SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS
OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30

1. REQUISITION NO.	PAGE 1 OF 535

2. CONTRACT NO.	3. AWARD/EFFECTIVE DATE	4. ORDER NO.	5. SOLICITATION NO.	6. SOLICITATION ISSUE DATE
NNX11AA01C	December 27, 2010	N/A	NNX10272008R	January 25, 2010

7. FOR SOLICITATION INFORMATION CALL ▶	a. NAME	b. TELEPHONE NO. (No collect calls)	8. OFFER DUE DATE/LOCAL TIME
	Tracy H. Hall, tracy.h.hall@nasa.gov	228-813-6032	See Section III Provision 13.0

9. ISSUED BY	CODE XD042	10. THIS ACQUISITION IS	11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED	12. DISCOUNT TERMS
NASA Shared Services Center Procurement Operations Division, MC: XD042 Building 1111, C. Road Stennis Space Center, MS 39529		☒ UNRESTRICTED OR ☐ SET ASIDE: ☐ % FOR ☐ SMALL BUSINESS ☐ EMERGING SMALL BUSINESS ☐ HUBZONE SMALL BUSINESS ☐ SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS ☐ 8(A) NAICS: 541512 SIZE STD: $23.0 M	☐ SEE SCHEDULE	See Volume III - Pricing
			☒ 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)	
			13b. RATING: DO-C9	
			14. METHOD OF SOLICITATION ☐ RFQ ☐ RFO ☐ IFB ☒ RFP	

15. DELIVER TO	CODE XD030	16. ADMINISTERED BY	CODE XD042
NASA NASA Shared Services Center Building 1111, C. Road Stennis Space Center, MS 39529		See Block 9 Joseph Ladner, joseph.d.ladner@nasa.gov Phone: 228-813-6890	

17a. CONTRACTOR/ OFFEROR CODE	FACILITY CODE	18a. PAYMENT WILL BE MADE BY	CODE XD011
HP Enterprise Services, LLC 13600 EDS Drive Herndon, VA 20171 TELEPHONE NO.		NASA Shared Services Center Financial Management Division (FMD) – Accounts Payable Building 1111, C. Road Stennis Space Center, MS 39529 REF: NNX10272008R Email: NSSC-AccountsPayable@nasa.gov FAX: 1-866-209-5415	
☐ 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER		18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED ☐ SEE ADDENDUM	

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	All labor, materials, supplies and management necessary to provide Agency Consolidated End-user Services to NASA in accordance with the contract terms and conditions contained herein. Type of contract: Single Award, Firm-Fixed-Price, IDIQ Minimum IDIQ Value: $5,000,000 Maximum IDIQ Value: $2,500,000,000 *(Use Reverse and/or Attach Additional Sheets as Necessary)*				

25. ACCOUNTING AND APPROPRIATION DATA	26. TOTAL AWARD AMOUNT *(For Govt. Use Only)*
PR 4200272008 & 4200369585 Incremental Funding: See Section I, Clause 2.8	See Section I, Clause 2.3

☒ 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4. FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDA ☒ ARE ☐ ARE NOT ATTACHED.
☐ 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA ☒ ARE ☐ ARE NOT ATTACHED.

☒ 28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN SEE SECTION III, PROVISION 14.0 COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED HEREIN.	☐ 29. AWARD OF CONTRACT: REFERENCE _____ OFFER DATED _____. YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS:

30a. SIGNATURE OF OFFEROR/CONTRACTOR	31a. UNITED STATES OF AMERICA *(SIGNATURE OF CONTRACTING OFFICER)*
Kathleen A. Massie	

30b. NAME AND TITLE OF SIGNER *(TYPE OR PRINT)*	30c. DATE SIGNED	31b. NAME OF CONTRACTING OFFICER *(TYPE OR PRINT)*	31c. DATE SIGNED
Kathleen A. Massie Director, Federal Contracts	12/27/2010	Michael L. Sweigart, Procurement Officer	December 27, 2010

AUTHORIZED FOR LOCAL REPRODUCTION
PREVIOUS EDITION IS NOT USABLE

STANDARD FORM 1449 (REV.3/2005)
Prescribed by GSA - FAR (48 CFR) 53.212

RELEASED - Printed documents may be obsolete; validate prior to use.

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT

32a. QUANTITY IN COLUMN 21 HAS BEEN
☐ RECEIVED ☐ INSPECTED ☐ ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: _____

32b. SIGNATURE OF AUTHORIZED GOVT REPRESENTATIVE	32c. DATE	32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	32f. TELEPHONE NUMBER OF AUTHORIZED GOVERNMENT REPRESENTATIVE 32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE

33. SHIP NUMBER ☐ PARTIAL	34. VOUCHER NUMBER	35. AMOUNT VERIFIED CORRECT FOR	36. PAYMENT ☐ COMPLETE ☐ PARTIAL ☐ FINAL	37. CHECK NUMBER

38. S/R ACCOUNT NO.	39. S/R VOUCHER NO.	40. PAID BY

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT	42a. RECEIVED BY *(Print)*

41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER	41c. DATE	42b. RECEIVED AT *(Location)*	
		42c. DATE REC'D *(YY/MM/DD)*	42d. TOTAL CONTAINERS

RELEASED - Printed documents may be obsolete; validate prior to use.

SECTION I – MODEL CONTRACT

TABLE OF CONTENTS

RELEASED - Printed documents may be obsolete; validate prior to use.

RELEASED - Printed documents may be obsolete; validate prior to use.

SECTION I
MODEL CONTRACT

1.0 CONTRACT CLAUSES FOR COMMERCIAL ITEMS

1.1 52.212-4 CONTRACT TERMS AND CONDITIONS—COMMERCIAL ITEMS (JUN 2010)

(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.

RELEASED - Printed documents may be obsolete; validate prior to use.

(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—Central Contractor Registration, or 52.232-34, Payment by Electronic Funds Transfer—Other Than Central Contractor Registration), or applicable agency procedures.
(C) EFT banking information is not required if the Government waived the requirement to pay by EFT.

RELEASED - Printed documents may be obsolete; validate prior to use.

(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

RELEASED - Printed documents may be obsolete; validate prior to use.

(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.

RELEASED - Printed documents may be obsolete; validate prior to use.

(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;

RELEASED - Printed documents may be obsolete; validate prior to use.

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, and Compliance with Laws Unique to Government Contracts 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) Central Contractor Registration (CCR).

(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 CCR database, and for any liability resulting from the Government's reliance on inaccurate or incomplete data. To remain registered in the CCR 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 CCR database to ensure it is current, accurate and complete. Updating information in the CCR 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 CCR 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.

(iii) If the Contractor fails to comply with the requirements of paragraph (t)(2)(i) of this clause, or fails to perform the agreement at

RELEASED - Printed documents may be obsolete; validate prior to use.

paragraph (t)(2)(i)(C) of this clause, and, in the absence of a properly executed novation or change-of-name agreement, the CCR 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 CCR 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 CCR database. Information provided to the Contractor's CCR 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 the internet at http://www.ccr.gov or by calling 1-888-227-2423 or 269-961-5757.

(End of clause)

1.2 52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS - COMMERCIAL ITEMS (Sep 2010)

(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)).

☐ (i)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:

[*Contracting Officer check as appropriate*.]

☒ (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).

☒ (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)).

RELEASED - Printed documents may be obsolete; validate prior to use.

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

☒ (4) 52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards (Jul 2010) (Pub. L. 109-282) (31 U.S.C. 6101 note).

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

☐ (6) 52.219-3, Notice of Total HUBZone Set-Aside (Jan 1999) (15 U.S.C. 657a).

☐ (7) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (JULY 2005) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

☐ (8) [Reserved]

☐ (9)(i) 52.219-6, Notice of Total Small Business Set-Aside (June 2003) (15 U.S.C. 644).

☐ (ii) Alternate I (Oct 1995) of 52.219-6.

☐ (iii) Alternate II (Mar 2004) of 52.219-6.

☐ (10)(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.

☒ (11) 52.219-8, Utilization of Small Business Concerns (May 2004) (15 U.S.C. 637(d)(2) and (3)).

☒ (12)(i) 52.219-9, Small Business Subcontracting Plan (Jul 2010) (15 U.S.C. 637(d)(4)).

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

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

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

☐ (13) 52.219-14, Limitations on Subcontracting (Dec 1996) (15 U.S.C. 637(a)(14)).

RELEASED - Printed documents may be obsolete; validate prior to use.

☒ (14) 52.219-16, Liquidated Damages—Subcontracting Plan (Jan 1999) (15 U.S.C. 637(d)(4)(F)(i)).

☐ (15)(i) 52.219-23, Notice of Price Evaluation Adjustment for Small Disadvantage 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.

☒ (16) 52.219-25, Small Disadvantaged Business Participation Program—Disadvantaged Status and Reporting (Apr 2008) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

☐ (17) 52.219-26, Small Disadvantaged Business Participation Program—Incentive Subcontracting (Oct 2000) (Pub. L. 103-355, section 7102, and 10 U.S.C. 2323).

☐ (18) 52.219-27, Notice of Total Service-Disabled Veteran-Owned Small Business Set-Aside (May 2004) (15 U.S.C. 657 f).

☒ (19) 52.219-28, Post Award Small Business Program Rerepresentation (APR 2009) (15 U.S.C. 632(a)(2)).

☒ (20) 52.222-3, Convict Labor (June 2003) (E.O. 11755).

☒ (21) 52.222-19, Child Labor—Cooperation with Authorities and Remedies (Jul 2010) (E.O. 13126).

☒ (22) 52.222-21, Prohibition of Segregated Facilities (Feb 1999).

☒ (23) 52.222-26, Equal Opportunity (Mar 2007) (E.O. 11246).

☒ (24) 52.222-35, Equal Opportunity for Veterans (Sep 2010) (38 U.S.C. 4212)..

☒ (25) 52.222-36, Affirmative Action for Workers with Disabilities (Jun 1998) (29 U.S.C. 793).

☒ (26) 52.222-37, Employment Reports on Veterans, (Sep 2010) (38 U.S.C. 4212).

☐ (27) 52.222-54, Employment Eligibility Verification (JAN 2009). (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.)

☐ (28)(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)).

☐ (ii) Alternate I (May 2008) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)).

☒ (29) 52.223-15, Energy Efficiency in Energy-Consuming Products (Dec 2007) (42 U.S.C. 8259b).

RELEASED - Printed documents may be obsolete; validate prior to use.

☒ (30)(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.

☒ (31) 52.223-18, Contractor Policy to Ban Text Messaging While Driving (Sep 2010) (E.O. 13513).

☐ (32) 52.225-1, Buy American Act—Supplies (Feb 2009) (41 U.S.C. 10a-10d).

☐ (33)(i) 52.225-3, Buy American Act—Free Trade Agreements—Israeli Trade Act (Jun 2009) (41 U.S.C. 10a-10d, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, 19 U.S.C. 3805 note, Pub. L. 108-77, 108-78, 108-286, 108-302, 109-53, 109-169, 109-283, and 110-138).

☐ (ii) Alternate I (Jan 2004) of 52.225-3.

☐ (iii) Alternate II (Jan 2004) of 52.225-3.

☐ (34) 52.225-5, Trade Agreements (AUG 2009) (19 U.S.C. 2501, *et seq*., 19 U.S.C. 3301 note).

☒ (35) 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).

☐ (36) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (Nov 2007) (42 U.S.C. 5150).

☐ (37) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (Nov 2007) (42 U.S.C. 5150).

☐ (38) 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)).

☐ (39) 52.232-30, Installment Payments for Commercial Items (Oct 1995) (41 U.S.C. 255(f), 10 U.S.C. 2307(f)).

☐ (40) 52.232-33, Payment by Electronic Funds Transfer—Central Contractor Registration (Oct 2003) (31 U.S.C. 3332).

☒ (41) 52.232-34, Payment by Electronic Funds Transfer—Other than Central Contractor Registration (May 1999) (31 U.S.C. 3332).

☐ (42) 52.232-36, Payment by Third Party (Feb 2010) (31 U.S.C. 3332).

☒ (43) 52.239-1, Privacy or Security Safeguards (Aug 1996) (5 U.S.C. 552a).

☒ (44)(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).

RELEASED - Printed documents may be obsolete; validate prior to use.

☐ (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:

[*Contracting Officer check as appropriate.*]

☐ (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 U.S.C. 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) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations (Mar 2009) (Pub. L. 110-247).

☐ (8) 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

RELEASED - Printed documents may be obsolete; validate prior to use.

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 (May 2004) (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 $550,000 ($1,000,000 for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(iii) [Reserved]

(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 (June 1998) (29 U.S.C. 793).

(vii) [Reserved]

(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)). Flow down required in accordance with paragraph (f) of FAR clause 52.222-50.

-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 (Jan 2009).

RELEASED - Printed documents may be obsolete; validate prior to use.

(xiii) 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.

(xiv) 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)

RELEASED - Printed documents may be obsolete; validate prior to use.

2.0 CONTRACT VALUE AND FUNDING

2.1 52.216-22 INDEFINITE QUANTITY (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 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 after June 30, 2021.

(End of clause)

2.2 MINIMUM AND MAXIMUM QUANTITIES

For purposes of the minimum and maximum values identified in FAR clause 52.216-22, *Indefinite Quantity*, the minimum and maximum quantities to be ordered under this contract during the entire ten year period of performance are specified below:

a. The minimum contract value is $5,000,000.

b. The maximum contract value is $2,500,000,000.

(End of clause)

2.3 1852.216-78 FIRM FIXED PRICE (DEC 1988)

The fixed unit prices for services, products and labor hours are as specified in Attachment I-9. On a monthly basis, the Contracting Officer will modify this clause to reflect all orders made through ESRS in the preceding 30 days. For accounting purposes and entry into

RELEASED - Printed documents may be obsolete; validate prior to use.

NASA's Integrated Enterprise Management system, the firm fixed price of this contract is further broken down by Procurement Line Item (PLI) as identified below:

Base Period (Jul 1, 2011-Jun 30, 2015)			
PLI	**Center**	**Description**	**Amount**
001	Agency	All End-user Services & Catalog Purchases	$**Redacted**
001A	Agency	All Base Services	$ **Redacted**
001B	Agency	All "S" Computing Seats	$0.00
001C	Agency	All "M" Computing Seats	$0.00
001D	Agency	All "B" Computing Seats	$0.00
001E	Agency	All "T" Computing Seats	$0.00
001F	Agency	All "S" Cell Phone Seats	$0.00
001G	Agency	All "B" Cell Phone Seats	$0.00
001H	Agency	All "S" Smartphone Seats	$0.00
001I	Agency	All "B" Smartphone Seats	$0.00
001J	Agency	All Pager Seats	$0.00
001K	Agency	All Network Printer (PRN) Seats	$0.00
001L	Agency	MFD B&W Desktop Seat	$0.00
001M	Agency	MFD B&W Floor Seat	$0.00
001N	Agency	MFD Color Desktop Seat	$0.00
001O	Agency	MFD Color Floor Seat	$0.00
001P	Agency	Virtual Team Service (VTS) Seat	$0.00
001Q	Agency	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
001R	Agency	All ACES Product Catalog (APC)	$0.00
001S	Agency	All Enhanced Support Services	$0.00
001T	Agency	All Other General Services	$0.00
002	ARC	All End-user Services & Catalog Purchases	$0.00
002A	ARC	Reserved	$0.00
002B	ARC	All "S" Computing Seats	$0.00
002C	ARC	All "M" Computing Seats	$0.00
002D	ARC	All "B" Computing Seats	$0.00
002E	ARC	All "T" Computing Seats	$0.00
002F	ARC	All "S" Cell Phone Seats	$0.00
002G	ARC	All "B" Cell Phone Seats	$0.00
002H	ARC	All "S" Smartphone Seats	$0.00
002I	ARC	All "B" Smartphone Seats	$0.00
002J	ARC	All Pager Seats	$0.00
002K	ARC	All Network Printer (PRN) Seats	$0.00
002L	ARC	MFD B&W Desktop Seat	$0.00
002M	ARC	MFD B&W Floor Seat	$0.00
002N	ARC	MFD Color Desktop Seat	$0.00
002O	ARC	MFD Color Floor Seat	$0.00
002P	ARC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
002Q	ARC	Virtual Team Service (VTS) Seat	$0.00
002R	ARC	All ACES Product Catalog (APC)	$0.00
002S	ARC	All Enhanced Support Services	$0.00
002T	ARC	All Other General Services	$0.00
003	DFRC	All End-user Services & Catalog Purchases	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

003A	DFRC	Reserved	$0.00
003B	DFRC	All “S” Computing Seats	$0.00
003C	DFRC	All “M” Computing Seats	$0.00
003D	DFRC	All “B” Computing Seats	$0.00
003E	DFRC	All “T” Computing Seats	$0.00
003F	DFRC	All “S” Cell Phone Seats	$0.00
003G	DFRC	All “B” Cell Phone Seats	$0.00
003H	DFRC	All “S” Smartphone Seats	$0.00
003I	DFRC	All “B” Smartphone Seats	$0.00
003J	DFRC	All Pager Seats	$0.00
003K	DFRC	All Network Printer (PRN) Seats	$0.00
003L	DFRC	MFD B&W Desktop Seat	$0.00
003M	DFRC	MFD B&W Floor Seat	$0.00
003N	DFRC	MFD Color Desktop Seat	$0.00
003O	DFRC	MFD Color Floor Seat	$0.00
003P	DFRC	Virtual Team Service (VTS) Seat	$0.00
003Q	DFRC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
003R	DFRC	All ACES Product Catalog (APC)	$0.00
003S	DFRC	All Enhanced Support Services	$0.00
003T	DFRC	All Other General Services	$0.00
004	GRC	All End-user Services & Catalog Purchases	$0.00
004A	GRC	Reserved	$0.00
004B	GRC	All “S” Computing Seats	$0.00
004C	GRC	All “M” Computing Seats	$0.00
004D	GRC	All “B” Computing Seats	$0.00
004E	GRC	All “T” Computing Seats	$0.00
004F	GRC	All “S” Cell Phone Seats	$0.00
004G	GRC	All “B” Cell Phone Seats	$0.00
004H	GRC	All “S” Smartphone Seats	$0.00
004I	GRC	All “B” Smartphone Seats	$0.00
004J	GRC	All Pager Seats	$0.00
004K	GRC	All Network Printer (PRN) Seats	$0.00
004L	GRC	MFD B&W Desktop Seat	$0.00
004M	GRC	MFD B&W Floor Seat	$0.00
004N	GRC	MFD Color Desktop Seat	$0.00
004O	GRC	MFD Color Floor Seat	$0.00
004P	GRC	Virtual Team Service (VTS) Seat	$0.00
004Q	GRC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
004R	GRC	All ACES Product Catalog (APC)	$0.00
004S	GRC	All Enhanced Support Services	$0.00
004T	GRC	All Other General Services	$0.00
005	GSFC	All End-user Services & Catalog Purchases	$0.00
005A	GSFC	Reserved	$0.00
005B	GSFC	All “S” Computing Seats	$0.00
005C	GSFC	All “M” Computing Seats	$0.00
005D	GSFC	All “B” Computing Seats	$0.00
005E	GSFC	All “T” Computing Seats	$0.00
005F	GSFC	All “S” Cell Phone Seats	$0.00
005G	GSFC	All “B” Cell Phone Seats	$0.00
005H	GSFC	All “S” Smartphone Seats	$0.00
005I	GSFC	All “B” Smartphone Seats	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

005J	GSFC	All Pager Seats	$0.00
005K	GSFC	All Network Printer (PRN) Seats	$0.00
005L	GSFC	MFD B&W Desktop Seat	$0.00
005M	GSFC	MFD B&W Floor Seat	$0.00
005N	GSFC	MFD Color Desktop Seat	$0.00
005O	GSFC	MFD Color Floor Seat	$0.00
005P	GSFC	Virtual Team Service (VTS) Seat	$0.00
005Q	GSFC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
005R	GSFC	All ACES Product Catalog (APC)	$0.00
005S	GSFC	All Enhanced Support Services	$0.00
005T	GSFC	All Other General Services	$0.00
006	HQ	All End-user Services & Catalog Purchases	$0.00
006A	HQ	Reserved	$0.00
006B	HQ	All “S” Computing Seats	$0.00
006C	HQ	All “M” Computing Seats	$0.00
006D	HQ	All “B” Computing Seats	$0.00
006E	HQ	All “T” Computing Seats	$0.00
006F	HQ	All “S” Cell Phone Seats	$0.00
006G	HQ	All “B” Cell Phone Seats	$0.00
006H	HQ	All “S” Smartphone Seats	$0.00
006I	HQ	All “B” Smartphone Seats	$0.00
006J	HQ	All Pager Seats	$0.00
006K	HQ	All Network Printer (PRN) Seats	$0.00
006L	HQ	MFD B&W Desktop Seat	$0.00
006M	HQ	MFD B&W Floor Seat	$0.00
006N	HQ	MFD Color Desktop Seat	$0.00
006O	HQ	MFD Color Floor Seat	$0.00
006P	HQ	Virtual Team Service (VTS) Seat	$0.00
006Q	HQ	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
006R	HQ	All ACES Product Catalog (APC)	$0.00
006S	HQ	All Enhanced Support Services	$0.00
006T	HQ	All Other General Services	$0.00
007	JSC	All End-user Services & Catalog Purchases	$0.00
007A	JSC	Reserved	$0.00
007B	JSC	All “S” Computing Seats	$0.00
007C	JSC	All “M” Computing Seats	$0.00
007D	JSC	All “B” Computing Seats	$0.00
007E	JSC	All “T” Computing Seats	$0.00
007F	JSC	All “S” Cell Phone Seats	$0.00
007G	JSC	All “B” Cell Phone Seats	$0.00
007H	JSC	All “S” Smartphone Seats	$0.00
007I	JSC	All “B” Smartphone Seats	$0.00
007J	JSC	All Pager Seats	$0.00
007K	JSC	All Network Printer (PRN) Seats	$0.00
007L	JSC	MFD B&W Desktop Seat	$0.00
007M	JSC	MFD B&W Floor Seat	$0.00
007N	JSC	MFD Color Desktop Seat	$0.00
007O	JSC	MFD Color Floor Seat	$0.00
007P	JSC	Virtual Team Service (VTS) Seat	$0.00
007Q	JSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

007R	JSC	All ACES Product Catalog (APC)	$0.00
007S	JSC	All Enhanced Support Services	$0.00
007T	JSC	All Other General Services	$0.00
008	KSC	All End-user Services & Catalog Purchases	$0.00
008A	KSC	Reserved	$0.00
008B	KSC	All “S” Computing Seats	$0.00
008C	KSC	All “M” Computing Seats	$0.00
008D	KSC	All “B” Computing Seats	$0.00
008E	KSC	All “T” Computing Seats	$0.00
008F	KSC	All “S” Cell Phone Seats	$0.00
008G	KSC	All “B” Cell Phone Seats	$0.00
008H	KSC	All “S” Smartphone Seats	$0.00
008I	KSC	All “B” Smartphone Seats	$0.00
008J	KSC	All Pager Seats	$0.00
008K	KSC	All Network Printer (PRN) Seats	$0.00
008L	KSC	MFD B&W Desktop Seat	$0.00
008M	KSC	MFD B&W Floor Seat	$0.00
008N	KSC	MFD Color Desktop Seat	$0.00
008O	KSC	MFD Color Floor Seat	$0.00
008P	KSC	Virtual Team Service (VTS) Seat	$0.00
008Q	KSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
008R	KSC	All ACES Product Catalog (APC)	$0.00
008S	KSC	All Enhanced Support Services	$0.00
008T	KSC	All Other General Services	$0.00
009	LaRC	All End-user Services & Catalog Purchases	$0.00
009A	LaRC	Reserved	$0.00
009B	LaRC	All “S” Computing Seats	$0.00
009C	LaRC	All “M” Computing Seats	$0.00
009D	LaRC	All “B” Computing Seats	$0.00
009E	LaRC	All “T” Computing Seats	$0.00
009F	LaRC	All “S” Cell Phone Seats	$0.00
009G	LaRC	All “B” Cell Phone Seats	$0.00
009H	LaRC	All “S” Smartphone Seats	$0.00
009I	LaRC	All “B” Smartphone Seats	$0.00
009J	LaRC	All Pager Seats	$0.00
009K	LaRC	All Network Printer (PRN) Seats	$0.00
009L	LaRC	MFD B&W Desktop Seat	$0.00
009M	LaRC	MFD B&W Floor Seat	$0.00
009N	LaRC	MFD Color Desktop Seat	$0.00
009O	LaRC	MFD Color Floor Seat	$0.00
009P	LaRC	Virtual Team Service (VTS) Seat	$0.00
009Q	LaRC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
009R	LaRC	All ACES Product Catalog (APC)	$0.00
009S	LaRC	All Enhanced Support Services	$0.00
009T	LaRC	All Other General Services	$0.00
010	MSFC	All End-user Services & Catalog Purchases	$0.00
010A	MSFC	Reserved	$0.00
010B	MSFC	All “S” Computing Seats	$0.00
010C	MSFC	All “M” Computing Seats	$0.00
010D	MSFC	All “B” Computing Seats	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

010E	MSFC	All “T” Computing Seats	$0.00
010F	MSFC	All “S” Cell Phone Seats	$0.00
010G	MSFC	All “B” Cell Phone Seats	$0.00
010H	MSFC	All “S” Smartphone Seats	$0.00
010I	MSFC	All “B” Smartphone Seats	$0.00
010J	MSFC	All Pager Seats	$0.00
010K	MSFC	All Network Printer (PRN) Seats	$0.00
010L	MSFC	MFD B&W Desktop Seat	$0.00
010M	MSFC	MFD B&W Floor Seat	
010N	MSFC	MFD Color Desktop Seat	$0.00
010O	MSFC	MFD Color Floor Seat	$0.00
010P	MSFC	Virtual Team Service (VTS) Seat	$0.00
010Q	MSFC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
010R	MSFC	All ACES Product Catalog (APC)	$0.00
010S	MSFC	All Enhanced Support Services	$0.00
010T	MSFC	All Other General Services	$0.00
011	NSSC	All End-user Services & Catalog Purchases	$0.00
011A	NSSC	Reserved	$0.00
011B	NSSC	All “S” Computing Seats	$0.00
011C	NSSC	All “M” Computing Seats	$0.00
011D	NSSC	All “B” Computing Seats	$0.00
011E	NSSC	All “T” Computing Seats	$0.00
011F	NSSC	All “S” Cell Phone Seats	$0.00
011G	NSSC	All “B” Cell Phone Seats	$0.00
011H	NSSC	All “S” Smartphone Seats	$0.00
011I	NSSC	All “B” Smartphone Seats	$0.00
011J	NSSC	All Pager Seats	$0.00
011K	NSSC	All Network Printer (PRN) Seats	$0.00
011L	NSSC	MFD B&W Desktop Seat	$0.00
011M	NSSC	MFD B&W Floor Seat	$0.00
011N	NSSC	MFD Color Desktop Seat	$0.00
011O	NSSC	MFD Color Floor Seat	$0.00
011P	NSSC	Virtual Team Service (VTS) Seat	$0.00
011Q	NSSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
011R	NSSC	All ACES Product Catalog (APC)	$0.00
011S	NSSC	All Enhanced Support Services	$0.00
011T	NSSC	All Other General Services	$0.00
012	SSC	All End-user Services & Catalog Purchases	$0.00
012A	SSC	Reserved	$0.00
012B	SSC	All “S” Computing Seats	$0.00
012C	SSC	All “M” Computing Seats	$0.00
012D	SSC	All “B” Computing Seats	$0.00
012E	SSC	All “T” Computing Seats	$0.00
012F	SSC	All “S” Cell Phone Seats	$0.00
012G	SSC	All “B” Cell Phone Seats	$0.00
012H	SSC	All “S” Smartphone Seats	$0.00
012I	SSC	All “B” Smartphone Seats	$0.00
012J	SSC	All Pager Seats	$0.00
012K	SSC	All Network Printer (PRN) Seats	$0.00
012L	SSC	MFD B&W Desktop Seat	$0.00
012M	SSC	MFD B&W Floor Seat	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

012N	SSC	MFD Color Desktop Seat	$0.00
012O	SSC	MFD Color Floor Seat	$0.00
012P	SSC	Virtual Team Service (VTS) Seat	$0.00
012Q	SSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
012R	SSC	All ACES Product Catalog (APC)	$0.00
012S	SSC	All Enhanced Support Services	$0.00
012T	SSC	All Other General Services	$0.00

Option Period 1 (Jul 1, 2015-Jun 30, 2018)			
PLI	**Center**	**Description**	**Amount**
001	Agency	All End-user Services & Catalog Purchases	$0.00
001A	Agency	All Base Services	$0.00
001B	Agency	All “S” Computing Seats	$0.00
001C	Agency	All “M” Computing Seats	$0.00
001D	Agency	All “B” Computing Seats	$0.00
001E	Agency	All “T” Computing Seats	$0.00
001F	Agency	All “S” Cell Phone Seats	$0.00
001G	Agency	All “B” Cell Phone Seats	$0.00
001H	Agency	All “S” Smartphone Seats	$0.00
001I	Agency	All “B” Smartphone Seats	$0.00
001J	Agency	All Pager Seats	$0.00
001K	Agency	All Network Printer (PRN) Seats	$0.00
001L	Agency	MFD B&W Desktop Seat	$0.00
001M	Agency	MFD B&W Floor Seat	$0.00
001N	Agency	MFD Color Desktop Seat	$0.00
001O	Agency	MFD Color Floor Seat	$0.00
001P	Agency	Virtual Team Service (VTS) Seat	$0.00
001Q	Agency	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
001R	Agency	All ACES Product Catalog (APC)	$0.00
001S	Agency	All Enhanced Support Services	$0.00
001T	Agency	All Other General Services	$0.00
002	ARC	All End-user Services & Catalog Purchases	$0.00
002A	ARC	Reserved	$0.00
002B	ARC	All “S” Computing Seats	$0.00
002C	ARC	All “M” Computing Seats	$0.00
002D	ARC	All “B” Computing Seats	$0.00
002E	ARC	All “T” Computing Seats	$0.00
002F	ARC	All “S” Cell Phone Seats	$0.00
002G	ARC	All “B” Cell Phone Seats	$0.00
002H	ARC	All “S” Smartphone Seats	$0.00
002I	ARC	All “B” Smartphone Seats	$0.00
002J	ARC	All Pager Seats	$0.00
002K	ARC	All Network Printer (PRN) Seats	$0.00
002L	ARC	MFD B&W Desktop Seat	$0.00
002M	ARC	MFD B&W Floor Seat	$0.00
002N	ARC	MFD Color Desktop Seat	$0.00
002O	ARC	MFD Color Floor Seat	$0.00
002P	ARC	Virtual Team Service (VTS) Seat	$0.00
002Q	ARC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

002R	ARC	All ACES Product Catalog (APC)	$0.00
002S	ARC	All Enhanced Support Services	$0.00
002T	ARC	All Other General Services	$0.00
003	DFRC	All End-user Services & Catalog Purchases	$0.00
003A	DFRC	Reserved	$0.00
003B	DFRC	All “S” Computing Seats	$0.00
003C	DFRC	All “M” Computing Seats	$0.00
003D	DFRC	All “B” Computing Seats	$0.00
003E	DFRC	All “T” Computing Seats	$0.00
003F	DFRC	All “S” Cell Phone Seats	$0.00
003G	DFRC	All “B” Cell Phone Seats	$0.00
003H	DFRC	All “S” Smartphone Seats	$0.00
003I	DFRC	All “B” Smartphone Seats	$0.00
003J	DFRC	All Pager Seats	$0.00
003K	DFRC	All Network Printer (PRN) Seats	$0.00
003L	DFRC	MFD B&W Desktop Seat	$0.00
003M	DFRC	MFD B&W Floor Seat	$0.00
003N	DFRC	MFD Color Desktop Seat	$0.00
003O	DFRC	MFD Color Floor Seat	$0.00
003P	DFRC	Virtual Team Service (VTS) Seat	$0.00
003Q	DFRC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
003R	DFRC	All ACES Product Catalog (APC)	$0.00
003S	DFRC	All Enhanced Support Services	$0.00
003T	DFRC	All Other General Services	$0.00
004	GRC	All End-user Services & Catalog Purchases	$0.00
004A	GRC	Reserved	$0.00
004B	GRC	All “S” Computing Seats	$0.00
004C	GRC	All “M” Computing Seats	$0.00
004D	GRC	All “B” Computing Seats	$0.00
004E		All “T” Computing Seats	$0.00
004F	GRC	All “S” Cell Phone Seats	$0.00
004G	GRC	All “B” Cell Phone Seats	$0.00
004H	GRC	All “S” Smartphone Seats	$0.00
004I	GRC	All “B” Smartphone Seats	$0.00
004J	GRC	All Pager Seats	$0.00
004K	GRC	All Network Printer (PRN) Seats	$0.00
004L	GRC	MFD B&W Desktop Seat	$0.00
004M	GRC	MFD B&W Floor Seat	$0.00
004N	GRC	MFD Color Desktop Seat	$0.00
004O	GRC	MFD Color Floor Seat	$0.00
004P	GRC	Virtual Team Service (VTS) Seat	$0.00
004Q	GRC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
004R	GRC	All ACES Product Catalog (APC)	$0.00
004S	GRC	All Enhanced Support Services	$0.00
004T	GRC	All Other General Services	$0.00
005	GSFC	All End-user Services & Catalog Purchases	$0.00
005A	GSFC	Reserved	$0.00
005B	GSFC	All “S” Computing Seats	$0.00
005C	GSFC	All “M” Computing Seats	$0.00
005D	GSFC	All “B” Computing Seats	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

005E	GSFC	All “T” Computing Seats	$0.00
005F	GSFC	All “S” Cell Phone Seats	$0.00
005G	GSFC	All “B” Cell Phone Seats	$0.00
005H	GSFC	All “S” Smartphone Seats	$0.00
005I	GSFC	All “B” Smartphone Seats	$0.00
005J	GSFC	All Pager Seats	$0.00
005K	GSFC	All Network Printer (PRN) Seats	$0.00
005L	GSFC	MFD B&W Desktop Seat	$0.00
005M	GSFC	MFD B&W Floor Seat	$0.00
005N	GSFC	MFD Color Desktop Seat	$0.00
005O	GSFC	MFD Color Floor Seat	$0.00
005P	GSFC	Virtual Team Service (VTS) Seat	$0.00
005Q	GSFC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
005R	GSFC	All ACES Product Catalog (APC)	$0.00
005S	GSFC	All Enhanced Support Services	$0.00
005T	GSFC	All Other General Services	$0.00
006	HQ	All End-user Services & Catalog Purchases	$0.00
006A	HQ	Reserved	$0.00
006B	HQ	All “S” Computing Seats	$0.00
006C	HQ	All “M” Computing Seats	$0.00
006D	HQ	All “B” Computing Seats	$0.00
006E	HQ	All “T” Computing Seats	$0.00
006F	HQ	All “S” Cell Phone Seats	$0.00
006G	HQ	All “B” Cell Phone Seats	$0.00
006H	HQ	All “S” Smartphone Seats	$0.00
006I	HQ	All “B” Smartphone Seats	$0.00
006J	HQ	All Pager Seats	$0.00
006K	HQ	All Network Printer (PRN) Seats	$0.00
006L	HQ	MFD B&W Desktop Seat	$0.00
006M	HQ	MFD B&W Floor Seat	$0.00
006N	HQ	MFD Color Desktop Seat	$0.00
006O	HQ	MFD Color Floor Seat	$0.00
006P	HQ	Virtual Team Service (VTS) Seat	$0.00
006Q	HQ	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
006R	HQ	All ACES Product Catalog (APC)	$0.00
006S	HQ	All Enhanced Support Services	$0.00
006T	HQ	All Other General Services	$0.00
007	JSC	All End-user Services & Catalog Purchases	$0.00
007A	JSC	Reserved	$0.00
007B	JSC	All “S” Computing Seats	$0.00
007C	JSC	All “M” Computing Seats	$0.00
007D	JSC	All “B” Computing Seats	$0.00
007E	JSC	All “T” Computing Seats	$0.00
007F	JSC	All “S” Cell Phone Seats	$0.00
007G	JSC	All “B” Cell Phone Seats	$0.00
007H	JSC	All “S” Smartphone Seats	$0.00
007I	JSC	All “B” Smartphone Seats	$0.00
007J	JSC	All Pager Seats	$0.00
007K	JSC	All Network Printer (PRN) Seats	$0.00
007L	JSC	MFD B&W Desktop Seat	$0.00
007M	JSC	MFD B&W Floor Seat	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

