Proposals meeting these criteria will be further evaluated and award will be made to the responsible offeror(s) whose proposals are determined to represent the best value to the Government, Management/Technical Approach and Price. The relative order of importance of the Management/Technical Approach and Price factors are set forth in, A.4.1.3., below. Past Performance will be evaluated on an Acceptable/Unacceptable basis.

A.4.1.2. General Description of Evaluation Factors

The evaluation factors are Management/Technical Approach and Price. In accordance with NFS 1815.304-70, the Management/Technical Approach subfactor will be weighted and scored on a 1000 point scale. Only the Management/Technical Approach factor is numerically scored.

A.4.1.3. Relative Order of Importance for Evaluation Factors

The Management/Technical Approach Factor is approximately equal in importance to the Price Factor. Price will be evaluated in accordance with the pricing model and WILL NOT BE POINT SCORED.

A.4.2. COMPLIANCE WITH MINIMUM MANDATORY SPECIFICATIONS

The Government will first evaluate TAB 1 of the proposals received for compliance in addressing and meeting the minimum mandatory specifications. To the extent that it is unclear whether the offeror meets the minimum mandatory specifications, the Government reserves the right to obtain clarification of these areas. Offers meeting the minimum mandatory specifications will be further evaluated as stated under the Relative Order of Importance for Evaluation Factors paragraph included in this Section. Failure to meet any of the minimum mandatory specifications will result in the proposal being deemed technically unacceptable, and the proposal will not be given further consideration. Note that a response of “No” to any minimum mandatory specification in Exhibit MMx Minimum Mandatory Specification Matrix indicates a minimum mandatory specification is not met.

(End of text)

A.4.3. NO EVALUATION OF TRANSPORTATION COSTS 52.247-50 (APR 1984)

Costs of transporting supplies to be delivered under this contract will not be an evaluation factor for award.

(End of provision)

A.4.4. PROSPECTIVE CONTRACTOR RESPONSIBILITY

(a) The standards and procedures for determining whether prospective contractors and subcontractors are responsible are set forth in FAR Subpart 9.1. Deficiencies concerning the general standards of prospective contractor responsibility at FAR 9.104-1, and the special standards established for this procurement under FAR 9.104-2, detailed below, may be serious enough to result in a determination of non-responsibility. As with all aspects of prospective contractor responsibility, a finding of non-responsibility can be made at any time prior to contract award. However, even if such deficiencies are not so serious to result in such a determination, they will nonetheless be considered in the evaluation as conducted under the evaluation factors set forth in this solicitation.

(b)The following special standards of responsibility have been established for this procurement:

- Commercial Small Business Subcontracting Plan (all Offerors other than small business(es))

(End of text)

A.4.5. PROMPT PAYMENT DISCOUNTS

Prompt payment discounts will not be considered in the evaluation of offers. However any offered discount will form a part of the award, and will be taken if payment is made within the discount period indicated in the offer by the offeror. As an alternative to offering a prompt payment discount in conjunction with the offer, Offerors awarded contracts may include prompt payment discounts on individual invoices.

(End of text)

A.4.6. MANAGEMENT/TECHNICAL APPROACH EVALUATION FACTORS

The following Management/Technical Approach factors are structured to focus attention upon the major concerns in this acquisition.

This information is intended to explain the criteria by which proposals will be evaluated by the integrated evaluation team. Offerors are to prepare proposals with these criteria in mind, i.e., in terms of both content and organization, in order to assist the team in determining the relative merit of proposals in relation to the requirements as defined in Addendum 1, Attachment A, Technical Specifications and Attachment C, Statement of Work.

The government will evaluate the offeror's technical and management proposals, risk assessments and proposed responses under each of the three subfactors for completeness, the accuracy of the assessment, the effectiveness and efficiency of the planned responses, and the degree to which the Offerors technical and management proposals, risk assessment and responses reflects an understanding of all contract requirements and the acquisition objectives stated in the SOW.

Evaluation Findings

The Government will evaluate proposals by classifying findings as strengths, weaknesses, significant strengths, significant weaknesses, or deficiencies using the following definitions:

Weakness – a flaw in the proposal that increases the risk of unsuccessful contract performance

Significant Weakness – a proposal flaw that appreciably increases the risk of unsuccessful contract performance

Deficiency – a material failure of a proposal to meet a Government requirement or a combination of significant weaknesses in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level

Strength – a proposal area that enhances the potential for successful performance or contributes toward exceeding the contract requirements in a manner that provides additional value to the government (this could be associated with a process, technical approach, materials, facilities, etc.).

Significant Strength – a proposal area that greatly enhances the potential for successful performance or contributes significantly toward exceeding the contract requirements in a manner that provides additional value to the government.

Weights and Scoring

In accordance with NFS 1815.304-70(b)(1), the Management/Technical Approach factor will be weighted and scored on a 1000 point scale.

The weights (points) associated with each Management/Technical Approach subfactors are as follows:

The Management/Technical Approach Subfactors and weights are:

1. **Excellence of Proposed Systems (Subfactor A)**		300 points
2. **Offeror's Support and Commitment (Subfactor B)**		250 points
3. **Management Plan (Subfactor C)**		450 points
	Total:	**1000 points**

(End of text)

The Management/Technical Approach subfactors will be evaluated using the adjectival rating, definitions, and percentile ranges stated in NFS 1815.305(a)(3)(A). The maximum points available for each subfactor will be multiplied by the assessed percent for each subfactor to derive the score for the particular subfactor. For example, if a subfactor has possible 200 points and receives a percent rating 80, then the score for that subfactor would be 160 points.

(End of provision)

A.4.6.1. Excellence of Proposed Systems (Subfactor A)

This subfactor will evaluate the Offerors Technical Approach to meeting the contract requirements regarding the proposed technology in providing the required functionality and in meeting the Acquisition Objectives in Attachment C, Statement of Work.

Proposed Systems

The extent to which the proposed technology (including available components) offers state-of-the-art and leading edge technology, promotes portability and interoperability and incorporates and integrates emerging technologies in their product line in supporting and enhancing the functional characteristics of the class will be evaluated with emphasis on the advanced technology features identified in the Technical Specifications.