007N	JSC	MFD Color Desktop Seat	$0.00
007O	JSC	MFD Color Floor Seat	$0.00
007P	JSC	Virtual Team Service (VTS) Seat	$0.00
007Q	JSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
007R	JSC	All ACES Product Catalog (APC)	$0.00
007S	JSC	All Enhanced Support Services	$0.00
007T	JSC	All Other General Services	$0.00
008	KSC	All End-user Services & Catalog Purchases	$0.00
008A	KSC	Reserved	$0.00
008B	KSC	All “S” Computing Seats	$0.00
008C	KSC	All “M” Computing Seats	$0.00
008D	KSC	All “B” Computing Seats	$0.00
008E	KSC	All “T” Computing Seats	$0.00
008F	KSC	All “S” Cell Phone Seats	$0.00
008G	KSC	All “B” Cell Phone Seats	$0.00
008H	KSC	All “S” Smartphone Seats	$0.00
008I	KSC	All “B” Smartphone Seats	$0.00
008J	KSC	All Pager Seats	$0.00
008K	KSC	All Network Printer (PRN) Seats	$0.00
008L	KSC	MFD B&W Desktop Seat	$0.00
008M	KSC	MFD B&W Floor Seat	$0.00
008N	KSC	MFD Color Desktop Seat	$0.00
008O	KSC	MFD Color Floor Seat	$0.00
008P	KSC	Virtual Team Service (VTS) Seat	$0.00
008Q	KSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
008R	KSC	All ACES Product Catalog (APC)	$0.00
008S	KSC	All Enhanced Support Services	$0.00
008T	KSC	All Other General Services	$0.00
009	LaRC	All End-user Services & Catalog Purchases	$0.00
009A	LaRC	Reserved	$0.00
009B	LaRC	All “S” Computing Seats	$0.00
009C	LaRC	All “M” Computing Seats	$0.00
009D	LaRC	All “B” Computing Seats	$0.00
009E	LaRC	All “T” Computing Seats	$0.00
009F	LaRC	All “S” Cell Phone Seats	$0.00
009G	LaRC	All “B” Cell Phone Seats	$0.00
009H	LaRC	All “S” Smartphone Seats	$0.00
009I	LaRC	All “B” Smartphone Seats	$0.00
009J	LaRC	All Pager Seats	$0.00
009K	LaRC	All Network Printer (PRN) Seats	$0.00
009L	LaRC	MFD B&W Desktop Seat	$0.00
009M	LaRC	MFD B&W Floor Seat	$0.00
009N	LaRC	MFD Color Desktop Seat	$0.00
009O	LaRC	MFD Color Floor Seat	$0.00
009P	LaRC	Virtual Team Service (VTS) Seat	$0.00
009Q	LaRC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
009R	LaRC	All ACES Product Catalog (APC)	$0.00
009S	LaRC	All Enhanced Support Services	$0.00
009T	LaRC	All Other General Services	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

010	MSFC	All End-user Services & Catalog Purchases	$0.00
010A	MSFC	Reserved	$0.00
010B	MSFC	All “S” Computing Seats	$0.00
010C	MSFC	All “M” Computing Seats	$0.00
010D	MSFC	All “B” Computing Seats	$0.00
010E	MSFC	All “T” Computing Seats	$0.00
010F	MSFC	All “S” Cell Phone Seats	$0.00
010G	MSFC	All “B” Cell Phone Seats	$0.00
010H	MSFC	All “S” Smartphone Seats	$0.00
010I	MSFC	All “B” Smartphone Seats	$0.00
010J	MSFC	All Pager Seats	$0.00
010K	MSFC	All Network Printer (PRN) Seats	$0.00
010L	MSFC	MFD B&W Desktop Seat	$0.00
010M	MSFC	MFD B&W Floor Seat	$0.00
010N	MSFC	MFD Color Desktop Seat	$0.00
010O	MSFC	MFD Color Floor Seat	$0.00
010P	MSFC	Virtual Team Service (VTS) Seat	$0.00
010Q	MSFC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
010R	MSFC	All ACES Product Catalog (APC)	$0.00
010S	MSFC	All Enhanced Support Services	$0.00
010T	MSFC	All Other General Services	$0.00
011	NSSC	All End-user Services & Catalog Purchases	$0.00
011A	NSSC	Reserved	$0.00
011B	NSSC	All “S” Computing Seats	$0.00
011C	NSSC	All “M” Computing Seats	$0.00
011D	NSSC	All “B” Computing Seats	$0.00
011E	NSSC	All “T” Computing Seats	$0.00
011F	NSSC	All “S” Cell Phone Seats	$0.00
011G	NSSC	All “B” Cell Phone Seats	$0.00
011H	NSSC	All “S” Smartphone Seats	$0.00
011I	NSSC	All “B” Smartphone Seats	$0.00
011J	NSSC	All Pager Seats	$0.00
011K	NSSC	All Network Printer (PRN) Seats	$0.00
011L	NSSC	MFD B&W Desktop Seat	$0.00
011M	NSSC	MFD B&W Floor Seat	$0.00
011N	NSSC	MFD Color Desktop Seat	$0.00
011O	NSSC	MFD Color Floor Seat	$0.00
011P	NSSC	Virtual Team Service (VTS) Seat	$0.00
011Q	NSSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
011R	NSSC	All ACES Product Catalog (APC)	$0.00
011S	NSSC	All Enhanced Support Services	$0.00
011T	NSSC	All Other General Services	$0.00
012	SSC	All End-user Services & Catalog Purchases	$0.00
012A	SSC	Reserved	$0.00
012B	SSC	All “S” Computing Seats	$0.00
012C	SSC	All “M” Computing Seats	$0.00
012D	SSC	All “B” Computing Seats	$0.00
012E	SSC	All “T” Computing Seats	$0.00
012F	SSC	All “S” Cell Phone Seats	$0.00
012G	SSC	All “B” Cell Phone Seats	$0.00
012H	SSC	All “S” Smartphone Seats	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

012I	SSC	All “B” Smartphone Seats	$0.00
012J	SSC	All Pager Seats	$0.00
012K	SSC	All Network Printer (PRN) Seats	$0.00
012L	SSC	MFD B&W Desktop Seat	$0.00
012M	SSC	MFD B&W Floor Seat	$0.00
012N	SSC	MFD Color Desktop Seat	$0.00
012O	SSC	MFD Color Floor Seat	$0.00
012P	SSC	Virtual Team Service (VTS) Seat	$0.00
012Q	SSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
012R	SSC	All ACES Product Catalog (APC)	$0.00
012S	SSC	All Enhanced Support Services	$0.00
012T	SSC	All Other General Services	$0.00
Option Period 2 (Jul 1, 2018-June30 2021)			
PLI	**Center**	**Description**	**Amount**
001	Agency	All End-user Services & Catalog Purchases	$0.00
001A	Agency	All Base Services	$0.00
001B	Agency	All “S” Computing Seats	$0.00
001C	Agency	All “M” Computing Seats	$0.00
001D	Agency	All “B” Computing Seats	$0.00
001E	Agency	All “T” Computing Seats	$0.00
001F	Agency	All “S” Cell Phone Seats	$0.00
001G	Agency	All “B” Cell Phone Seats	$0.00
001H	Agency	All “S” Smartphone Seats	$0.00
001I	Agency	All “B” Smartphone Seats	$0.00
001J	Agency	All Pager Seats	$0.00
001K	Agency	All Network Printer (PRN) Seats	$0.00
001L	Agency	MFD B&W Desktop Seat	$0.00
001M	Agency	MFD B&W Floor Seat	$0.00
001N	Agency	MFD Color Desktop Seat	$0.00
001O	Agency	MFD Color Floor Seat	$0.00
001P	Agency	Virtual Team Service (VTS) Seat	$0.00
001Q	Agency	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
001R	Agency	All ACES Product Catalog (APC)	$0.00
001S	Agency	All Enhanced Support Services	$0.00
001T	Agency	All Other General Services	$0.00
002	ARC	All End-user Services & Catalog Purchases	$0.00
002A	ARC	Reserved	$0.00
002B	ARC	All “S” Computing Seats	$0.00
002C	ARC	All “M” Computing Seats	$0.00
002D	ARC	All “B” Computing Seats	$0.00
002E	ARC	All “T” Computing Seats	$0.00
002F	ARC	All “S” Cell Phone Seats	$0.00
002G	ARC	All “B” Cell Phone Seats	$0.00
002H	ARC	All “S” Smartphone Seats	$0.00
002I	ARC	All “B” Smartphone Seats	$0.00
002J	ARC	All Pager Seats	$0.00
002K	ARC	All Network Printer (PRN) Seats	$0.00
002L	ARC	MFD B&W Desktop Seat	$0.00
002M	ARC	MFD B&W Floor Seat	$0.00
002N	ARC	MFD Color Desktop Seat	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

002O	ARC	MFD Color Floor Seat	$0.00
002P	ARC	Virtual Team Service (VTS) Seat	$0.00
002Q	ARC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
002R	ARC	All ACES Product Catalog (APC)	$0.00
002S	ARC	All Enhanced Support Services	$0.00
002T	ARC	All Other General Services	$0.00
003	DFRC	All End-user Services & Catalog Purchases	$0.00
003A	DFRC	Reserved	$0.00
003B	DFRC	All “S” Computing Seats	$0.00
003C	DFRC	All “M” Computing Seats	$0.00
003D	DFRC	All “B” Computing Seats	$0.00
003E	DFRC	All “T” Computing Seats	$0.00
003F	DFRC	All “S” Cell Phone Seats	$0.00
003G	DFRC	All “B” Cell Phone Seats	$0.00
003H	DFRC	All “S” Smartphone Seats	$0.00
003I	DFRC	All “B” Smartphone Seats	$0.00
003J	DFRC	All Pager Seats	$0.00
003K	DFRC	All Network Printer (PRN) Seats	$0.00
003L	DFRC	MFD B&W Desktop Seat	$0.00
003M	DFRC	MFD B&W Floor Seat	$0.00
003N	DFRC	MFD Color Desktop Seat	$0.00
003O	DFRC	MFD Color Floor Seat	$0.00
003P	DFRC	Virtual Team Service (VTS) Seat	$0.00
003Q	DFRC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
003R	DFRC	All ACES Product Catalog (APC)	$0.00
003S	DFRC	All Enhanced Support Services	$0.00
003T	DFRC	All Other General Services	$0.00
004	GRC	All End-user Services & Catalog Purchases	$0.00
004A	GRC	Reserved	$0.00
004B	GRC	All “S” Computing Seats	$0.00
004C	GRC	All “M” Computing Seats	$0.00
004D	GRC	All “B” Computing Seats	$0.00
004E	GRC	All “T” Computing Seats	$0.00
004F	GRC	All “S” Cell Phone Seats	$0.00
004G	GRC	All “B” Cell Phone Seats	$0.00
004H	GRC	All “S” Smartphone Seats	$0.00
004I	GRC	All “B” Smartphone Seats	$0.00
004J	GRC	All Pager Seats	$0.00
004K	GRC	All Network Printer (PRN) Seats	$0.00
004L	GRC	MFD B&W Desktop Seat	$0.00
004M	GRC	MFD B&W Floor Seat	$0.00
004N	GRC	MFD Color Desktop Seat	$0.00
004O	GRC	MFD Color Floor Seat	$0.00
004P	GRC	Virtual Team Service (VTS) Seat	$0.00
004Q	GRC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
004R	GRC	All ACES Product Catalog (APC)	$0.00
004S	GRC	All Enhanced Support Services	$0.00
004T	GRC	All Other General Services	$0.00
005	GSFC	All End-user Services & Catalog Purchases	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

005A	GSFC	Reserved	$0.00
005B	GSFC	All “S” Computing Seats	$0.00
005C	GSFC	All “M” Computing Seats	$0.00
005D	GSFC	All “B” Computing Seats	$0.00
005E	GSFC	All “T” Computing Seats	$0.00
005F	GSFC	All “S” Cell Phone Seats	$0.00
005G	GSFC	All “B” Cell Phone Seats	$0.00
005H	GSFC	All “S” Smartphone Seats	$0.00
005I	GSFC	All “B” Smartphone Seats	$0.00
005J	GSFC	All Pager Seats	$0.00
005K	GSFC	All Network Printer (PRN) Seats	$0.00
005L	GSFC	MFD B&W Desktop Seat	$0.00
005M	GSFC	MFD B&W Floor Seat	$0.00
005N	GSFC	MFD Color Desktop Seat	$0.00
005O	GSFC	MFD Color Floor Seat	$0.00
005P	GSFC	Virtual Team Service (VTS) Seat	$0.00
005Q	GSFC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
005R	GSFC	All ACES Product Catalog (APC)	$0.00
005S	GSFC	All Enhanced Support Services	$0.00
005T	GSFC	All Other General Services	$0.00
006	HQ	All End-user Services & Catalog Purchases	$0.00
006A	HQ	Reserved	$0.00
006B	HQ	All “S” Computing Seats	$0.00
006C	HQ	All “M” Computing Seats	$0.00
006D	HQ	All “B” Computing Seats	$0.00
006E	HQ	All “T” Computing Seats	$0.00
006F	HQ	All “S” Cell Phone Seats	$0.00
006G	HQ	All “B” Cell Phone Seats	$0.00
006H	HQ	All “S” Smartphone Seats	$0.00
006I	HQ	All “B” Smartphone Seats	$0.00
006J	HQ	All Pager Seats	$0.00
006K	HQ	All Network Printer (PRN) Seats	$0.00
006L	HQ	MFD B&W Desktop Seat	$0.00
006M	HQ	MFD B&W Floor Seat	$0.00
006N	HQ	MFD Color Desktop Seat	$0.00
006O	HQ	MFD Color Floor Seat	$0.00
006P	HQ	Virtual Team Service (VTS) Seat	$0.00
006Q	HQ	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
006R	HQ	All ACES Product Catalog (APC)	$0.00
006S	HQ	All Enhanced Support Services	$0.00
006T	HQ	All Other General Services	$0.00
007	JSC	All End-user Services & Catalog Purchases	$0.00
007A	JSC	Reserved	$0.00
007B	JSC	All “S” Computing Seats	$0.00
007C	JSC	All “M” Computing Seats	$0.00
007D	JSC	All “B” Computing Seats	$0.00
007E	JSC	All “T” Computing Seats	$0.00
007F	JSC	All “S” Cell Phone Seats	$0.00
007G	JSC	All “B” Cell Phone Seats	$0.00
007H	JSC	All “S” Smartphone Seats	$0.00
007I	JSC	All “B” Smartphone Seats	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

007J	JSC	All Pager Seats	$0.00
007K	JSC	All Network Printer (PRN) Seats	$0.00
007L	JSC	MFD B&W Desktop Seat	$0.00
007M	JSC	MFD B&W Floor Seat	$0.00
007N	JSC	MFD Color Desktop Seat	$0.00
007O	JSC	MFD Color Floor Seat	$0.00
007P	JSC	Virtual Team Service (VTS) Seat	$0.00
007Q	JSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
007R	JSC	All ACES Product Catalog (APC)	$0.00
007S	JSC	All Enhanced Support Services	$0.00
007T	JSC	All Other General Services	$0.00
008	KSC	All End-user Services & Catalog Purchases	$0.00
008A	KSC	Reserved	$0.00
008B	KSC	All “S” Computing Seats	$0.00
008C	KSC	All “M” Computing Seats	$0.00
008D	KSC	All “B” Computing Seats	$0.00
008E	KSC	All “T” Computing Seats	$0.00
008F	KSC	All “S” Cell Phone Seats	$0.00
008G	KSC	All “B” Cell Phone Seats	$0.00
008H	KSC	All “S” Smartphone Seats	$0.00
008I	KSC	All “B” Smartphone Seats	$0.00
008J	KSC	All Pager Seats	$0.00
008K	KSC	All Network Printer (PRN) Seats	$0.00
008L	KSC	MFD B&W Desktop Seat	$0.00
008M	KSC	MFD B&W Floor Seat	$0.00
008N	KSC	MFD Color Desktop Seat	$0.00
008O	KSC	MFD Color Floor Seat	$0.00
008P	KSC	Virtual Team Service (VTS) Seat	$0.00
008Q	KSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
008R	KSC	All ACES Product Catalog (APC)	$0.00
008S	KSC	All Enhanced Support Services	$0.00
008T	KSC	All Other General Services	$0.00
009	LaRC	All End-user Services & Catalog Purchases	$0.00
009A	LaRC	Reserved	$0.00
009B	LaRC	All “S” Computing Seats	$0.00
009C	LaRC	All “M” Computing Seats	$0.00
009D	LaRC	All “B” Computing Seats	$0.00
009E	LaRC	All “T” Computing Seats	$0.00
009F	LaRC	All “S” Cell Phone Seats	$0.00
009G	LaRC	All “B” Cell Phone Seats	$0.00
009H	LaRC	All “S” Smartphone Seats	$0.00
009I	LaRC	All “B” Smartphone Seats	$0.00
009J	LaRC	All Pager Seats	$0.00
009K	LaRC	All Network Printer (PRN) Seats	$0.00
009L	LaRC	MFD B&W Desktop Seat	$0.00
009M	LaRC	MFD B&W Floor Seat	$0.00
009N	LaRC	MFD Color Desktop Seat	$0.00
009O	LaRC	MFD Color Floor Seat	$0.00
009P	LaRC	Virtual Team Service (VTS) Seat	$0.00
009Q	LaRC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

009R	LaRC	All ACES Product Catalog (APC)	$0.00
009S	LaRC	All Enhanced Support Services	$0.00
009T	LaRC	All Other General Services	$0.00
010	MSFC	All End-user Services & Catalog Purchases	$0.00
010A	MSFC	Reserved	$0.00
010B	MSFC	All “S” Computing Seats	$0.00
010C	MSFC	All “M” Computing Seats	$0.00
010D	MSFC	All “B” Computing Seats	$0.00
010E	MSFC	All “T” Computing Seats	$0.00
010F	MSFC	All “S” Cell Phone Seats	$0.00
010G	MSFC	All “B” Cell Phone Seats	$0.00
010H	MSFC	All “S” Smartphone Seats	$0.00
010I	MSFC	All “B” Smartphone Seats	$0.00
010J	MSFC	All Pager Seats	$0.00
010K	MSFC	All Network Printer (PRN) Seats	$0.00
010L	MSFC	MFD B&W Desktop Seat	$0.00
010M	MSFC	MFD B&W Floor Seat	$0.00
010N	MSFC	MFD Color Desktop Seat	$0.00
010O	MSFC	MFD Color Floor Seat	$0.00
010P	MSFC	Virtual Team Service (VTS) Seat	$0.00
010Q	MSFC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
010R	MSFC	All ACES Product Catalog (APC)	$0.00
010S	MSFC	All Enhanced Support Services	$0.00
010T	MSFC	All Other General Services	$0.00
011	NSSC	All End-user Services & Catalog Purchases	$0.00
011A	NSSC	Reserved	$0.00
011B	NSSC	All “S” Computing Seats	$0.00
011C	NSSC	All “M” Computing Seats	$0.00
011D	NSSC	All “B” Computing Seats	$0.00
011E	NSSC	All “T” Computing Seats	$0.00
011F	NSSC	All “S” Cell Phone Seats	$0.00
011G	NSSC	All “B” Cell Phone Seats	$0.00
011H	NSSC	All “S” Smartphone Seats	$0.00
011I	NSSC	All “B” Smartphone Seats	$0.00
011J	NSSC	All Pager Seats	$0.00
011K	NSSC	All Network Printer (PRN) Seats	$0.00
011L	NSSC	MFD B&W Desktop Seat	$0.00
011M	NSSC	MFD B&W Floor Seat	$0.00
011N	NSSC	MFD Color Desktop Seat	$0.00
011O	NSSC	MFD Color Floor Seat	$0.00
011P	NSSC	Virtual Team Service (VTS) Seat	$0.00
011Q	NSSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
011R	NSSC	All ACES Product Catalog (APC)	$0.00
011S	NSSC	All Enhanced Support Services	$0.00
011T	NSSC	All Other General Services	$0.00
012	SSC	All End-user Services & Catalog Purchases	$0.00
012A	SSC	Reserved	$0.00
012B	SSC	All “S” Computing Seats	$0.00
012C	SSC	All “M” Computing Seats	$0.00
012D	SSC	All “B” Computing Seats	$0.00

RELEASED - Printed documents may be obsolete; validate prior to use.

012E	SSC	All "T" Computing Seats	$0.00
012F	SSC	All "S" Cell Phone Seats	$0.00
012G	SSC	All "B" Cell Phone Seats	$0.00
012H	SSC	All "S" Smartphone Seats	$0.00
012I	SSC	All "B" Smartphone Seats	$0.00
012J	SSC	All Pager Seats	$0.00
012K	SSC	All Network Printer (PRN) Seats	$0.00
012L	SSC	MFD B&W Desktop Seat	$0.00
012M	SSC	MFD B&W Floor Seat	$0.00
012N	SSC	MFD Color Desktop Seat	$0.00
012O	SSC	MFD Color Floor Seat	$0.00
012P	SSC	Virtual Team Service (VTS) Seat	$0.00
012Q	SSC	All Infrastructure Upgrade Proposal (IUP) Labor Rates	$0.00
012R	SSC	All ACES Product Catalog (APC)	$0.00
012S	SSC	All Enhanced Support Services	$0.00
012T	SSC	All Other General Services	$0.00

A summary of orders placed for PLIs A-O is provided in Attachment I-5, *Summary of Base Services;* Attachment I-6, *Summary of ACES Product Catalog (APC) Purchases; and* Attachment I-8, *Summary of Seat Purchases and All Other Services*. These summaries record orders placed by each Center using the Enterprise Service Request System (ESRS) and are updated on a monthly basis. Attachment I-7, *Summary of Infrastructure Upgrade Proposals*, provides a summary of all approved infrastructure upgrade proposals (PLI P) and is updated as new IUPs are authorized by the Contracting Officer.

(End of clause)

2.4 SCHEDULE OF PRICES FOR INDIVIDUAL SEATS

Firm-Fixed Prices for individual seats by contract year are delineated in Attachment I-9, *CLIN Pricing*. These prices have been proposed on an Agency-wide basis and apply to seat purchases regardless of Center location. All delivery charges, taxes, and handling costs are included in the listed prices.

(End of clause)

2.5 ACES SEATS VOLUME DISCOUNT

(a) The Contractor shall provide volume discounts for all ACES seats of a particular seat type (e.g., "S" Computing seat) when the quantity of these ACES seats currently invoiced is in excess of the estimated quantities stated in this clause.

(b) The Contractor agrees to reduce the monthly seat price of all ACES seats in the affected CLINs (e.g., S Computing seats, M Computing seats, T Computing seats, or MFD seats) by the discount rate if the number of ordered seats are increased above the volume threshold. For example, if the estimated quantity for a particular CLIN is 17,500, the volume threshold increase is 1,000, and the discount rate is 1%, a quantity increase of 3,300 to 20,800, would result in a total reduction of 3%.

RELEASED - Printed documents may be obsolete; validate prior to use.

(c) This seat price reduction is effective when the increased quantity is maintained for a minimum of six (6) continuous months. At the end of the continuous six-month period, the Contractor shall provide a total credit amount equal to the previous six months' difference between the negotiated seat price (Attachment I-9, *CLIN Pricing*) and the reduced seat price. The Contractor shall continue to provide a monthly credit for the difference between the negotiated seat price and the reduced seat amount thereafter.

(d) If the seat count for a particular CLIN drops below the seat volume thresholds, the applicable reduction will be rescinded. In the example above, if the quantity reduced from 20,800 to 19,800, then the total reduction would be 2%. However, the price will never be higher than the original negotiated seat price (Attachment I-9, *CLIN Pricing*).

CLIN	Description	Estimated Quantity	Volume Threshold Increase	Discount Rate
T-1	"S" Computing Seat Microsoft Compatible Desktop Platform	Yr 1: 18,627; Yr 2: 18,268 Yr 3: 17,840; Yr 4: 18,118 Yr 5: 18,527; Yr 6: 18,935 Yr 7: 19,484; Yr 8: 20,190 Yr 9: 21,078; Yr 10: 22,179	each 500 seats	**Redacted** %
T-2	"S" Computing Seat Microsoft Compatible Laptop Platform	Yr 1: 13,745; Yr 2: 14,797 Yr 3: 15,966; Yr 4: 16,747 Yr 5: 17,618; Yr 6: 18,558 Yr 7: 19,607; Yr 8: 20,779 Yr 9: 22,096; Yr 10: 23,576	each 500 seats	**Redacted** %
T-3	"S" Computing Seat Apple Compatible Desktop Platform	Yr 1: 837; Yr 2: 871 Yr 3: 896; Yr 4: 912 Yr 5: 931; Yr 6: 951 Yr 7: 973; Yr 8: 997 Yr 9: 1,026; Yr 10: 1,059	each 100 seats	**Redacted** %
T-4	"S" Computing Seat Apple Compatible Laptop Platform	Yr 1: 2,113; Yr 2: 2,224 Yr 3: 2,329; Yr 4: 2,376 Yr 5: 2,428; Yr 6: 2,482 Yr 7: 2,541; Yr 8: 2,605 Yr 9: 2,677; Yr 10: 2,755	each 100 seats	**Redacted** %
U-1	"M" Computing Seat Microsoft Compatible Desktop Platform	Yr 1: 1,732; Yr 2: 1,726 Yr 3: 1,775; Yr 4: 2,034 Yr 5: 2,333; Yr 6: 2,400 Yr 7: 2,467; Yr 8: 2,537 Yr 9: 2,609; Yr 10: 2,681	each 100 seats	**Redacted** %
U-2	"M" Computing Seat Microsoft Compatible Laptop Platform	Yr 1: 1,947; Yr 2: 1,648 Yr 3: 1,693; Yr 4: 1,925 Yr 5: 2,193; Yr 6: 2,253 Yr 7: 2,313; Yr 8: 2,376 Yr 9: 2,439; Yr 10: 2,505	each 100 seats	**Redacted** %
U-3	"M" Computing Seat Microsoft Compatible Lightweight Platform	Yr 1: 2,675; Yr 2: 2,832 Yr 3: 3,003; Yr 4: 3,591 Yr 5: 3,848; Yr 6: 4,071 Yr 7: 4,314; Yr 8: 4,580 Yr 9: 4,872; Yr 10: 5,192	each 100 seats	**Redacted** %
U-4	"M" Computing Seat	Yr 1: 502; Yr 2: 529	each 100	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

	Microsoft Compatible Tablet Platform	Yr 3: 559; Yr 4: 599 Yr 5: 645; Yr 6: 685 Yr 7: 730; Yr 8: 779 Yr 9: 833; Yr 10: 894	seats	%
U-5	"M" Computing Seat Microsoft Compatible Workstation Platform	Yr 1: 3,393; Yr 2: 3,570 Yr 3: 3,763; Yr 4: 3,978 Yr 5: 4,221; Yr 6: 4,492 Yr 7: 4,797; Yr 8: 5,141 Yr 9: 5,531; Yr 10: 5,972	each 100 seats	**Redacted** %
U-6	"M" Computing Seat Apple Compatible Desktop Platform	Yr 1: 52; Yr 2: 58 Yr 3: 64; Yr 4: 72 Yr 5: 83; Yr 6: 94 Yr 7: 107; Yr 8: 123 Yr 9: 142; Yr 10: 165	each 100 seats	**Redacted** %
U-7	"M" Computing Seat Apple Compatible Laptop Platform	Yr 1: 110; Yr 2: 113 Yr 3: 116; Yr 4: 119 Yr 5: 131; Yr 6: 134 Yr 7: 138; Yr 8: 143 Yr 9: 148; Yr 10: 153	each 100 seats	**Redacted** %
U-8	"M" Computing Seat Apple Compatible Lightweight Platform	Yr 1: 76; Yr 2: 78 Yr 3: 79; Yr 4: 81 Yr 5: 83; Yr 6: 85 Yr 7: 86; Yr 8: 88 Yr 9: 90; Yr 10: 92	each 100 seats	**Redacted** %
U-9	"M" Computing Seat Apple Compatible Workstation Platform	Yr 1: 167; Yr 2: 170 Yr 3: 173; Yr 4: 177 Yr 5: 182; Yr 6: 186 Yr 7: 191; Yr 8: 197 Yr 9: 204; Yr 10: 214	each 100 seats	**Redacted** %
U-10	"M" Computing Seat LINUX Desktop Platform	Yr 1:72; Yr 2: 74 Yr 3: 76; Yr 4: 79 Yr 5: 82; Yr 6: 85 Yr 7: 89; Yr 8: 93 Yr 9: 97; Yr 10: 103	each 100 seats	**Redacted** %
U-11	"M" Computing Seat LINUX Laptop Platform	Yr 1:72; Yr 2: 75 Yr 3: 76; Yr 4: 80 Yr 5: 83; Yr 6: 86 Yr 7: 90; Yr 8: 93 Yr 9: 98; Yr 10: 103	each 100 seats	**Redacted** %
U-12	"M" Computing Seat UNIX Workstation Platform	Yr 1: 61; Yr 2: 64 Yr 3: 68; Yr 4: 72 Yr 5: 76; Yr 6: 80 Yr 7: 85; Yr 8: 92 Yr 9: 98; Yr 10: 105	each 100 seats	**Redacted** %
V-1	"T" Computing Seat Desktop Platform	Yr 1: 1,200; Yr 2: 1,500 Yr 3: 1,800; Yr 4: 2,200 Yr 5: 3,000; Yr 6: 3,000 Yr 7: 3,000; Yr 8: 3,000 Yr 9: 3,000; Yr 10: 3,000	each 300 seats	**Redacted** *%
V-2	"T" Computing Seat Laptop Platform	Yr 1: 300; Yr 2: 400 Yr 3: 500; Yr 4: 500	each 300 seats	**Redacted** %

RELEASED - Printed documents may be obsolete; validate prior to use.

		Yr 5: 500; Yr 6: 500 Yr 7: 500; Yr 8: 500 Yr 9: 500; Yr 10: 500		

(End of clause)

2.6 PRICES FOR CATALOG ITEMS

The Contractor shall maintain a catalog of common ancillary information technology items as required in Section 3.3 of the Performance Work Statement. The Contractor agrees to provide a discount off the manufacturer suggested retail price as specified below. The Contractor also agrees that all associated material handling charges are included in the annual price of the Base Services (PLI 001A) price and shall not be added to the price of the individual catalog item.

	Period	Discount Rate
Base	Jul 1, 2011-Jun 30, 2015	**Redacted** %
Option 1	Jul 1, 2015-Jun 30, 2018	**Redacted** %
Option 2	Jul 1, 2018-June 30 2021	**Redacted** %

** Note: If the Discount Rate is not the same within each period, the Offeror shall specify the yearly discount rate

(End of clause)

2.7 52.216-3 ECONOMIC PRICE ADJUSTMENT- SEMISTANDARD SUPPLIES (JAN 1997)

(a) The Contractor warrants that the supplies and services identified in Clause 2.4, *Schedule of Prices for Individual Seats*, are (except for modifications required by the contract specifications) supplies or services for which there is an established price. The term "established price" means a price that (1) is an established catalog or market price for a commercial item sold in substantial quantities to the general public, and (2) is the net price after applying any standard trade discounts offered by the Contractor. The Contractor further warrants that, as of the date of this contract, any difference between the unit prices stated in the contract for these line items and the Contractor's established prices for like quantities of the nearest commercial equivalents are due to compliance with contract specifications and with any contract requirements for preservation, packaging, and packing beyond standard commercial practice.

(b) The Contractor shall promptly notify the Contracting Officer of the amount and effective date of each decrease in any applicable established price. At a minimum, the

RELEASED - Printed documents may be obsolete; validate prior to use.

Contractor shall submit an adjustment proposal annually or as the marketplace changes. This does not alleviate the Contractor from submitting an adjustment proposal as identified in Paragraph (a) of this clause. Each corresponding contract unit price (exclusive of any part of the unit price that reflects modifications resulting from compliance with specifications or with requirements for preservation, packaging, and packing beyond standard commercial practice) shall be decreased by the same percentage that the established price is decreased. The decrease shall apply to those items delivered on and after the effective date of the decrease in the Contractor's established price, and this contract shall be modified accordingly.

(c) If the Contractor's applicable established price is increased after the contract date, the corresponding contract unit price (exclusive of any part of the unit price resulting from compliance with specifications or with requirements for preservation, packaging, and packing beyond standard commercial practice) shall be increased, upon the Contractor's written request to the Contracting Officer, by the same percentage that the established price is increased, and the contract shall be modified accordingly, subject to the following limitations:

(1) The aggregate of the increases in any contract unit price under this clause shall not exceed 10 percent of the original contract unit price.

(2) The increased contract unit price shall be effective—

(i) On the effective date of the increase in the applicable established price if the Contracting Officer receives the Contractor's written request within 10 days thereafter; or

(ii) If the written request is received later, on the date the Contracting Officer receives the request.

(3) The increased contract unit price shall not apply to quantities scheduled under the contract for delivery before the effective date of the increased contract unit price, unless failure to deliver before that date results from causes beyond the control and without the fault or negligence of the Contractor, within the meaning of the Default clause.

(4) No modification increasing a contract unit price shall be executed under this paragraph (c) until the Contracting Officer verifies the increase in the applicable established price.

(5) Within 30 days after receipt of the Contractor's written request, the Contracting Officer may cancel, without liability to either party, any undelivered portion of the contract items affected by the requested increase.

(d) During the time allowed for the cancellation provided for in paragraph (c)(5) of this clause, and thereafter if there is no cancellation, the Contractor shall continue deliveries according to the contract delivery schedule, and the Government shall pay for such deliveries at the contract unit price, increased to the extent provided by paragraph (c) of this clause.

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

2.8 1852.232-77 LIMITATION OF FUNDS (FIXED- PRICE CONTRACT) (MAR 1989)

(a) Of the total price of CLINs identified in NFS Clause 1852.216-78, *Firm-Fixed-Price*, the sum of $ 1,000,000 is presently available for payment and allotted to this contract. It is anticipated that from time to time additional funds will be allocated to the contract in accordance with the following schedule, until the total price of said items is allotted:

SCHEDULE FOR ALLOTMENT OF FUNDS

Date	Amounts
To be Determined	

(b) The Contractor agrees to perform or have performed work on the items specified in paragraph (a) of this clause up to the point at which, if this contract is terminated pursuant to the Termination for Convenience of the Government clause of this contract, the total amount payable by the Government (including amounts payable for subcontracts and settlement costs) pursuant to paragraphs (f) and (g) of that clause would, in the exercise of reasonable judgment by the Contractor, approximate the total amount at the time allotted to the contract. The Contractor is not obligated to continue performance of the work beyond that point. The Government is not obligated in any event to pay or reimburse the Contractor more than the amount from time to time allotted to the contract, anything to the contrary in the Termination for Convenience of the Government clause notwithstanding.

(c) (1) It is contemplated that funds presently allotted to this contract will cover the work to be performed until January 15, 2011.

(2) If funds allotted are considered by the Contractor to be inadequate to cover the work to be performed until that date, or an agreed date substituted for it, the Contractor shall notify the Contracting Officer in writing when within the next 60 days the work will reach a point at which, if the contract is terminated pursuant to the Termination for Convenience of the Government clause of this contract, the total amount payable by the Government (including amounts payable for subcontracts and settlement costs) pursuant to paragraphs (f) and (g) of that clause will approximate 75 percent of the total amount then allotted to the contract.

(3) (i) The notice shall state the estimate when the point referred to in paragraph (c) (2) of this clause will be reached and the estimated amount of additional funds required to continue performance to the date specified in paragraph (c) (1) of this clause, or an agreed date substituted for it.

(ii) The Contractor shall, 60 days in advance of the date specified in paragraph (c) (1) of this clause, or an agreed date substituted for it, advise the Contracting Officer in writing as to the estimated amount of additional funds required for the timely performance of the contract for a further period as may be specified in the contract or otherwise agreed to by the parties.

(4) If, after the notification referred to in paragraph (c) (3) (ii) of this clause, additional funds are not allotted by the date specified in paragraph (c) (1) of this clause, or an agreed date substituted for it, the Contracting Officer shall, upon the Contractor's written request,

RELEASED - Printed documents may be obsolete; validate prior to use.

terminate this contract on that date or on the date set forth in the request, whichever is later, pursuant to the Termination for Convenience of the Government clause.

(d) When additional funds are allotted from time to time for continued performance of the work under this contract, the parties shall agree on the applicable period of contract performance to be covered by these funds. The provisions of paragraphs (b) and (c) of this clause shall apply to these additional allotted funds and the substituted date pertaining to them, and the contract shall be modified accordingly.

(e) If, solely by reason of the Government's failure to allot additional funds in amounts sufficient for the timely performance of this contract, the Contractor incurs additional costs or is delayed in the performance of the work under this contract, and if additional funds are allotted, an equitable adjustment shall be made in the price or prices (including appropriate target, billing, and ceiling prices where applicable) of the items to be delivered, or in the time of delivery, or both.

(f) The Government may at any time before termination, and, with the consent of the Contractor, after notice of termination, allot additional funds for this contract.