While manufacturer technical specifications may be provided and evaluated in this section, evaluation is primarily based on the comprehensiveness of the offeror’s narrative technical description as a whole rather than the technical aspects of individual products. The degree to which the implementation of advanced architectural features provides the Government with added benefit will be evaluated with particular emphasis on how the

design improves interoperability, interconnectivity and productivity and the synergistic effects of the overall architectural design.

The overall system design, the integrity, reliability, maintainability and modularity of the proposed configuration, the effective integration of the system components, along with the innovative characteristics of the proposed equipment and software will be evaluated for effectiveness. The way in which the proposed technology supports the first acquisition objective in Attachment C, Statement of Work will be evaluated for suitability. The technological leadership evidenced by the offeror's proposed architecture will be evaluated for effectiveness in preparing the way for the next generation technology.

Available Components

The offeror's list of available components (hardware and software) in support of the third Acquisition Objectives in Attachment C, for the proposed equipment will be evaluated for their depth and breadth.

Depth refers to how many products within a technology segment are provided; e.g., the depth of the printer offerings is based on how many printers are provided.

Breadth refers to the number and variety of technology segments represented by product offerings. The breadth of offerings is limited only by the SEWP scope as defined in Attachment C, Section C.1.1.3. ACQUISITION OBJECTIVES: “Information Technology products including hardware, software, maintenance, warranty, product training and firm fixed price services in support of installing and implementing the products.”

The extent to which the offeror provides access to a larger number of manufacturers and/or a greater variety of available components will be evaluated for its effectiveness in meeting the Acquisition Objectives in the Statement of Work.

Exceeding the Minimum / Desirable Feature

The extent and manner in which the offeror exceeds the minimum specifications will be evaluated for its effectiveness in meeting the Acquisition Objectives in the Statement of Work Evaluation will consider how many minimums were exceeded, by how much each minimum was exceeded, and how the minimum is exceeded. In particular, exceeding a minimum by simply substituting one product for another with a higher value product will be evaluated lower than exceeding the minimum in a way that expands the technology, capability, or functionality of the overall product.

The extent to which the offeror provides Government-specified desirable feature(s) will be evaluated. All identified desirable features within a group have equal value in terms of the evaluation of this criterion.

Other Features

The following features will be evaluated as to how they enhance suitability for the group and support Government initiatives and policies:
- features that facilitate access by those users that are disadvantaged, or that offer aids for lessening the stress of the use of physical user interfaces.
- capability and plans for the Contractor to support and provide information relevant to Section 508 of the Rehabilitation Act of 1973.
- capabilities and corporate policies and procedures that aid in conserving energy and supporting environmentally-friendly products and services
- the state of the art of the proposed mandatory technology in the manufacturer's line for meeting the requirements for this group.
- the extent to which the proposed items are established in the commercial market place and where the proposed products are in their life cycle.
- the range of third party software products available in the commercial marketplace which augment the group specific functionality for the proposed products and which are not specifically required to be provided or supported in the technical specifications.
- the comprehensiveness, completeness, ease-of-use, and availability of documentation (on-line and printed)

A.4.6.2. Offeror's Support and Commitment (Subfactor B)

This subfactor addresses the offeror's support and commitment as defined in Attachment C, Statement of Work.

Commitment to Supply Chain Management and Supply Diversity

The range of available vendors under contract and the range of hardware and software proposed to support, interconnect and enhance the full range of products in scope for SEWP along with the extent of the offeror's capability to enhance the range of software and hardware technology being offered through corporate policies and resources will be evaluated for efficiency and effectiveness in support of the second and third Acquisition Objective in, Attachment C, Statement of Work.

The ability of the offeror to augment their vendor teaming relationships will also be evaluated for reasonableness and the extent to which those relationships might enhance or inhibit Government accessibility to a range of products and be provided with a continuous competitive environment.

The corporate policies, procedures and activities related to supply chain risk management will be evaluated for effectiveness and completeness in reducing the risk of counterfeiting, tainting, product substitution, and other risks related to supply chain management. Participation either directly or indirectly in national and international standards type activities will be considered in support of the reduction of risk in the supply chain.

Post Award Support and Service

The offeror's overall plan for providing the technical support described in the Statement of Work Sections C.1.3.1.3, C.1.5., and C.1.4.1. will be evaluated for effectiveness, completeness and integrated approach in providing the Government with comprehensive support and licensing. General areas of evaluation include the offeror's proposed approach, corporate policies, personnel, warranty and licensing plans to provide hardware and software support services for timely and effective problem diagnosis and resolution.

Evaluation is based on the comprehensiveness and thoroughness of the narrative in the proposal. Descriptions must be more than simple restatements of the Statement of Work Sections or responses such as “We will do this”.

A.4.6.3. Management Plan (Subfactor C)

In this subfactor Program Management and administrative aspects of the proposal will be evaluated.

Program Management

The offeror’s planned management approach to the contract and associated problems and problem resolution will be evaluated for effectiveness, thoroughness, and understanding, to provide the SEWP Program Office and the Government customer with an integrated approach to acquisition program management

The organization established that will comply with the contract requirements will be evaluated.
The Offeror's point-by-point response to Attachment C, Statement of Work, Sections C.1.3.2. and Program Office Support, C.1.3.3. Ordering Guides and information regarding the organization and processes to be followed to meet the requirements in A.1.19. TECHNOLOGY REFRESHMENT, A.1.21. FAIR OPPORTUNITY AND REQUESTS FOR QUOTES and A.1.27. CONTRACTOR COLLECTION OF AGENCY ADMINISTRATIVE HANDLING FEE will be evaluated for effectiveness, thoroughness and efficiency in regards to responsibility for delivery orders, quality assurance, how the offeror ensures proper replication between SEWP and other databases and demonstrating that the offeror understands how to effectively operate within the framework of this type of contract.

Evaluation of the offeror’s management plan is based on the comprehensiveness and thoroughness of the narrative in the proposal. Descriptions must be more than simple restatements of the Statement of Work Sections or responses such as “We will do this”.

Data Interchange

In this section, the Government will evaluate the offeror's response to Attachment C, Statement of Work, and C.1.3.4. Electronic Processes, C.1.3.5. Technology Refreshment Proposals and Attachment D Contractor / Government Communication Requirements. The offeror's ability to respond to innovative procurement actions and processes will be evaluated for cost effectiveness and efficiency in support of the fourth Acquisition Objective in Addendum 1, Attachment C. The Government will evaluate the offeror's ability to implement and utilize automated processes for order processing, tracking, delivery, invoicing and payment which minimize human intervention. The Government will evaluate the offeror's corporate electronic interchange, EDI and e-Commerce strategy and corporate resources devoted to electronic interchange, EDI and e-Commerce. The Government will evaluate the offeror's response to Attachment C, Section C.1.3.1.1. World Wide Web (WWW) Services for completeness. The Offeror's method for HTML authoring and the mechanism for maintaining data integrity between the offeror's database of SEWP products and the WWW ordering guide will be evaluated for effectiveness and understanding.

Evaluation of Subfactor C is based on the comprehensiveness of the narrative in the proposal. Descriptions must be more than simple restatements of the Statement of Work Sections or responses such as "We will do this".

(End of text)

A.4.7. PAST PERFORMANCE EVALUATION

Each Offeror's recent and relevant past performance history for ongoing or completed contracts within 3 years of the proposal due date will be evaluated on an Acceptable/Unacceptable basis. Following proposal receipt, the Integrated Evaluation Team will review the proposal, Government Past Performance Databases, and any other sources of past performance evaluations or input to locate any relevant past performance information for the Offeror within three years of the proposal due date. Relevant past performance information includes any performance history that is similar in content and scope to the proposed work for this acquisition and was ongoing or completed within 3 years of the proposal due date. The term "content" means the type and complexity of services, work, or supplies, in comparison to the requirements of this solicitation. This evaluation will include the offeror's experience on IDIQ contracts, both GWAC and commercial, concerning management of contracts from financial, organizational, technical, and operational perspectives.

An Offeror with no relevant record of past performance within 3 years of the proposal due date that was ongoing or completed will be evaluated as "Acceptable". Any Offeror with relevant and acceptable performance information within 3 years of the proposal due date will evaluated as "Acceptable". If an Offeror has adverse relevant past performance information the Contracting Officer will contact the Offeror and provide them with an opportunity to provide a written response to address the adverse past performance information. An Offeror will be evaluated as "Unacceptable", and therefore will not be eligible for contract award, in the event that it's relevant past performance history within 3 years of the proposal due date reflects significant adverse performance issues. If an offeror presents information demonstrating improved performance, processes, policies, changes, etc., since any adverse performance events that may be provided to the Government as part of the Offeror's written response and will be considered in the evaluation.

(End of text)

A.4.8. PRICE EVALUATION

A price analysis will be conducted in accordance with FAR 15.305(a)(1). Price analysis is described at FAR 15.404-1(b). This analysis is done to ensure that a "fair and reasonable" price is paid by the Government.

The pricing evaluation will be done by adding the Mandatory pricing and Available Component Pricing Values:

a. As described in A.3.14.4. and A.3.14.5. and A.3.14.5.1. the proposed price for each mandatory line item is multiplied by an estimate quantity (fixed in the pricing exhibits). A 3- year life cycle pricing is established based on a 3- year warranty period. The total 3- year life cycle cost of all items is summed up to provide the Total Mandatory Items pricing

b. As described in A.3.15.4.1., the total list price and total proposed SEWP price of all available components for each of the provided Product Classification Worksheet will be summed up for each associated worksheet and the overall proposed discount for each of those Product Classifications will be calculated. The overall proposed discount is then multiplied by a Government estimated value for that Category to arrive at an evaluation price for each category. The individual category prices are then summed up to provide the Total Available Components pricing

c. The Total Mandatory Items are added to the Total Available Components pricing to arrive at the evaluated overall Proposal Total. It is this Proposal Total which is used for the Price Evaluation.

(End of text)

V. OFFEROR REPRESENTATIONS AND CERTIFICATIONS--COMMERCIAL ITEMS (52.212-3) (AUG 2013)--ALTERNATE I (APR 2011)

An offeror shall complete only paragraph (b) of this provision if the offeror has completed the annual representations and certifications electronically via http://www.acquisition.gov. If an offeror has not completed the annual representations and certifications electronically at the System for Award Management (SAM) website, the offeror shall complete only paragraphs (c) through (o) of this provision.

(a) *Definitions*. As used in this provision—

"Economically disadvantaged women-owned small business (EDWOSB) concern" means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States and who are economically disadvantaged in accordance with 13 CFR part 127. It automatically qualifies as a women-owned small business eligible under the WOSB Program.

"Forced or indentured child labor" means all work or service—

(1) Exacted from any person under the age of 18 under the menace of any penalty for its nonperformance and for which the worker does not offer himself voluntarily; or

(2) Performed by any person under the age of 18 pursuant to a contract the enforcement of which can be accomplished by process or penalties.

"Inverted domestic corporation", as used in this section, means a foreign incorporated entity which is treated as an inverted domestic corporation under 6 U.S.C. 395(b), *i.e.*, a corporation that used to be incorporated in the United States, or used to be a partnership in the United States, but now is incorporated in a foreign country, or is a subsidiary whose parent corporation is incorporated in a foreign country, that meets the criteria specified in 6 U.S.C. 395(b), applied in accordance with the rules and definitions of 6 U.S.C. 395(c). An inverted domestic corporation as herein defined does not meet the definition of an inverted domestic corporation as defined by the Internal Revenue Code at 26 U.S.C. 7874.

"Manufactured end product" means any end product in Federal Supply Classes (FSC) 1000-9999, except—

(1) FSC 5510, Lumber and Related Basic Wood Materials;

(2) Federal Supply Group (FSG) 87, Agricultural Supplies;

(3) FSG 88, Live Animals;

(4) FSG 89, Food and Related Consumables;

(5) FSC 9410, Crude Grades of Plant Materials;

(6) FSC 9430, Miscellaneous Crude Animal Products, Inedible;

(7) FSC 9440, Miscellaneous Crude Agricultural and Forestry Products;

(8) FSC 9610, Ores;

(9) FSC 9620, Minerals, Natural and Synthetic; and

(10) FSC 9630, Additive Metal Materials.