(g) The provisions of this clause with respect to termination shall in no way be deemed to limit the rights of the Government under the default clause of this contract. The provisions of this Limitation of Funds clause are limited to the work on and allotment of funds for the items set forth in paragraph (a) of this clause. This clause shall become inoperative upon the allotment of funds for the total price of said work except for rights and obligations then existing under this clause.

(h) Nothing in this clause shall affect the right of the Government to terminate this contract pursuant to the Termination for Convenience of the Government clause of this contract.

(End of clause)

2.9 RETAINAGE POOLS AND PERFORMANCE METRICS

(a) To promote excellent service delivery, customer satisfaction, and maximum efficiency, the Government will establish a series of retainage pools constituting 12 percent of the Contractor's total monthly invoice. This amount will be processed in accordance with Attachment I-3, *Retainage Pools and Performance Metrics*. The full invoice amount will be disbursed to the Contractor in accordance with this clause and Attachment I-3, *Retainage Pools and Performance Metrics*, and any amount to be retained due to performance failure from one or more of the pools defined in Attachment I-3 will be deducted from the Contractor's full invoice for the following month after the retainage determination has been made.

(b) The Government has established three retainage pools and associated performance metrics to evaluate the Contractor's performance. A detailed discussion of these retainage pools and performance metrics are provided in Attachment I-3, *Retainage Pools and Performance Metrics,* and summarized in the table below.

RELEASED - Printed documents may be obsolete; validate prior to use.

Type of Metric	Frequency of Evaluation	Invoice Percentage Withheld	Determination Official
Metric Retainage Pool (MRP)	Monthly	8%	Agency CIO or designee
Performance Retainage Pool (PRP)	Semi-Annually	3%	Agency CIO or designee
Small Business Utilization Pool (SBUP)	Annually	1%	Agency CIO or designee

(c) The Government will complete its assessment and determination of MRP earned by the 25th calendar day of the following month in which the performance occurred. The assessment and determination of PRP and SBUP earned will be completed by the Government within sixty (60) calendar days after the end of the semi-annual and annual evaluation period, respectively.

(d) The percentage of each retainage pool earned is identified in the table below.

Type of Metric	Metrics Retainage Pool -- Percentage Earned										
	Max Amount	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
MRP											
January	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
February	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
March	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
April	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
May	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
June	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
July	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
August	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
September	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
October	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
November	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
December	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
PRP											
1st Eval Period	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2nd Eval Period	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
SBUP											
1st Eval Period	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2nd Eval Period	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

(e) The Contractor shall submit a monthly report identifying its performance against the metrics specified in Attachment I-3, *Retainage Pools and Performance Metrics*. This report shall also include self-assessment and be prepared in accordance with MA-07, *Retainage Pools and Performance Metrics Report.*

(f) The Government shall use this clause in lieu of requiring re-performance of services as provided for in paragraph (a) of 52.212-4, *Contract Terms and Conditions - Commercial Items.*

(End of clause)

2.10 SUPPLEMENTAL CONTRACTOR INVOICING INSTRUCTIONS

Contractor invoices shall comply with the requirements stipulated in FAR clause 52.212-4, *Contract Terms and Conditions - Commercial Items*, Paragraph (g) and the following supplemental instructions:

RELEASED - Printed documents may be obsolete; validate prior to use.

1) The invoice shall contain a summary worksheet and individual worksheets for each Center identifying costs being invoiced. Costs should include the following applicable taxes: property, sales, commercial activity, rental and/or gross receipts.
2) Worksheets shall be consistent with the standard ordering reports generated by the Enterprise Service Request System, to facilitate reconciliation and verification of all costs.
3) The Contractor shall provide the Agency summary and individual worksheets for each Center to the ACES Project Office. Individual worksheets for each Center shall also be submitted to the locally identified Center POC.
4) The invoice shall identify seats and services ordered, retainage pool withholdings, excess charges, and credits.
5) The original invoice shall be submitted to the NSSC Financial Management Division at the address specified in Block 18A of the SF1449 with an information copy to the Contracting Officer, ACES Project Office, and each Center Technical Monitor (CTM).
6) Invoices shall be submitted on the 15th day of each month for the previous thirty (30) days of services performed.

(End of clause)

2.11 LIABILITY FOR LOSS, THEFT, DAMAGE OR DESTRUCTION

(a) The Government assumes no liability for loss, theft, damage, destruction (willful or otherwise) of any asset (tangible or intangible) provided by the Contractor to any party in performance of this contract except as stated in this clause.

(b) The liability of the Contractor for losses resulting from loss, theft, damage, or destruction of any asset, provided by the Contractor to the Government in performance of this contract, caused by (i) a Government employee, (ii) another Government Contractor, and/or (iii) grantee, shall not exceed 0.80% of all Agency orders procured during the previous year, as reflected through the Contracting Officer's updates to clause 1852.216-78, *Firm Fixed Price*.

(c) If the actual losses resulting from loss, theft, damage, or destruction caused by (i) a Government employee, (ii) another Government Contractor, and/or (iii) a grantee, exceeds 0.80% of all Agency orders procured during the previous year, the Government will reimburse the Contractor for the lesser of the actual loss (acquisition cost less straight-line depreciation) or actual cost for replacing lost, stolen, damaged or destroyed equipment, in excess of 0.80% of all Agency orders procured during the previous year, provided the Contractor can substantiate both the nature of the loss and the reimbursement costs with either written or electronic records.

(End of clause)

2.12 CREDIT FOR OUTAGES

A seat is considered down if any service associated with that seat, as defined by the PWS, is unavailable. If the return to service period is exceeded the credit starts to take place with

RELEASED - Printed documents may be obsolete; validate prior to use.

the next business day after the return to service has been missed. A credit equaled to one-thirtieth of the monthly seat invoice will be applied for each day that the seat is down. Credit provisions do not apply to outages that are beyond the control of the Contractor. (Reference Section I, 1.1, 52.212-4(f), *Excusable Delay*, which gives a definition of "beyond control".) The Government shall use this clause in lieu of requiring re-performance of services as provided for in paragraph (a) of 52.212-4, Contract Terms and Conditions - Commercial Items.

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

3.0 ORDERING OF SERVICES AND SUPPLIES

3.1 PLACING ORDERS FOR SEATS, CATALOG ITEMS, AND INFRASTRUCTURE UPGRADES (GENERAL)

(a) The Government will order all services and supplies required under this contract through either the (1) Enterprise Service Request System (ESRS) or (2) Infrastructure Upgrade Ordering Process.

(b) The ESRS provides authorized users a single automated tool to place orders for seats and catalog items. The ESRS is further defined in Clause 3.2, *Enterprise Service Request System.*

(c) Labor and materials required to perform infrastructure upgrade services will be ordered by the Contracting Officer utilizing the procedures delineated in Clause 3.3, *Infrastructure Upgrade Ordering Process*.

(d) Minimum and maximum order limitations for any single order are stipulated in FAR clause 52.216-19, *Order Limitations*. Orders under this contract may be placed anytime before expiration of the current term of the contract; however performance must be completed no later than six months after the expiration of the current contract term.

(End of clause)

3.2 ENTERPRISE SERVICE REQUEST SYSTEM (ESRS)

(a) The ESRS is an integrated management tool which will be used by all I^3P Contractors to coordinate and fulfill service requests from authorized users. As part of the ACES contract, the ESRS will also provide authorized users with a single automated tool to place orders for end-user services and catalog purchases. ESRS will also provide the ACES Project Management Office with a reporting tool to track Center purchases down to the individual seat level and provide associated financial information.

(b) On a monthly basis, the Contracting Officer will modify NFS Clause 1852.216-78, *Firm Fixed Price* and Attachment I-5, *Summary of Base Services;* Attachment I-6, *Summary of ACES Product Catalog (APC) Purchases; and* Attachment I-8, *Summary of Seat Purchases and All Other Services*, to reflect all orders for base services and catalog items ordered through ESRS in the preceding 30 days.

Note to Offerors: The ESRS is being developed concurrently by the NASA Shared Services Center and Computer Sciences Corporation under contract NNX05AA01C. As development of the ESRS matures, this clause will be revised to provide more comprehensive information on the system.

(End of clause)

3.3 INFRASTRUCTURE UPGRADE ORDERING PROCESS

(a) Only the Contracting Officer may authorize the Contractor to provide infrastructure upgrade services under this contract. The Contractor may only incur costs for infrastructure upgrade services in performance of orders authorized under this clause. No other costs are

RELEASED - Printed documents may be obsolete; validate prior to use.

authorized unless otherwise specified in the contract or expressly authorized by the Contracting Officer.

(b) Prior to providing authorization for infrastructure upgrade services to commence, the Contracting Officer will issue a request for an infrastructure upgrade proposal containing the following information:

(1) Functional description of the work required, identifying the objectives or results desired.

(2) Schedule with milestones, list of deliverables required and due dates.

(3) Request for a task plan from the Contractor to include the technical approach, period of performance, appropriate cost information, and any other information required to determine the reasonableness of the Contractor's proposal. The Contractor shall use the labor categories and fully burdened labor rates contained in Attachment I-10, *Schedule of Fully Burdened Labor Rates*, to price the proposal.

(c) Within ten (10) calendar days (or as specified by the Contracting Officer in the request) after receipt of the Contracting Officer's request, the Contractor shall submit a proposal conforming to the request.

(d) After review and any necessary discussions, the Contracting Officer may provide written authorization to the Contractor to proceed. The written authorization will contain, as a minimum, the following:

(1) Date of the authorization.

(2) Order number.

(3) Functional description of the work identifying the objectives or results desired from the task order, including special instructions or other information necessary for performance of the task.

(4) Performance standards, and where appropriate, quality assurance standards.

(5) Firm-fixed-price and level of effort (if applicable).

(6) Any other resources (travel, materials, equipment, facilities, etc.) authorized.

(7) Delivery/performance schedule including start and end dates.

(e) The Contracting Officer may amend orders in the same manner in which they were authorized.

(f) The Contracting Officer will modify NFS Clause 1852.216-78, *Firm Fixed Price* and Attachment I- 7, *Summary of Infrastructure Upgrade Proposals*, to reflect all orders for infrastructure upgrade services as they are authorized.

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

3.4 52.216-19 ORDER LIMITATIONS (OCT 1995)

(a) *Minimum order*. When the Government requires supplies or services covered by this contract in an amount of less than ten dollars ($10.00), the Government is not obligated to purchase, nor is the Contractor 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 five hundred thousand dollars ($500,000.00);

(2) Any order for a combination of items in excess of one hundred million dollars ($100,000,000.00); or

(3) A series of orders from the same ordering office within five (5) days that together call for quantities exceeding the limitation in paragraph (b)(1) or (2) of this section.

(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) of this section.

(d) Notwithstanding paragraphs (b) and (c) of this section, 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 two (2) 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)

3.5 TECHNOLOGY INFUSION/TRANSFORMATION PLANNING

(a) The process to start a Technology Infusion or Transformation activity shall commence with the submission of a Technology Infusion/Transformation Plan. The Plan shall contain sufficient detail to evaluate its viability as an alternate approach to delivering required services in a functional area. The Plan shall be developed in accordance with NPR 7120.7 and shall include as a minimum:

- A description, at the individual requirement level, as to how the proposed alternate approach meets or exceeds the functional requirements and Service Level Agreements (SLAs) detailed in the relevant portions of the RFP/contract
- Identification of any variance from requirements detailed in the RFP/contract
- The specific benefit(s) of undertaking the proposed technology infusion/transformation in terms of its technical merits and addressing the intent of PWS Section 1.2, *Goals and Objectives*
- Identification of the initiation date and occurrence of major milestones as defined in NPR 7120.7 (e.g. PDR, CDR, ORR, etc.) relative to that date

RELEASED - Printed documents may be obsolete; validate prior to use.

- Identification of any assumptions and impacts, (e.g., impacts on end-users during and after the technology infusion/transformation, policies, architecture, procedures, integration with other I^3P contracts, etc.), as well as mitigation strategies to address the impacts.
- Identification of a reduction to the overall life cycle costs for the affected functional area to which the Contractor shall commit to if the transformation is implemented as proposed
- A commitment to provide a fully NPR 7120.7 compliant technology infusion/transformation project plan at no additional cost before a final Government decision on implementing the technology infusion/transformation is made

(b) After review of the Plan, the Government at its option may request the Contractor to submit NPR 7120.7 Project Plan above. This Project Plan may require subsequent modifications before final acceptance. If the Plan is accepted by the Government, an equitable adjustment to the contract will be negotiated pursuant to the Shared Savings clause, Section I, 6.20.

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

4.0 CONTRACT TERMS AND OPTIONS

4.1 PERIOD OF PERFORMANCE

(a) The Period of Performance of the base period shall be from July 1, 2011 to June 30, 2015

(b) In the event that the Government exercises its right to extend the term of the contract under FAR clause 52.217-9, *Option to Extend the Term of the Contract*, the period of performance of each option is identified below:

Option No.	Period of Performance
1	July 1, 2015 to June 30, 2018
2	July 1, 2018 to June 30, 2021

(End of clause)

4.2 52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor any time prior to the end of the existing contract period, 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 ten years.

(End of clause)

4.3 ANALYSIS TO SUPPORT EXERCISE OF OPTIONS

(a) Prior to the exercise of any option under this contract, the Contracting Officer shall make a written determination that exercise of the option is the most advantageous method of fulfilling the Government's requirement. This determination is especially critical for this contract given the length of the period of performance, rapid advances in information technology, and price reductions on existing information technology items.

(1) To support that determination, the requiring organization and Contracting Officer shall conduct an analysis that considers existing option prices, Contractor's performance to date, current market conditions, advances in technology, and other programmatic factors.

RELEASED - Printed documents may be obsolete; validate prior to use.

(2) This analysis must be completed in advance of providing the notice to the Contractor required by FAR 17.207(a) and allow sufficient time in the performance period to allow for the acquisition team to pursue appropriate alternative approaches with minimal impact to the program or project in terms of technical, cost, or schedule risk should the analysis conclude that the best programmatic path is not exercising the option.

(b) The CO will determine the effect on the option prices of the most recent economic price adjustment, if any, pursuant to the provision at Section I, 2.7 of this contract, prior to determining whether to exercise the option.

(End of clause)

4.4 52.237-3 CONTINUITY OF SERVICES (JAN 1991)

(a) The Contractor recognizes that the services under this contract are vital to the Government and must be continued without interruption and that, upon contract expiration, a successor, either the Government or another Contractor, may continue them. The Contractor agrees to—

(1) Furnish phase-in training; and

(2) Exercise its best efforts and cooperation to effect an orderly and efficient transition to a successor.

(b) The Contractor shall, upon the Contracting Officer's written notice, (1) furnish phase-in, phase-out services for up to 90 days after this contract expires and (2) negotiate in good faith a plan with a successor to determine the nature and extent of phase-in, phase-out services required. The plan shall specify a training program and a date for transferring responsibilities for each division of work described in the plan, and shall be subject to the Contracting Officer's approval. The Contractor shall provide sufficient experienced personnel during the phase-in, phase-out period to ensure that the services called for by this contract are maintained at the required level of proficiency.

(c) The Contractor shall allow as many personnel as practicable to remain on the job to help the successor maintain the continuity and consistency of the services required by this contract. The Contractor also shall disclose necessary personnel records and allow the successor to conduct on-site interviews with these employees. If selected employees are agreeable to the change, the Contractor shall release them at a mutually agreeable date and negotiate transfer of their earned fringe benefits to the successor.

(d) The Contractor shall be reimbursed for all reasonable phase-in, phase-out costs (*i.e.,* costs incurred within the agreed period after contract expiration that result from phase-in, phase-out operations) and a fee (profit) not to exceed a pro rata portion of the fee (profit) under this contract.

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

4.5 ASSET TRANSITION FROM ACES CONTRACT TO SUCCESSOR CONTRACT

(a) For purposes of this clause, the successor to the ACES contract is either: the Government, a single prime contractor, or multiple prime contractors, depending on the acquisition strategy used to procure the follow-on contract(s). The ACES Contractor shall ensure the services provided under this contract continue without interruption for the successor to the ACES contract during the phase-in period. The successor shall have the opportunity to acquire existing ACES assets (e.g., hardware and software) from the ACES Contractor after award of a follow-on contract(s) has been made in accordance with the following procedures and requirements:

1) The successor will be afforded the opportunity to acquire the assets listed in the Asset Transition Value (ATV) report (DRD IT-06) at no more than the residual value listed in the DRD.
2) In the event that the Successor chooses not to acquire the existing ACES assets, the ACES Contractor shall coordinate a schedule for the removal of those assets with the successor. The removal of any assets not acquired by the Successor shall be completed by the ACES Contractor during the phase-in period of the follow-on contract(s).
3) All existing assets shall remain installed and usable by the Government through the transition of assets or their replacement by the Successor.
4) The ACES Contractor shall ensure all purchase and leasing arrangements, both for hardware and software, used by the ACES Contractor, include provisions to transfer to a successor.
5) Software licenses acquired by the ACES Contractor shall be transferable to the successor at no additional cost upon completion of the ACES contract.
6) The ACES Contractor shall be responsible for pick-up and removal of any hardware asset replaced by the Successor within three working days after the replacement occurs.

(b) The ACES Contractor shall furnish familiarization training at the beginning of the phase-in period to the Successor.

(c) Asset Transition Value Methodology (ATVM) – The following methodology and business rules shall apply to the calculation of the ATV:

1) The Residual Value is defined as the value of the asset at the time of asset transition and calculated by subtracting accumulated depreciation from initial purchase cost.
2) The Residual Value is based on straight line depreciation over the useful life of the asset as shown in the table below:

Asset Category	Useful Life
Computer Systems and associated components (except for the “T” ‘seat)	3 years
Network Peripherals	4 years
Infrastructure Servers and the “T” seat	5 years

3) Cell phones, Smartphones, pagers, software, and all items procured via the ESRS have a residual value of $0 from the time of purchase.

RELEASED - Printed documents may be obsolete; validate prior to use.

4) The ATV shall not include any Government-furnished or institutional-provided property or equipment, nor shall it include any infrastructure items for which title resides with the Government.
5) The ATV amount is based upon the asset being left in place and the successor taking title to the equipment.

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

5.0 PROPERTY MANAGEMENT

5.1 52.245-1 GOVERNMENT PROPERTY (Aug 2010) and Alt I (Aug 2010)

(a) Definitions. As used in this clause—

"Acquisition cost" means the cost to acquire a tangible capital asset including the purchase price of the asset and costs necessary to prepare the asset for use. Costs necessary to prepare the asset for use include the cost of placing the asset in location and bringing the asset to a condition necessary for normal or expected use.

"Cannibalize" means to remove serviceable parts from one item of equipment in order to install them on another item of equipment.

"Contractor-acquired property" means property acquired, fabricated, or otherwise provided by the Contractor for performing a contract, and to which the Government has title.

"Contractor inventory" means—

(1) Any property acquired by and in the possession of a Contractor or subcontractor under a contract for which title is vested in the Government and which exceeds the amounts needed to complete full performance under the entire contract;

(2) Any property that the Government is obligated or has the option to take over under any type of contract, *e.g.*, as a result either of any changes in the specifications or plans thereunder or of the termination of the contract (or subcontract thereunder), before completion of the work, for the convenience or at the option of the Government; and

(3) Government-furnished property that exceeds the amounts needed to complete full performance under the entire contract.

(4) "Contractor's managerial personnel" means the Contractor's directors, officers, managers, superintendents, or equivalent representatives who have supervision or direction of—

(1) All or substantially all of the Contractor's business;

(2) All or substantially all of the Contractor's operation at any one plant or separate location; or

(3) A separate and complete major industrial operation.

"Demilitarization" means rendering a product unusable for, and not restorable to, the purpose for which it was designed or is customarily used.

"Discrepancies incident to shipment" means any differences (*e.g.*, count or condition) between the items documented to have been shipped and items actually received.

"Equipment" means a tangible item that is functionally complete for its intended purpose, durable, nonexpendable, and needed for the performance of a contract. Equipment is not intended for sale, and does not ordinarily lose its identity or become a component part of another article when put into use. Equipment does not include material, real property, special test equipment or special tooling.

"Government-furnished property" means property in the possession of, or directly acquired by, the Government and subsequently furnished to the Contractor for performance of a contract. Government-furnished property includes, but is not limited to, spares and property furnished for repair, maintenance, overhaul, or modification. Government-furnished property also includes contractor-acquired property if the contractor-acquired property is a deliverable under a cost contract when accepted by the Government for continued use under the contract.

"Government property" means all property owned or leased by the Government. Government property includes both Government-furnished and Contractor-acquired property. Government property includes material, equipment, special tooling, special test equipment, and real property. Government property does not include intellectual property and software.

RELEASED - Printed documents may be obsolete; validate prior to use.

"Material" means property that may be consumed or expended during the performance of a contract, component parts of a higher assembly, or items that lose their individual identity through incorporation into an end item. Material does not include equipment, special tooling, special test equipment or real property.

"Nonseverable" means property that cannot be removed after construction or installation without substantial loss of value or damage to the installed property or to the premises where installed.

"Precious metals" means silver, gold, platinum, palladium, iridium, osmium, rhodium, and ruthenium.

"Property" means all tangible property, both real and personal.

"Property Administrator" means an authorized representative of the Contracting Officer appointed in accordance with agency procedures, responsible for administering the contract requirements and obligations relating to Government property in the possession of a Contractor.

"Property records" means the records created and maintained by the contractor in support of its stewardship responsibilities for the management of Government property.

"Provide" means to furnish, as in Government-furnished property, or to acquire, as in contractor-acquired property.

"Real property" See Federal Management Regulation 102-71.20 (41 CFR 102-71.20).

"Sensitive property" means property potentially dangerous to the public safety or security if stolen, lost, or misplaced, or that shall be subject to exceptional physical security, protection, control, and accountability. Examples include weapons, ammunition, explosives, controlled substances, radioactive materials, hazardous materials or wastes, or precious metals.

"Surplus property" means excess personal property not required by any Federal agency as determined by the Administrator of the General Services Administration (GSA).

(b) *Property management.*

(1) The Contractor shall have a system to manage (control, use, preserve, protect, repair and maintain) Government property in its possession. The system shall be adequate to satisfy the requirements of this clause. In doing so, the Contractor shall initiate and maintain the processes, systems, procedures, records, and methodologies necessary for effective control of Government property, consistent with voluntary consensus standards and/or industry-leading practices and standards for Government property management except where inconsistent with law or regulation. During the period of performance, the Contractor shall disclose any significant changes to their property management system to the Property Administrator prior to implementation.

(2) The Contractor's responsibility extends from the initial acquisition and receipt of property, through stewardship, custody, and use until formally relieved of responsibility by authorized means, including delivery, consumption, expending, sale (as surplus property), or other disposition, or via a completed investigation, evaluation, and final determination for lost, stolen, damaged, or destroyed property. This requirement applies to all Government property under the Contractor's accountability, stewardship, possession or control, including its vendors or subcontractors (see paragraph (f)(1)(v) of this clause).

(3) The Contractor shall include the requirements of this clause in all subcontracts under which Government property is acquired or furnished for subcontract performance.

RELEASED - Printed documents may be obsolete; validate prior to use.

(c) *Use of Government property*.

(1) The Contractor shall use Government property, either furnished or acquired under this contract, only for performing this contract, unless otherwise provided for in this contract or approved by the Contracting Officer.

(2) Modifications or alterations of Government property are prohibited, unless they are—

(i) Reasonable and necessary due to the scope of work under this contract or its terms and conditions;

(ii) Required for normal maintenance; or

(iii) Otherwise authorized by the Contracting Officer.

(3) The Contractor shall not cannibalize Government property unless otherwise provided for in this contract or approved by the Contracting Officer.

(d) *Government-furnished property.*

(1) The Government shall deliver to the Contractor the Government-furnished property described in this contract. The Government shall furnish related data and information needed for the intended use of the property. The warranties of suitability of use and timely delivery of Government-furnished property do not apply to property acquired or fabricated by the Contractor as contractor-acquired property and subsequently transferred to another contract with this Contractor.

(2) The delivery and/or performance dates specified in this contract are based upon the expectation that the Government-furnished property will be suitable for contract performance and will be delivered to the Contractor by the dates stated in the contract.

(i) If the property is not delivered to the Contractor by the dates stated in the contract, the Contracting Officer shall, upon the Contractor's timely written request, consider an equitable adjustment to the contract.

(ii) In the event property is received by the Contractor, or for Government-furnished property after receipt and installation, in a condition not suitable for its intended use, the Contracting Officer shall, upon the Contractor's timely written request, advise the Contractor on a course of action to remedy the problem. Such action may include repairing, replacing, modifying, returning, or otherwise disposing of the property at the Government's expense. Upon completion of the required action(s), the Contracting Officer shall consider an equitable adjustment to the contract (see also paragraph (f)(1)(ii)(A) of this clause).

(iii) The Government may, at its option, furnish property in an "as-is" condition. The Contractor will be given the opportunity to inspect such property prior to the property being provided. In such cases, the Government makes no warranty with respect to the serviceability and/or suitability of the property for contract performance. Any repairs, replacement, and/or refurbishment shall be at the Contractor's expense.

(3)

(i) The Contracting Officer may by written notice, at any time—

(A) Increase or decrease the amount of Government-furnished property under this contract;

(B) Substitute other Government-furnished property for the property previously furnished, to be furnished, or to be acquired by the Contractor for the Government under this contract; or

(C) Withdraw authority to use property.

RELEASED - Printed documents may be obsolete; validate prior to use.

(ii) Upon completion of any action(s) under paragraph (d)(3)(i) of this clause, and the Contractor's timely written request, the Contracting Officer shall consider an equitable adjustment to the contract.

(e) *Title to Government property.*

(1) The Government shall retain title to all Government-furnished property. Title to Government property shall not be affected by its incorporation into or attachment to any property not owned by the Government, nor shall Government property become a fixture or lose its identity as personal property by being attached to any real property.

(2) *Fixed-price contracts.*

(i) All Government-furnished property and all property acquired by the Contractor, title to which vests in the Government under this paragraph (collectively referred to as "Government property"), are subject to the provisions of this clause.

(ii) Title vests in the Government for all property acquired or fabricated by the Contractor in accordance with the financing provisions or other specific requirements for passage of title in the contract. Under fixed price type contracts, in the absence of financing provisions or other specific requirements for passage of title in the contract, the Contractor retains title to all property acquired by the Contractor for use on the contract, except for property identified as a deliverable end item. If a deliverable item is to be retained by the Contractor for use after inspection and acceptance by the Government, it shall be made accountable to the contract through a contract modification listing the item as Government-furnished property.

(iii) If this contract contains a provision directing the Contractor to purchase property for which the Government will reimburse the Contractor as a direct item of cost under this contract—

(A) Title to property purchased from a vendor shall pass to and vest in the Government upon the vendor's delivery of such property; and

(B) Title to all other material shall pass to and vest in the Government upon—

(1) Issuance of the material for use in contract performance;

(2) Commencement of processing of the material or its use in contract performance; or

(3) Reimbursement of the cost of the material by the Government, whichever occurs first.

(3) *Title under Cost-Reimbursement or Time-and-Material Contracts or Cost-Reimbursable contract line items under Fixed-Price contracts*.

(i) Title to all property purchased by the Contractor for which the Contractor is entitled to be reimbursed as a direct item of cost under this contract shall pass to and vest in the Government upon the vendor's delivery of such property.

(ii) Title to all other property, the cost of which is reimbursable to the Contractor, shall pass to and vest in the Government upon—

(A) Issuance of the property for use in contract performance;

(B) Commencement of processing of the property for use in contract performance; or

(C) Reimbursement of the cost of the property by the Government, whichever occurs first.

RELEASED - Printed documents may be obsolete; validate prior to use.

(iii) All Government-furnished property and all property acquired by the Contractor, title to which vests in the Government under this paragraph (e)(3)(iii) (collectively referred to as "Government property"), are subject to the provisions of this clause.

(f) *Contractor plans and systems*.

(1) Contractors shall establish and implement property management plans, systems, and procedures at the contract, program, site or entity level to enable the following outcomes:

(i) *Acquisition of Property.* The Contractor shall document that all property was acquired consistent with its engineering, production planning, and material control operations.

(ii) *Receipt of Government Property*. The Contractor shall receive Government property (document the receipt), record the information necessary to meet the record requirements of paragraph (f)(1)(iii)(A)(*1*) through (*5*) of this clause, identify as Government owned in a manner appropriate to the type of property (*e.g.*, stamp, tag, mark, or other identification), and manage any discrepancies incident to shipment.

(A) *Government-furnished property*. The Contractor shall furnish a written statement to the Property Administrator containing all relevant facts, such as cause or condition and a recommended course(s) of action, if overages, shortages, or damages and/or other discrepancies are discovered upon receipt of Government-furnished property.

(B) *Contractor-acquired property*. The Contractor shall take all actions necessary to adjust for overages, shortages, damage and/or other discrepancies discovered upon receipt, in shipment of Contractor-acquired property from a vendor or supplier, so as to ensure the proper allocability and allowability of associated costs.

(iii) *Records of Government property*. The Contractor shall create and maintain records of all Government property accountable to the contract, including Government-furnished and Contractor-acquired property.

(A) Property records shall enable a complete, current, auditable record of all transactions and shall, unless otherwise approved by the Property Administrator, contain the following:

(1) The name, part number and description, manufacturer, model number, and National Stock Number (if needed for additional item identification tracking and/or disposition).

(2) Quantity received (or fabricated), issued, and balance-on-hand.

(3) Unit acquisition cost.

(4) Unique-item identifier or equivalent (if available and necessary for individual item tracking).

(5) Unit of measure.

(6) Accountable contract number or equivalent code designation.

(7) Location.

(8) Disposition.

(9) Posting reference and date of transaction.

(10) Date placed in service.

(B) *Use of a Receipt and Issue System for Government Material*. When approved by the Property Administrator, the Contractor may maintain, in lieu of formal property records, a file of appropriately cross-referenced documents evidencing receipt, issue, and use of material that is issued for immediate consumption.

(iv) *Physical inventory*. The Contractor shall periodically perform, record, and disclose physical inventory results. A final physical inventory shall be performed upon contract completion or termination. The Property Administrator may waive this final inventory requirement, depending on the circumstances (*e.g.*, overall reliability of the Contractor's system or the property is to be transferred to a follow-on contract).

(v) *Subcontractor control*.

RELEASED - Printed documents may be obsolete; validate prior to use.

(A) The Contractor shall award subcontracts that clearly identify assets to be provided and shall ensure appropriate flow down of contract terms and conditions (*e.g.*, extent of liability for loss, damage, destruction or theft of Government property).

(B) The Contractor shall assure its subcontracts are properly administered and reviews are periodically performed to determine the adequacy of the subcontractor's property management system.

(vi) *Reports*. The Contractor shall have a process to create and provide reports of discrepancies; loss, damage, destruction, or theft; physical inventory results; audits and self-assessments; corrective actions; and other property related reports as directed by the Contracting Officer.

(A) Loss, damage, destruction, or theft. Unless otherwise directed by the Property Administrator, the Contractor shall investigate and promptly furnish a written narrative of all incidents of loss, damage, destruction, or theft to the property administrator as soon as the facts become known or when requested by the Government.

(B) Such reports shall, at a minimum, contain the following information:

(1) Date of incident (if known).

(2) The name, commercial description, manufacturer, model number, and National Stock Number (if applicable).

(3) Quantity.

(4) Unique Item Identifier (if available).

(5) Accountable Contract number.

(6) A statement indicating current or future need.

(7) Acquisition cost, or if applicable, estimated scrap proceeds, estimated repair or replacement costs.

(8) All known interests in commingled property of which the Government property is a part.

(9) Cause and corrective action taken or to be taken to prevent recurrence.

(10) A statement that the Government will receive any reimbursement covering the loss, damage, destruction, or theft, in the event the Contractor was or will be reimbursed or compensated.

(11) Copies of all supporting documentation.

(12) Last known location.

(13) A statement that the property did or did not contain sensitive or hazardous material, and if so, that the appropriate agencies were notified.

(vii) *Relief of stewardship responsibility*. Unless the contract provides otherwise, the Contractor shall be relieved of stewardship responsibility for Government property when such property is—

(A) Consumed or expended, reasonably and properly, or otherwise accounted for, in the performance of the contract, including reasonable inventory adjustments of material as determined by the Property Administrator; or a Property Administrator granted relief of responsibility for loss, damage, destruction or theft of Government property;

(B) Delivered or shipped from the Contractor's plant, under Government instructions, except when shipment is to a subcontractor or other location of the Contractor; or

(C) Disposed of in accordance with paragraphs (j) and (k) of this clause.

(viii) *Utilizing Government property*.

(A) The Contractor shall utilize, consume, move, and store Government Property only as authorized under this contract. The Contractor shall promptly disclose and report Government property in its possession that is excess to contract performance.

(B) Unless otherwise authorized in this contract or by the Property Administrator the Contractor shall not commingle Government property with property not owned by the Government.

RELEASED - Printed documents may be obsolete; validate prior to use.

(ix) *Maintenance*. The Contractor shall properly maintain Government property. The Contractor's maintenance program shall enable the identification, disclosure, and performance of normal and routine preventative maintenance and repair. The Contractor shall disclose and report to the Property Administrator the need for replacement and/or capital rehabilitation.

(x) *Property closeout*. The Contractor shall promptly perform and report to the Property Administrator contract property closeout, to include reporting, investigating and securing closure of all loss, damage, destruction, or theft cases; physically inventorying all property upon termination or completion of this contract; and disposing of items at the time they are determined to be excess to contractual needs.

(2) The Contractor shall establish and maintain Government accounting source data, as may be required by this contract, particularly in the areas of recognition of acquisitions and dispositions of material and equipment.

(3) The Contractor shall establish and maintain procedures necessary to assess its property management system effectiveness, and shall perform periodic internal reviews and audits. Significant findings and/or results of such reviews and audits pertaining to Government property shall be made available to the Property Administrator.

(g) Systems analysis.

(1) The Government shall have access to the Contractor's premises and all Government property, at reasonable times, for the purposes of reviewing, inspecting and evaluating the Contractor's property management plan(s), systems, procedures, records, and supporting documentation that pertains to Government property. This access includes all site locations and, with the Contractor's consent, all subcontractor premises.

(2) Records of Government property shall be readily available to authorized Government personnel and shall be appropriately safeguarded.

(3) Should it be determined by the Government that the Contractor's (or subcontractor's) property management practices are inadequate or not acceptable for the effective management and control of Government property under this contract, or present an undue risk to the Government, the Contractor shall prepare a corrective action plan when requested by the Property Administer and take all necessary corrective actions as specified by the schedule within the corrective action plan.

(4) The Contractor shall ensure Government access to subcontractor premises, and all Government property located at subcontractor premises, for the purposes of reviewing, inspecting and evaluating the subcontractor's property management plan, systems, procedures, records, and supporting documentation that pertains to Government property.

(h) *Contractor Liability for Government Property.*

(1) Unless otherwise provided for in the contract, the Contractor shall not be liable for loss, theft, damage or destruction to the Government property furnished or acquired under this contract, except when any one of the following applies—

(i) The risk is covered by insurance or the Contractor is otherwise reimbursed (to the extent of such insurance or reimbursement). The allowability of insurance costs shall be determined in accordance with 31.205-19.

(ii) The loss, theft, damage or destruction is the result of willful misconduct or lack of good faith on the part of the Contractor's managerial personnel.

(iii) The Contracting Officer has, in writing, revoked the Government's assumption of risk for loss, theft, damage or destruction, due to a determination under paragraph (g) of this clause that the Contractor's property management practices are inadequate, and/or present

RELEASED - Printed documents may be obsolete; validate prior to use.

an undue risk to the Government, and the Contractor failed to take timely corrective action. If the Contractor can establish by clear and convincing evidence that the loss, theft, damage or destruction of Government property occurred while the Contractor had adequate property management practices or the loss, theft, damage or destruction of Government property did not result from the Contractor's failure to maintain adequate property management practices, the Contractor shall not be held liable.

(2) The Contractor shall take all reasonable actions necessary to protect the Government property from further loss, theft, damage or destruction. The Contractor shall separate the damaged and undamaged Government property, place all the affected Government property in the best possible order, and take such other action as the Property Administrator directs.

(3) The Contractor shall do nothing to prejudice the Government's rights to recover against third parties for any loss, theft, damage or destruction of Government property.

(4) Upon the request of the Contracting Officer, the Contractor shall, at the Government's expense, furnish to the Government all reasonable assistance and cooperation, including the prosecution of suit and the execution of instruments of assignment in favor of the Government in obtaining recovery.

(i) *Equitable adjustment.* Equitable adjustments under this clause shall be made in accordance with the procedures of the Changes clause. However, the Government shall not be liable for breach of contract for the following:

(1) Any delay in delivery of Government-furnished property.