"Place of manufacture" means the place where an end product is assembled out of components, or otherwise made or processed from raw materials into the finished product that is to be provided to the Government. If a product is disassembled and reassembled, the place of reassembly is not the place of manufacture.

"Restricted business operations" means business operations in Sudan that include power production activities, mineral extraction activities, oil-related activities, or the production of military equipment, as those terms are defined in the Sudan Accountability and Divestment Act of 2007 (Pub. L. 110-174). Restricted business operations do not include business operations that the person (as that term is defined in Section 2 of the Sudan Accountability and Divestment Act of 2007) conducting the business can demonstrate—

(1) Are conducted under contract directly and exclusively with the regional government of southern Sudan;

(2) Are conducted pursuant to specific authorization from the Office of Foreign Assets Control in the Department of the Treasury, or are expressly exempted under Federal law from the requirement to be conducted under such authorization;

(3) Consist of providing goods or services to marginalized populations of Sudan;

(4) Consist of providing goods or services to an internationally recognized peacekeeping force or humanitarian organization;

(5) Consist of providing goods or services that are used only to promote health or education; or

(6) Have been voluntarily suspended.

"Sensitive technology"—

(1) Means hardware, software, telecommunications equipment, or any other technology that is to be used specifically—

(i) To restrict the free flow of unbiased information in Iran; or

(ii) To disrupt, monitor, or otherwise restrict speech of the people of Iran; and

(2) Does not include information or informational materials the export of which the President does not have the authority to regulate or prohibit pursuant to section 203(b)(3) of the International Emergency Economic Powers Act (50 U.S.C. 1702(b)(3)).

"Service-disabled veteran-owned small business concern"—

(1) Means a small business concern—

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

"Small business concern" means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and size standards in this solicitation.

"Subsidiary" means an entity in which more than 50 percent of the entity is owned—

(1) Directly by a parent corporation; or

(2) Through another subsidiary of a parent corporation.

"Veteran-owned small business concern" means a small business concern—

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

"Women-owned business concern" means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of its stock is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

"Women-owned small business concern" means a small business concern—

(1) That is at least 51 percent owned by one or more women; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

"Women-owned small business (WOSB) concern eligible under the WOSB Program" (in accordance with 13 CFR part 127), means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States.

(b)

(1) *Annual Representations and Certifications*. Any changes provided by the offeror in paragraph (b)(2) of this provision do not automatically change the representations and certifications posted on the SAM website.

(2) The offeror has completed the annual representations and certifications electronically via the SAM website accessed through http://www.acquisition.gov. After reviewing the SAM database information, the offeror verifies by submission of this offer that the representations and certifications currently posted electronically at FAR 52.212-3, Offeror Representations and Certifications—Commercial Items, have been entered or updated in the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201), except for paragraphs _____.

[*Offeror to identify the applicable paragraphs at (c) through (o) of this provision that the offeror has completed for the purposes of this solicitation only, if any.*

These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted electronically on SAM.]

(c) Offerors must complete the following representations when the resulting contract will be performed in the United States or its outlying areas. Check all that apply.

(1) *Small business concern*. The offeror represents as part of its offer that it [ ] is, [ ] is not a small business concern.

(2) *Veteran-owned small business concern*. [*Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision*.] The offeror represents as part of its offer that it [ ] is, [ ] is not a veteran-owned small business concern.

(3) *Service-disabled veteran-owned small business concern*. [*Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(2) of this provision*.] The offeror represents as part of its offer that it [ ] is, [ ] is not a service-disabled veteran-owned small business concern.

(4) *Small disadvantaged business concern*. [*Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision*.] The offeror represents, for general statistical purposes, that it [ ] is, [ ] is not a small disadvantaged business concern as defined in 13 CFR 124.1002.

(5) *Women-owned small business concern*. [*Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision*.] The offeror represents that it [ ] is, [ ] is not a women-owned small business concern.

(6) WOSB concern eligible under the WOSB Program. *[Complete only if the offeror represented itself as a women-owned small business concern in paragraph (c)(5) of this provision.]* The offeror represents that—

(i) It [ ] is,[ ] is not a WOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (c)(6)(i) of this provision is accurate for each WOSB concern eligible under the WOSB Program participating in the joint venture. [*The offeror shall enter the name or names of the WOSB concern eligible under the WOSB Program and other small businesses that are participating in the joint venture:* _____.] Each WOSB concern eligible under the WOSB Program participating in the joint venture shall submit a separate signed copy of the WOSB representation.

(7) Economically disadvantaged women-owned small business (EDWOSB) concern. [*Complete only if the offeror represented itself as a WOSB concern eligible under the WOSB Program in (c)(6) of this provision.*] The offeror represents that—

(i) It [ ] is, [ ] is not an EDWOSB concern, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It [ ] is, [ ] is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (c)(7)(i) of this provision is accurate for each EDWOSB concern participating in the joint venture. [*The offeror shall enter the name or names of the EDWOSB concern and other small businesses that are participating in the joint venture:* _____.] Each EDWOSB concern participating in the joint venture shall submit a separate signed copy of the EDWOSB representation.

Note: Complete paragraphs (c)(8) and (c)(9) only if this solicitation is expected to exceed the simplified acquisition threshold.

(8) *Women-owned business concern (other than small business concern).* [*Complete only if the offeror is a women-owned business concern and did not represent itself as a small business concern in paragraph (c)(1) of this provision*.] The offeror represents that it o is a women-owned business concern.

(9) *Tie bid priority for labor surplus area concerns*. If this is an invitation for bid, small business offerors may identify the labor surplus areas in which costs to be incurred on account of manufacturing or production (by offeror or first-tier subcontractors) amount to more than 50 percent of the contract price:_____

(10) [*Complete only if the solicitation contains the clause at FAR* 52.219-23*, Notice of Price Evaluation Adjustment for Small Disadvantaged Business Concerns, or FAR* 52.219-25*, Small Disadvantaged Business Participation Program—Disadvantaged Status and Reporting, and the offeror desires a benefit based on its disadvantaged status.*]

(i) *General*. The offeror represents that either—

(A) It [ ] is, [ ] is not certified by the Small Business Administration as a small disadvantaged business concern and identified, on the date of this representation, as a certified small disadvantaged business concern in the SAM Dynamic Small Business Search database maintained by the Small Business Administration, and that no material change in disadvantaged ownership and control has occurred since its certification, and, where the concern is owned by one or more individuals claiming disadvantaged status, the net worth of each individual upon whom the

certification is based does not exceed $750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); or

(B) It [ ] has, [ ] has not submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR 124, Subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted.

(ii) [ ] *Joint Ventures under the Price Evaluation Adjustment for Small Disadvantaged Business Concerns.* The offeror represents, as part of its offer, that it is a joint venture that complies with the requirements in 13 CFR 124.1002(f) and that the representation in paragraph (c)(10)(i) of this provision is accurate for the small disadvantaged business concern that is participating in the joint venture. [*The offeror shall enter the name of the small disadvantaged business concern that is participating in the joint venture:* _____.]

(11) *HUBZone small business concern*. [*Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.*] The offeror represents, as part of its offer, that—

(i) It [ ] is, [ ] is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material changes in ownership and control, principal office, or HUBZone employee percentage have occurred since it was certified in accordance with 13 CFR Part 126; and

(ii) It [ ] is, [ ] is not a HUBZone joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (c)(11)(i) of this provision is accurate for each HUBZone small business concern participating in the HUBZone joint venture. [The offeror shall enter the names of each of the HUBZone small business concerns participating in the HUBZone joint venture: _____.] Each HUBZone small business concern participating in the HUBZone joint venture shall submit a separate signed copy of the HUBZone representation.

(12) (Complete if the offeror has represented itself as disadvantaged in paragraph (c)(4) or (c)(10) of this provision.)

[*The offeror shall check the category in which its ownership falls*]:

____ Black American.

____ Hispanic American.

____ Native American (American Indians, Eskimos, Aleuts, or Native Hawaiians).

____ Asian-Pacific American (persons with origins from Burma, Thailand, Malaysia, Indonesia, Singapore, Brunei, Japan, China, Taiwan, Laos, Cambodia (Kampuchea), Vietnam, Korea, The Philippines, U.S. Trust Territory of the Pacific Islands (Republic of Palau), Republic of the Marshall Islands, Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, Guam, Samoa, Macao, Hong Kong, Fiji, Tonga, Kiribati, Tuvalu, or Nauru).

____ Subcontinent Asian (Asian-Indian) American (persons with origins from India, Pakistan, Bangladesh, Sri Lanka, Bhutan, the Maldives Islands, or Nepal).

____ Individual/concern, other than one of the preceding.

(d) Representations required to implement provisions of Executive Order 11246—

(1) Previous contracts and compliance. The offeror represents that—

(i) It [ ] has, [ ] has not participated in a previous contract or subcontract subject to the Equal Opportunity clause of this solicitation; and

(ii) It [ ] has, [ ] has not filed all required compliance reports.

(2) *Affirmative Action Compliance*. The offeror represents that—

(i) It [ ] has developed and has on file, [ ] has not developed and does not have on file, at each establishment, affirmative action programs required by rules and regulations of the Secretary of Labor (41 cfr parts 60-1 and 60-2), or

(ii) It [ ] has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

(e) *Certification Regarding Payments to Influence Federal Transactions (*31 U.S.C. 1352*)*. (Applies only if the contract is expected to exceed $150,000.) By submission of its offer, the offeror certifies to the best of its knowledge and belief that no Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with the award of any resultant contract. If any registrants under the Lobbying Disclosure Act of 1995 have made a lobbying contact on behalf of the offeror with respect to this contract, the offeror shall complete and submit, with its offer, OMB Standard Form LLL, Disclosure of Lobbying Activities, to provide the name of the registrants. The offeror need not report regularly employed officers or employees of the offeror to whom payments of reasonable compensation were made.

(f) *Buy American Act Certificate*. (Applies only if the clause at Federal Acquisition Regulation (FAR) 52.225-1, Buy American Act—Supplies, is included in this solicitation.)

(1) The offeror certifies that each end product, except those listed in paragraph (f)(2) of this provision, is a domestic end product and that for other than COTS items, the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The offeror shall list as foreign end products those end products manufactured in the United States that do not qualify as domestic end products, *i.e.*, an end product that is not a COTS item and does not meet the component test in paragraph (2) of the definition of "domestic end product." The terms "commercially available off-the-shelf (COTS) item" "component," "domestic end product," "end product," "foreign end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act—Supplies."

(2) Foreign End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

[*List as necessary*]

(3) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(g)(1) *Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate*. (Applies only if the clause at FAR 52.225-3, Buy American Act—Free Trade Agreements—Israeli Trade Act, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(1)(ii) or (g)(1)(iii) of this provision, is a domestic end product and that for other than COTS items, the offeror has considered components of unknown origin to have been mined, produced, or manufactured outside the United States. The terms "Bahrainian, Moroccan, Omani, Panamanian, or Peruvian end product," "commercially available off-the-shelf (COTS) item," "component," "domestic end product," "end product," "foreign end product," "Free Trade Agreement country," "Free Trade Agreement country end product," "Israeli end product," and "United States" are defined in the clause of this solicitation entitled "Buy American Act—Free Trade Agreements–Israeli Trade Act."

(ii) The offeror certifies that the following supplies are Free Trade Agreement country end products (other than Bahrainian, Moroccan, Omani, Panamanian, or Peruvian end products) or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act—Free Trade Agreements—Israeli Trade Act":

Free Trade Agreement Country End Products (Other than Bahrainian, Moroccan, Omani, Panamanian, or Peruvian End Products) or Israeli End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

[*List as necessary*]

(iii) The offeror shall list those supplies that are foreign end products (other than those listed in paragraph (g)(1)(ii) of this provision) as defined in the clause of this solicitation entitled "Buy American Act—Free Trade Agreements—Israeli Trade Act." The offeror shall list as other foreign end products those end products manufactured in the United States that do not qualify as domestic end products, *i.e.*, an end product that is not a COTS item and does not meet the component test in paragraph (2) of the definition of "domestic end product."

Other Foreign End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

[*List as necessary*]

(iv) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25.