(2) Delivery of Government-furnished property in a condition not suitable for its intended use.

(3) An increase, decrease, or substitution of Government-furnished property.

(4) Failure to repair or replace Government property for which the Government is responsible.

(j) Contractor inventory disposal. Except as otherwise provided for in this contract, the Contractor shall not dispose of Contractor inventory until authorized to do so by the Plant Clearance Officer.

(1) Scrap to which the Government has obtained title under paragraph (e) of this clause.

(i) Contractor with an approved scrap procedure.

(A) The Contractor may dispose of scrap resulting from production or testing under this contract without Government approval. However, if the scrap requires demilitarization or is sensitive property, the Contractor shall submit the scrap on an inventory disposal schedule.

(B) For scrap from other than production or testing the Contractor may prepare scrap lists in lieu of inventory disposal schedules (provided such lists are consistent with the approved scrap procedures).

(C) Inventory disposal schedules shall be submitted for all aircraft regardless of condition, flight safety critical aircraft parts, and scrap that—

(1) Requires demilitarization;

(2) Is a classified item;

(3) Is generated from classified items;

(4) Contains hazardous materials or hazardous wastes;

(5) Contains precious metals that are economically beneficial to recover; or

RELEASED - Printed documents may be obsolete; validate prior to use.

(6) Is dangerous to the public health, safety, or welfare.

(ii) *Contractor without an approved scrap procedure*. The Contractor shall submit an inventory disposal schedule for all scrap. The Contractor may not dispose of scrap resulting from production or testing under this contract without Government approval.

(2) Predisposal requirements.

(i) Once the Contractor determines that Contractor-acquired property is no longer needed for contract performance, the Contractor in the following order of priority—

(A) May contact the Contracting Officer if use of the property in the performance of other Government contracts is practical;

(B) May purchase the property at the acquisition cost; or

(C) Shall make reasonable efforts to return unused property to the appropriate supplier at fair market value (less, if applicable, a reasonable restocking fee that is consistent with the supplier's customary practices).

(ii) The Contractor shall list, on Standard Form 1428, Inventory Disposal Schedule, property that was not used in the performance of other Government contracts under paragraph (j)(2)(i)(A) of this clause, property that was not purchased under paragraph (j)(2)(i)(B) of this clause, and property that could not be returned to a supplier under paragraph (j)(2)(i)(C) of ths clause.

(3) *Inventory disposal schedules*.

(i) The Contractor shall use Standard Form 1428, Inventory Disposal Schedule, to identify—

(A) Government-furnished property that is no longer required for performance of this contract, provided the terms of another Government contract do not require the Government to furnish that property for performance of this contract;

(B) Contractor-acquired property, to which the Government has obtained title under paragraph (e) of this clause, which is no longer required for performance of that contract; and

(C) Termination inventory.

(ii) The Contractor may annotate inventory disposal schedules to identify property the Contractor wishes to purchase from the Government.

(iii) Unless the Plant Clearance Officer has agreed otherwise, or the contract requires electronic submission of inventory disposal schedules, the Contractor shall prepare separate inventory disposal schedules for—

(A) Special test equipment with commercial components;

(B) Special test equipment without commercial components;

(C) Printing equipment;

(D) Information technology (*e.g.*, computers, computer components, peripheral equipment, and related equipment);

(E) Precious metals in raw or bulk form;

(F) Nonnuclear hazardous materials or hazardous wastes; or

(G) Nuclear materials or nuclear wastes.

(iv) The Contractor shall provide the information required by FAR 52.245-1(f)(1)(iii) along with the following:

RELEASED - Printed documents may be obsolete; validate prior to use.

(A) Any additional information that may facilitate understanding of the property's intended use.

(B) For work-in-progress, the estimated percentage of completion.

(C) For precious metals, the type of metal and estimated weight.

(D) For hazardous material or property contaminated with hazardous material, the type of hazardous material.

(E) For metals in mill product form, the form, shape, treatment, hardness, temper, specification (commercial or Government) and dimensions (thickness, width and length).

(v) Property with the same description, condition code, and reporting location may be grouped in a single line item.

(vi) Scrap should be reported by "lot" along with metal content, estimated weight and estimated value.

(4) *Submission requirements*. The Contractor shall submit inventory disposal schedules to the Plant Clearance Officer no later than—

(i) 30-days following the Contractor's determination that a Government property item is no longer required for performance of this contract;

(ii) 60 days, or such longer period as may be approved by the Plant Clearance Officer, following completion of contract deliveries or performance; or

(iii) 120 days, or such longer period as may be approved by the Termination Contracting Officer following contract termination in whole or in part.

(5) *Corrections*. The Plant Clearance Officer may—

(i) Reject a schedule for cause (*e.g.*, contains errors, determined to be inaccurate); and

(ii) Require the Contractor to correct an inventory disposal schedule.

(6) *Postsubmission adjustments*. The Contractor shall notify the Plant Clearance Officer at least 10 working days in advance of its intent to remove an item from an approved inventory disposal schedule. Upon approval of the Plant Clearance Officer, or upon expiration of the notice period, the Contractor may make the necessary adjustments to the inventory schedule.

(7) *Storage*.

(i) The Contractor shall store the property identified on an inventory disposal schedule pending receipt of disposal instructions. The Government's failure to furnish disposal instructions within 120 days following acceptance of an inventory disposal schedule may entitle the Contractor to an equitable adjustment for costs incurred to store such property on or after the 121st day.

(ii) The Contractor shall obtain the Plant Clearance Officer's approval to remove Government property from the premises where the property is currently located prior to receipt of final disposition instructions. If approval is granted, any costs incurred by the Contractor to transport or store the property shall not increase the price or fee of any Government contract. The storage area shall be appropriate for assuring the property's physical safety and suitability for use. Approval does not relieve the Contractor of any liability for such property under this contract.

(8) Disposition instructions.

RELEASED - Printed documents may be obsolete; validate prior to use.

(i) If the Government does not furnish disposition instructions to the Contractor within 45 days following acceptance of a scrap list, the Contractor may dispose of the listed scrap in accordance with the Contractor's approved scrap procedures.

(ii) The Contractor shall prepare for shipment, deliver f.o.b. origin, or dispose of Contractor inventory as directed by the Plant Clearance Officer. Unless otherwise directed by the Contracting Officer or by the Plant Clearance Officer, the Contractor shall remove and destroy any markings identifying the property as U.S. Government-owned property prior to its disposal.

(iii) The Contracting Officer may require the Contractor to demilitarize the property prior to shipment or disposal. In such cases, the Contractor may be entitled to an equitable adjustment under paragraph (i) of this clause.

(9) *Disposal proceeds*. As directed by the Contracting Officer, the Contractor shall credit the net proceeds from the disposal of Contractor inventory to the contract, or to the Treasury of the United States as miscellaneous receipts.

(10) *Subcontractor inventory disposal schedules*. The Contractor shall require its Subcontractors to submit inventory disposal schedules to the Contractor in accordance with the requirements of paragraph (j)(4) of this clause.

(k) *Abandonment of Government property*.

(1) The Government shall not abandon sensitive Government property or termination inventory without the Contractor's written consent.

(2) The Government, upon notice to the Contractor, may abandon any nonsensitive Government property in place, at which time all obligations of the Government regarding such property shall cease.

(3) The Government has no obligation to restore or rehabilitate the Contractor's premises under any circumstances; however, if Government-furnished property is withdrawn or is unsuitable for the intended use, or if other Government property is substituted, then the equitable adjustment under paragraph (i) of this clause may properly include restoration or rehabilitation costs.

(l) *Communication*. All communications under this clause shall be in writing.

(m) *Contracts outside the United States*. If this contract is to be performed outside of the United States and its outlying areas, the words "Government" and "Government-furnished" (wherever they appear in this clause) shall be construed as "United States Government" and "United States Government-furnished," respectively.

(End of clause)

5.2 1852.245-71 INSTALLATION-ACCOUNTABLE GOVERNMENT PROPERTY (Sep 2007) (DEVIATION)

(a) The Government property described in paragraph (c) of this clause may be made available to the Contractor on a no-charge basis for use in performance of this contract. This property shall be utilized only within the physical confines of the NASA installation that provided the property unless authorized by the contracting officer under (b)(1)(iv). Under this clause, the Government retains accountability for, and title to, the property, and the Contractor shall comply with the following NASA Procedural Requirements (NPR):

RELEASED - Printed documents may be obsolete; validate prior to use.

NPR 4100, NASA Materials Inventory Management Manual
NPR 4200, NASA Equipment Management Procedural Requirements
NPR 4300, NASA Personal Property Disposal Procedural Requirements

Property not recorded in NASA property systems must be managed in accordance with the requirements of FAR 52.245-1.

The Contractor shall establish and adhere to a system of written procedures to assure continued, effective management control and compliance with these user responsibilities. Such procedures must include holding employees liable, when appropriate, for loss, damage, or destruction of Government property.

(b)(1) The official accountable recordkeeping, financial control, and reporting of the property subject to this clause shall be retained by the Government and accomplished within NASA management information systems prescribed by the installation Supply and Equipment Management Officer (SEMO) and Financial Management Officer. If this contract provides for the Contractor to acquire property, title to which will vest in the Government, the following additional procedures apply:

(i) The Contractor's purchase order shall require the vendor to deliver the property to the installation central receiving area.

(ii) The Contractor shall furnish a copy of each purchase order, prior to delivery by the vendor, to the installation central receiving area.

(iii) The Contractor shall establish a record of the property as required by FAR 52.245-1, Government Property, and furnish to the Industrial Property Officer a DD Form 1149, Requisition and Invoice/Shipping Document, (or installation equivalent) to transfer accountability to the Government within 5 working days after receipt of the property by the Contractor. The Contractor is accountable for all Contractor-acquired property until the property is transferred to the Government's accountability.

(iv) Contractor use of Government property at an off-site location and off-site subcontractor use require advance approval of the Contracting Officer and notification of the Industrial Property Officer. The property shall be considered Government furnished and the Contractor shall assume accountability and financial reporting responsibility. The Contractor shall establish records and property control procedures and maintain the property in accordance with the requirements of FAR 52.245-1, Government Property, until its return to the installation. NASA Procedural Requirements related to property loans shall not apply to offsite use of property by Contractors.

(2) After transfer of accountability to the Government, the Contractor shall continue to maintain such internal records as are necessary to execute the user responsibilities identified in paragraph (a) of this clause and document the acquisition, billing, and disposition of the property. These records and supporting documentation shall be made available, upon request, to the SEMO and any other authorized representatives of the Contracting Officer.

(c) The following property and services are provided if checked.

☒ (1) Office space, work area space, and utilities. Government telephones are available for official purposes only.

RELEASED - Printed documents may be obsolete; validate prior to use.

☒ (2) Office furniture.

☒ (3) Property listed in Attachment I- 11, *List of Government Furnished Property*.

(ii) If the Contractor acquires property, title to which vests in the Government pursuant to other provisions of this contract, this property also shall become accountable to the Government upon its entry into Government records.

(iii) The Contractor shall not bring to the installation for use under this contract any property owned or leased by the Contractor, or other property that the Contractor is accountable for under any other Government contract, without the Contracting Officer's prior written approval.

☐ (4) Supplies from stores stock.

☒ (5) Publications and blank forms stocked by the installation.

☒ (6) Safety and fire protection for Contractor personnel and facilities.

☒ (7) Installation service facilities: NASA Exchange Facilities per Installation Directives .

☒ (8) Medical treatment of a first-aid nature for Contractor personnel injuries or illnesses sustained during on-site duty.

☒ (9) Cafeteria privileges for Contractor employees during normal operating hours.

☒ (10) Building maintenance for facilities occupied by Contractor personnel.

☒ (11) Moving and hauling for office moves, movement of large equipment, and delivery of supplies. Moving services may be provided on-site, as approved by the Contracting Officer.

(End of clause)

5.3 1852.245-75 PROPERTY MANAGEMENT CHANGES (SEP 2007) (DEVIATION)

(a) The Contractor shall submit any changes to standards and practices used for management and control of Government property under this contract to the assigned property administrator and Industrial Property Officer (IPO), prior to making the change whenever the change –

(1) Employs a standard that allows increase in thresholds or changes the timing for reporting loss, damage, or destruction of property;

(2) Alters physical inventory timing or procedures;

(3) Alters recordkeeping practices;

(4) Alters practices for recording the transport or delivery of Government property; or

(5) Alters practices for disposition of Government property.

RELEASED - Printed documents may be obsolete; validate prior to use.

(b) The Contractor shall contact the IPO at:

Center	Name	Address/Mail Code	Telephone #	Email Address
ARC	Maria-Elena Lopez	ARC-JS	(281) 483-4964	maria.d.lopez@nasa.gov
ARC	Evelyn A. Warren	ARC-JS	(650) 604-5681	evelyn.warren@nasa.gov
DFRC	Jean C. Manning	DFRC-F	(661) 276-2590	jean.c.manning@nasa.gov
GRC	Patricia M. Dimaline	GRC-CO00	(216) 433-2893	patricia.m.dimaline@nasa.gov
GSFC	Gary V. Morris	GSFC-2730	(301) 286-5031	gary.v.morris@nasa.gov
GSFC	Sherry L. Pollock	GSFC-2730	(301) 286-3242	sherry.l.pollock@nasa.gov
HQ	Daniel S. Young	HQ-LD040	(202) 358-4476	daniel.s.young@nasa.gov
JPL	Eric Lau	JPL-800B	(818) 354-8300	eric.c.Lau@jpl.nasa.gov
JSC	Michael Caputo	JSC-JB311	(281) 483-7909	michael.caputo-1@nasa.gov
KSC	Cynthia R. Jarvis	KSC-TAB2A	(321) 867-3421	cynthia.r.jarvis@nasa.gov
LaRC	Susan C. Tillman	LARC-D401B	(757) 864-2064	susan.c.tillman@nasa.gov
MSFC	Tracy A. Helmick	MSFC-AS41	(256) 544-5272	tracy.a.helmick@nasa.gov
SSC	Donald R. Griffith	SSC-RA30	(228) 688-2144	donald.r.griffith@nasa.gov

(End of clause)

5.4 1852.245-78 PHYSICAL INVENTORY OF CAPITAL PERSONAL PROPERTY (SEP 2007) (DEVIATION)

(a) In addition to physical inventory requirements under the clause at FAR 52.245-1, Government Property, the Contractor shall conduct annual physical inventories for individual property items with an acquisition cost exceeding $100,000.

(1) The Contractor shall inventory --

(i) Items of property furnished by the Government;

(ii) Items acquired by the Contractor and titled to the Government under the clause at FAR 52.245-1;

(iii) Items constructed by the Contractor and not included in the deliverable, but titled to the Government under the clause at FAR 52.245-1; and

(iv) Complete but undelivered deliverables.

(2) The Contractor shall use the physical inventory results to validate the property record data, specifically location, condition and use status, and to prepare summary reports of inventory as described in paragraph (c) of this clause.

(b) Unless specifically authorized in writing by the NASA Industrial Property Officer (IPO), the inventory shall be performed and posted by individuals other than those assigned custody of the items, responsibility for maintenance, or responsibility for posting to the property record.

RELEASED - Printed documents may be obsolete; validate prior to use.

The Contractor may request a waiver from this separation of duties requirement from the NASA IPO, when all of the conditions in either (1) or (2) below are met.

(1) The Contractor utilizes an electronic system for property identification, such as a laser bar-code reader or radio frequency identification reader, and

(i) The programs or software preclude manual data entry of inventory identification data by the individual performing the inventory; and

(ii) The inventory and property management systems contain sufficient management controls to prevent tampering and assure proper posting of collected inventory data.

(2) The Contractor has limited quantities of property, limited personnel, or limited property systems; and,

(i) The Contractor provides written confirmation that the Government property exists in the recorded condition and location; and

(ii) The items continue to be used exclusively for performance of the contract or as otherwise authorized by the Contracting Officer.

(3) The Contractor shall submit the request to the cognizant property administrator and obtain approval from the IPO prior to implementation of the practice.

(c) The Contractor shall report the results of the physical inventory to the property administrator and the NASA Industrial Property Officer within 10 calendar days of completion of the physical inventory. The report shall --

(1) Provide a summary showing number and value of items inventoried; and

(2) Include additional supporting reports of --

(i) Loss, damage or destruction, in accordance with the clause at 52.245-1, Government Property;

(ii) Idle property available for reuse or disposition; and

(iii) A summary of adjustments made to location, condition, status, or user as a result of the physical inventory reconciliation.

(d) The Contractor shall retain all physical inventory records, including records of all transactions associated with inventory reconciliation. All records shall be subject to Government review and/or audit.

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

5.5 1852.245-82 OCCUPANCY MANAGEMENT REQUIREMENTS (SEP 2007) (DEVIATION)

(a) In addition to the requirements of the clause at FAR 52.245-1, Government Property, the Contractor shall comply with the following in performance of work in and around Government real property:

(1) NPD 8800.14, Policy for Real Property Management.
(2) NPR 8831.2, Facility Maintenance Management

(b) The Contractor shall obtain the written approval of the Contracting Officer before installing or removing Contractor-owned property onto or into any Government real property or when movement of Contractor-owned property may damage or destroy Government-owned property. The Contractor shall restore damaged property to its original condition at the Contractor's expense.

(c) The Contractor shall not acquire, construct or install any fixed improvement or structural alterations in Government buildings or other real property without the advance, written approval of the Contracting Officer. Fixed improvement or structural alterations, as used herein, means any alteration or improvement in the nature of the building or other real property that, after completion, cannot be removed without substantial loss of value or damage to the premises. Title to such property shall vest in the Government.

(d) The Contractor shall report any real property or any portion thereof when it is no longer required for performance under the contract, as directed by the Contracting Officer.

(End of cause)

5.6 1852.245-83 REAL PROPERTY MANAGEMENT REQUIREMENTS (SEP 2007) (DEVIATION)

(a) In addition to the requirements of the FAR Government Property Clause (FAR 52,245-1) the Contractor shall comply with the following in performance of any maintenance, construction, modification, demolition, or management activities of any Government real property:

(1) NPD 8800.14, Policy for Real Property Management.
(2) NPR 8831.2, Facility Maintenance Management.

(b) Within 30 calendar days following award, the Contractor shall provide a plan for maintenance of Government real property provided for use under this contract. The Contractor's maintenance program shall enable the identification, disclosure, and performance of normal and routine preventative maintenance and repair. The Contractor shall disclose and report to the Contracting Officer the need for replacement and/or capital rehabilitation. Upon acceptance by the Contracting Officer, the program shall become a requirement under this contract.

(c) Title to parts replaced by the Contractor in carrying out its normal maintenance obligations shall pass to and vest in the Government upon completion of their installation in

RELEASED - Printed documents may be obsolete; validate prior to use.

the facilities. The Contractor shall keep the property free and clear of all liens and encumbrances.

(d) The Contractor shall keep records of all work done to real property, including plans, drawings, charts, warranties, and manuals. Records shall be complete and current. Record of all transactions shall be auditable. The Government shall have access to these records at all reasonable times, for the purposes of reviewing, inspecting, and evaluating the Contractor's real property management effectiveness. When real property is disposed of under this contract, the Contractor shall deliver the related records to the Government.

(e) The Contracting Officer may direct the Contractor in writing to reduce the work required by the maintenance program authorized in paragraph (b) at any time.

(End of clause)

5.7 REQUIREMENTS FOR GOVERNMENT-OWNED PROPERTY IN CONTRACTOR-OWNED EQUIPMENT

(a) The Contractor shall de-install and return a Government-owned item to the Government in its present condition if any of the following conditions exist:

(1)The Contractor-owned equipment is no longer functional or reaches the end of its useful life.
(2)The item is no longer functional or reaches the end of its useful life.

(b) In the case of loss, theft, or damage of an Government-owned item due to negligence by the Contractor, the Contractor shall replace the item at no additional cost to the Government.

(End of clause)

5.8 COMPONENT CLASSIFICATION FOR "S", "M" AND "T" SEATS

All hardware and software components provided by the Contractor shall be field-proven and of modern design. A component is field-proven, if it has been available from the Original Equipment Manufacturer (OEM) for at least 30 days. The hardware and software components shall meet current NASA performance standards as defined in NASA-STD 2804*x* and NASA-STD 2805*x*. During the course of the contract, the Contractor shall supply completed hardware configuration templates as identified in DRD IT-07, *Vendor Product Performance Specifications*, within thirty (30) days of each NASA-STD 2804*x* and 2805*x* revision. All equipment and/or components shall be delivered in accordance with Section I, *Model Contract*, 6.27, 52.223-17 Affirmative Procurement of EPA-Designated Items In Service and Construction Contracts. Until a new NASA-STD 2804*x* and NASA-STD 2805*x* revision is issued, the Contractor shall deliver the hardware components as specified in DRD IT-07, *Vendor Product Performance Specifications*, unless a change is proposed and approved by the Government for implementation outside of the revision cycle.

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

5.9 STEVENSON-WYDLER OBJECTIVES

(a) Under the letter and spirit of the Stevenson-Wydler Act, NASA supports local educational institutions by providing excess computer equipment to elementary and secondary schools, universities, and other non-profit institutions. It is important to NASA that this outreach initiative is continued where cost effective, even though the Agency no longer has or desires to have asset management responsibilities.

(b) The Contractor shall propose an amount equal to or above 45% of the systems the Government procures for each Center, which the Contractor shall donate, to local schools, universities, and other non-profit organizations, as they become excess to the needs of the contract.

Stevenson-Wydler Objectives: **Redacted** %

(End of clause)

5.10 ASSET OWNERSHIP

The following table details the accountability and ownership for ACES-related hardware and software. "Government" in the below table is defined as Government or support contractor.

Type of Asset	Accountability	Ownership
"S," "M," Amortized "B", and "T" Computing Seat Hardware	ACES Contractor	ACES Contractor
Purchased "B" Computing Seat and X-Build Hardware	ACES administered system: ACES Contractor Non-ACES administered system: Government	Government
Support Level 1 Software	ACES Contractor	ACES Contractor
Support Level 2 and 3 Software	ACES Contractor	Government
Housed Infrastructure Server Systems (Hardware and OS Operating System Software)	ACES Contractor	ACES Contractor
APC-Purchased Hardware	ACES Contractor	Government
APC-Purchased Software	ACES Contractor	Government
Software Transferred from ODIN Contract		
Standard Load Software	ACES Contractor	ACES Contractor
Software Purchased from ODIN Catalog	ACES Contractor	ACES Contractor
Infrastructure Server Software	ACES Contractor	ACES Contractor

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

5.11 DELIVERY OF NEW ASSETS

The Contractor shall implement Option B for asset transition (delivery of new assets). The Contractor shall deliver new assets in accordance with the following requirements:

(a) The assets shall be certifiable as new and meet NASA-STD-2805*x* and NASA-STD-2804*x* requirements.

(b) The new assets shall replace existing ODIN assets, be made operational in a manner consistent with Section 3.5, *Technology Refresh*, and with installation completed during the phase-in period and before the implementation date for each Wave.

(c) Government mission needs shall be assured and take precedence in replacement actions.

(d) Coordinate with the Government, current ODIN Contractor, I3P Contractors, and other Contractors to prevent service interruption during the phase-in period.

(e) The Contractor shall provide at the start of the phase-in period a detailed plan to accomplish the replacement of existing assets and coordinate with the incumbent Contractor to remove those existing assets. As a minimum this plan shall include: (a) A week by week replacement schedule at the individual asset level; (b) A means to engage and address specific customer replacement requirements; (c) A means to address delays caused by Government mission requirements; and (d) Contingency plan in case all assets are not fully refreshed by the start of contract implementation.

(f) Include an exception process to allow retainage of existing assets when mission critical resources require it.

(g) The Contractor shall refresh multi-functional devices (MFDs) during the phase-in period.

(h) The Contractor shall have the ability to request the ODIN enterprise software licenses be transferred at no cost. The Contractor shall accept existing hardware and software obtained through ODIN catalog purchases (e.g., peripherals and internal augmentations) at no cost. The Contractor shall be responsible for retaining any existing OEM warranties until their expiration. The ACES Contractor be responsible for tagging and tracking the equipment, as well as disposing of it at the end of its useful life.

(End of clause)

6.0 SPECIAL CONTRACT REQUIREMENTS

6.1 ASSOCIATE CONTRACTOR AGREEMENTS (ACA)

(a) The contractor shall enter into Associate Contractor Agreements (ACAs) for any portion of the contract requiring cooperation and coordination (with contractors under other NASA contracts) in the accomplishment of the Government's requirement. The agreements shall include the basis for sharing information, data, technical knowledge, expertise, and/or

RELEASED - Printed documents may be obsolete; validate prior to use.

resources essential to the implementation of I^3P which shall ensure the greatest degree of cooperation to meet the terms of the contract. Associate contractors are listed in paragraph (h) below.

(b) ACA shall include the following general information:

(1) Identify the associate contractors and their relationships.
(2) Identify the program(s) involved and the relevant Government contracts of the associate contractors.
(3) Describe the associate contractor interfaces by general subject matter.
(4) Specify the categories of information to be exchanged or support to be provided.
(5) Identify the expiration date (or event) of the ACA.
(6) Identify potential conflicts between relevant Government contracts and the ACA and include agreements on protection of proprietary data and restrictions on employees.

(c) A copy of such agreement shall be provided to the CO for review before execution of the document by the cooperating associate contractors. The CO has the right to ask questions and receive answers from each party, make comments and suggestions, and provide edits prior to execution by the parties. Initial ACAs should be in place 3 months after contract award. Subsequent ACAs required during contract performance shall be accomplished within 3 months of written notification from the CO to the contractor.

(d) Nothing in the foregoing shall affect compliance with the requirements of the *Organizational Conflict of Interest* clause.

(e) The contractor is not relieved of any contract requirements or entitled to any adjustments to the contract terms because of a failure to resolve a disagreement with an associate contractor.

(f) Liability for the improper disclosure of any proprietary data contained in or referenced by any agreement shall rest with the parties to the agreement, and not the Government.

(g) All costs or price associated with the agreements are included in the negotiated cost of this contract. Agreements may be amended as required by the Government during the performance of contract.

(h) The following are “associate contractors” with whom agreements are required:

Contract	Services	Contractor	I^3P	Other
Enterprise Applications Service Technologies (EAST)	Business and engineering applications	TBD	X	
NASA Integrated Communications Services (NICS)	Communication services	TBD	X	
Web Service Technologies (WEST)	NASA Web portal	TBD	X	

RELEASED - Printed documents may be obsolete; validate prior to use.

Security Operations Center (SOC)	IT Security services	TBD		X
NASA Shared Services Center (NSSC)	Enterprise Service Desk, NASA Enterprise Service Ordering System	CSC		X
Agency-wide Protective Services Contract	Protective services	TBD		X
Mission Voice Services	Voice transmission services	Frequentis USA		X
NASA Agency-wide Switched Voice, Out-of-Band Access Circuits, and Tail Circuits (Networx)	Circuits	AT&T Corp. (tail circuits only) Qwest Government Services, Inc.		X
NASA Agency-wide Conferencing Telecommunications Services (Networx)	Circuits	Verizon Business		X
NASA Agency-wide Core and Regional Circuits (Networx)	Circuits	TBD		X
NASA Agency-wide Mission Network Services (Networx)	Circuits	TBD		X

****Denotes I^{3}P procurement and center-specific contractors****

(i) In addition to those Agency contracts delineated above, the contractor shall also be required in performance of ACES services to interact/interface with the following Center-specific contracts/contractors.

Contract	Services	Contractor
Ames Research Center		
Ames Consolidated Information Technology Services 2 (ACITS 2) - NNA08AF13C	General system administration support for commodity IT services	Perot Systems
NASA Supercomputing Support Services (NS3) - NNA07CA29C	Supercomputing IT support and 24x7 tier-1 response to IT security events	Computer Sciences Corporation
Agency Incident Response and Monitoring - W912HZ-05-D-0015 / NNA07CA42T	NASA IT Security Tier-2 analysis, monitoring, and detection	EYAK Technology LLC
Dryden Flight Research Center		
Research Facilities & Engineering Support Services (RF&ESS) - NAS4-00047	Research facilities and engineering support services	Arcata Associates, Inc.

RELEASED - Printed documents may be obsolete; validate prior to use.

Engineering & Technical Support for Flight Research & Development – NND08RR01B	Engineering and technical support for flight research & development	TYBRIN Corporation
Facilities Maintenance, Grounds Maintenance, & Custodial Services – NND07FA01C	Facilities maintenance, grounds maintenance, and custodial services	PRIDE Industries
Logistics Support Services – NND04AB26C	Logistics	Scientific & Commercial Systems Corporation
Security & Protective Services – NND04AC17C	Security and protective services	Wackenhut Services, Inc.
Glenn Research Center		
Facility Operation Repair Maintenance (FORM Contract) – NNC07BA04B	Maintenance and operation of institutional facilities (buildings and systems)	Call Henry, Inc.
Professional, Administrative, Computational & Engineering (PACE III) – NNC08BA09B	Professional, administrative, computational & engineering services in support of Information Technology requirements.	DB Consulting, Inc.
Goddard Space Flight Center		
Maintenance and Operations of the Interconnect Telecommunications System (ITS)	Provisioning Fiber for Corporate Network Infrastructure	Seimens
Goddard Unified Enterprise Services & Technology (GUEST)	Enterprise Call Center Services; Data Center Service; Application Development Services IT Security Services	TBD
NASA Headquarters		
Facilities Maintenance Contract	Facility infrastructure	Arranged through HQ Civil Servant service owner
Logistics Contract	Logistics, and loading dock services	Trax
Protective Services	Physical Security	SecTec
HQ Locally Provisioned Services	HQ IT related services that are not elements of I^3P	TBD
Johnson Space Center		
JSC Enabling Technology	IT Security, system	Muniz Engineering

RELEASED - Printed documents may be obsolete; validate prior to use.

Services (JETS)	administration, network monitoring	
Facilities Maintenance Contract (NNJ08JA01C)	Physical security, facility infrastructure, power	CSC
Logistics Contract (NNJ08JA01C)	Logistics	L&M Technologies
Kennedy Space Center		
Institutional Support Contract (ISC)	Facility infrastructure operations, engineering & support (including power, HVAC, and transportation)	EG&G Technical Services
Information Management & Communications Support (IMCS)	All communications and IT security services not specifically identified in the NICS contract or other I^3P contracts for KSC performance	Abacus Technologies
KSC Institution Support Services (KISS)	Mail services, technical training, photocopy/reproduction services	REDE/Critique, JV
Space Program Operations Contract (SPOC)	Facility infrastructure operations, engineering & support (including Power, & HVAC) in selected KSC facilities	United Space Alliance (USA)
Expendable Launch Vehicle Integrated Support (ELVIS) Contract	Acquisition and management of Expendable Launch Vehicle (ELV) launch services	Analex Corporation
Langley Research Center		
Consolidated Information Technology Services (CONITS)	IT security, system administration, network monitoring	Raytheon Technical Services
Research Operations, Maintenance, and Engineering (ROME)	Facility Operations, Engineering Maintenance & Utilities	Jacobs Technology
Consolidated Logistics, Administrative, and Scientific Information Contract (CLASIC)	Logistics, Administrative Support and Media Services	Tessada & Associates, Inc.
Security Services	Physical Security	Computer Sciences Corporation (CSC) Applied Technology Division
Marshall Space Flight Center		
Center Operations Support Services (COSS)		EG&G
Logistics Services Contract	Center logistical services including moves	EG&G

RELEASED - Printed documents may be obsolete; validate prior to use.

Michoud Assembly Facility Manufacturing Support	MAF Facility operations	TBD
MSFC Information Technology Services (MITS)	IT Security, IT Planning, Policy, Architecture & Integration, telecommunications services, applications and web services, computing services, and AV information services	TBD
NASA Shared Services Center		
NSSC Service Provider Contract (NNX05AA01C)	IT Security, System Administration	CSC
Stennis Space Center		
Facility and Operating Support Contract (FOSC)		Jacobs Technology
Information Technology Services		Computer Science Corporation

(End of Clause)

6.2 52.204-2 SECURITY REQUIREMENTS (AUG 1996)

(a) This clause applies to the extent that this contract involves access to information classified "Confidential," "Secret," or "Top Secret."

(b) The Contractor shall comply with—

(1) The Security Agreement (DD Form 441), including the *National Industrial Security Program Operating Manual* (DoD 5220.22-M); and

(2) Any revisions to that manual, notice of which has been furnished to the Contractor.

(c) If, subsequent to the date of this contract, the security classification or security requirements under this contract are changed by the Government and if the changes cause an increase or decrease in security costs or otherwise affect any other term or condition of this contract, the contract shall be subject to an equitable adjustment as if the changes were directed under the Changes clause of this contract.

(d) The Contractor agrees to insert terms that conform substantially to the language of this clause, including this paragraph (d) but excluding any reference to the Changes clause of this contract, in all subcontracts under this contract that involve access to classified information.

(End of clause)

6.3 1852.204-75 SECURITY CLASSIFICATION REQUIREMENTS (SEP 1989)

Performance under this contract will involve access to and/or generation of classified information, work in a security area, or both, up to the level of "Top Secret". See Federal

RELEASED - Printed documents may be obsolete; validate prior to use.

Acquisition Regulation clause 52.204-2 in this contract and Attachment I-13, *DD Form 254, Contract Security Classification Specification*.

(End of clause)

6.4 52.204-9 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (SEP 2007)

(a) The Contractor shall comply with agency personal identity verification procedures identified in the contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24 and Federal Information Processing Standards Publication (FIPS PUB) Number 201.

(b) The Contractor shall insert this clause in all subcontracts when the subcontractor is required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system.

(End of clause)

6.5 ACCESS TO NASA INSTALLATIONS

(a) Each NASA Center is required to enact and maintain appropriate physical security measures necessary to provide for protection of persons and property. Positive entry controls have been established at all entry points to the Center and individually designated security areas and facilities, as deemed necessary, to preclude unauthorized access to critical areas, information, or personnel.

NASA currently employs an Agency-specific employee photo-ID badge or Center-specific visitor pass to ensure only properly authorized personnel are granted access to NASA Centers, facilities, and other resources. Center Chiefs of Security have developed local procedures pertaining to the issuance, utilization, control, and accountability of the NASA Photo-ID badge and any Center-specific visitor passes. These photo-ID badges are required as official identification for entry to NASA facilities.

(b) The Contractor's program manager or designee shall obtain, from each Center Technical Monitor (CTM), guidance on Center specific policies and procedures relative to the issuance, utilization, control, and accountability of the NASA Photo-ID badge and any Center-specific visitor passes.

(c) CT Ms have been delegated the responsibility to review and approve all requests for NASA Photo-ID badges consistent with the requirements of FAR 52.204-9, *Personal Identity Verification of Contractor Personnel*, NPR 1600.1, *NASA Security Program Procedural Requirements, and any local Center policies.*

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

6.6 1852.204-76 SECURITY REQUIREMENTS FOR UNCLASSIFIED INFORMATION TECHNOLOGY RESOURCES (OCTOBER 2009) (DEVIATION)

(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 subcontractors 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: 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.

(4) IT Security Plan – this is a FISMA requirement; see the ADL for applicable requirements.

Within 30 days after contract award, the Contractor shall develop and deliver an IT Security Management Plan. The delivery address and 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 website 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

RELEASED - Printed documents may be obsolete; validate prior to use.

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.

(f) The Contracting Officer may waive specific requirements of this clause upon request of the contractor. The Contractor shall provide all relevant information requested by the Contracting Officer to support the waiver request.

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)

6.7 52.204-4 PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

(a) *Definitions*. As used in this clause—

"Postconsumer material" means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material." For paper and paper products, postconsumer material means "postconsumer fiber" defined by the U.S. Environmental Protection Agency (EPA) as—

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

"Printed or copied double-sided" means printing or reproducing a document so that information is on both sides of a sheet of paper.

"Recovered material," for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as "recovered fiber" and means the following materials:

(1) Postconsumer fiber; and

(2) Manufacturing wastes such as—

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and

RELEASED - Printed documents may be obsolete; validate prior to use.

trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

(b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.

(c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards.

(End of clause)

6.8 1852.208-81 RESTRICTIONS ON PRINTING AND DUPLICATING (NOV 2004)

(a) The Contractor may duplicate or copy any documentation required by this contract in accordance with the provisions of the Government Printing and Binding Regulations, No. 26, S. Pub 101-9, U.S. Government Printing Office, Washington, DC, 20402, published by the Joint Committee on Printing, U.S. Congress.

(b) The Contractor shall not perform, or procure from any commercial source, any printing in connection with the performance of work under this contract. The term "printing" includes the processes of composition, platemaking, presswork, duplicating, silk screen processes, binding, microform, and the end items of such processes and equipment.