(2) *Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate, Alternate I*. If Alternate I to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products as defined in the clause of this solicitation entitled "Buy American Act—Free Trade Agreements—Israeli Trade Act":

Canadian End Products:

Line Item No.

_____

_____

_____

[*List as necessary*]

(3) *Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate, Alternate II*. If Alternate II to the clause at FAR 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Canadian end products or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act—Free Trade Agreements—Israeli Trade Act":

Canadian or Israeli End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

[*List as necessary*]

(4) *Buy American Act—Free Trade Agreements—Israeli Trade Act Certificate, Alternate III*. If Alternate III to the clause at 52.225-3 is included in this solicitation, substitute the following paragraph (g)(1)(ii) for paragraph (g)(1)(ii) of the basic provision:

(g)(1)(ii) The offeror certifies that the following supplies are Free Trade Agreement country end products (other than Bahrainian, Korean, Moroccan, Omani, Panamanian, or Peruvian end products) or Israeli end products as defined in the clause of this solicitation entitled "Buy American Act-Free Trade Agreements-Israeli Trade Act":

Free Trade Agreement Country End Products (Other than Bahrainian, Korean, Moroccan, Omani, Panamanian, or Peruvian End Products) or Israeli End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

[*List as necessary*]

(5) *Trade Agreements Certificate*. (Applies only if the clause at FAR 52.225-5, Trade Agreements, is included in this solicitation.)

(i) The offeror certifies that each end product, except those listed in paragraph (g)(5)(ii) of this provision, is a U.S.-made or designated country end product, as defined in the clause of this solicitation entitled "Trade Agreements."

(ii) The offeror shall list as other end products those end products that are not U.S.-made or designated country end products.

Other End Products:

Line Item No.	Country of Origin
_____	_____
_____	_____
_____	_____

[*List as necessary*]

(iii) The Government will evaluate offers in accordance with the policies and procedures of FAR Part 25. For line items covered by the WTO GPA, the Government will evaluate offers of U.S.-made or designated country end products without regard to the restrictions of the Buy American Act. The Government will consider for award only offers of U.S.-made or designated country end products unless the Contracting Officer determines that there are no offers for such products or that the offers for such products are insufficient to fulfill the requirements of the solicitation.

(h) *Certification Regarding Responsibility Matters (Executive Order 12689*). (Applies only if the contract value is expected to exceed the simplified acquisition threshold.) The offeror certifies, to the best of its knowledge and belief, that the offeror and/or any of its principals—

(1) o Are, o are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(2) o Have, o have not, within a three-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, state or local government contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, violating Federal criminal tax laws, or receiving stolen property;

(3) o Are, o are not presently indicted for, or otherwise criminally or civilly charged by a Government entity with, commission of any of these offenses enumerated in paragraph (h)(2) of this clause; and

(4) o Have, o have not, within a three-year period preceding this offer, been notified of any delinquent Federal taxes in an amount that exceeds $3,000 for which the liability remains unsatisfied.

(i) Taxes are considered delinquent if both of the following criteria apply:

(A) *The tax liability is finally determined*. The liability is finally determined if it has been assessed. A liability is not finally determined if there is a pending administrative or judicial challenge. In the case of a judicial challenge to the liability, the liability is not finally determined until all judicial appeal rights have been exhausted.

(B) *The taxpayer is delinquent in making payment*. A taxpayer is delinquent if the taxpayer has failed to pay the tax liability when full payment was due and required. A taxpayer is not delinquent in cases where enforced collection action is precluded.

(ii) *Examples*.

(A) The taxpayer has received a statutory notice of deficiency, under I.R.C. §6212, which entitles the taxpayer to seek Tax Court review of a proposed tax deficiency. This is not a delinquent tax because it is not a final

tax liability. Should the taxpayer seek Tax Court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(B) The IRS has filed a notice of Federal tax lien with respect to an assessed tax liability, and the taxpayer has been issued a notice under I.R.C. §6320 entitling the taxpayer to request a hearing with the IRS Office of Appeals contesting the lien filing, and to further appeal to the Tax Court if the IRS determines to sustain the lien filing. In the course of the hearing, the taxpayer is entitled to contest the underlying tax liability because the taxpayer has had no prior opportunity to contest the liability. This is not a delinquent tax because it is not a final tax liability. Should the taxpayer seek tax court review, this will not be a final tax liability until the taxpayer has exercised all judicial appeal rights.

(C) The taxpayer has entered into an installment agreement pursuant to I.R.C. §6159. The taxpayer is making timely payments and is in full compliance with the agreement terms. The taxpayer is not delinquent because the taxpayer is not currently required to make full payment.

(D) The taxpayer has filed for bankruptcy protection. The taxpayer is not delinquent because enforced collection action is stayed under 11 U.S.C. §362 (the Bankruptcy Code).

(i) Certification Regarding Knowledge of Child Labor for *Listed End Products (Executive Order 13126)*. [*The Contracting Officer must list in paragraph (i)(1) any end products being acquired under this solicitation that are included in the List of Products Requiring Contractor Certification as to Forced or Indentured Child Labor, unless excluded at* 22.1503*(b)*.]

(1) *Listed end products.*

Listed End Product	Listed Countries of Origin
_____	_____
_____	_____

(2) *Certification*. [*If the Contracting Officer has identified end products and countries of origin in paragraph (i)(1) of this provision, then the offeror must certify to either (i)(2)(i) or (i)(2)(ii) by checking the appropriate block.*]

[ ] (i) The offeror will not supply any end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product.

[ ] (ii) The offeror may supply an end product listed in paragraph (i)(1) of this provision that was mined, produced, or manufactured in the corresponding country as listed for that product. The offeror certifies that it has made a good faith effort to determine whether forced or indentured child labor was used to mine, produce, or manufacture any such end product furnished under this contract. On the basis of those efforts, the offeror certifies that it is not aware of any such use of child labor.

(j) *Place of manufacture.* (Does not apply unless the solicitation is predominantly for the acquisition of manufactured end products.) For statistical purposes only, the offeror shall indicate whether the place of manufacture of the end products it expects to provide in response to this solicitation is predominantly—

(1) [ ] In the United States (Check this box if the total anticipated price of offered end products manufactured in the United States exceeds the total anticipated price of offered end products manufactured outside the United States); or

(2) [ ] Outside the United States.