(c) The Contractor is authorized to duplicate or copy production units provided the requirement does not exceed 5,000 production units of any one page or 25,000 units in the aggregate of multiple pages. Such pages may not exceed a maximum image size of 10-3/4 by 14-1/4 inches. A "production unit" is one sheet, size 8-1/2 x 11 inches (215 x 280 mm), one side only, and one color ink.

(d) This clause does not preclude writing, editing, preparation of manuscript copy, or preparation of related illustrative material as a part of this contract, or administrative duplicating/copying (for example, necessary forms and instructional materials used by the Contractor to respond to the terms of the contract).

(e) Costs associated with printing, duplicating, or copying in excess of the limits in paragraph (c) of this clause are unallowable without prior written approval of the Contracting

RELEASED - Printed documents may be obsolete; validate prior to use.

Officer. If the Contractor has reason to believe that any activity required in fulfillment of the contract will necessitate any printing or substantial duplicating or copying, it immediately shall provide written notice to the Contracting Officer and request approval prior to proceeding with the activity. Requests will be processed by the Contracting Officer in accordance with the provisions of the Government Printing and Binding Regulations, NFS 1808.802, and NPR 1490.5, NASA Procedural Requirements for Printing, Duplicating, and Copying Management.

(f) The Contractor shall include in each subcontract which may involve a requirement for any printing, duplicating, and copying in excess of the limits specified in paragraph (c) of this clause, a provision substantially the same as this clause, including this paragraph (f).

(End of clause)

6.9 1852.215-84 OMBUDSMAN (OCT 2003)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from Offerors, potential Offerors, and Contractors during the preaward and postaward 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:

Rebecca S. Dubuisson
NASA Shared Services Center
Building 5100
Stennis Space Center, MS 39529-6000
Phone: 228-813-6019
Fax: 228-813-6002
Email: Rebecca.S.Dubuisson@NASA.gov

Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the NASA ombudsman, the Director of the Contract Management Division, at 202-358-0445, facsimile 202-358-3083, e-mail james.a.balinskas@nasa.gov. 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.

(End of clause)

6.10 52.222-54, EMPLOYMENT ELIGIBILITY VERIFICATION (JAN 2009)

(a) Definitions. As used in this clause-

RELEASED - Printed documents may be obsolete; validate prior to use.

"Commercially available off-the-shelf (COTS) item"-

(1) Means any item of supply that is-

(i) A commercial item (as defined in paragraph (1) of the definition at 2.101);

(ii) Sold in substantial quantities in the commercial marketplace; and

(iii) Offered to the Government, without modification, in the same form in which it is sold in the commercial marketplace; and

(2) Does not include bulk cargo, as defined in section 3 of the Shipping Act of 1984 (46 U.S.C. App. 1702), such as agricultural products and petroleum products. Per 46 CFR 525.1 (c)(2), "bulk cargo" means cargo that is loaded and carried in bulk onboard ship without mark or count, in a loose unpackaged form, having homogenous characteristics. Bulk cargo loaded into intermodal equipment, except LASH or Seabee barges, is subject to mark and count and, therefore, ceases to be bulk cargo.

"Employee assigned to the contract" means an employee who was hired after November 6, 1986, who is directly performing work, in the United States, under a contract that is required to include the clause prescribed at 22.1803. An employee is not considered to be directly performing work under a contract if the employee—

(1) Normally performs support work, such as indirect or overhead functions; and

(2) Does not perform any substantial duties applicable to the contract.

"Subcontract" means any contract, as defined in 2.101, entered into by a subcontractor to furnish supplies or services for performance of a prime contract or a subcontract. It includes but is not limited to purchase orders, and changes and modifications to purchase orders.

"Subcontractor" means any supplier, distributor, vendor, or firm that furnishes supplies or services to or for a prime Contractor or another subcontractor.

"United States", as defined in 8 U.S.C. 1101(a)(38), means the 50 States, the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands.

(b) Enrollment and verification requirements.

(1) If the Contractor is not enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall—

(i) Enroll. Enroll as a Federal Contractor in the E-Verify program within 30 calendar days of contract award;

(ii) Verify all new employees. Within 90 calendar days of enrollment in the E-Verify program, begin to use E-Verify to initiate verification of employment eligibility of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); and

(iii) Verify employees assigned to the contract. For each employee assigned to the contract, initiate verification within 90 calendar days after date of enrollment or within 30 calendar days of the employee's assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(2) If the Contractor is enrolled as a Federal Contractor in E-Verify at time of contract award, the Contractor shall use E-Verify to initiate verification of employment eligibility of—

(i) All new employees.

(A) Enrolled 90 calendar days or more. The Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether

RELEASED - Printed documents may be obsolete; validate prior to use.

or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(B) Enrolled less than 90 calendar days. Within 90 calendar days after enrollment as a Federal Contractor in E-Verify, the Contractor shall initiate verification of all new hires of the Contractor, who are working in the United States, whether or not assigned to the contract, within 3 business days after the date of hire (but see paragraph (b)(3) of this section); or

(ii) Employees assigned to the contract. For each employee assigned to the contract, the Contractor shall initiate verification within 90 calendar days after date of contract award or within 30 days after assignment to the contract, whichever date is later (but see paragraph (b)(4) of this section).

(3) If the Contractor is an institution of higher education (as defined at 20 U.S.C. 1001(a)); a State or local government or the government of a Federally recognized Indian tribe; or a surety performing under a takeover agreement entered into with a Federal agency pursuant to a performance bond, the Contractor may choose to verify only employees assigned to the contract, whether existing employees or new hires. The Contractor shall follow the applicable verification requirements at (b)(1) or (b)(2) respectively, except that any requirement for verification of new employees applies only to new employees assigned to the contract.

(4) Option to verify employment eligibility of all employees. The Contractor may elect to verify all existing employees hired after November 6, 1986, rather than just those employees assigned to the contract. The Contractor shall initiate verification for each existing employee working in the United States who was hired after November 6, 1986, within 180 calendar days of—

(i) Enrollment in the E-Verify program; or

(ii) Notification to E-Verify Operations of the Contractor's decision to exercise this option, using the contact information provided in the E-Verify program Memorandum of Understanding (MOU).

(5) The Contractor shall comply, for the period of performance of this contract, with the requirements of the E-Verify program MOU.

(i) The Department of Homeland Security (DHS) or the Social Security Administration (SSA) may terminate the Contractor's MOU and deny access to the E-Verify system in accordance with the terms of the MOU. In such case, the Contractor will be referred to a suspension or debarment official.

(ii) During the period between termination of the MOU and a decision by the suspension or debarment official whether to suspend or debar, the Contractor is excused from its obligations under paragraph (b) of this clause. If the suspension or debarment official determines not to suspend or debar the Contractor, then the Contractor must reenroll in E-Verify.

(c) Web site. Information on registration for and use of the E-Verify program can be obtained via the Internet at the Department of Homeland Security Web site: http://www.dhs.gov/E-Verify.

(d) Individuals previously verified. The Contractor is not required by this clause to perform additional employment verification using E-Verify for any employee—

(1) Whose employment eligibility was previously verified by the Contractor through the E-Verify program;

RELEASED - Printed documents may be obsolete; validate prior to use.

(2) Who has been granted and holds an active U.S. Government security clearance for access to confidential, secret, or top secret information in accordance with the National Industrial Security Program Operating Manual; or

(3) Who has undergone a completed background investigation and been issued credentials pursuant to Homeland Security Presidential Directive (HSPD)-12, Policy for a Common Identification Standard for Federal Employees and Contractors.

(e) Subcontracts. The Contractor shall include the requirements of this clause, including this paragraph (e) (appropriately modified for identification of the parties), in each subcontract that-

(1) Is for-

(i) Commercial or noncommercial services (except for commercial services that are part of the purchase of a COTS item (or an item that would be a COTS item, but for minor modifications), performed by the COTS provider, and are normally provided for that COTS item); or

(ii) Construction;

(2) Has a value of more than $3,000; and

(3) Includes work performed in the United States.

(End of clause)

6.11 1852.223-70 SAFETY AND HEALTH (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 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 Contractor shall immediately notify and promptly report to the Contracting Officer or a designee any accident, incident, or exposure resulting in fatality, lost-time occupational injury, occupational disease, contamination of property beyond any stated acceptable limits set forth in the contract Schedule; or property loss of $25,000 or more, or Close Call (a situation or occurrence with no injury, no damage or only minor damage (less than $1,000) but possesses the potential to cause any type mishap, or any injury, damage, or negative mission impact) that may be of immediate interest to NASA, arising out of work performed

RELEASED - Printed documents may be obsolete; validate prior to use.

under this contract. The Contractor is not required to include in any report an expression of opinion as to the fault or negligence of any employee. In addition, service contractors (excluding construction contracts) shall provide quarterly reports specifying lost-time frequency rate, number of lost-time injuries, exposure, and accident/incident dollar losses as specified in the contract Schedule.

(e) The Contractor shall investigate all work-related incidents, accidents, and Close Calls, to the extent necessary to determine their causes and furnish the Contracting Officer a report, in such form as the Contracting Officer may require, of the investigative findings and proposed or completed corrective actions.

(f)(1) The Contracting Officer may notify the Contractor in writing of any noncompliance with this clause and specify corrective actions to be taken. When 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.

(2) If the Contractor fails or refuses to institute prompt corrective action in accordance with subparagraph (f)(1) of this clause, the Contracting Officer may invoke the stop-work order clause in this contract or any other remedy available to the Government in the event of such failure or refusal.

(g) The Contractor (or subcontractor or supplier) shall insert the substance of this clause, including this paragraph (g) and any applicable Schedule provisions and clauses, with appropriate changes of designations of the parties, in all solicitations and subcontracts of every tier, when one or more of the following conditions exist:

(1) The work will be conducted completely or partly on premises owned or controlled by the Government.

(2) The work includes construction, alteration, or repair of facilities in excess of the simplified acquisition threshold.

(3) The work, regardless of place of performance, involves hazards that could endanger the public, astronauts and pilots, the NASA workforce (including Contractor employees working on NASA contracts), or high value equipment or property, and the hazards are not adequately addressed by Occupational Safety and Health Administration (OSHA) or Department of Transportation (DOT) regulations (if applicable).

(4) When the Contractor (or subcontractor or supplier) determines that the assessed risk and consequences of a failure to properly manage and control the hazard(s) warrants use of the clause.

(h) The Contractor (or subcontractor or supplier) may exclude the provisions of paragraph (g) from its solicitation(s) and subcontract(s) of every tier when it determines that the clause is not necessary because the application of the OSHA and DOT (if applicable) regulations constitute adequate safety and occupational health protection. When a determination is made to exclude the provisions of paragraph (g) from a solicitation and subcontract, the Contractor must notify and provide the basis for the determination to the

RELEASED - Printed documents may be obsolete; validate prior to use.

Contracting Officer. In subcontracts of every tier above the micro-purchase threshold for which paragraph (g) does not apply, the Contractor (or subcontractor or supplier) shall insert the substance of paragraphs (a), (b), (c), and (f) of this clause).

(i) Authorized Government representatives of the Contracting Officer shall have access to and the right to examine the sites or areas where work under this contract is being performed in order to determine the adequacy of the Contractor's safety and occupational health measures under this clause.

(j) The Contractor shall continually update the safety and health plan when necessary. In particular**,** the Contractor shall furnish a list of all hazardous operations to be performed, and a list of other major or key operations required or planned in the performance of the contract, even though not deemed hazardous by the Contractor. NASA and the Contractor shall jointly decide which operations are to be considered hazardous, with NASA as the final authority. Before hazardous operations commence, the Contractor shall submit for NASA concurrence --

(1) Written hazardous operating procedures for all hazardous operations; and/or

(2) Qualification standards for personnel involved in hazardous operations.

(End of clause)

6.12 1852.223-75 MAJOR BREACH OF SAFETY OR SECURITY (FEB 2002) -- ALT I (FEB 2006)

(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. 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. 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.

RELEASED - Printed documents may be obsolete; validate prior to use.

(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 Contractor shall immediately notify and promptly report to the Contracting Officer or a designee any accident, incident, or exposure resulting in fatality, lost-time occupational injury, occupational disease, contamination of property beyond any stated acceptable limits set forth in the contract Schedule; or property loss of $25,000 or more, or Close Call (a situation or occurrence with no injury, no damage or only minor damage (less than $1,000) but possesses the potential to cause any type mishap, or any injury, damage, or negative mission impact) that may be of immediate interest to NASA, arising out of work performed under this contract. The Contractor is not required to include in any report an expression of opinion as to the fault or negligence of any employee. In addition, service contractors (excluding construction contracts) shall provide quarterly reports specifying lost-time frequency rate, number of lost-time injuries, exposure, and accident/incident dollar losses as specified in the contract Schedule.

(e) The Contractor shall investigate all work-related incidents, accidents, and Close Calls, to the extent necessary to determine their causes and furnish the Contracting Officer a report, in such form as the Contracting Officer may require, of the investigative findings and proposed or completed corrective actions.

(f)(1) The Contracting Officer may notify the Contractor in writing of any noncompliance with this clause and specify corrective actions to be taken. When 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.

(2) If the Contractor fails or refuses to institute prompt corrective action in accordance with subparagraph (f)(1) of this clause, the Contracting Officer may invoke the stop-work order clause in this contract or any other remedy available to the Government in the event of such failure or refusal.

(g) The Contractor (or subcontractor or supplier) shall insert the substance of this clause, including this paragraph (g) and any applicable Schedule provisions and clauses, with appropriate changes of designations of the parties, in all solicitations and subcontracts of every tier, when one or more of the following conditions exist:

(1) The work will be conducted completely or partly on premises owned or controlled by the Government.

(2) The work includes construction, alteration, or repair of facilities in excess of the simplified acquisition threshold.

(3) The work, regardless of place of performance, involves hazards that could endanger the public, astronauts and pilots, the NASA workforce (including Contractor

RELEASED - Printed documents may be obsolete; validate prior to use.

employees working on NASA contracts), or high value equipment or property, and the hazards are not adequately addressed by Occupational Safety and Health Administration (OSHA) or Department of Transportation (DOT) regulations (if applicable).

(4) When the Contractor (or subcontractor or supplier) determines that the assessed risk and consequences of a failure to properly manage and control the hazard(s) warrants use of the clause.

(h) The Contractor (or subcontractor or supplier) may exclude the provisions of paragraph (g) from its solicitation(s) and subcontract(s) of every tier when it determines that the clause is not necessary because the application of the OSHA and DOT (if applicable) regulations constitute adequate safety and occupational health protection. When a determination is made to exclude the provisions of paragraph (g) from a solicitation and subcontract, the Contractor must notify and provide the basis for the determination to the Contracting Officer. In subcontracts of every tier above the micro-purchase threshold for which paragraph (g) does not apply, the Contractor (or subcontractor or supplier) shall insert the substance of paragraphs (a), (b), (c), and (f) of this clause).

(i) Authorized Government representatives of the Contracting Officer shall have access to and the right to examine the sites or areas where work under this contract is being performed in order to determine the adequacy of the Contractor's safety and occupational health measures under this clause.

(j) The Contractor shall continually update the safety and health plan when necessary. In particular**,** the Contractor shall furnish a list of all hazardous operations to be performed, and a list of other major or key operations required or planned in the performance of the contract, even though not deemed hazardous by the Contractor. NASA and the Contractor shall jointly decide which operations are to be considered hazardous, with NASA as the final authority. Before hazardous operations commence, the Contractor shall submit for NASA concurrence --

(1) Written hazardous operating procedures for all hazardous operations; and/or

(2) Qualification standards for personnel involved in hazardous operations.

(End of clause)

6.13 52.224-1 PRIVACY ACT NOTIFICATION (APR 1984)

The Contractor will be required to design, develop, or operate a system of records on individuals, to accomplish an agency function subject to the Privacy Act of 1974, Public Law 93-579, December 31, 1974 (5 U.S.C. 552a) and applicable agency regulations. Violation of the Act may involve the imposition of criminal penalties.

(End of clause)

6.14 52.224-2 PRIVACY ACT (APR 1984)

RELEASED - Printed documents may be obsolete; validate prior to use.

(a) The Contractor agrees to-

(1) Comply with the Privacy Act of 1974 (the Act) and the agency rules and regulations issued under the Act in the design, development, or operation of any system of records on individuals to accomplish an agency function when the contract specifically identifies-

(i) The systems of records; and

(ii) The design, development, or operation work that the contractor is to perform;

(2) Include the Privacy Act notification contained in this contract in every solicitation and resulting subcontract and in every subcontract awarded without a solicitation, when the work statement in the proposed subcontract requires the redesign, development, or operation of a system of records on individuals that is subject to the Act; and

(3) Include this clause, including this paragraph (3), in all subcontracts awarded under this contract which requires the design, development, or operation of such a system of records.

(b) In the event of violations of the Act, a civil action may be brought against the agency involved when the violation concerns the design, development, or operation of a system of records on individuals to accomplish an agency function, and criminal penalties may be imposed upon the officers or employees of the agency when the violation concerns the operation of a system of records on individuals to accomplish an agency function. For purposes of the Act, when the contract is for the operation of a system of records on individuals to accomplish an agency function, the Contractor is considered to be an employee of the agency.

(c)(1) “Operation of a system of records,” as used in this clause, means performance of any of the activities associated with maintaining the system of records, including the collection, use, and dissemination of records.

(2) “Record,” as used in this clause, means any item, collection, or grouping of information about an individual that is maintained by an agency, including, but not limited to, education, financial transactions, medical history, and criminal or employment history and that contains the person’s name, or the identifying number, symbol, or other identifying particular assigned to the individual, such as a fingerprint or voiceprint or a photograph.

(3) “System of records on individuals,” as used in this clause, means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.

(End of clause)

6.15 1852.225-70 EXPORT LICENSES (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

RELEASED - Printed documents may be obsolete; validate prior to use.

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 NASA 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)

6.16 1852.228-75 MINIMUM INSURANCE COVERAGE (OCT 1988)

The Contractor shall obtain and maintain insurance coverage as follows for the performance of this contract:

(a) Worker's compensation and employer's liability insurance as required by applicable Federal and state workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with the Contractor's commercial operations that it would not be practical. The employer's liability coverage shall be at least $100,000, except in States with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

(b) Comprehensive general (bodily injury) liability insurance of at least $500,000 per occurrence.

(c) Motor vehicle liability insurance written on the comprehensive form of policy which provides for bodily injury and property damage liability covering the operation of all motor vehicles used in connection with performing the contract. Policies covering motor vehicles operated in the United States shall provide coverage of at least $200,000 per person and $500,000 per occurrence for bodily injury liability and $50,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

(d) Comprehensive general and motor vehicle liability policies shall contain a provision worded as follows:

> "The insurance company waives any right of subrogation against the United States of America which may arise by reason of any payment under the policy."

RELEASED - Printed documents may be obsolete; validate prior to use.

(e) When aircraft are used in connection with performing the contract, aircraft public and passenger liability insurance of at least $200,000 per person and $500,000 per occurrence for bodily injury, other than passenger liability, and $200,000 per occurrence for property damage. Coverage for passenger liability bodily injury shall be at least $200,000 multiplied by the number of seats or passengers, whichever is greater.

(End of clause)

6.17 1852.237-72 ACCESS TO SENSITIVE INFORMATION (JUN 2005)

(a) As used in this clause, ``sensitive information'' refers to information that a contractor has developed at private expense, or that the Government has generated that qualifies for an exception to the Freedom of Information Act, which is not currently in the public domain, and which may embody trade secrets or commercial or financial information, and which may be sensitive or privileged.

(b) To assist NASA in accomplishing management activities and administrative functions, the Contractor shall provide the services specified elsewhere in this contract.

(c) If performing this contract entails access to sensitive information, as defined above, the Contractor agrees to--

(1) Utilize any sensitive information coming into its possession only for the purposes of performing the services specified in this contract, and not to improve its own competitive position in another procurement.

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

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

(4) Preclude access and disclosure of sensitive information to persons and entities outside of the Contractor's organization.

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

(6) 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.

(7) 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.

(d) The Contractor will comply with all procedures and obligations specified in its Organizational Conflicts of Interest Avoidance Plan, which this contract incorporates as a compliance document.

RELEASED - Printed documents may be obsolete; validate prior to use.

(e) The nature of the work on this contract may subject the Contractor and its employees to a variety of laws and regulations relating to ethics, conflicts of interest, corruption, and other criminal or civil matters relating to the award and administration of government contracts. Recognizing that this contract establishes a high standard of accountability and trust, the Government will carefully review the Contractor's performance in relation to the mandates and restrictions found in these laws and regulations. Unauthorized uses or disclosures of sensitive information may result in termination of this contract for default, or in debarment of the Contractor for serious misconduct affecting present responsibility as a government contractor.

(f) The Contractor shall include the substance of this clause, including this paragraph (f), suitably modified to reflect the relationship of the parties, in all subcontracts that may involve access to sensitive information

(End of clause)

6.18 1852.237-73 RELEASE OF SENSITIVE INFORMATION (JUN 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:

RELEASED - Printed documents may be obsolete; validate prior to use.

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 consider 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,

RELEASED - Printed documents may be obsolete; validate prior to use.

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)

6.19 1852.242-72 OBSERVANCE OF LEGAL HOLIDAYS (AUG 1992) -- ALT I (SEP 1989) -- ALT II (OCT 2000)

(a) The on-site Government personnel observe the following holidays:

New Year's Day	Martin Luther King, Jr.'s Birthday
President's Day	Memorial Day
Independence Day	Labor Day
Columbus Day	Veterans Day
Thanksgiving Day	Christmas Day

Any other day designated by Federal statute, Executive order, or the President's proclamation.

(b) When any holiday falls on a Saturday, the preceding Friday is observed. When any holiday falls on a Sunday, the following Monday is observed. Observance of such days by Government personnel shall not by itself be cause for an additional period of performance or entitlement of compensation except as set forth within the contract.

(c) On-site personnel assigned to this contract shall not be granted access to the installation during the holidays in paragraph (a) of the clause, except as follows: the Contractor shall provide sufficient on-site personnel to perform round-the-clock requirements of critical work already in process, unless otherwise instructed by the Contracting Officer or authorized representative. If the Contractor's on-site personnel work during a holiday other than those in paragraph (a) of this clause, no form of holiday or other premium compensation shall be reimbursed as either a direct or indirect cost. However, this does not preclude payment for authorized overtime work that would have been overtime regardless of the status of the day as a holiday.

(d) The Contractor shall place identical requirements, including this paragraph, in all subcontracts that require performance of work on-site, unless otherwise instructed by the Contracting Officer.

(e) When the NASA installation grants administrative leave to its Government

RELEASED - Printed documents may be obsolete; validate prior to use.

employees (e.g., as a result of inclement weather, potentially hazardous conditions, or other special circumstances), Contractor personnel working on-site should also be dismissed. However, the contractor shall provide sufficient on-site personnel to perform round-the-clock requirements of critical work already in process, unless otherwise instructed by the Contracting Officer or authorized representative.

(f) Whenever administrative leave is granted to Contractor personnel pursuant to paragraph (e) of this clause, it shall be without loss to the Contractor. The cost of salaries and wages to the Contractor for the period of any such excused absence have already been calculated in the firm-fixed-price of this contract and a request for equitable adjustment for salaries and wages will not be considered by the Government.

(End of clause)

6.20 1852.243-71 SHARED SAVINGS (MAR 1997)

(a) The Contractor is entitled, under the provisions of this clause, to share in cost savings resulting from the implementation of cost reduction projects which are presented to the Government in the form of Cost Reduction Proposals (CRP) and approved by the Contracting Officer. These cost reduction projects may require changes to the terms, conditions or statement of work of this contract. Any cost reduction projects must not change the essential function of any products to be delivered or the essential purpose of services to be provided under the contract.

(b) Definitions:

(1) Cost savings, as contemplated by this clause mean savings that result from instituting changes to the covered contract, as identified in an approved Cost Reduction Proposal.

(2) Cost Reduction Proposal - For the purposes of this clause, a Cost Reduction Proposal means a proposal that recommends alternatives to the established procedures and/or organizational support of a contract or group of contracts. These alternatives must result in a net reduction of contract cost and price to NASA. The proposal will include technical and cost information sufficient to enable the Contracting Officer to evaluate the CRP and approve or disapprove it.

(3) Covered contract - As used in this provision, covered contract means the contract, including unexercised options but excluding future contracts, whether contemplated or not, against which the CRP is submitted.

(4) Contractor implementation costs - As used in this provision, Contractor implementation costs, or "implementation costs", shall mean those costs which the Contractor incurs on covered contracts specifically in developing, preparing, submitting, and negotiating a CRP, as well as those costs the Contractor will incur on covered contracts to make any structural or organizational changes in order to implement an approved CRP.

(5) Government costs - As used in this provision, the term Government costs means internal costs of NASA, or any other Government agency, which result directly from development and implementation of the CRP. These may include, but are not limited to, costs associated with the administration of the contract or with such contractually related

RELEASED - Printed documents may be obsolete; validate prior to use.

functions such as testing, operations, maintenance and logistics support. These costs also include costs associated with other Agency contracts (including changes in contract price or cost and fee) that may be affected as a result of the implementation of a CRP. They do not include the normal administrative costs of reviewing and processing the Cost Reduction Proposal.

(c) General. The Contractor will develop, prepare and submit CRP's with supporting information as detailed in paragraph (e) of this clause, to the Contracting Officer. The CRP will describe the proposed cost reduction activity in sufficient detail to enable the Contracting Officer to evaluate it and to approve or disapprove it. The Contractor shall share in any net cost savings realized from approved and implemented CRPs in accordance with the terms of this clause. The Contractor's actual percentage share of the cost savings shall be a matter for negotiation with the Contracting Officer, but shall not, in any event, exceed 50 percent of the total cost savings recognized by the Contracting Officer. The Contractor may propose changes in other activities that impact performance on its contract, including Government and other Contractor operations, if such changes will optimize cost savings. A Contractor shall not be entitled to share, however, in any cost savings that are internal to the Government, or which result from changes made to any contracts to which it is not a party even if those changes were proposed as a part of its CRP. Early communication between the Contractor and Government is encouraged. The communication may be in the form of a concept paper or preliminary proposal. The Government is not committed to accepting any proposal as a result of these early discussions.

(d) Computation of cost savings. The cost savings to be shared between the Government and the Contractor will be computed by the Contracting Officer by comparing a current estimate to complete (ETC) for the covered contract, as structured before implementation of the proposed CRP, to a revised ETC which takes into account the implementation of that CRP. The cost savings to be shared shall be reduced by any cost overrun, whether experienced or projected, that is identified on the covered contract before implementation of the CRP. Although a CRP may result in cost savings that extend far into the future, the period in which the Contractor may share in those savings will be limited to no more than five years. Implementation costs of the Contractor must be considered and specifically identified in the revised ETC. The Contracting Officer shall offset Contractor cost savings by any increased costs (whether implementing or recurring) to the Government when computing the total cost savings to be shared. The Contractor shall not be entitled, under the provisions of this clause, to share in any cost reductions to the contract that are the result of changes stemming from any action other than an approved CRP. However, this clause does not limit recovery of any such reimbursements that are allowed as a result of other contract provisions.

(e) Supporting Information. As a minimum, the Contractor shall provide the following supporting information with each CRP:

(1) Identification of the current contract requirements or established procedures and/or organizational support which are proposed to be changed.

(2) A description of the difference between the current process or procedure and the proposed change. This description shall address how proposed changes will meet NASA requirements and discuss the advantages and disadvantages of the existing practice and the proposed changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

(3) A list of contract requirements which must be revised, if any, if the CRP is approved, along with proposed revisions. Any changes to NASA or delegated contract management processes should also be addressed.

(4) Detailed cost estimates which reflect the implementation costs of the CRP.

(5) An updated ETC for the covered contract, unchanged, and a revised ETC for the covered contract which reflects changes resulting from implementing the CRP. If the CRP proposes changes to only a limited number of elements of the contract, the ETCs need only address those portions of the contract that have been impacted. Each ETC shall depict the level of costs incurred or to be incurred by year, or to the level of detail required by the Contracting Officer. If other CRPs have been proposed or approved on a contract, the impact of these CRPs must be addressed in the computation of the cost savings to ensure that the cost savings identified are attributable only to the CRP under consideration in the instant case.

(6) Identification of any other previous submissions of the CRP, including the dates submitted, the agencies and contracts involved, and the disposition of those submittals.

(f) Administration.

(1) The Contractor shall submit proposed CRPs to the Contracting Officer who shall be responsible for the review, evaluation and approval. Normally, CRP's should not be entertained for the first year of performance to allow the Contracting Officer to assess performance against the basic requirements. If a cost reduction project impacts more than a single contract, the Contractor may, upon concurrence of the Contracting Officers responsible for the affected contracts, submit a single CRP which addresses fully the cost savings projected on all affected contracts that contain this Shared Savings Clause. In the case of multiple contracts affected, responsibility for the review and approval of the CRP will be a matter to be decided by the affected Contracting Officers.

(2) Within 60 days of receipt, the Contracting Officer shall complete an initial evaluation of any proposed cost reduction plan to determine its feasibility. Failure of the Contracting Officer to provide a response within 60 days shall not be construed as approval of the CRP. The Government shall promptly notify the Contractor of the results of its initial evaluation and indicate what, if any, further action will be taken. If the Government determines that the proposed CRP has merit, it will open discussions with the Contractor to establish the cost savings to be recognized, the Contractor's share of the cost savings, and a payment schedule. The Contractor shall continue to perform in accordance with the terms and conditions of the existing contract until a contract modification is executed by the Contracting Officer. The modification shall constitute approval of the CRP and shall incorporate the changes identified by the CRP, adjust the contract cost and/or price, establish the Contractor's share of cost savings, and incorporate the agreed to payment schedule.

(3) The Contractor will receive payment by submitting invoices to the Contracting Officer for approval. The amount and timing of individual payments will be made in accordance with the schedule to be established with the Contracting Officer. Notwithstanding the overall savings recognized by the Contracting Officer as a result of an approved CRP, payment of any portion of the Contractor's share of savings shall not be made until NASA begins to realize a net cost savings on the contract (i.e., implementation,

RELEASED - Printed documents may be obsolete; validate prior to use.

startup and other increased costs resulting from the change have been offset by cumulative cost savings). Savings associated with unexercised options will not be paid unless and until the contract options are exercised. It shall be the responsibility of the Contractor to provide such justification as the Contracting Officer deems necessary to substantiate that cost savings are being achieved.

(4) Any future activity, including a merger or acquisition undertaken by the Contractor (or to which the Contractor becomes an involved party), which has the effect of reducing or reversing the cost savings realized from an approved CRP for which the Contractor has received payment may be cause for recomputing the net cost savings associated with any approved CRP. The Government reserves the right to make an adjustment to the Contractor's share of cost savings and to receive a refund of moneys paid if necessary. Such adjustment shall not be made without notifying the Contractor in advance of the intended action and affording the Contractor an opportunity for discussion.

(g) Limitations. Contract requirements that are imposed by statute shall not be targeted for cost reduction exercises. The Contractor is precluded from receiving reimbursements under both this clause and other incentive provisions of the contract, if any, for the same cost reductions.

(h) Disapproval of, or failure to approve, any proposed cost reduction proposal shall not be considered a dispute subject to remedies under the Disputes clause.

(i) Cost savings paid to the Contractor in accordance with the provisions of this clause do not constitute profit or fee within the limitations imposed by 10 U.S.C. 2306(d) and 41 U.S.C. 254(b).

(End of clause)

6.21 REPEATED EQUIPMENT FAILURE PLAN

For any system or component procured through the ESRS, that repeatedly fails (three or more times) due to a specific hardware-related problem, the Contractor shall replace the failing hardware in lieu of repair, at no additional cost, and remove the failed item from service. The Contractor shall provide a monthly report stating the number of hardware replacements made within a given month.

(End of clause)

6.22 COMPUTER/ELECTRONIC ACCOMMODATIONS PROGRAM (CAP) SUPPORT

The Contractor shall support NASA employees in obtaining assistive technology in accordance with the Computer/Electronic Accommodations Program (CAP), a partnership between NASA and the Department of Defense.

CAP provides assistive technology and services to people with disabilities, Federal managers, supervisors and IT professionals. The CAP Technology Evaluation Center (CAPTEC) is a demonstration and assessment facility where Managers and individuals

RELEASED - Printed documents may be obsolete; validate prior to use.

seeking solutions to accessibility challenges can see assistive technology, compare different solutions, and ensure equipment compatibility.

The Contractor's responsibilities are as follows:

a.) For users that have an ACES Computing seat, the Contractor shall participate with CAP in identifying products that meet the users' needs and ensure they are compatible with their ACES seats. CAP shall acquire and deliver the products to the user, or, if preferred, the ACES Contractor.

b.) If the service is ordered from the ACES catalog, the Contractor shall install and setup the products on the user's seat. This includes making software changes to accommodate the CAP products.

c.) The CAP products will be considered Government furnished property under the ACES contract. The Contractor shall manage the CAP products in the same manner as other Government furnished property under their contract.

d.) The Contractor shall be responsible for any necessary registering of the assistive technology after it is installed on the user's seat.

e.) If maintenance support service is ordered from the ACES catalog, the Contractor shall also be responsible for all maintenance and repair of the CAP product. However, this does not include replacement due to breakage or incompatibility with subsequent ACES technology. Replacement products will be obtained through the CAP.

f.) CAP will be responsible for any needed user training.

g.) The Contractor shall only be responsible for ensuring product compatibility under the Contractor's control.

(End of clause)

6.23 SECTION 508 COMPLIANCE

(a) The Workforce Investment Act of 1998 amended Section 508 of the Rehabilitation Act of 1973 to require that :

(1) When developing, procuring, maintaining or using Electronic and Information Technology (EIT), agencies must ensure employees with disabilities have access to and use of information and data comparable to that for other employees; and

(2) Members of the public with disabilities seeking information or services from an agency have access to and use of information and data comparable to that for members of the public without disabilities.

(b) Section 508 standards shall be taken into consideration in the design of prototypes. Failure to meet Section 508 standards will impact the Government's ability to make future purchases of the technology developed under this contract. Information regarding Section 508 standards can be obtained at http://www.access-board.gov/508.htm.

RELEASED - Printed documents may be obsolete; validate prior to use.

(c) Supplies or services delivered as a result of this solicitation will be accepted based in part on satisfaction of identified Section 508 requirements for accessibility. The Contractor shall also provide OEM validation when hardware and software changes occur.

(End of clause)

6.24 STANDARDIZATION INCENTIVES

The Contractor shall provide a standardization incentive *of* **Redacted** % discount to the monthly unit price of an "M" Computing seat when the Agency standardizes upon any Service Option. This incentive discount shall apply only to the "M" Computing seat if NASA chooses to consolidate a service with multiple Service Options to one Service Option. The incentive can be initiated at any time during the life of the contract.

(End of clause)

6.25 52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (AUG 2003)

(a) *Definitions*. As used in this clause—
"Priority chemical" means a chemical identified by the Interagency Environmental Leadership Workgroup or, alternatively, by an agency pursuant to Section 503 of Executive Order 13148 of April 21, 2000, Greening the Government through Leadership in Environmental Management.
"Toxic chemical" means a chemical or chemical category listed in 40 CFR 372.65.

(b) Executive Order 13148 requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13101-13109).

(c) The Contractor shall provide all information needed by the Federal facility to comply with the following:

(1) The emergency planning reporting requirements of Section 302 of EPCRA.

(2) The emergency notice requirements of Section 304 of EPCRA.

(3) The list of Material Safety Data Sheets, required by Section 311 of EPCRA.

(4) The emergency and hazardous chemical inventory forms of Section 312 of EPCRA.

(5) The toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA.

(6) The toxic chemical, priority chemical, and hazardous substance release and use reduction goals of Sections 502 and 503 of Executive Order 13148.

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

6.26 52.223-14 TOXIC CHEMICAL RELEASE REPORTING (AUG 2003)

(a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.

(b) A Contractor-owned or -operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if—

(1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed in 40 CFR 372.65;

(2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within the following Standard Industrial Classification (SIC) codes or their corresponding North American Industry Classification System sectors:

(i) Major group code 10 (except 1011, 1081, and 1094.

(ii) Major group code 12 (except 1241).

(iii) Major group codes 20 through 39.

(iv)Industry code 4911, 4931, or 4939 (limited to facilities that combust coal and/or oil for the purpose of generating power for distribution in commerce).

(v) Industry code 4953 (limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C (42 U.S.C. 6921, *et seq*.)), or 5169, or 5171, or 7389 (limited to facilities primarily engaged in solvent recovery services on a contract or fee basis); or

(5) The facility is not located in the United States or its outlying areas.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt—

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall—

(i) Submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and

(ii) Continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

RELEASED - Printed documents may be obsolete; validate prior to use.

(e) Except for acquisitions of commercial items as defined in FAR Part 2, the Contractor shall—

(1) For competitive subcontracts expected to exceed $100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding $100,000 (including all options), the substance of this clause, except this paragraph (e).