(k) *Certificates regarding exemptions from the application of the Service Contract Act.* (Certification by the offeror as to its compliance with respect to the contract also constitutes its certification as to compliance by its subcontractor if it subcontracts out the exempt services.)

[ ] (1) Maintenance, calibration, or repair of certain equipment as described in FAR 22.1003-4(c)(1). The offeror [ ] does o does not certify that—

(i) The items of equipment to be serviced under this contract are used regularly for other than Governmental purposes and are sold or traded by the offeror (or subcontractor in the case of an exempt subcontract) in substantial quantities to the general public in the course of normal business operations;

(ii) The services will be furnished at prices which are, or are based on, established catalog or market prices (see FAR 22.1003-4(c)(2)(ii)) for the maintenance, calibration, or repair of such equipment; and

(iii) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract will be the same as that used for these employees and equivalent employees servicing the same equipment of commercial customers.

[ ] (2) Certain services as described in FAR 22.1003-4(d)(1). The offeror [ ] does [ ] does not certify that—

(i) The services under the contract are offered and sold regularly to non-Governmental customers, and are provided by the offeror (or subcontractor in the case of an exempt subcontract) to the general public in substantial quantities in the course of normal business operations;

(ii) The contract services will be furnished at prices that are, or are based on, established catalog or market prices (see FAR 22.1003-4(d)(2)(iii));

(iii) Each service employee who will perform the services under the contract will spend only a small portion of his or her time (a monthly average of less than 20 percent of the available hours on an annualized basis, or less than 20 percent of available hours during the contract period if the contract period is less than a month) servicing the Government contract; and

(iv) The compensation (wage and fringe benefits) plan for all service employees performing work under the contract is the same as that used for these employees and equivalent employees servicing commercial customers.

(3) If paragraph (k)(1) or (k)(2) of this clause applies—

(i) If the offeror does not certify to the conditions in paragraph (k)(1) or (k)(2) and the Contracting Officer did not attach a Service Contract Act wage determination to the solicitation, the offeror shall notify the Contracting Officer as soon as possible; and

(ii) The Contracting Officer may not make an award to the offeror if the offeror fails to execute the certification in paragraph (k)(1) or (k)(2) of this clause or to contact the Contracting Officer as required in paragraph (k)(3)(i) of this clause.

(l) *Taxpayer Identification Number (TIN) (*26 U.S.C. 6109, *31 U.S.C. 7701)*. (Not applicable if the offeror is required to provide this information to the SAM database to be eligible for award.)

(1) All offerors must submit the information required in paragraphs (l)(3) through (l)(5) of this provision to comply with debt collection requirements of 31 U.S.C. 7701(c) and 3325(d), reporting requirements of 26 U.S.C. 6041, 6041A, and 6050M, and implementing regulations issued by the Internal Revenue Service (IRS).

(2) The TIN may be used by the Government to collect and report on any delinquent amounts arising out of the offeror's relationship with the Government (31 U.S.C. 7701(c)(3)). If the resulting contract is subject to the payment reporting requirements described in FAR 4.904, the TIN provided hereunder may be matched with IRS records to verify the accuracy of the offeror's TIN.

(3) *Taxpayer Identification Number (TIN)*.

[ ] TIN: _____.

[ ] TIN has been applied for.

[ ] TIN is not required because:

[ ] Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the United States and does not have an office or place of business or a fiscal paying agent in the United States;

[ ] Offeror is an agency or instrumentality of a foreign government;

[ ] Offeror is an agency or instrumentality of the Federal Government.

(4) *Type of organization*.

[ ] Sole proprietorship;

[ ] Partnership;

[ ] Corporate entity (not tax-exempt);

[ ] Corporate entity (tax-exempt);

[ ] Government entity (Federal, State, or local);

[ ] Foreign government;

[ ] International organization per 26 CFR 1.6049-4;

[ ] Other _____.

(5) *Common parent*.

[ ] Offeror is not owned or controlled by a common parent;

[ ] Name and TIN of common parent:

Name _____.

TIN _____.

(m) *Restricted business operations in Sudan*. By submission of its offer, the offeror certifies that the offeror does not conduct any restricted business operations in Sudan.

(n) Prohibition on Contracting with Inverted Domestic Corporations.

(1) *Relation to Internal Revenue Code*. An inverted domestic corporation as herein defined does not meet the definition of an inverted domestic corporation as defined by the Internal Revenue Code 25 U.S.C. 7874.

(2) *Representation*. By submission of its offer, the offeror represents that—

(i) It is not an inverted domestic corporation; and

(ii) It is not a subsidiary of an inverted domestic corporation.

(o) Prohibition on contracting with entities engaging in certain activities or transactions relating to Iran.

(1) The offeror shall e-mail questions concerning sensitive technology to the Department of State at CISADA106@state.gov.

(2) *Representation and Certifications*. Unless a waiver is granted or an exception applies as provided in paragraph (o)(3) of this provision, by submission of its offer, the offeror—

(i) Represents, to the best of its knowledge and belief, that the offeror does not export any sensitive technology to the government of Iran or any entities or individuals owned or controlled by, or acting on behalf or at the direction of, the government of Iran;

(ii) Certifies that the offeror, or any person owned or controlled by the offeror, does not engage in any activities for which sanctions may be imposed under section 5 of the Iran Sanctions Act; and

(iii) Certifies that the offeror, and any person owned or controlled by the offeror, does not knowingly engage in any transaction that exceeds $3,000 with Iran's Revolutionary Guard Corps or any of its officials, agents, or affiliates, the property and interests in property of which are blocked pursuant to the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.) (see OFAC's Specially Designated Nationals and Blocked Persons List at http://www.treasury.gov/ofac/downloads/t11sdn.pdf).

(3) The representation and certification requirements of paragraph (o)(2) of this provision do not apply if—

(i) This solicitation includes a trade agreements certification (*e.g.*, 52.212-3(g) or a comparable agency provision); and

(ii) The offeror has certified that all the offered products to be supplied are designated country end products.

(End of provision)

A.5.1 INFORMATION TECHNOLOGY SYSTEMS FROM ENTITIES OWNED, DIRECTED OR SUBSIDIZED BY THE PEOPLE'S REPUBLIC OF CHINA 1852.225-73 (JUNE 2013) (DEVIATION)(NASA ORDERS ONLY)

(a) Definitions –

"Acquire" means procure with appropriated funds by and for the use of NASA through purchase or lease.

"Entity owned, directed or subsidized by the People's Republic of China" means any organization incorporated under the laws of the People's Republic of China.

"**Information Technology (IT) System"** means the combination of hardware components, software, and other equipment to make a system whose core purpose is to accomplish a data processing need such as the automatic acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data. IT systems include ground systems in support of flight hardware. IT systems do not include—

(i) Systems acquired by a contractor incidental to a contract;

(ii) Imbedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, analysis, evaluation, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation, are not information technology systems;

(iii) Services in support of IT systems, such as help desk services; or

(iv) Flight hardware, which includes aircraft, spacecraft, artificial satellites, launch vehicles, balloon systems, sounding rockets, on-board instrument and technology demonstration systems, and equipment operated on the International Space Station; as well as prototypes, and engineering or brass boards created and used to test, troubleshoot, and refine air- and spacecraft hardware, software and procedures.

(b) Section 516 of the Consolidated and Further Continuing Appropriation Act, 2013 (Pub. L.113-6), requires NASA's Office of the Chief Information Officer (OCIO) to assess the risk of cyber-espionage or sabotage of an information technology (IT) system that is produced, manufactured, or assembled by an entity owned, directed or subsidized by the People's Republic of China. By submitting an offer in response to this solicitation, the Offeror understands and agrees that the Government retains the right to reject any offer or response to this solicitation made by the Offeror, without any further recourse by, or explanation to, the Offeror, if the Government determines the Offeror or the equipment or software offered by the Offeror, in whole or in part, presents an unacceptable risk to national security.

(c) *Representation*. The Offeror represents that any information technology system offered, except those listed in paragraph (d) of this provision, is not produced, manufactured, or assembled by an entity owned, directed or subsidized by the People's Republic of China.

(d) Information technology system(s) produced, manufactured, or assembled by an entity owned, directed or subsidized by the People's Republic of China:

ITEM	VENDOR/MANUFACTURER'S COMPANY NAME AND ADDRESS
_____	_____
_____	_____
_____	_____

[*List as necessary*]

(e) The Contracting Officer will provide the list referenced in paragraph (d) to the NASA Office of the Chief Information Officer (OCIO) which will assess the risk of cyber-espionage or sabotage and make a determination if

the acquisition of such system is in the national interest. Only items so approved may be provided under the contract. The Contracting Officer will advise the Offeror if any items are not approved and may provide the Offeror an opportunity to revise its proposal.

(End of provision)

A.5.2 REPRESENTATION BY OFFERORS THAT THEY ARE NOT THE ASSOCIATION OF COMMUNITY ORGANIZATIONS FOR REFORM NOW (ACORN) OR A SUBSIDIARY OF ACORN (1852.209-73) (FEB 2012)

(a) In accordance with section 534 of The Consolidated and Further Continuing Appropriation Act of 2012 (Pub. L.112-55) none of the funds made available by the Act may be distributed to the Association of Community Organizations for Reform Now (ACORN) or its subsidiaries.
(b) The offeror represents, by submission of its offer, that it is not the Association of Community Organizations for Reform Now (ACORN) or a subsidiary thereof.

(End of provision)

Class Deviation – Certification by Offerors regarding Federal income tax filing and Federal income tax violations.

A.5.3 CERTIFICATION BY OFFERORS REGARDING FEDERAL INCOME TAX FILING and FEDERAL INCOME TAX VIOLATIONS.(1852-209.74)(DEVIATION FEB 2012)

(a) In accordance with section 527 of The Consolidated and Further Continuing Appropriation Act of 2012 (Pub. L.112-55) none of the funds made available by the Act may be used to enter into a contract in an amount greater than $5 Million unless the prospective contractor certifies in writing to NASA that, to the best of its knowledge and belief, the contractor has filed all Federal tax returns required during the three years preceding the certification, has not been convicted of a criminal offense under the Internal revenue Code of 1986, and has not, more than 90 days prior to certification, been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default, or the assessment is the subject of a non-frivolous administrative or judicial proceeding.

(b) The offeror's proposal shall include a signed written certification as follows –

To the best of my knowledge and belief, ---(name of offeror)--- has filed the Federal tax returns required during the three years preceding this certification, has not been convicted of a criminal offense under the Internal revenue Code of 1986, and has not, more than 90 days prior to certification, been notified of any unpaid Federal tax assessment for which the liability remains unsatisfied, unless the assessment is the subject of an installment agreement or offer in compromise that has been approved by the Internal Revenue Service and is not in default, or the assessment is the subject of a non-frivolous administrative or judicial proceeding.

Firm _____

Signature _____

Name _____

Title _____

Date of execution _____

(End of Provision)

Class Deviation – Prohibition against Contracting with Corporations that have an Unpaid Delinquent Tax Liability or a Felony Conviction under Federal Law.

A.5.4 REPRESENTATION BY CORPORATIONS REGARDING AN UNPAID DELINQUENT TAX LIABILITY OR A FELONY CONVICTION UNDER ANY FEDERAL LAW (1852.209-75)(FEB 2012)

(a) In accordance with sections 544 and 543 of The Consolidated and Further Continuing Appropriation Act of 2012 (Pub. L.112-55), none of the funds made available by that Act may be used to enter into a contract with any corporation that-

(1) Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless the agency has considered suspension or debarment of the corporation and made a determination that this action is not necessary to protect the interests of the Government; or

(2) Was convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless the agency has considered suspension or debarment of the corporation and made a determination that this action is not necessary to protect the interests of the Government.

(b) The offeror represents that –

(1) It is [ ] is not [ ] a corporation that has had any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and

(2) It is [ ] is not [ ] a corporation that was convicted, or had an officer or agent acting on behalf of the corporation convicted, of a felony criminal violation under a Federal law within the preceding 24 months.

(End of provision)

- End of Amendment 8