(End of clause)

6.27 52.223-17 AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS (MAY 2008)

(a) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot
be acquired—

(1) Competitively within a timeframe providing for compliance with the contract performance schedule;

(2) Meeting contract performance requirements; or

(3) At a reasonable price.

(b) Information about this requirement is available at EPA's Comprehensive Procurement Guidelines web site, http://www.epa.gov/cpg/. The list of EPA-designated items is available at http://www.epa.gov/cpg/products.htm.

(End of clause)

6.28 1852.209-71 LIMITATION OF FUTURE CONTRACTING (DEC 1988)

(a) The Contracting Officer has determined that this acquisition may give rise to a potential organizational conflict of interest. Accordingly, the attention of prospective offerors is invited to FAR Subpart 9.5--Organizational Conflicts of Interest.

(b) The nature of this conflict is [describe the conflict].

(c) The restrictions upon future contracting are as follows:

(1) If the Contractor, under the terms of this contract, or through the performance of tasks pursuant to this contract, is required to develop specifications or statements of work that are to be incorporated into a solicitation, the Contractor shall be ineligible to perform the work described in that solicitation as a prime or first-tier subcontractor under an ensuing NASA contract. This restriction shall remain in effect for a reasonable time, as agreed to by the Contracting Officer and the Contractor, sufficient to avoid unfair competitive advantage or potential bias (this time shall in no case be less than the duration of the initial production contract). NASA shall not unilaterally require the Contractor to prepare such specifications or statements of work under this contract.

RELEASED - Printed documents may be obsolete; validate prior to use.

(2) To the extent that the work under this contract requires access to proprietary, business confidential, or financial data of other companies, and as long as these data remain proprietary or confidential, the Contractor shall protect these data from unauthorized use and disclosure and agrees not to use them to compete with those other companies.

(End of clause)

6.29 ORGANIZATIONAL CONFLICTS OF INTEREST (OCI)

(a) OCI Plan. The Contractor's Organizational Conflict of Interest (OCI) Plan is hereby incorporated into this contract as a compliance document. If a specific OCI has been identified with respect to the Contractor, the OCI Plan shall describe the actions the Contractor will take to mitigate any identified OCIs. The Contractor shall permit a Government review of the OCI Plan for verification purposes. Additionally, during contract performance, NASA will review the OCI Plan as needed, in the event of changes in the contractor community due to mergers, consolidations, or any unanticipated circumstances that may create unacceptable organizational conflicts of interest.

(b) The Contractor agrees that if an actual or potential OCI is discovered after award, the Contractor shall make a prompt and full disclosure in writing to the Contracting Officer. The disclosure shall include either an update to the existing OCI Plan or submission of a separate OCI Plan. The Contractor shall consult with the Contracting Officer to determine whether an update to the existing OCI Plan or submission of a separate OCI Plan is appropriate. This submission shall describe actions the Contractor has taken or proposed to take, to mitigate the actual or potential conflict. Changes in the Contractor's relationships due to mergers, consolidations or any unanticipated circumstances may create an unacceptable organizational conflict of interest that necessitates such disclosure. NASA reserves the right to reject an OCI Plan in whole or in part or any revisions thereto, if in the opinion of the Contracting Officer, the OCI cannot be avoided, neutralized, or mitigated.

(c) If the Contractor was aware of a potential OCI prior to award or discovered an actual or potential conflict after award and did not disclose or misrepresented relevant information to the Contracting Officer, the Government may terminate this contract for default, suspend or debar the Contractor from government contracting, or pursue such other remedies as may be permitted by law or this contract.

(d) The Contractor further agrees to insert provisions which shall conform substantially to the language of this clause including this paragraph (d) in any subcontract or consultant agreement hereunder.

(End of clause)

6.30 UNPLANNED SCHEDULE DELAY

(a) The planned Phase-In Period allocated for each wave is six months, in accordance with Attachment I-14, *Phase-In Schedule*.

(b) In the event that the Wave 1 Phase-In Start date is delayed less than two months, the Wave 1 Implementation date will remain as indicated in Attachment I-14, *Phase-In Schedule.*

RELEASED - Printed documents may be obsolete; validate prior to use.

(c) In the event that the Wave 1 Phase-In Start date is delayed beyond two months, the Wave 1 and Wave 2 Phase-Ins shall occur concurrently.

(d) No "Wave" Phase-In Start date will begin any later than 5/01/11.

(e) So long as the Phase-In start dates are not delayed beyond 5/01/11, prices (reference Attachment I-9, *CLIN Pricing*) shall remain unchanged.

(End of clause)

6.31 52.227-14 RIGHTS IN DATA--GENERAL. (Dec 2007)

(a) Definitions. As used in this clause—
"Computer database" or "database means" a collection of recorded information in a form capable of, and for the purpose of, being stored in, processed, and operated on by a computer. The term does not include computer software.

"Computer software"—

(1) Means

(i) Computer programs that comprise a series of instructions, rules, routines, or statements, regardless of the media in which recorded, that allow or cause a computer to perform a specific operation or series of operations; and

(ii) Recorded information comprising source code listings, design details, algorithms, processes, flow charts, formulas, and related material that would enable the computer program to be produced, created, or compiled.

(2) Does not include computer databases or computer software documentation.
"Computer software documentation" means owner's manuals, user's manuals, installation instructions, operating instructions, and other similar items, regardless of storage medium, that explain the capabilities of the computer software or provide instructions for using the software.

"Data" means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

"Form, fit, and function data" means data relating to items, components, or processes that are sufficient to enable physical and functional interchangeability, and data identifying source, size, configuration, mating and attachment characteristics, functional characteristics, and performance requirements. For computer software it means data identifying source, functional characteristics, and performance requirements but specifically excludes the source code, algorithms, processes, formulas, and flow charts of the software.

"Limited rights" means the rights of the Government in limited rights data as set forth in the Limited Rights Notice of paragraph (g)(3) if included in this clause.

RELEASED - Printed documents may be obsolete; validate prior to use.

“Limited rights data” means data, other than computer software, that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertain to items, components, or processes developed at private expense, including minor modifications.

“Restricted computer software” means computer software developed at private expense and that is a trade secret, is commercial or financial and confidential or privileged, or is copyrighted computer software, including minor modifications of the computer software.

“Restricted rights,” as used in this clause, means the rights of the Government in restricted computer software, as set forth in a Restricted Rights Notice of paragraph (g) if included in this clause, or as otherwise may be provided in a collateral agreement incorporated in and made part of this contract, including minor modifications of such computer software.

“Technical data” means recorded information (regardless of the form or method of the recording) of a scientific or technical nature (including computer databases and computer software documentation). This term does not include computer software or financial, administrative, cost or pricing, or management data or other information incidental to contract administration. The term includes recorded information of a scientific or technical nature that is included in computer databases (See 41 U.S.C. 403(8)).

“Unlimited rights” means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so.

(b) Allocation of rights.

(1) Except as provided in paragraph (c) of this clause, the Government shall have unlimited rights in—

(i) Data first produced in the performance of this contract;

(ii) Form, fit, and function data delivered under this contract;

(iii) Data delivered under this contract (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation, or routine maintenance and repair of items, components, or processes delivered or furnished for use under this contract; and

(iv) All other data delivered under this contract unless provided otherwise for limited rights data or restricted computer software in accordance with paragraph (g) of this clause.

(2) The Contractor shall have the right to—

(i) Assert copyright in data first produced in the performance of this contract to the extent provided in paragraph (c)(1) of this clause;

(ii) Use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, unless provided otherwise in paragraph (d) of this clause;

RELEASED - Printed documents may be obsolete; validate prior to use.

(iii) Substantiate the use of, add, or correct limited rights, restricted rights, or copyright notices and to take other appropriate action, in accordance with paragraphs (e) and (f) of this clause; and

(iv) Protect from unauthorized disclosure and use those data that are limited rights data or restricted computer software to the extent provided in paragraph (g) of this clause.

(c) Copyright—

(1) Data first produced in the performance of this contract.

(i) Unless provided otherwise in paragraph (d) of this clause, the Contractor may, without prior approval of the Contracting Officer, assert copyright in scientific and technical articles based on or containing data first produced in the performance of this contract and published in academic, technical or professional journals, symposia proceedings, or similar works. The prior, express written permission of the Contracting Officer is required to assert copyright in all other data first produced in the performance of this contract.

(ii) When authorized to assert copyright to the data, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402, and an acknowledgment of Government sponsorship (including contract number).

(iii) For data other than computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly by or on behalf of the Government. For computer software, the Contractor grants to the Government, and others acting on its behalf, a paid-up, nonexclusive, irrevocable, worldwide license in such copyrighted computer software to reproduce, prepare derivative works, and perform publicly and display publicly (but not to distribute copies to the public) by or on behalf of the Government.

(2) Data not first produced in the performance of this contract. The Contractor shall not, without the prior written permission of the Contracting Officer, incorporate in data delivered under this contract any data not first produced in the performance of this contract unless the Contractor—

(i) Identifies the data; and

(ii) Grants to the Government, or acquires on its behalf, a license of the same scope as set forth in paragraph (c)(1) of this clause or, if such data are restricted computer software, the Government shall acquire a copyright license as set forth in paragraph (g)(4) of this clause (if included in this contract) or as otherwise provided in a collateral agreement incorporated in or made part of this contract.

(3) Removal of copyright notices. The Government will not remove any authorized copyright notices placed on data pursuant to this paragraph (c), and will include such notices on all reproductions of the data.

(d) Release, publication, and use of data. The Contractor shall have the right to use, release to others, reproduce, distribute, or publish any data first produced or specifically used by the Contractor in the performance of this contract, except—

RELEASED - Printed documents may be obsolete; validate prior to use.

(1) As prohibited by Federal law or regulation (e.g., export control or national security laws or regulations);

(2) As expressly set forth in this contract; or

(3) If the Contractor receives or is given access to data necessary for the performance of this contract that contain restrictive markings, the Contractor shall treat the data in accordance with such markings unless specifically authorized otherwise in writing by the Contracting Officer.

(e) Unauthorized marking of data.

(1) Notwithstanding any other provisions of this contract concerning inspection or acceptance, if any data delivered under this contract are marked with the notices specified in paragraph (g)(3) or (g) (4) if included in this clause, and use of the notices is not authorized by this clause, or if the data bears any other restrictive or limiting markings not authorized by this contract, the Contracting Officer may at any time either return the data to the Contractor, or cancel or ignore the markings. However, pursuant to 41 U.S.C. 253d, the following procedures shall apply prior to canceling or ignoring the markings.

(i) The Contracting Officer will make written inquiry to the Contractor affording the Contractor 60 days from receipt of the inquiry to provide written justification to substantiate the propriety of the markings;

(ii) If the Contractor fails to respond or fails to provide written justification to substantiate the propriety of the markings within the 60-day period (or a longer time approved in writing by the Contracting Officer for good cause shown), the Government shall have the right to cancel or ignore the markings at any time after said period and the data will no longer be made subject to any disclosure prohibitions.

(iii) If the Contractor provides written justification to substantiate the propriety of the markings within the period set in paragraph (e)(1)(i) of this clause, the Contracting Officer will consider such written justification and determine whether or not the markings are to be cancelled or ignored. If the Contracting Officer determines that the markings are authorized, the Contractor will be so notified in writing. If the Contracting Officer determines, with concurrence of the head of the contracting activity, that the markings are not authorized, the Contracting Officer will furnish the Contractor a written determination, which determination will become the final agency decision regarding the appropriateness of the markings unless the Contractor files suit in a court of competent jurisdiction within 90 days of receipt of the Contracting Officer’s decision. The Government will continue to abide by the markings under this paragraph (e)(1)(iii) until final resolution of the matter either by the Contracting Officer’s determination becoming final (in which instance the Government will thereafter have the right to cancel or ignore the markings at any time and the data will no longer be made subject to any disclosure prohibitions), or by final disposition of the matter by court decision if suit is filed.

(2) The time limits in the procedures set forth in paragraph (e)(1) of this clause may be modified in accordance with agency regulations implementing the Freedom of Information Act (5 U.S.C. 552) if necessary to respond to a request thereunder.

RELEASED - Printed documents may be obsolete; validate prior to use.

(3) Except to the extent the Government's action occurs as the result of final disposition of the matter by a court of competent jurisdiction, the Contractor is not precluded by paragraph (e) of the clause from bringing a claim, in accordance with the Disputes clause of this contract, that may arise as the result of the Government removing or ignoring authorized markings on data delivered under this contract.

(f) Omitted or incorrect markings.

(1) Data delivered to the Government without any restrictive markings shall be deemed to have been furnished with unlimited rights. The Government is not liable for the disclosure, use, or reproduction of such data.

(2) If the unmarked data has not been disclosed without restriction outside the Government, the Contractor may request, within 6 months (or a longer time approved by the Contracting Officer in writing for good cause shown) after delivery of the data, permission to have authorized notices placed on the data at the Contractor's expense. The Contracting Officer may agree to do so if the Contractor—

(i) Identifies the data to which the omitted notice is to be applied;

(ii) Demonstrates that the omission of the notice was inadvertent;

(iii) Establishes that the proposed notice is authorized; and

(iv) Acknowledges that the Government has no liability for the disclosure, use, or reproduction of any data made prior to the addition of the notice or resulting from the omission of the notice.

(3) If data has been marked with an incorrect notice, the Contracting Officer may—

(i) Permit correction of the notice at the Contractor's expense if the Contractor identifies the data and demonstrates that the correct notice is authorized; or

(ii) Correct any incorrect notices.

(g) Protection of limited rights data and restricted computer software.

(1) The Contractor may withhold from delivery qualifying limited rights data or restricted computer software that are not data identified in paragraphs (b)(1)(i), (ii), and (iii) of this clause. As a condition to this withholding, the Contractor shall—

(i) Identify the data being withheld; and

(ii) Furnish form, fit, and function data instead.

(2) Limited rights data that are formatted as a computer database for delivery to the Government shall be treated as limited rights data and not restricted computer software.

(3) [Reserved]

(h) Subcontracting. The Contractor shall obtain from its subcontractors all data and rights therein necessary to fulfill the Contractor's obligations to the Government under this

RELEASED - Printed documents may be obsolete; validate prior to use.

contract. If a subcontractor refuses to accept terms affording the Government those rights, the Contractor shall promptly notify the Contracting Officer of the refusal and shall not proceed with the subcontract award without authorization in writing from the Contracting Officer.

(i) Relationship to patents or other rights. Nothing contained in this clause shall imply a license to the Government under any patent or be construed as affecting the scope of any license or other right otherwise granted to the Government.

(End of clause)

6.32 52.227-19 COMMERCIAL COMPUTER SOFTWARE LICENSE (DEC 2007)

(a) Notwithstanding any contrary provisions contained in the Contractor's standard commercial license or lease agreement, the Contractor agrees that the Government will have the rights that are set forth in paragraph (b) of this clause to use, duplicate or disclose any commercial computer software delivered under this contract. The terms and provisions of this contract shall comply with Federal laws and the Federal Acquisition Regulation.

(b)(1) The commercial computer software delivered under this contract may not be used, reproduced, or disclosed by the Government except as provided in paragraph (b)(2) of this clause or as expressly stated otherwise in this contract.

(2) The commercial computer software may be—

(i) Used or copied for use with the computer(s) for which it was acquired, including use at any Government installation to which the computer(s) may be transferred;

(ii) Used or copied for use with a backup computer if any computer for which it was acquired is inoperative;

(iii) Reproduced for safekeeping (archives) or backup purposes;

(iv) Modified, adapted, or combined with other computer software, provided that the modified, adapted, or combined portions of the derivative software incorporating any of the delivered, commercial computer software shall be subject to same restrictions set forth in this contract;

(v) Disclosed to and reproduced for use by support service Contractors or their subcontractors, subject to the same restrictions set forth in this contract; and

(vi) Used or copied for use with a replacement computer.

(3) If the commercial computer software is otherwise available without disclosure restrictions, the Contractor licenses it to the Government without disclosure restrictions.

(c) The Contractor shall affix a notice substantially as follows to any commercial computer software delivered under this contract: Notice-Notwithstanding any other lease or license agreement that may pertain to, or accompany the delivery of, this computer software, the

RELEASED - Printed documents may be obsolete; validate prior to use.

rights of the Government regarding its use, reproduction and disclosure are as set forth in Government Contract No. to be inserted upon contract award .

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

7.0 SMALL BUSINESS REQUIREMENTS

7.1 SMALL DISADVANTAGED BUSINESS PARTICIPATION – CONTRACT TARGETS

(a) In accordance with FAR 19.1202-4(a), SDB subcontracting targets shall be incorporated in the Contract. Targets for this contract are as follows:

*NAICS Industry Subsectors | Dollar Target | Percent of Contract Value

NASA ACES Small Disadvantaged Business Participation – Contracting Targets		
NAICS Industry Subsectors	**Dollar Target**	**Percent of Contract Value**
Redacted	**$Redacted**	**Redacted %**
Total	**$ Redacted**	**Redacted %**

*North American Industry Classification System (NAICS) Industry Subsectors as determined by the Department of Commerce as being underrepresented in accordance with FAR 19.201(b)

(b) FAR 19.1202-4(b) requires that SDB concerns specifically identified by the Offeror be listed in the contract when the extent of the identification of such subcontractors was part of the subfactor on Small Business Utilization. SDB concerns (subcontractors) specifically identified by the Offeror are as follows:

Name & Address of SDB Concern(s):

SDB Partner Company Name and Address	
Redacted	**Redacted**

The Contractor shall notify the Contracting Officer of any substitutions of the firms listed if the replacement contractor is not an SDB concern.

(c) If the prime Offeror is an SDB the target for the work it intends to perform as the prime Contractor is as follows:

*NAICS Industry Subsectors | Dollars | Percent of Contract Value

N/A to HP Enterprise Services, LLC

(End of clause)

RELEASED - Printed documents may be obsolete; validate prior to use.

7.2 52.219-4 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (JULY 2005)

(a) *Definition*. "HUBZone small business concern," as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

(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) Reserved

(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 paragraph (d) of this clause do not apply if the Offeror has waived the evaluation preference.

☐ Offeror elects to waive the evaluation preference.

N/A to HP Enterprise Services, LLC

(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 nonmanufacturer 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, 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 HUBZone 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 HUBZone small business concerns.

RELEASED - Printed documents may be obsolete; validate prior to use.

(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 HUBZone small business participant or participants.

(f) A HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

7.3 1852.219-75 SMALL BUSINESS SUBCONTRACTING REPORTING (MAY 1999)

(a) The Contractor shall submit the Summary Subcontract Report (Standard Form (SF) 295) semiannually for the reporting periods specified in block 4 of the form. All other instructions for SF 295 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)

7.4 1852.219-76 NASA 8 PERCENT GOAL (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

RELEASED - Printed documents may be obsolete; validate prior to use.

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)

RELEASED - Printed documents may be obsolete; validate prior to use.

8.0 LIST OF ATTACHMENTS

Attachment No.	Description	Pages
I-1	Performance Work Statement (PWS)	98
	Addendum 1 to Attachment I-1, Cross Functional PWS	75
	Addendum 2 to Attachment I-1, Std Load software	7
	Addendum 3 to Attachment I-1, Min Hardware Require	13
I-2	Data Procurement Document (DPD)	57
I-3	Retainage Pools and Performance Metrics	15
I-4	Government Provided Storage and Facilities	4
I-5	Summary of Base Services	5
	Addendum 1 to Attachment I-5, Base Ser Monthly Pricing	7
I-6	Summary of ACES Product Catalog (APC) Purchases	1
I-7	Summary of Infrastructure Upgrade Proposals (IUP)	1
I-8	Summary of Seat Purchases and All Other Services	1
I-9	CLIN Pricing	33
I-10	Schedule of Fully Burdened Labor Rates	3
I-11	List of Government Furnished Property	83
I-12	List of Applicable Documents	2
I-13	DD Form 254, Contract Security Classification Specification	2
I-14	Phase-In Schedule	1
I-15	Phase-In Plan	33
I-16	Small Business Subcontracting Plan	16
I-17	Government Property Plan	1
I-18	Safety and Health Plan	13
I-19	Management Plan	47
I-20	Surveillance Plan	1
I-21	Technology Refresh Plan	1
I-22	Acronyms Listing	5
I-23	Glossary of Terms	7
I-24	Mission Suitability Proposal	1

RELEASED - Printed documents may be obsolete; validate prior to use.

AGENCY CONSOLIDATED END-USER SERVICES (ACES)

ATTACHMENT I-1

PERFORMANCE WORK STATEMENT

October 8, 2010

RELEASED - Printed documents may be obsolete; validate prior to use.

Table of Contents

RELEASED - Printed documents may be obsolete; validate prior to use.

RELEASED - Printed documents may be obsolete; validate prior to use.

ADDENDUMS

RELEASED - Printed documents may be obsolete; validate prior to use.

1.0 AGENCY CONSOLIDATED END-USER SERVICES (ACES)

1.1 MISSION STATEMENT

Since its establishment, the National Aeronautics and Space Administration (NASA) (also referred to as the Government or the Agency) has continued to evolve as a result of changing missions and priorities. Similarly, NASA's Information Technology (IT) infrastructure is evolving toward a level of maturity that will allow it to successfully change NASA's existing IT environment into a seamless and truly integrated IT architecture. NASA recognizes that effectively and efficiently creating, researching, managing, preserving, protecting, and disseminating the information required to achieve the objectives of space exploration, as well as other NASA missions, is vital to mission success.

The nature of NASA's program implementation model requires extensive cross-Center collaboration which is vital to the planning, design, and development of mission-related capabilities and technology in the future. NASA, therefore, requires a seamless technical IT infrastructure to ensure interoperability both within programs and across Centers and facilities.

The ACES contract (hereafter referred to as "the Contract") will develop a long-term outsourcing arrangement with the commercial sector to provide and manage the vast majority of NASA's personal computing hardware, Agency standard software, mobile IT services, peripherals and accessories, associated end-user services, and supporting infrastructure.

NASA considers its end-user computing assets vital to its continuing success as the world leader in aeronautics, space exploration, and scientific research. NASA personnel use IT to support NASA's core business, scientific, research, and computational activities. It is imperative that the commercial sector deliver cost-effective IT services that meet NASA mission and program needs while achieving efficiency and high level customer satisfaction.

Within this framework, the task of the ACES Contractor (hereafter referred to as "the Contractor") is to provide, manage, secure, and maintain IT services that meet the requirements as defined in this Performance Work Statement (PWS) and the I^3P Cross Functional Performance Work Statement (CF PWS) (Addendum 1).

The Contractor shall: (a) install, operate, and maintain hardware, software, and services and (b) plan, design, develop or acquire, integrate, test, upgrade, and implement new systems or enhancements to existing systems for the following services:

a. Contract Management: General contract management; financial management; service asset and configuration management; contract phase-in/implementation management; safety, health, and environmental management; quality assurance and management; IT Infrastructure Integration Program (I^3P) program integration; contract administration; technology infusion and transformation; records management; and Service Level Agreement (SLA) terms and conditions.
b. General Services: Delivery of comprehensive, end-to-end computing services and back-office infrastructure support, including Tier 2/3 service desk support; Support Levels;

RELEASED - Printed documents may be obsolete; validate prior to use.

ACES Product Catalog services; software right to use; technology refresh; consumables; performance metrics reporting tool; developmental test laboratory; temporary seats; support for telecommuters, travelers, and off-site end-users; return to service surcharge; wipe and load services; elevated user privileges; support for special events; Enhanced Support Services; early seat refresh; data center services; software licensing continuation; other general services; Customer Relationship Management and outreach; response to information and audit requests; support for Federal initiatives; and software refresh portal.

c. Base Services: E-mail and collaborative calendaring services; Active Directory services; loaner pool management; print queue infrastructure management; security management, including IT security, Data At Rest services, physical security, emergency management, and emergency preparedness and response; software license management; Instant Messaging services; and two-factor user authentication token distribution.

d. Seat Services: Computing seats, Cellular seats, the Pager seat, Network Peripheral seats, and the Virtual Team Service (VTS) seat.

The Contract will be performed at the sites listed in Table 1.1-1, *ACES Performance Sites*. Additional performance sites may be identified throughout Contract execution.

Table 1.1-1. ACES Performance Sites

Ames Research Center (ARC)
Dryden Flight Research Center (DFRC)
Dryden Aircraft Operations Facility (DAOF)
Glenn Research Center Main Campus (GRC)
GRC - Plumbrook Facility
Goddard Space Flight Center Main Campus (GSFC)
GSFC – Wallops Flight Facility (WFF)
GSFC - White Sands Complex (WSC)
GSFC - Independent Verification and Validation Facility (IV&V)
GSFC - Goddard Institute for Space Studies (GISS)
Headquarters Main Campus (HQ)
HQ – JPL NASA Management Office
Jet Propulsion Laboratory (JPL) (Multi-Functional Device (MFD) seats and VTS seats only)
Johnson Space Center Main Campus (JSC)
JSC - White Sands Test Facility (WSTF)
JSC - El Paso Forward Operating Location
JSC – White Sands Space Harbor
Kennedy Space Center Main Campus (KSC)
KSC – Vandenberg Air Force Base (VAFB)
KSC – Transoceanic Abort Landing (TAL) Sites
Langley Research Center (LaRC)
Marshall Space Flight Center Main Campus (MSFC)
MSFC - Michoud Assembly Facility (MAF)
MSFC - National Space Science & Technology Center (NSSTC)

RELEASED - Printed documents may be obsolete; validate prior to use.

NASA Shared Services Center (NSSC)
Stennis Space Center (SSC)

Hereafter throughout the RFP, "Center(s)" will refer to NASA Center(s) and associated facilities.

1.2 GOALS AND OBJECTIVES

To guide tactical decisions and planning now and in the future, the NASA Chief Information Officer (CIO) has established the following principles:

a. **MISSION ENABLING**: IT at NASA serves to enable NASA's mission.
b. **INTEGRATED**: NASA will implement IT that enables integration of business (mission) processes and information across organizational boundaries.
c. **EFFICIENT**: NASA will implement IT to achieve efficiencies and ensure that IT is efficiently implemented.
d. **SECURE**: NASA will implement and sustain secure IT solutions.

Using these four principles as guidance, NASA is pursuing a strategy intended to:

e. Clearly define that the CIO shall provide reliable and efficient IT infrastructure services.
f. Standardize and consolidate infrastructure to provide end-to-end visibility, improving security, reducing cost, and enabling collaboration.

In direct support of these key principles and strategy, the following goals and objectives are established for the Contract:

Goal 1: Consolidate the provisioning of end-user services across all Centers using a single Agency solution

Objectives:

a. Achieve operational efficiencies through standardized hardware and software solutions.
b. Improve service and end-user experience by providing standardized service delivery across all Centers.
c. Increase insight into NASA's IT assets.
d. Leverage economies of scale to obtain a lower overall cost on a per capita basis.

Goal 2: **Ensure NASA's mission is enabled by the Agency end-user solution**

Objectives:

a. Provide a sufficiently flexible approach to meet the diverse needs of NASA's mission.
b. Serve as a mission enabler by appropriately infusing emerging technology and transforming end-user service delivery as NASA's mission evolves.
c. Enable cross-Center collaboration.

RELEASED - Printed documents may be obsolete; validate prior to use.

Goal 3: **Improve NASA's IT security posture**

Objectives:

a. Become the single provider of IT Security solutions within the ACES scope for all end-user systems across the Agency.
b. Provide a standardized, coordinated, and rapid response to IT security issues.
c. Implement consistent IT security on services.
d. Secure systems in a manner that enables NASA's mission.

Goal 4: Improve the management of NASA's IT infrastructure

Objectives:

a. Provide a consolidated interface for end-user services in support of NASA IT Governance.
b. Operate and maintain the NASA enterprise end-user services for all users.
c. Align service delivery with Information Technology Infrastructure Library (ITIL® Version 3.0).
d. Improve support for Federal Government initiatives (e.g., greening and cloud computing)

Goal 5: Enable a mechanism for transformation of NASA's end-user services in support of emerging mission requirements

Objectives:

a. Enable infusion of new technologies across the Agency through partnership between the Government and the Contractor.
b. Assist end-users with the adoption of new technologies that enable NASA's mission while minimizing adverse impacts.
c. Infuse new technology while maintaining cost efficiencies.
d. Facilitate the Agency's end-user services transformation through application of Government and industry best practices.

1.3 CHARACTERISTICS OF SUCCESS

The following characteristics are representative indicators of successful attainment of the above Goals and Objectives:

a. Seamless integration between ACES operations and the other I^3P contracts is achieved.
b. ACES demonstrates an integrated, streamlined support of the Agency and Center governance model and processes.
c. Participation in ACES grows so that maximum participation is achieved.

RELEASED - Printed documents may be obsolete; validate prior to use.

d. ACES is routinely cited by Government and industry as a model for high quality of service and cost containment.
e. Demonstration of improved ACES services at a per capita decreased cost on an annual basis.
f. NASA mission organizations consistently seek out the Contractor to partner with in meeting their IT infrastructure service needs.
g. The ACES configuration control data is an authoritative source for configuration and asset management across the Agency because it is accurate and updated in a timely manner.
h. Repeated achievement of indicators reflecting a strong IT security posture in IT infrastructure services. Examples include:
    - Systems are consistently patched.
    - The number of IT security Incidents associated with ACES systems consistently meets the Agency metric.
    - Results from external reviews (Office of Management and Budget (OMB)/General Services Administration (GSA) report cards, third-party audits, etc.) are consistently positive in the areas associated with ACES services.
    - Seamless integration of ACES operations and the NASA Security Operations Center (SOC) is achieved.
    - Certification and Accreditation is achieved on all ACES systems with effective management of near zero Plan of Action and Milestones (POA&M) items.
    - A contract management structure exists that supports infusion of emerging technologies in ACES services, anticipates changing mission requirements, and implements robust and flexible change management.
i. Consistently high Customer Satisfaction with ACES services that enable end-users to meet mission requirements.

1.4 GOVERNMENT RETAINED AUTHORITIES

The Government will retain a set of key authorities that encompass the overall service strategy and service design related to end-user services. The Government will also retain authority for all demand management, governance, and approval functions associated with ACES.

General information about responsibilities of the ACES Project Office is provided in Addendum 1, *CF PWS*. At the NASA Office of the Chief Information Officer (NASA OCIO, hereafter known as the OCIO) level, the End-user Services Project Executive will provide the overall project strategy for ACES. The ACES Project Office located at the NSSC and led by the Government ACES Project Manager (GAPM) will be responsible for oversight of ACES operations. Management of the Contract will be carried out by the ACES Contracting Officer (CO) and ACES Contracting Officer's Technical Representative (COTR). In support of the ACES COTR's responsibilities, ACES Center Technical Monitors (CTMs) may be appointed to provide local Center-level oversight if required.

Evolving Federal, Agency, and Center policies, standards, and regulations shall be accommodated in the Contractor's management, technical, and cost approach.

RELEASED - Printed documents may be obsolete; validate prior to use.

In support of the Government's retained authorities, the Contractor shall review proposed changes to such things as Agency and Center IT policies, architectures, standards, and procedures and recommend additions, modifications, and deletions as needed to ensure conformity with the Contract. The Contractor shall advise the Agency of any adverse impacts to stability, cost, architecture, interoperability, compatibility, or service and recommend mitigation strategies. The Contractor shall notify the GAPM of any issues caused by proposed changes to Agency and Center IT policies, architectures, standards, and procedures during the informal or formal review cycles.

To assure maintenance of the NASA IT architectural configuration, the Contractor shall follow the process set forth in NASA Policy Directive (NPD) 2800.1*x*, *Managing Information Technology*, and associated NASA Procedural Requirements (NPRs), which are available in the NASA Online Directives Information System (NODIS). The Contractor shall bring recommendations for changes to the NASA IT architecture and standards to the attention of the GAPM. The GAPM is responsible for ensuring that the review and approval process is conducted in compliance with NPD 2800.1*x*. The Contractor shall support the GAPM when presenting project issues and resolutions to the OCIO or other Agency organizations. This support shall include such things as travel to meetings, video teleconferences, voice teleconferences, and the development of support documentation.

The Contractor shall ensure compliance with all relevant NASA standards and policies. The Contractor shall continuously assess the Government's operational needs in relation to all ACES services and actively participate in the informal and formal reviews of the NASA standards and policies. The Contractor shall provide advance notification of changes to the Government for review and approval prior to deployment of new technologies to the NASA end-user community.

All Contractor-developed processes and procedures necessary for the execution of Contract service delivery requirements and compliance with NASA standards and policies shall be provided to the Government upon request, subject to any limitations contained in FAR 52.227-14, *Rights in Data*.

The Contractor shall baseline the core components of ACES seats at the level identified in the most current version of NASA-STD-2805*x*, *Minimum Hardware Configurations*, or Addendum 3, *Minimum Hardware Requirements*, and shall not reduce the core components below the baseline for the remainder of the Contract. On subsequent NASA-STD-2805*x* or Addendum 3 revisions, if the Contractor enhances one or more of the core components, the enhancement shall become the new baseline for those components on the future revisions. (Note: The core components are defined as processor; random access memory (RAM); hard drive capacity; video card memory; optical drive; removable media capacity; monitor type, size, and resolution; and, if applicable, the device itself.)

Each Center local Configuration Control Board (CCB) will include a non-voting Contractor's representative. Functions of the local CCB include approving proposed changes to local architectures and standards to ensure consistency with Agency interoperability and compatibility standards.

RELEASED - Printed documents may be obsolete; validate prior to use.

2.0 CONTRACT MANAGEMENT

2.1 GENERAL CONTRACT MANAGEMENT

The Contractor shall devise an overall management approach and the activities necessary to perform the core functions required under the Contract, in accordance with Attachment I-2, *Data Procurement Document* (DPD), *Data Requirements Description* (DRD) MA-01, *Management Plan*.

2.2 FINANCIAL MANAGEMENT

The Contractor shall perform all business and financial functions necessary to fulfill the requirements of the Contract and integrate these functions across all areas of performance. The Contractor shall provide ongoing business analysis and respond to requests and inquiries from the Government relating to budget. In performing these functions, the Contractor shall:

a. Implement and maintain a financial management system that interfaces with the NASA Enterprise Service Request System (ESRS) and ACES Product Catalog (APC) and allows for invoice reconciliation.
b. Present monthly invoices in accordance with the invoicing clauses of the Contract. The monthly invoices shall include organizational codes as defined by the Agency and Center.
c. Provide documentation to the GAPM that appropriate tax exemptions have been applied for as related to the applicable Centers and/or facilities.
d. Provide financial and budget information maintained by the Contractor for use by the Government for budgeting purposes and business case analyses (e.g., Program, Planning, Budget and Execution, and OMB Exhibit 300).
e. Employ an approach that allows invoicing to be customized for each Center. In addition, this approach shall provide the ability to share Work Breakdown Structures for invoice segregation by Centers carrying appropriate discounts, allowances, and billing methodology.

2.3 SERVICE ASSET AND CONFIGURATION MANAGEMENT

The Contractor shall devise an approach and the activities necessary to perform property management functions required under the Contract, in accordance with Attachment I-2, *DPD*, DRD MA-02, *Property Management Plan*. The Contractor shall perform service asset and configuration management functions, in accordance with NPD 4200.1*x*, *Equipment Management*, and NPR 4200.1*x*, *NASA Equipment Management Procedural Requirements*, in coordination with local NASA property management officials. The Contractor shall:

a. Assume the current inventory of property listed in Attachment I-11, *List of Government Furnished Property*, and provide property management of these items.
b. Utilize the NASA Plant, Property, and Equipment (PP&E) Web-based system N-PROP to track, manage, and maintain Government Furnished Property. (Note: The N-PROP

RELEASED - Printed documents may be obsolete; validate prior to use.

application will not feed the Government-provided configuration management database (CMDB).)

c. Identify excess and obsolete out-of-service Contractor-owned service assets and configuration items and perform data removal (i.e., sanitization) prior to excess, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-1), National Institute of Standards and Technology (NIST) Special Publication (SP) 800-88, *Guidelines for Media Sanitization*, and NASA IT Security Standard Operating Procedure (ITS-SOP) ITS-SOP-0035, *Digital Media Sanitization*, and initiate disposal, in accordance with Agency guidelines, policies, directives, and local statutes.
d. Utilize the existing property tags permanently affixed to all existing assets. Utilize Government-provided NASA Equipment Control Number (ECN) tags and decals for acquired or procured equipment when title is transferred to the Government.
e. Ensure that facilities used for storage of hardware, software, and other associated equipment include adequate protection and security for all items to which the Government has or will obtain title, whether Government-provided or Contractor-provided storage facilities are used.

2.3.1 Configuration Item/Resource Tracking

The Contractor shall maintain configuration control for the ACES-managed/provided environment, including the supporting infrastructure. The Contractor shall use the Government-provided CMDB to identify, maintain, track, and report all ACES-managed configuration items, including Government Furnished Equipment (GFE). This report shall provide data that is sortable by each Center. The Contractor shall update the CMDB with current information after receiving, installing, refreshing, excessing, or moving items, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SACM-3). The Government-provided CMDB is an integral database contained within the Remedy by BMC system that will be used by the ACES, Enterprise Applications Services Technologies (EAST), NASA Enterprise Data Center (NEDC), NASA Integrated Communications Services (NICS), Web Enterprise Service Technologies (WEST), and Enterprise Service Desk (ESD) contracts, as reflected in Addendum 1, *CF PWS*. The Government will retain full access rights to all data in the system. Up to ten (10) Agency Remedy System Floating User Licenses will be provided as Government Furnished Service. If additional licenses are required, it is the Contractor's responsibility to provision them. Information to be tracked includes:

a. Current hardware configuration.
b. System configuration and software versions for all ACES-provided hardware and software at the seat level, to include augmentations.
c. Service Options.
d. APC items ordered for the seat. (See Section 3.3, *ACES Product Catalog (APC) Services*.)
e. Machine name.
f. Media Access Control (MAC) address(es).
g. End-user data profile (including username, NASA organization code, phone number, and building and room location information for the device).

RELEASED - Printed documents may be obsolete; validate prior to use.

h. Configuration item in-service date and unique interface point to the network ID (e.g., jack number).
i. System administrator name (for seats managed through ACES Enhanced Support Services). (See Section 3.15, *Enhanced Support Services*.)
j. Projected hardware technology refresh date. (See Section 3.5, *Technology Refresh*.)
k. Current special status levels (e.g., critical uplift, security uplift, and configuration freeze). (See Section 3.1.1, *Priority Service Support*; Attachment I-23, *Glossary of Terms*; and Section 2.3.2, *Configuration Freeze*, respectively.)

The Contractor shall create new and maintain existing system architecture and as-built diagrams for all ACES-managed support Infrastructure (e.g., NASA Operational Messaging and Directory (NOMAD) and NASA Consolidated Active Directory (NCAD)), in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Targets SACM-1 and SACM-2).

2.3.2 Configuration Freeze

Due to mission, business, or other special operations, there will be times when Contractor access to specific systems and areas will be restricted. These restrictions may prevent the Contractor from performing routine services (e.g., preventative maintenance, conducting planned outages, and implementing software and/or hardware configuration changes); however, Service Level Agreements shall be maintained and corrective maintenance performed as required. These restrictions, regardless of duration and frequency, will not entitle the Contractor to any price adjustment. Each Center will have unique configuration freeze requirements. To meet these requirements, the Contractor shall:

a. Coordinate configuration freezes with the GAPM or designee and the affected ACES CTMs, and notify the GAPM or designee and the affected ACES CTMs of configuration freezes, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SACM-4).
b. Coordinate physical access, when necessary (i.e., corrective maintenance), to the affected systems and areas with the affected ACES CTMs, the requesting end-user, and/or applicable organization.
c. Track the configuration requirements to the freeze level and report freeze occurrences and duration to the affected ACES CTMs.
d. Ensure all ACES services are coordinated with each Center-specific configuration freeze requirement.

2.3.2.1 Scheduled Outages

A scheduled outage is defined as any planned activity that impacts the end-user's ability to access ACES services. A scheduled outage is considered downtime if all affected end-users were not notified at least three (3) days in advance. Unless directed by the Government to conduct maintenance or testing, an outage during Prime Time hours, defined as the hours between 6:00 a.m. and 6:00 p.m., local time, excluding Federal Holidays and weekends, shall be counted as downtime.

RELEASED - Printed documents may be obsolete; validate prior to use.

The Contractor shall accurately communicate to all affected NASA end-users outage information relating to ACES activities that impact Agency IT services via the ESD and in accordance with established ESD processes. The Contractor shall notify affected end-users of scheduled outages in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-2), and unscheduled outages as soon as practicable.

The Contractor shall include as part of Attachment I-2, *DPD*, DRD MA-01, *Management Plan*, an ACES Outage Communications Approach. The Approach shall address and include:

a. Outage Scope—e.g., Agency/Center, type of outage, duration, and severity.
b. Outage Participant Roles and Responsibilities—Contractor, ACES COTR, ACES CTMs, and affected end-users.
c. Scheduling Requirements—Prior notification, repeat notifications, and closure/resolution notification.
d. Types of Customer Notification—e.g., e-mail, voicemail, in person, written memoranda, and posted bulletins.
e. Outage process flow from original outage identification to final outage closure message.
f. Ensure that all ACES services are coordinated with each Center-specific configuration freeze requirement.

The Contractor shall obtain approval from the ACES COTR or designee for any scheduled outage, coordinate the outage with the ACES CTM, and notify all affected end-users through the ESD. Unless the ACES COTR or designee grants a waiver prior to the outage, any planned Agency-wide maintenance activities shall occur outside of Prime Time hours.

2.4 CONTRACT PHASE-IN/IMPLEMENTATION MANAGEMENT

The Contractor shall detail its planned Contract phase-in and implementation approach in its Phase-In Plan, prepared in accordance with Attachment I-2, *DPD*, DRD MA-03, *Phase-In Plan*. In conjunction with the phase-in, consistent with Section 5.2 of Addendum 1, *CF PWS*, the Contractor shall perform an initial update of the NASA Enterprise Architecture Repository (NEAR) in accordance with Attachment I-2, *DPD*, DRD CF-13, *I^3P NASA Enterprise Service Catalog Data Requirements*, and DRD CF-14, *I^3P Problem Documentation*.

2.5 SAFETY, HEALTH, AND ENVIRONMENTAL MANAGEMENT

The Contractor shall provide, implement, and maintain a comprehensive Attachment I-18, *Safety and Health Plan*, in accordance with Attachment I-2, *DPD*, DRD SA-01, *Safety and Health Plan*, and NASA FAR Supplement (NFS) 1852.223-70, *Safety and Health*, and establish and implement an industrial safety, occupational health, and environmental program that (a) prevents employee fatalities, (b) reduces the number of Safety, Health, and Environmental Incidents, (c) reduces the severity of employee injuries and illnesses, and (d) protects property, equipment, and the environment through the ongoing planning, implementation, integration, and management control of these programs. The Safety and Health Plan shall address each of the following

RELEASED - Printed documents may be obsolete; validate prior to use.

Agency Safety, Health, and Environmental Management core program requirements in detail that are applicable to the contracted effort:

a. Management leadership and employee involvement
b. System and worksite analysis
c. Hazard prevention and control
d. Safety, health, and environmental training
e. Environment compliance

The Contractor shall devise an approach and the activities necessary to dispose of toner and equipment parts in ways that meet Federal Government and NASA requirements, in accordance with Attachment I-2, *DPD*, DRD IT-02, *Toner and Waste Disposal Plan.* The Contractor shall prepare and submit reports used to complete the annual report to NASA Headquarters on affirmative procurement, waste reduction, energy efficient product procurement, and ozone depleting substances, in accordance with Attachment I-2, *DPD*, DRD MA-08, *Environmental and Energy Consuming Product Compliance Reports*.

For each Center where work will be performed, the Contractor shall work closely with the ACES CTM to coordinate with each Center's Safety and Mission Assurance Directorate/Office to ensure compliance with that Center's specific safety, health, and environmental requirements. The Contractor shall submit mishaps and safety statistics reports, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-3), directly to the NASA Incident Reporting Information System (IRIS) or use Center-specific forms provided by each Center's Safety and Mission Assurance Directorate/Office, or their electronic equivalent, to report mishaps and related information required to produce the safety metrics.

The Contractor shall ensure that all work, including that which may require exposure to asbestos, is performed in accordance with all Federal, State, Local, and Center-specific safety, health, environment, and fire protection/prevention regulations and procedures, as well as the Contractor's Attachment I-18, *Safety and Health Plan,* and is performed by personnel trained for such activities. The Contractor shall also provide safety and protective equipment (e.g., asbestos protection clothing and respiratory protection) as required.

2.6 QUALITY ASSURANCE AND MANAGEMENT

The Contractor shall detail its planned quality controls in Attachment I-19, *Management Plan*, prepared in accordance with Attachment I-2, *DPD*, DRD MA-01, *Management Plan*. If the Contractor adheres to or uses Center procedures, the Contractor shall support the applicable Center's registration process for these procedures.

2.7 I^3P PROGRAM INTEGRATION

The Contract is part of the NASA OCIO's multi-sourced I^3P acquisition strategy, which spans across the following services: Network Communications, Data Center, End-user Services, Enterprise Applications, and Web Services.

RELEASED - Printed documents may be obsolete; validate prior to use.

Success of NASA's I^{3}P is dependent upon the ability of I^{3}P Contractors to work within, and across, independent service contracts (I^{3}P and non- I^{3}P) to ensure a seamless IT service delivery environment and capability across the Agency. To better enable this environment, the Contractor shall, at a minimum, implement Associate Contractor Agreements with I^{3}P Contractors and other contractors (e.g., other Agency and Center contractors) to ensure continuity of service and provide transparency to the NASA end-users in accordance with defined Service Level Agreements.

The Contractor shall meet the requirements stated in Addendum 1, *CF PWS*. In addition, consistent with the ITIL framework and NPR 7120.7, *NASA IT and Institutional Infrastructure Program and Project Management Requirements*, the Contractor shall host Process Integration Workshops to develop a shared understanding of how the Contractor needs to work with the other I3P stakeholders. Further, the following integration requirements shall apply.

2.7.1 NASA Enterprise Data Center (NEDC)

This section identifies the ACES integration requirements with the NEDC Contractor. The NEDC will provide enterprise data center services to NASA and NASA Contractors.

There are no specific integration requirements with the NEDC.

2.7.2 NASA Integrated Communications Services (NICS)

This section identifies the ACES integration requirements with the NICS Contractor. The NICS contract will consolidate Local Area Network (LAN) and Wide Area Network (WAN) services for the Agency. No cost shall be included in the ACES proposal for these services.

The Contractor shall obtain telecommunications services from NICS or other contractors, as well as meet the following requirements:

a. Obtain all WAN services required to support provisioning of ACES services from NICS.
b. Obtain all LAN services required to support ACES from NICS, when NICS is the service provider. For Centers that have a contractor other than NICS provisioning LAN services, the Contractor shall obtain those services from that contractor and coordinate such services with NICS.
c. Obtain Internet Protocol (IP) address space and Domain Name System (DNS) services from NICS following NICS-provided processes.
d. Obtain Network Time Protocol services from NICS when NICS is the service provider for these services.
e. Obtain all communications services required to support ACES from NICS when NICS is the service provider for these services.
f. Coordinate with NICS for integrated ACES/communications services when NICS is the service provider for these communications services.

RELEASED - Printed documents may be obsolete; validate prior to use.

2.7.3 Enterprise Applications Service Technologies (EAST)

This section identifies the ACES integration requirements with the EAST Contractor. The EAST contract includes support of existing operational applications and systems, as well as improvements and additions to existing capabilities.

The Contractor shall meet the following requirements:

a. Coordinate with EAST to obtain the distribution package for EAST-managed desktop software.
b. Validate EAST software distribution packages in the ACES environment for successful deployment. If validation is unsuccessful, the Contractor shall notify the EAST Contractor.
c. Deploy EAST software distribution packages to end-user client desktops.
d. Obtain EAST-managed end-user accounts using EAST-defined processes and procedures.
e. Coordinate with EAST to ensure proper provisioning of two-factor user authentication tokens and certificates prior to distribution.

2.7.4 Web Enterprise Service Technologies (WEST)

This section identifies the ACES integration requirements with the WEST Contractor. The WEST contract includes public Web site hosting, Web content management and integration, and support of other Web site services.

The Contractor shall meet the following requirements:

a. Obtain all WEST within-scope Web services required to support provisioning of ACES services from WEST.

2.7.5 Enterprise Service Desk (ESD)

This section identifies the ACES integration requirements with the ESD Contractor. The ESD contract provides Tier 0/1 Service Desk support in response to reported I^3P Incidents and Problems and provides an integrated service ordering capability for all I^3P services.

The Contractor shall meet the following requirements:

a. Provide Tier 2/3 Service Desk support in response to ESD reported Incidents and Problems and Service Requests originating from the ESD or the ESRS.
b. For any remote desktop implementation by the Contractor, allow read-only access by the ESD to allow the ESD to ‘read’ configuration information from the end-user’s system that may help the ESD to determine at the Tier 1 Service Desk level where a Problem exists, while the Contractor maintains control of the system.

RELEASED - Printed documents may be obsolete; validate prior to use.

c. Provide a mechanism to accept a warm hand-off (i.e., the ability to accept a real-time transferred call) from the ESD to continue the original call at the ACES Tier 2 support level.
d. Coordinate with the ESD to ensure that APC-related administrative and funding approvals are accomplished and orders for all ACES services (including General Services, Base Services, and Seat Services) are placed electronically through the ESRS in accordance with standard ESD and ESRS processes.
e. Work with the ESD to develop and provide step-by-step ACES service ordering instructions (e.g., for requesting a new seat, seat move, seat modification, seat organization or end-user change, early hardware refresh, seat desubscription (i.e., removal), and conversion of a seat from one seat type to another). (See Section 3.0, *General Services*, and Section 5.0, *Seat Services*, for descriptions of these services.)

2.8 CONTRACT ADMINISTRATION

In performance of contract administration functions, the Contractor shall:

a. Detail in Attachment I-19, *Management Plan*, how the Contractor will communicate with the Government, other contractors, customers, and end-users, in accordance with Attachment I-2, *DPD*, DRD MA-01, *Management Plan*.
b. Provide primary and secondary points of contact with contractual obligation authority to perform all contract administration functions and activities required for this Contract. These points of contact shall have access to all contract administration data and information related to contract performance.
c. Provide online access to contract administration information and other required data to the CO and other designated personnel, in accordance with NPD 1440.6*x*, *NASA Records Management*.
d. Provide and maintain a listing of all Contractor and subcontractor employees working under the Contract and their designated locations in accordance with Attachment I-2, *DPD*, DRD MA-04, *Employee Listing*.
e. Generate, edit, merge, maintain, and distribute documentation related to the performance of this Contract to include documents, storage media, and records. Submit all deliverables required on the dates specified in Attachment I-2, *DPD*, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-44).

2.8.1 Program Coordination Support

The Contractor shall provide technical and managerial support and input to Agency- and Center-level program boards, panels, reviews, teams, working groups, and various ad-hoc meetings. Some meetings require the Contractor to give formal briefings, while others only require attendance and participation. The Contractor shall support these meetings and reviews with the level of technical and managerial participation sufficient to meet the needs of the meeting or review.

Examples include, but are not limited to:

RELEASED - Printed documents may be obsolete; validate prior to use.

a. Program Milestone Reviews (e.g., I^3P architecture review).
b. I^3P Service Integration Meetings.
c. Program Documentation Reviews.
d. Working Groups (e.g., end-user work groups).
e. Outage Reviews.
f. Anomaly/Investigation Reviews.
g. ACES Management and Contract Reviews.
h. ACES Monthly Technical Operations Reviews (Agency and ACES CTM Status meetings).
i. ACES CO/COTR Meetings.
j. Major Move Reviews and Meetings.

2.9 TECHNOLOGY INFUSION AND TRANSFORMATION

The Contractor shall perform technology infusion and transformation management to ensure that functions and services are effectively planned, managed, and integrated with the NASA mission, program, enterprise architecture, and business needs. For significant technology infusion/transformation activities (those which would have a noticeable impact on end-user service delivery or operations), the Contractor shall submit a Technology Infusion/Transformation Plan in accordance with Section I, 3.5, *Technology Infusion/Transformation Planning*.

2.10 RECORDS MANAGEMENT

The Contractor shall ensure that accurate and complete records (including vital records) of Government business are maintained in accordance with Federal requirements and NPR 1441.1*x*, *NASA Records Retention Schedules,* and are segregated from company-owned records and from non-record materials. The term "records" is defined in 44 U.S.C. 3301 as:

> "all books, papers, maps, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of data in them. Library and museum material made or acquired and preserved solely for reference or exhibition purposes, extra copies of documents preserved only for convenience of reference, and stocks of publications and of processed documents are not included."

All data created for Government use are Federal records subject to the provisions of 44 U.S.C. Chapters 21, 29, 31, and 33; the Freedom of Information Act (FOIA), as amended; and the Privacy Act, and must be managed and scheduled for disposition as provided in 36 CFR XII, Subchapter B.

The Contractor shall meet the following specific records management requirements:

RELEASED - Printed documents may be obsolete; validate prior to use.

a. Maintain a records management program and submit a Records Management Program Plan in accordance with Attachment I-2, *DPD*, DRD MA-05, *Records Management Program Plan*.
b. Provide NASA or authorized representatives with access to all Government records. The Government reserves the right to inspect, audit, and copy record holdings.
c. Submit an annual Inventory of Records Holdings to the GAPM with a copy to the Center records manager, unless otherwise specified to be submitted to another party, in accordance with Attachment I-2, *DPD*, DRD MA-06, *Inventory of Records Holdings*.
d. Manage legacy Federal records (data created for Government use and delivered to or falling under the legal control of the Government) inherited from previous contracts.
e. At the completion or termination of the Contract, leave all Government-owned records at the Center for which the data were generated, and deliver or disposition the records as directed by the appropriate Center records manager.
    i. To enable planning for the final records disposition, the Contractor shall deliver to the appropriate Center records manager, within ninety (90) days prior to Contract completion or termination, a final Inventory of Records Holdings, in accordance with Attachment I-2, *DPD*, DRD MA-06, *Inventory of Records Holdings*.
    ii. Delivery of records shall include sufficient technical documentation of all electronic records to permit Government access and use.

2.11 SERVICE LEVEL AGREEMENT TERMS AND CONDITIONS

The Contractor shall adhere to the following Terms and Conditions during performance of the Contract:

a. Funds retained as part of the Retainage Pool process (see Section I, 2.9, *Retainage Pools and Performance Metrics*) are not deemed or construed to be liquidated damages or a sole and exclusive remedy or in derogation of any other rights and remedies the Government has available under the Contract.
b. The Contractor shall cooperate with other I^3P Contractors and other contractors in a coordinated and collaborative manner as needed to achieve service level targets, regardless of whether the reason for a service level failure was caused by the Contractor.
c. The Government will provide at least ninety (90) days written notice prior to the date that additions, deletions, or changes are made to service levels.
d. New or changed service levels will be mutually agreed upon by both the Government and the Contractor.
e. Service levels may be based on Government requirements, measurement data collected by the Contractor, and/or industry standards.
f. If multiple metrics are missed due to a single Incident, the Government will have the right to select which one of the missed metrics will apply.
g. If the Contractor fails to meet any service levels, the Contractor shall provide the Government with a written plan for improving performance within thirty (30) days of the failure. The Contractor's plan shall be subject to the Government's approval.

RELEASED - Printed documents may be obsolete; validate prior to use.

h. The Contractor shall specify and provide the appropriate measurement tools to collect and accurately reflect the performance data needed to determine service level performance.
i. The Contractor shall not be responsible for a failure to meet a service level solely to the extent that such failure is directly attributable to: the Government's errors, omissions, or breaches of contract; infringements of proprietary rights; willful misconduct or violations of law by the Government or the Government's Contractor; Government approved resource reductions where such reduction was the cause and the Contractor notified the Government in writing that reduction would cause such failure; or services performed during the execution of a Disaster Recovery Plan.
j. Service levels shall be measured on a monthly basis, unless otherwise specified.
k. Service level reports shall be available online and by the fifth business day of the following month.

RELEASED - Printed documents may be obsolete; validate prior to use.

3.0 GENERAL SERVICES

The Contractor shall provide the following general services in support of the management and technical execution of the Contract.

3.1 TIER 2/3 SERVICE DESK SUPPORT

The Contractor shall provide Tier 2/3 Service Desk support in response to reported Incidents, Problems, and Service Requests originating from the ESD or the ESRS. The Contractor shall:

a. Provide Tier 2 functionality twenty-four (24) hours a day, seven (7) days a week (24X7), and integrate it with the ESD.
b. Provide Tier 2 Cellular functionality 24X7 to manage the voice and data communication environment for ACES.
c. Utilize an Incident Management System as defined in NASA Contract NNX05AA01C, Change Order No. 28, Attachment J-21, *Enterprise Service Desk and Enterprise Service Request System Performance Work Statement*, and in accordance with Addendum 1, *CF PWS*, for automated logging, categorization, prioritization, and tracking of end-user Incidents and Problems. If a Contractor-supplied Incident Management system is used, the Contractor shall integrate it with the Government-furnished Remedy system in accordance with Addendum 1, *CF PWS*.
d. Document all Incidents (including IT security Incidents) accurately and completely to support management, resolution, and reporting of Incidents and Problems.
e. After receipt of an Incident ticket, respond to the end-user with acknowledgement that the ticket has been received by the Contractor, in accordance with the end-user's selected Return To Service level or the ticket's critical uplift status (see Section 3.1.1, *Priority Service Support*, and Section 5.0, *Seat Services*), as well as Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Targets SD-4, SD-5, and SD-7). The accepted form of acknowledgement shall be a phone call to the end-user and leaving a message if the end-user does not answer. In the case of a priority uplift request (see PWS Section 3.1.1), the Contractor shall provide a response in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-7).
f. Restore full service to the end-user's system in accordance with the end-user's selected Return To Service level or the ticket's critical uplift status (see Section 3.1.1, *Priority Service Support*, and Section 5.0, *Seat Services*), as well as Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Targets IM-2, IM-3, and IM-4).
g. Isolate, escalate, and route calls to Center support and field personnel.
h. Provide processes, criteria, and points of contact (including other services providers and suppliers) necessary for effecting Problem resolution, including but not limited to maintaining escalation contacts and procedures and notification lists and processes.
i. Maintain a knowledge management capability to assist in resolution of Incidents on the first call at the ESD and to identify trends in reported end-user Incidents.
j. Provide temporary replacement ACES seats for out-of-service repairs or security mitigation for either IT security Incidents or to support audits, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-6). The

RELEASED - Printed documents may be obsolete; validate prior to use.

ACES CTM shall be informed of the temporary replacement in the instance of a security mitigation.

k. Generate and report root cause analysis and corrective action plans for Incidents and Problems.

Any remote desktop implementation by the Contractor shall allow read-only access by the ESD to allow the ESD to 'read' configuration information from the end-user's system that may help the ESD to determine at the Tier 1 Service Desk level where a Problem exists, while the Contractor maintains control of the system. This does not preclude the Contractor from granting the ESD more capability, but only requires the read-only access as a minimum requirement.

3.1.1 Priority Service Support

The Contractor shall allow for the number of monthly trouble tickets, aggregated at the Agency level, equivalent to 2 percent of the ACES subscribed seats Agency-wide to be uplifted to priority service. In the event that the Agency's critical uplift tickets are not used in the current month, the unused portion shall not carry forward to the next month. Support for special events shall not be counted against Priority Services Percentages. In the event of a reoccurring Problem or prematurely closed ticket, the Contractor shall automatically elevate the ticket to priority service and shall not include the ticket in the calculation of the 2-percent priority service allocation. The Contractor shall honor a request for priority service whether or not the 2% limit has been exceeded. At the end of the month, the Contractor shall submit to NASA the priority ticket overages and count the overages against the next month's priority services percentage target.

3.2 SUPPORT LEVELS

'Support Level' is defined as the level of system administration and technical support that the Contractor is expected to provide for hardware and software used by end-users under the Contract. The support requirements are divided into three categories: Support Levels 1, 2, and 3, which are defined in Sections 3.2.1, *Support Level 1: ACES-Supported Hardware and Software*; 3.2.2, *Support Level 2: Agency-Provided and Licensed Software*; and 3.2.3, *Support Level 3: Other Hardware and Software*.

3.2.1 Support Level 1: ACES-Supported Hardware and Software

Support Level 1 provides full system administration support. The Contractor shall provide the full scope of services required for ACES-supported hardware and software on ACES-managed/provided seats or systems. ACES-supported hardware and software systems include: Agency standard hardware and software loads (as documented in NASA-STD-2804*x*, *Minimum Interoperability Software Suite*, and NASA-STD-2805*x*, *Minimum Hardware Configurations*) and items defined in Addendum 2, *Standard Load Software*, Tables 1-W, 1-M, 1-L, and 1-U.

3.2.2 Support Level 2: Agency-Provided and Licensed Software

Support Level 2 software includes:

RELEASED - Printed documents may be obsolete; validate prior to use.

a. Software defined in Addendum 2, *Standard Load Software*, Table 3, *Commonly Used, Multi-Platform Software*, that follows the guidelines in this Section.
b. Agency and Center site-licensed software: Any Agency or Center Government-owned site-licensed software whereby licensing is managed by the Contractor.

The Government will identify an Agency technical POC (or, alternatively, individual Centers can identify a technical POC) to the Contractor as a subject matter expert for each software product in this Support Level. In the event an Agency technical POC is not identified and an individual Center has not identified a technical POC, the software will become Support Level 3 for that Center.

Certification and Accreditation (C&A) for Support Level 2 software is performed by the party responsible for the C&A of the system on which the software resides.

Support Level 2 provides assisted system administration support. The Contractor shall provide Level 2 support on ACES-managed/provided seats or systems as defined below:

a. Facilitate resolution of Problems and respond to end-user requests for information and configuration changes by working with the Government identified POC.
b. Install the software during hardware technology refresh and Return To Service desk side visits. If required, the Contractor shall identify the location and make available the appropriate file space to store Agency-provided software.
c. Ensure the availability of the latest licensed version of the software, as identified by the Government-identified technical POC.
d. De-install and re-install any covered software to another seat consistent with move, add, and change provisions for a system (Section 5.1.2, *Requirements for All Computing Seats*).
e. Return the configuration to the previous stable baseline installation within the subscribed Return To Service timeframe when it is determined that the covered software implementation affects the stability or operability of the ACES configuration.

If the Contractor has added Support Level 2 software component(s) to the existing baseline configuration and the updated configuration is stable and interoperable, the updated configuration will be established as the new baseline for that system. If the Contractor subsequently modifies the baseline configuration as part of a normal ACES process, and the configuration becomes unstable due to the Support Level 2 software implementation, the end-user may submit a waiver request. The Contractor shall return the configuration to the established baseline. The Contractor shall document and track the configuration change and the waiver request. If this inability to update the baseline configuration results in the Contractor being unable to meet a Contract requirement, such as an IT security requirement or software upgrade, the Contractor shall contact the ACES COTR or designee for guidance.

RELEASED - Printed documents may be obsolete; validate prior to use.

3.2.3 Support Level 3: Other Hardware and Software

Support Level 3 includes any item not covered as Support Level 1 or 2. The Contractor shall provide Support Level 3 hardware and software via the APC (see Section 3.3, *ACES Product Catalog (APC) Services*) without technical assistance for installation or maintenance. In the event the end-user requires technical assistance, including installation and maintenance support, the Contractor shall provide the service through the APC.

For any seat where an end-user has implemented a change and the Contractor subsequently modifies the configuration as part of a normal ACES process, and the configuration becomes unstable due to the Support Level 3 software implementation, the end-user may submit a waiver request. The Contractor shall return the configuration to the previous stable baseline installation within the subscribed Return To Service timeframe. The Contractor shall document and track the configuration change and the waiver request. If this inability to update the configuration results in the Contractor being unable to meet a Contract requirement, such as an IT security requirement or software upgrade, the Contractor shall contact the ACES COTR or designee for guidance.

In addition to the above, for any seat where it is determined that a Support Level 3 hardware or software change has adversely affected the stability, operability, or performance metrics for the seat or any ACES service, the Contractor shall return the configuration to the standard configuration. A joint decision will be made between the Contractor, end-user, and ACES COTR (or Center designee) on how to proceed. The ACES COTR will involve the appropriate people (including the Center CIO, if needed) to resolve a configuration issue.

3.3 ACES PRODUCT CATALOG (APC) SERVICES

The Contractor shall provide a single, Agency-wide, Web-based catalog of ACES commercially available IT products, available to all NASA personnel, including items specified in the ACES Seat Services (see Section 5.0, *Seat Services*), and associated maintenance services. Examples include printers, non-Standard Load software, second monitors, memory, keyboards, and internal hard drives. The Contractor shall make the APC available and operational on the Contract Implementation date for Wave 1 (see Attachment I-14, *Phase-In Schedule*).

The APC shall be linkable from and shall interface with the ESRS, in accordance with Section 2.7.5, *Enterprise Service Desk (ESD).* Payment for APC purchases shall be made in accordance with FAR 52.212-4, *Contract Terms and Conditions - Commercial Items,* which provides for funding through a Work Breakdown Structure (WBS) number. The APC shall have the capability to accept Government credit card information to complete a purchase transaction.

The Contractor shall offer hardware and software catalog prices that are a fixed percentage discount below the manufacturer's suggested retail price (MSRP). The Government will use the MSRP set by the manufacturer as the baseline source data. The Government reserves the right to direct the Contractor to add or remove items available from the APC. The APC shall include a function that allows the catalog to display the fixed percent discount below MSRP. In the case where a user searches for a product that is available through multiple distributors' catalogs, the

RELEASED - Printed documents may be obsolete; validate prior to use.

catalog shall return the lowest cost item that is in stock from the multiple catalogs based on the OEM part number.

The APC shall provide for end-user consultation, placing orders, order status, issue resolution for disputed orders, receiving and inspection, delivery to customers, installation of products, and returns. Each APC entry shall define what support is included in the APC price. APC items are subject to the Service Level Agreement (SLA) requirements and performance metrics associated with the seat for which they are ordered, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics*. APC items that are installed internal to existing seat hardware shall be considered part of the hardware for the life of the hardware. For APC items that are not associated with any ACES seat and are within the OEM warranty period, an eight (8)-business hour Return To Service (as defined in Section 5.1.6.3.5, *Return To Service*) shall apply.

The Contractor shall provide the ability to generate APC reports on all APC-purchased items sorted by type of asset (e.g., hardware, software, and peripherals). Information in the reports shall include APC purchases, associated unique seat identification, end-user name and organization code, availability for re-utilization, and identification of remaining maintenance/warranty sorted by catalog service type. These reports will be used by the Government to enable the review of buying habits over the life of the Contract, as well as to assist with current and future budgeting.

The Contractor shall provide and maintain a training module that reflects the latest capabilities of the APC. The training module shall include an up-to-date online APC user's guide and the capability to log end-user suggestions, changes, and modifications to the APC, training, and user's guide.

The Contractor shall provide a mechanism for end-users to submit a request for quote for products not found in the APC. For APC requests for quote, the Contractor shall provide a quote response, including price and delivery date, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-9). Upon request from the Government, the Contractor shall offer a quote for expedited delivery.

The Contractor shall deliver all APC items with full retail packaging. The Contractor shall provide a delivery date when the order is approved and shall deliver APC-ordered items, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-8). If the Contractor cannot deliver the item within the required SLA timeframe, the Contractor shall give the customer the option to accept a late delivery, order an alternate item, or cancel the order at no cost to the Government. If the item is not delivered within the required timeframe, the delivery is considered a missed metric.

APC items shall include the Original Equipment Manufacturer (OEM) warranty; when available from the OEM, extended warranty/service shall be offered to the Government as separately priced items. For each product, the Contractor shall include supplier information encompassing manufacturer model numbers and specifications that describe the product or service, and shall detail additional components required to make the product fully functional. The Contractor shall

RELEASED - Printed documents may be obsolete; validate prior to use.

provide the end-user the opportunity to order these components at the same time the product is ordered.

3.3.1 Hardware and Software Types

APC items shall include acquisition and OEM warranty, if available, facilitated by ACES.

The following additional services shall be offered at fixed prices:

Installation
i. Internal hardware installation
ii. External hardware installation
iii. Software installation

Upon delivery to the end-user, if installation was purchased, the installation shall be completed within the timeframe that corresponds to the subscribed Return To Service level.

Maintenance services shall be offered at a percentage of the purchase price for a three (3)-year period. Maintenance is defined as troubleshooting and repair or replacement for hardware and upgrades and patches for software.

3.3.2 X-Build

As part of the APC, the Contractor shall make available other OEMs' product lines not included in the "B" Computing seat (see Section 5.1, *Computing Seats*, for more information). Systems obtained through this mechanism (known as "X-Build" systems) may subscribe to the services listed under the "B" Computing seat.

3.3.3 Volume Discount for APC Items

a. The Contractor shall offer volume discount information as part of the APC services. The Contractor is authorized to use SEWP (Solutions for Enterprise-Wide Procurement) to stock the APC. At a minimum, the Contractor shall:
   i. Identify the APC items/services for which volume discounts are available.
   ii. Provide the quantity or quantity band(s) to which the discount will be applied.
   iii. Identify the price(s) or discount percentages that apply to the specified quantity or quantity band(s).
   iv. Identify the time period in which the volume discount applies.
b. The Contractor shall review APC prices and availability as well as update the volume discount listing at least quarterly and/or upon Government request. The Contractor shall notify the Government within five (5) business days of the completed update.

3.3.4 Price Matching for APC Items

The Contractor shall price match, on a case-by-case basis, items provided in the APC. Verifiable evidence (e.g., Web site, written quote) for an item for which a price match is requested must be

RELEASED - Printed documents may be obsolete; validate prior to use.

available from a nationally known vendor at the time the price match is requested. The Contractor shall effect the price match as a credit on the monthly invoice unless an alternate method is specified by the ACES COTR.

3.3.5 Returns

APC items shall not be delivered to end-users if damage is detected prior to delivery to the end-user. If an APC item is returned to the Contractor within fourteen (14) calendar days of the original delivery date to the end-user, the Contractor shall accept the returned item and provide a full refund to the customer, except under the following conditions:

a. APC software delivered to and subsequently opened or used while in the end-user's possession.
b. An APC item delivered to the end-user and subsequently damaged while in the end-user's possession.

If an item is returned within 14 days or less and is in full working condition, the returned item can be redeployed to another end-user who has ordered the same item.

3.4 SOFTWARE RIGHT TO USE

The Contractor shall grant the right to an ACES end-user to install ACES-provided software on a non-ACES computer (i.e., allow a copy of software to be used on a personally owned computer) with the following limitations:

a. Software provided through ACES Base Services shall be made available as Software Right To Use (RTU) to all end-users.
b. Software provided as part of a Computing seat subscription with the Standard Load Service Option selected shall be made available as Software RTU to the end-user of the corresponding Computing seat.

The Contractor shall develop the Software RTU provisioning process and follow the Government-provided Software RTU approval process. The Contractor shall grant Software RTU under the limitations shown above to the extent that the Contractor is able to obtain such a right from a software publisher and the Contractor and the Government jointly determine that such software shall be eligible for use on a non-ACES computer. The Contractor shall make all RTU supplied software updates available to these end-users, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-10). The Contractor shall develop and provide detailed instructions for installation and usage.

3.5 TECHNOLOGY REFRESH

ACES Computing, Cellular, and Network Peripheral seats have fixed hardware and software technology refresh periods. The Contractor shall refresh seat hardware and software as specified in Section 5.0, *Seat Services*, and shall complete refreshes and Return To Service after start of the refreshes, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics*

RELEASED - Printed documents may be obsolete; validate prior to use.

(SLA Targets SD-11 and SD-12). It is expected that the vast majority of Computing, Cellular, and Network Peripheral seats will be refreshed on or about their regularly scheduled refresh date. If there is a request from the end-user to extend the refresh beyond this date (as documented by an ACES CTM-approved refresh deferment request), the Contractor should contact the ACES COTR to facilitate the refresh. Until the system is refreshed, however, the Contractor shall be responsible for maintaining the equipment.

The Contractor shall provide computer seat hardware/software as specified in current versions of NASA-STD-2804*x* and NASA-STD-2805*x*.

The Government reserves the right to request a change in the Hardware Platform for any seat during refresh by notifying the Contractor within ninety (90) calendar days prior to the scheduled refresh date.

The Contractor shall provide a Technology Refresh Plan in accordance with Attachment I-2, *DPD*, DRD IT-04, *Technology Refresh Plan*.

Prior to the refresh of each ACES seat, the Contractor shall:

a. Survey each end-user to determine unique or unusual refresh requirements.
b. Provide each end-user with a report that identifies all items to be transferred during the refresh.
c. Notify the end-user if there are software or hardware peripherals (e.g., firewire peripherals) that cannot be ported or carried over for use.
d. Identify software items for which end-user needs to provide the media and/or license.
e. Obtain the end-user's sign-off on refresh requirements.
f. Coordinate a date/time window for the refresh.

The day of the refresh the Contractor shall:

a. Meet with the end-user at the agreed to date/time window.
b. Perform backups of all readily available, standardized, and transferable data.
c. Perform the refresh in accordance with the signed-off refresh requirements.
d. Inform the end-user of the Service Options (defined in Section 5.0, *Seat Services*) to which he/she is subscribed (e.g., Return To Service), in accordance with the seat type.
e. Configure and activate the refresh hardware and software, ensure operability, and test Support Level 2 software to ensure functionality, e.g., encryption software and Citrix clients.
f. Replicate backed up end-user data to the refreshed system.
g. Provide the end-user with familiarization training on the new seat, including identification of any new hardware and software.
h. Offer the opportunity for the end-user to test drive the refreshed system.

After the Refresh Process the Contractor shall:

RELEASED - Printed documents may be obsolete; validate prior to use.

a. Retain the end-user data and old system and hard drive(s) for thirty (30) calendar days in order to allow recovery of files that were inadvertently not replicated to the refreshed system (e.g., a PKI profile kept in a non-standard directory).
b. Perform a follow-up action (e.g., visit, customer sign-off, or phone call) to confirm end-user satisfaction.
c. Remove and sanitize replaced equipment in accordance with and as defined in NIST SP 800-88, and NASA ITS-SOP-0035.

If at any point during performing the above steps prior to, during, or after the refresh the end-user does not respond in time for the Contractor to meet refresh metrics, the Contractor shall request further guidance from the ACES CTM.

3.6 CONSUMABLES

Consumables are defined as product parts or supplies (except paper) that are consumed during the operation of the product, require replacement from time to time, and are necessary to provide the functionality of the device. The Contractor shall provide and replace the following consumables:

a. Battery replacements for ACES seats and APC purchases during the support timeframe, as described in Section 3.3, *ACES Product Catalog* (*APC) Services*, when the battery is no longer serviceable.
b. All printer and multi-functional device consumables (except for paper) as part of the peripheral services for all ACES-provided printer and multi-functional devices, as defined in Section 5.4, *Network Peripheral Seats*.
c. Tapes or other media as required for the backup and archiving services for ACES-managed servers.

3.7 PERFORMANCE METRICS REPORTING TOOL

The ACES COTR, with input from the ACES CTMs, will analyze the Contractor's metrics performance results, as reported to the Government in accordance with Attachment I-2, *DPD*, DRD MA-07, *Retainage Pools and Performance Metrics Report*. The Contractor shall make an enterprise Web-based metrics tracking tool available and operational on the Contract Implementation date for Wave 1 (see Attachment I-14, *Phase-In Schedule*). In performing metrics reporting, the Contractor shall:

a. Provide, implement, and maintain an enterprise Web-based metrics tracking tool, including any necessary interfaces to the ESRS to capture, report, summarize, and track all required metrics by Center and/or Agency information. This system shall allow for data to be examined and sorted in a variety of views, such as service being provided, end-user physical location, software installed on system supported, upcoming refresh dates, and infrastructure upgrades that impact end-users.
b. Update data daily, at a minimum, within the Contractor's metrics tracking tool.
c. Provide the Government with access to the Contractor's metrics tracking tool for the purpose of reviewing metrics requirements, conducting ongoing surveillance in

RELEASED - Printed documents may be obsolete; validate prior to use.

accordance with Attachment I-20, *Surveillance Plan*, ascertaining service trends, generating ad hoc data queries, and auditing the Contractor's performance.

d. Post performance metric results on a Government, non-public Web site for review and comment by Government management.

3.8 DEVELOPMENTAL TEST LABORATORY

The Contractor shall provide a laboratory for end-users to test software products on standard ACES-provided systems. If required, the space provided for laboratory capability will be negotiated between the Contractor and the Government. The Developmental Test Laboratory (DTL) shall interface to the NASA production environment enabling full operational testing to take place and reflecting the end-user's operational environment and configuration where the end-user is conducting the test.

The Contractor shall establish DTLs at each Center that are equipped to provide both local (physical) resources as well as remote (virtual) resources in which end-users can install, regression test, and validate their applications. Each DTL shall have one of each platform available for the "M" seat. The Linux, Windows, and MAC operating systems shall support desktop, laptop, and lightweight laptop platforms. In addition, the Linux and Windows operating systems shall support tablet platforms. The DTL team shall be the primary point of coordination for the ACES provisioning of the virtual machines. The Contractor shall also establish a single ACES specific proving center lab, logically separate from the main DTL with the primary goal of certifying all developed diagnostic troubleshooting routines used to validate components (i.e., Gold Disk) builds and maintaining the Definitive Software Library (DSL). This DTL shall interface with test instances of NOMAD and NCAD to simulate the production ACES environment.

Upon request by the Government, the Contractor shall make available in the DTL any hardware platform still deployed. In addition, the DTL shall include adaptive equipment for visual, hearing, and physical impairments to ensure that the ACES-provided computers and software are tested for accessibility as referenced in FAR 52.212-5 (specifically 52.222-36, *Affirmative Action for Workers with Disabilities*).

For activities lasting less than 30 days and which require a small number of support personnel (three or less), the Contractor shall deploy the requested support personnel within 24 hours of the approved request. In the event a larger pool of resources is requested, or if resources are required for a longer term, the Contractor shall work with the Government to develop an appropriate time frame for deployment.

3.9 TEMPORARY SEATS

The Contractor shall provide a means for obtaining ACES seats on a temporary basis. (See Section 5.0, *Seat Services*, for descriptions of ACES seats.) The Contractor shall make adjustments to equipment availability contingent upon the projected future volume of temporary seat requests. The customer will indicate a start and end date in each temporary seat request. A

RELEASED - Printed documents may be obsolete; validate prior to use.

temporary seat shall be billed on a monthly basis until the arrival of the end date, after which the Contractor shall pick up the seat and stop the monthly billing for the seat.

To fulfill temporary seat requests, the Contractor shall deliver systems that meet the requirements of the seat type ordered and that have one (1) year or greater of remaining useful life, defined as the time until the asset transition value of the asset has reached zero or the asset with residual value is no longer functional, if available. If the Contractor has no such systems available, the Contractor shall deliver an "S" seat as a temporary seat, unless the customer withdraws the temporary seat request. Temporary seats shall be delivered in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Targets SD-13 and SD-14).

3.10 SUPPORT FOR TELECOMMUTERS, TRAVELERS, AND OFF-SITE END-USERS

The Contractor shall ensure that telecommuters (i.e., end-users who work from a remote location), travelers (end-users at a NASA or non-NASA temporary duty location), and other off-site/near-site end-users (those whose permanent duty station is outside the perimeter of a Center) experience minimal interruption of services at the remote location for services within the Contractor's scope. (Note: Every NASA employee is a potential telecommuter and may request authorization to telecommute at any time and for any given timeframe.) The Contractor shall maintain Return To Service levels consistent with the seat subscription for travelers at NASA facilities. If unique circumstances exist that preclude the Contractor's ability to provide service in accordance with the end-user's subscribed Service Option, the Contractor shall provide a justification and metrics waiver request to the ACES CTM. The Contractor shall not perform activities at an end-user's personal residence.

The Contractor shall perform remote diagnostics and troubleshooting to resolve Problems for these end-users. For Problems that cannot be resolved remotely, the Contractor shall offer to the end-user overnight delivery of a temporary replacement device if such delivery is commercially available. If overnight delivery is not available, the next fastest commercially available delivery shall be utilized. The end-user receiving the replacement will be responsible for returning the defective unit to the Contractor. The Contractor shall provide for and arrange return delivery services if a temporary replacement unit has to be returned because it is defective.

The Contractor shall provide the same level of support to end-users visiting other Centers as they would receive at their home Center.

3.10.1 Support for Off-Site End-users

The Contractor shall provide Tier 2/3 Service Desk phone support and hardware and software maintenance services for end-users stationed at U.S. locations, other than Centers, and foreign locations. When the end-user needs software or hardware support that cannot be provided over the phone, the Contractor shall, at a minimum, provide these services by shipping properly configured hardware and software to the end-user using drop ship methodology or other ACES COTR-approved method. The Contractor shall provide the shipping materials, including packaging. The Government will be responsible for the shipping cost.

RELEASED - Printed documents may be obsolete; validate prior to use.

3.11 RETURN TO SERVICE SURCHARGE

The Contractor shall (with ACES CTM concurrence) charge a Return To Service Surcharge (RTSS) if a physical desk-side visit is required to restore an ACES seat to an operable condition as a result of an end-user performing any of the following actions without a valid waiver:

a. Installing or attempting to install, on an ACES seat, Support Level 3 software that is incompatible with the ACES software Standard Load.
b. Installing or attempting to install, on an ACES seat, non-ACES hardware that is incompatible with the ACES hardware.
c. Performing any action that results in the infection of an ACES seat with a computer virus or other malware. If the infection is due to lack of diligence on the part of the ACES Contractor, there will be no RTSS.
d. Performing any other action against the established policy that causes the seat to become unstable or inoperable.

In addition, the Contractor shall (with ACES CTM concurrence) charge an RTSS if an end-user deactivates a Government-mandated software management tool (e.g., Patchlink or anti-virus software) without a valid waiver or performs any other action without a valid waiver that causes the seat to become unstable or inoperable, even if the software can be activated or the seat restored to a stable and operable state remotely.

Prior to billing for an RTSS, the Contractor shall provide written documentation to justify each RTSS. The ACES CTM will review the RTSS assessment request and will authorize valid charges for invoicing.

The Contractor shall provide assistance to the Government to identify end-users who repeatedly, maliciously, or blatantly cause an RTSS.

An RTSS shall fall into one of three Charge Types:

a. Computing Seat RTSS – Applies only to Computing seats (see Section 5.1, *Computing Seats*). The Contractor shall propose the Computing seat RTSS per seat.
b. Cellular Seat RTSS – Applies only to Cellular seats (see Section 5.2, *Cellular Seats*). The Contractor shall propose the Cellular Seat RTSS per seat.
c. Software RTSS – Applies when a remote management tool (e.g., Software Management System, Patchlink, and Anti-Virus software) has been disabled by an end-user and a re-installation or re-activation is required.

3.12 WIPE AND LOAD SERVICES

The Contractor shall provide Wipe and Load services for ACES seats at the Government's request or when deemed necessary by the Contractor. Using consistent tools, processes, and procedures, the Contractor shall perform the following actions:

a. Coordinate a time with the end-user to perform the Wipe and Load.

RELEASED - Printed documents may be obsolete; validate prior to use.

b. Name the computer seat according to the appropriate naming standards. If the current name meets all naming standards, the Contractor shall not make any changes at the time of the Wipe and Load.
c. Add the computer to the appropriate domain, if the computer is part of an ACES-managed domain.
d. Configure the system with the Standard Load software, if that Service Option is selected for the seat, for the end-user's immediate use.
e. Perform the Wipe and Load, defined as the act of erasing all information on all of the ACES-supported hard drives associated with the seat and bringing the seat back to the current, fully functional baseline configuration. End-user data shall be preserved upon request.

3.12.1 Wipe and Load in Response to an Incident

When responding to an Incident that requires a Wipe and Load, the Contractor shall perform the following actions using consistent tools, processes, and procedures:

a. Record the health status of the seat, including the issue(s) that forced the Contractor to perform the Wipe and Load.
b. Preserve end-user data (providing it is not compromised) and restore it at the end of the Wipe and Load.

3.12.2 Wipe and Load in Response to an End-User Request

Wipe and Load service in response to an end-user request shall be provided to a single end-user with the intention to transfer the device to another end-user. When responding to an end-user request for Wipe and Load service, the Contractor shall preserve the end-user data to external media as directed by the requestor, and sanitize the device in addition to performing the Wipe and Load using consistent tools, processes, and procedures.

3.13 ELEVATED USER PRIVILEGES

End-user access with elevated privileges includes any access to the computer that allows the end-user or designee to install, upgrade, significantly change, or patch software (including the computer's operating system). The Contractor shall allow elevated user privileges on ACES Computing seats (see Section 5.1, *Computing Seats*) only as authorized by the Agency CIO or designee, in accordance with NASA Information Technology Requirement (NITR) 2810-14, *Managing Elevated User Privileges on NASA Desktop and Laptop Computers*. The end-user conducting the installation, upgrade, significant change, or patching is responsible for the added software and its associated risk consistent with Section 3.11, *Return To Service Surcharge*. If the newly installed, upgraded, significant changed, or patched software does not change the security controls, the Contractor shall continue to be responsible for the associated IT System Security Plan. In all instances, the Contractor is responsible for providing all subscribed system administration services described in Section 5.1.6.3.7, *System Administration*.

RELEASED - Printed documents may be obsolete; validate prior to use.

The Contractor shall follow procedures as established by the local Office of the CIO for provisioning elevated user privileges in accordance with NITR 2810-14. In the event performance issues stem from non-ACES personnel having elevated user privileges, the Contractor shall provide an explanation and metrics waiver request to the ACES CTM. The Contractor shall perform a monthly validation of its list of end-users or designees who have elevated user privileges with the list maintained by the Agency OCIO.

3.14 SUPPORT FOR SPECIAL EVENTS

The Contractor shall provide IT support for special events (e.g., Open Houses, technology expositions, and senior management meetings) as identified by the ACES COTR, ACES CTM, or designee. The Contractor shall escalate trouble tickets for these events to priority services. The special events trouble tickets shall not be counted against the priority service percentages. The Contractor shall work closely with the ACES COTR or ACES CTM to coordinate remote event support.

3.15 ENHANCED SUPPORT SERVICES

Enhanced Support Services are intended as an augmentation to the Standard System Administration services provided under the ACES seats as well as a vehicle for the Government to acquire computer support for other functionality. For periods greater than 1 month, the Government will provide office space, in close proximity to the end-users being served, for the individual performing the Enhanced Support Services.

The Contractor shall provide Enhanced Support Services for the following categories:

a. Basic Microsoft Operating Systems Analysis Services

Provides the following services on Microsoft OS's:

i. Setup and configuration of system hardware and software.
ii. Configuration of the ACES Standard Load for the end-user(s) of the system.
iii. Preparation, breakdown, moving, and set up in support of a move.
iv. Transfer of data from one system to another.
v. Addition of peripheral hardware, support software, and associated drivers, including testing and validation of proper operation.
vi. Addition of approved software.
vii. Testing, troubleshooting, and resolution of typical ACES Support Level 1 software applications.
viii. Resolution of driver and boot issues.

b. Advanced Microsoft Operating Systems Analysis Services

Provides all of the Basic Microsoft OS Analysis services plus the following services on Microsoft OS's:

RELEASED - Printed documents may be obsolete; validate prior to use.

i. Testing, troubleshooting, and resolution of typical ACES Support Level 2 and 3 software applications as applied to the supported organization.
ii. Act as Third Level vendor support for organizational software.
iii. Act as the organizational expert for non-Standard Load software.
iv. Perform programming and scripting within the Microsoft OS.
v. Perform system administration functions that support the mission of the organization.

c. Basic Apple Operating Systems Analysis Services

Provides the following services on Apple OS's:

i. Setup and configuration of system hardware and software.
ii. Configuration of the ACES Standard Load for the end-user(s) of the system.
iii. Preparation, breakdown, moving, and set up in support of a move.
iv. Transfer of data from one system to another.
v. Addition of peripheral hardware, support software, and associated drivers, including testing and validation of proper operation.
vi. Addition of approved software.
vii. Testing, troubleshooting, and resolution of typical ACES Support Level 1 software applications.
viii. Resolution of driver and boot issues.

d. Advanced Apple Operating Systems Analysis Services

Provides all of the Basic Apple OS Analysis services plus the following services on Apple OS's:

i. Testing, troubleshooting, and resolution of typical ACES Support Level 2 and 3 software applications as applied to the supported organization.
ii. Act as Third Level vendor support for organizational software.
iii. Act as the organizational expert for non-Standard Load software.
iv. Perform programming and scripting within the Apple OS.
v. Perform system administration functions that support the mission of the organization.

e. Basic Linux Operating Systems Analysis Services

Provides the following services on Linux OS's:

i. Setup and configuration of system hardware and software.
ii. Configuration of the ACES Standard Load for the end-user(s) of the system.
iii. Preparation, breakdown, moving, and set up in support of a move.
iv. Transfer of data from one system to another.
v. Addition of peripheral hardware, support software, and associated drivers, including testing and validation of proper operation.

RELEASED - Printed documents may be obsolete; validate prior to use.

vi. Addition of approved software.
vii. Testing, troubleshooting, and resolution of typical ACES Support Level 1 software applications.
viii. Resolution of driver and boot issues.

f. Advanced Linux Operating Systems Analysis Services

Provides all of the Basic Linux OS Analysis services plus the following services on Linux OS's:

i. Testing, troubleshooting, and resolution of typical ACES Support Level 2 and 3 software applications as applied to the supported organization.
ii. Act as Third Level vendor support for organizational software.
iii. Act as the organizational expert for non-Standard Load software.
iv. Perform programming and scripting within the Linux OS.
v. Perform system administration functions that support the mission of the organization.

g. Basic UNIX Operating Systems Analysis Services

Provides the following services on UNIX OS's:

i. Setup and configuration of system hardware and software.
ii. Configuration of the ACES Standard Load for the end-user(s) of the system.
iii. Preparation, breakdown, moving, and set up in support of a move.
iv. Transfer of data from one system to another.
v. Addition of peripheral hardware, support software, and associated drivers, including testing and validation of proper operation.
vi. Addition of approved software.
vii. Testing, troubleshooting, and resolution of typical ACES Support Level 1 software applications.
viii. Resolution of driver and boot issues.

h. Advanced UNIX Operating Systems Analysis Services

Provides all of the Basic UNIX OS Analysis services plus the following services on UNIX OS's:

i. Testing, troubleshooting, and resolution of typical ACES Support Level 2 and 3 software applications as applied to the supported organization.
ii. Act as Third Level vendor support for organizational software.
iii. Act as the organizational expert for non-Standard Load software.
iv. Perform programming and scripting within the UNIX OS.
v. Perform system administration functions that support the mission of the organization.

RELEASED - Printed documents may be obsolete; validate prior to use.

i. Basic Database Administration Services

Provides all activities related to the administration of computerized databases. Projects long-range requirements for database administration and design in conjunction with other managers in the information systems area as well as Government project managers.

j. Advanced Database Administration Services

Provides expertise in the design, implementation, and maintenance of complex databases, access methods, access time, device allocation, validation checks, organization, protection and security, documentation, and statistical methods. Services include maintenance of database dictionaries, overall monitoring of standards and procedures, and integration of systems through database design.

k. Basic Network Peripheral Technician Services

Provides assistance in maintenance and implementation of network peripherals. Responsible for providing assistance and technical support for network peripheral design activities. Assists in the review/assessment of end-user needs.

l. Advanced Network Peripheral Technician Services

Provides planning, design, and implementation of network peripherals. Plans and directs the activities of other technicians. Conducts feasibility studies, evaluates vendor products, and makes recommendations on selection. Provides guidance and training to less experienced technicians.

3.16 EARLY SEAT REFRESH

The Contractor shall provide the ability to affect an early seat refresh. Early seat refresh is defined as the replacement of a seat before its scheduled refresh date. The Contractor shall invoice the remainder of the Asset Transition Value (ATV) for the existing seat's hardware platform at the time of the request. The seat shall be refreshed in accordance with Section 3.5, *Technology Refresh*, and Attachment I-3, *Retainage Pools and Performance Metrics*. The refresh shall be accomplished in accordance with the corresponding SLA for the new seat type. Once the early refresh is concluded, the time to refresh is reset.

3.17 DATA CENTER SERVICES

The Contractor shall provide all necessary data center services (e.g., servers, operating systems, and system administration) required to deliver the ACES services. The provisioned data center services shall ensure the appropriate security controls for the system requiring those services. Any data center service needed by an ACES-required service shall be refreshed or upgraded as needed when the corresponding service is upgraded (e.g., enterprise migration to a new desktop operating system).

RELEASED - Printed documents may be obsolete; validate prior to use.

3.18 SOFTWARE LICENSING CONTINUATION

The Contractor shall be responsible for providing all licenses for any systems transitioning from the Outsourcing Desktop Initiative for NASA (ODIN) contract to the ACES contract on the Implementation date for Wave 1, in accordance with Attachment I-14, *Phase-In Schedule.*

3.19 OTHER GENERAL SERVICES

The Contractor shall provide the following technical services as individually fixed-priced services:

a. RTSS's for Computing seat, Cellular seat, and software. (See Section 5.1, *Computing Seats*, and Section 5.2, *Cellular Seats*, for descriptions of Computing seats and Cellular seats.)
b. Sanitization of non-ACES devices in accordance with NIST SP 800-88 and NASA ITS-SOP-0035. (Note: Sanitization of ACES devices shall be included as part of the Contract price.)
c. Installation of internal and external non-ACES peripherals to ACES computers. (This installation shall include any driver and cables (cables will be provided by the end-user) necessary to support the peripherals.)
d. Data transfer from an ACES to a non-ACES supported system, or from a non-ACES to an ACES supported system.
e. Wireless broadband cellular aircard service (including aircard) with unlimited data plan.
f. Means to respond to a service request during Non-Prime Time hours. When Non-Prime Time service is requested, the Contractor shall request ACES CTM authorization to proceed, in accordance with Center procedures and Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-15). If the service request is authorized, the Contractor shall notify the end-user, initiate work, in accordance with Attachment I-3 (SLA Target SD-16), and work until the system is returned to service or an end-user acceptable solution is achieved. The Contractor shall notify the ACES CTM of completion of the work.
g. Additional VTS meeting participants over 200 participants. (See Section 5.5, *Virtual Team Service (VTS) Seat*, for description of the VTS seat.)
h. Black and White (B&W) cost per copy over monthly volume band for Network Peripheral Seats (see Section 5.4, *Network Peripheral Seats*).
i. Color cost per copy over monthly volume band for Network Peripheral Seats (see Section 5.4, *Network Peripheral Seats*).
j. Excess cellular services usage (see Section 5.2, *Cellular Seats*).

3.20 CUSTOMER RELATIONSHIP MANAGEMENT (CRM) AND OUTREACH

The Contractor shall manage customer and end-user relationships and conduct outreach activities with the following goals in mind:

RELEASED - Printed documents may be obsolete; validate prior to use.

a. Appreciate and recognize the differences among customer and end-user types (e.g., end-users, CTM-identified Government points of contact for ACES issues at the local or organizational level, organizational managers, and senior staff), customer and end-user knowledge and skill levels (e.g., new end-users, long-time end-users, and prospective end-users), and areas of interest (e.g., UNIX/Linux, cellular devices, and network peripherals).
b. Understand changing and emerging conditions and business needs as they relate to ACES services and service offerings.
c. Expand end-users' knowledge and understanding of ACES services and service offerings, including providing educational and instructional information based on trouble call and service desk historical trend data to prevent future Incidents and Problems.
d. Facilitate end-users' obtaining needed services.
e. Engender positive perceptions of IT and the ACES 'brand' within NASA.

3.20.1 CRM and Outreach General Requirements

The Contractor shall establish a CRM program and CRM informational database to learn more about end-users' (and, through extension, customers') needs and behaviors, develop trusting relationships with them, and ensure that they are effectively served.

The Contractor shall conduct proactive end-user outreach activities. The Contractor shall focus on reaching current and prospective end-users while conducting the following activities:

a. Disseminating information about and educating end-users on ACES services and service offerings.
b. Providing outreach materials on Contract changes to the Government.
c. Assisting end-users with obtaining ACES services through the service ordering procedures.
d. Promoting ACES services.
e. Identifying current and anticipating future needs of end-users.
f. Providing outreach materials on ACES seats and services, to include user's guides and feature descriptions.

Each ACES CTM will identify IT points of contact at their Center for the Government and Contractor to partner with, guide, or provide insight into the various technical aspects of the Contract. The Contractor shall provide a corresponding technical contact for each Center for the major technical portions of the Contract. The ACES COTR will issue a letter defining the services for which a Contractor's POC shall be required. Including, but not limited to, the following:

a. Tier 2/3 Service Desk Support Services
b. Computing Seats
c. Cellular Seats
d. Pager Seat
e. Network Peripheral Seats

RELEASED - Printed documents may be obsolete; validate prior to use.

f. VTS Seat
g. E-mail
h. Active Directory
i. IT Security
j. APC
k. Outreach
l. Safety
m. Configuration Item Management

The Contractor shall work closely with the ACES CTM to ensure ACES products and services are ordered, approved, and communicated to end-users in a consistent manner using established processes. The Contractor shall channel communications with the end-users through the ACES CTM.

3.20.2 CRM and Outreach Operational Requirements

To perform CRM and outreach, the Contractor shall:

a. Schedule and conduct regular CRM and outreach meetings. If at any time during these meetings an attendee brings up a specific Incident or Problem that has or has not been reported to the ESD, the Contractor may discuss technical or other issues surrounding the issue in a general manner, and shall refer the attendee to the ESD for official reporting of the Incident or Problem. CRM and outreach meetings shall cover topics of interest, including, but not limited to, the following:
    i. ACES project status and progress reports.
    ii. ACES-provided software update/upgrade rollout status, schedules, testing opportunities, and training opportunities.
    iii. Reminders about lead time required to prepare for seasonal events involving ACES services (e.g., arrival of summer interns and upcoming ACES seat refresh cycles).
    iv. IT security tips and reminders pertinent to ACES services.
    v. Identification of key ACES personnel and contact information.
    vi. Upcoming ACES-related events.
    vii. Tutorials on ACES processes and procedures.
    viii. Platform-specific systems information.
    ix. New or less-widely-known or -understood technology offerings and service options.
b. Develop a communications plan, outlining the methods, media, types of information communicated, and frequency of outreach to the end-user community, for each Agency initiative and project.
c. Conduct ACES expositions/open houses at all Centers/Facilities to promote ACES services, ACES service offerings, and the latest technology available in the industry. The Contractor shall conduct a marketing campaign including traveling road shows and rolling town halls for CIOs, managers, and end-users.

RELEASED - Printed documents may be obsolete; validate prior to use.

d. Conduct forums and focus groups at all Centers/Facilities to proactively inquire about the needs of end-users, inform, promote, engender enthusiasm, and instruct in ACES services.
e. Publish a periodic online ACES newsletter (including archives), containing Agency-level and Center-level ACES news and information.
f. Coordinate and collaborate with the ACES COTR, ACES CTM, or designee at each Center on development of outreach materials prior to their release or distribution to Centers/Facilities.
g. Provide the end-user community with online access to information. Including, but not limited to, the following:
    i. ACES CRM and outreach meeting presentation materials and resulting questions and answers (both recent and archived).
    ii. Descriptions and definitions of all ACES seat types, services, and Service Options (including Standard Load, with versions, for each applicable Operating System).
    iii. Information about ACES training opportunities and mechanism(s) to sign up for training.
    iv. Refresh schedule, by Center, for the current year of the Contract.
    v. Refresh process overview.
    vi. System specifications for currently deployed equipment.
    vii. A mechanism to report lost or stolen ACES-provided property.
    viii. Other information and tools necessary to conduct CRM and outreach.

The Contractor shall communicate with end-users using the information residing in the CRM informational database and data that is technical and procedural in nature.

The Contractor shall identify and engage 5% (unless waived by the Government) of Center end-users in pilot tests to prove and ensure optimal performance of all Base, General, and Seat services before deploying to the general end-user population.

The Contractor shall use a communication approach (e.g., a Government-maintained non-ACES system administrator e-mail distribution list) at each Center to keep non-ACES system administrators informed of planned software updates/upgrades.

The Contractor shall coordinate with the ACES CTM to notify non-ACES system administrators of each planned software update/upgrade at least fourteen (14) days in advance of the update/upgrade. This will allow these system administrators sufficient time to test and determine the planned updates/upgrades' impact on the applications they support and time to mitigate any risks to those applications. The Government will instruct non-ACES system administrators to submit any update/upgrade-related issues to the ACES CTM for forwarding to the Contractor. The Contractor shall submit to the ACES CTM, in writing, any update/upgrade-related issues (both resolved and unresolved, with their resolution status) that non-ACES system administrators report to the Contractor directly.

RELEASED - Printed documents may be obsolete; validate prior to use.

3.21 RESPONSE TO INFORMATION AND AUDIT REQUESTS

The Contractor shall provide requested data (e.g., data from specific end-user mailboxes and access logs) in response to FOIA requests and requests from the NASA Office of Inspector General (OIG) and other official sources, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-17), at the direction of the ACES COTR.

3.22 SUPPORT FOR FEDERAL INITIATIVES

The Contractor shall work jointly with the Government to develop implementation plans to address Federal Government initiatives as they emerge. The Contractor shall implement these plans and provide support for their respective initiatives once approved by the Government.

The Contractor shall provide support for the Federal Government initiative for greening (as defined in Attachment I-23, *Glossary of Terms*) as detailed in the following current documents:

- Executive Order (EO) 13423, *Strengthening Federal Environmental, Energy, and Transportation Management*
- EO 13514, *Federal Leadership in Environmental, Energy, and Economic Performance*
- Memorandum on Electronic Stewardship Requirements (available in the I^3P Technical Library for ACES)
- NASA Implementation Plan for Electronic Stewardship (available in the I^3P Technical Library for ACES)

The Contractor shall provide support for the Federal Government initiative for cloud computing (as defined in Attachment I-23, *Glossary of Terms*) as detailed in the FY2011 NASA e-Gov Passback Guidance, which specifies that:

- By the FY2012 budget submission, for all new (planning/full acquisitions) major IT investments, agencies must complete an Alternative Analysis that includes a cloud computing based alternative.
- By the FY2013 budget submission, for all mixed lifecycle major IT investments, agencies must complete an Alternative Analysis that includes a cloud computing based alternative.
- By the FY2014 budget submission, for all steady-state major IT investments, agencies must complete an Alternative Analysis that includes a cloud computing based alternative.

The Contractor shall provide support for the Federal Government initiatives for greening and cloud computing as defined in future documents as they emerge.

3.23 SOFTWARE REFRESH PORTAL

The Software Refresh Portal (SRP) Application is a NASA-owned system developed to provide a centralized point of access to authorized software for ACES users and is described in the Software Refresh Portal document located in the I^3P Technical Library for ACES. The application consists of a Web interface and a client component providing end-users with a simplified method to install approved software packages for PC and Macintosh systems.

RELEASED - Printed documents may be obsolete; validate prior to use.

The Contractor shall maintain SRP through the life of the contract to ensure that as NASA STD-2804*x* or NASA STD-2805*x* change, the SRP infrastructure and application are upgraded accordingly to support any new Operating System (OS). Specifically, the Contractor shall:

a. Ensure that the NASA-STD-2805*x* hardware configurations with associated OS's are supported by the SRP system and client (e.g., Windows XP 32-bit, Windows 64-bit, and Mac OS X 10.6).
b. Develop deployment packages for the SRP system.
c. Test deployment packages before installing on SRP.
d. Provide to the Government the SRP software deployment packages upon request.
e. Support the addition of Government-approved software to the SRP.

RELEASED - Printed documents may be obsolete; validate prior to use.

4.0 BASE SERVICES

The Contractor shall provide services typically tied to individuals rather than devices to all NASA employees (contractor and civil service) and authorized personnel. Based on the NASA modified N2 database (the system of record containing the total number of all employees at each Center), base services shall be sized for an initial population of 50,000. Additional service bands (populations) are specified in Attachment I-5, *Summary of Base Services*. Base Services include:

a. E-mail and collaborative calendaring services: The Contractor shall provide e-mail and collaborative calendaring services (e.g., Client Access License (CAL) and Live Communication Server (LCS) license, and e-mail storage).
b. Active Directory services: The Contractor shall provide Active Directory services (e.g., domain account, group management, group policy object development, and deployment).
c. Loaner pool management: The Contractor shall manage all ACES devices designated as loaners.
d. Print queue infrastructure management: The Contractor shall provide and manage the infrastructure needed to support network peripherals (e.g., create and maintain all print queues and associated infrastructure for ACES and non-ACES printing devices).
e. Security management: The Contractor shall provide and manage IT security, data at rest services, physical security, emergency management, and emergency preparedness and response for all services.
f. Software license management: The Contractor shall provide a fully managed and supported shared license infrastructure, including management of the distribution of all Government-provided software licenses under the authorization of the ACES CTM.
g. Instant Messaging services: The Contractor shall provide Instant Messaging (IM) services for NASA.
h. Two-factor user authentication token distribution: The Contractor shall provide registration authority functionality for the issuance of authentication credentials and digital certificates as well as the distribution of two-factor authentication hardware tokens.

The Contractor shall restore Base Services, after an Incident ticket is received, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target IM-1).

The Contractor shall be responsible for the Base Services beginning with the Wave 1 Implementation date. To effect this responsibility, the Contractor shall provide all necessary support at the Enterprise (Agency) level. Center-level support needed to deliver the Base Services shall be provided by the ACES Contractor at the Wave 1 Centers starting on the Wave 1 Implementation date. The ACES Contractor shall coordinate with the incumbent contractor at the Wave 2 and Wave 3 Centers after the Wave 1 Implementation date until assumption of full Center-level responsibility for the Base Services on the Implementation date for each of those Waves (Waves 2 and 3). Thus, Center-level support needed to deliver the Base Services shall be provided by the ACES Contractor at the Wave 1 and 2 Centers starting on the Wave 2 Implementation date. The ACES Contractor shall coordinate with the incumbent contractor at the Wave 3 Centers after the Wave 2 Implementation date until the Wave 3 Implementation date.

RELEASED - Printed documents may be obsolete; validate prior to use.

4.1 E-MAIL AND COLLABORATIVE CALENDARING SERVICES

The Contractor shall provide two proposals for e-mail and collaborative calendaring services, one being the continuance of the existing NOMAD system and the other being an innovation approach. The Contractor shall provide NOMAD reporting in any implementation of e-mail and collaborative calendaring services, in accordance with Attachment I-2, *DPD*, DRD IT-10, *NOMAD Services Reports*.

4.1.1 Current NOMAD Service

The Contractor shall operate and maintain the current NOMAD service, a single system providing a unified and secure collaborative environment, meeting the operational requirements as described in the *NOMAD Configuration and Service Level Objectives (SLOs)* and *NOMAD System Description Document*, which are provided in the I^3P Technical Library for ACES. This system ensures access to NASA's civil service and contractor workforce is available to the public and NASA personnel through a centrally managed directory and an @NASA.GOV e-mail address. The Contractor shall operate the existing NOMAD system and infrastructure to ensure the following requirements are met:

a. Maintain e-mail and collaborative calendaring tools capable of supporting all NASA badged personnel. This includes providing secure Web access to e-mail, calendars, contacts, notes, and tasks.
b. Provide support for NASA-STD-2804*x* approved e-mail and calendaring clients, including Microsoft Windows, Apple, Linux, and cellular platforms.
c. Integrate NOMAD into the Agency authentication and directory infrastructure.
d. Ensure secure access to the NOMAD system from anywhere in the world.
e. Provide all NCAD-supported NASA badged personnel with the capability to securely share large files with other NOMAD users as well as individuals outside the Agency.

To meet the high-level requirements listed above, the Contractor shall ensure the following operational requirements are met:

a. Create and maintain e-mail accounts for all NASA personnel, role-based functions, and resources as requested by the Government. Provide secure access to e-mail accounts via Webmail. The total number of accounts is expected to be approximately equal to the modified N2 count. The NOMAD system is currently scaled for 65,000 accounts; the Contractor shall be responsible for expanding the existing hardware and software if there is any growth beyond that number. These costs shall be covered in the Base Services.
b. Delete NOMAD accounts upon notification from the NASA Account Management System (NAMS), in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-18).
c. Create Distribution Lists (DLs) as requested by the Government, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-19). The

RELEASED - Printed documents may be obsolete; validate prior to use.

Government will be responsible for populating and maintaining the membership of a distribution list once created.

d. Create and maintain Dynamic DLs (DDLs), e.g., NASA site groups, civil servants, and contractors, as changes occur. DDLs shall not be limited by Center; some may cross Centers.
e. Provision ninety (90) percent of the end-user accounts with a NOMAD-standard (currently 400 MB) mailbox and ten (10) percent of the end-user accounts with a NOMAD-expanded (currently 1 GB) mailbox. The 10 percent group will be identified by the Government.
f. Backup each complete mail store daily and the entire e-mail system semi-weekly without end-user interruption of service. The retention period for backup shall be thirty (30) days. The backup window for the e-mail system shall be 5 p.m. to 7 a.m. Central Time.
g. Ensure all SMTP traffic in and out of the e-mail system is logged. The system log shall include relevant message routing information, including sender and recipient e-mail addresses, size, date, and time.
h. Ensure all services are clustered or load balanced ensuring no single point of failure.
i. Provide an Anti-Spam and Anti-Virus solution capable of processing 600,000 messages per hour.
j. Automatically archive the mailboxes of the Agency's senior management (approximately 300 users) to capture the e-mail and calendar items for accumulation and transfer to the National Archives and Records Administration (NARA).
k. Provide near real-time monitoring for:
    i. Performance.
    ii. Resource exhaustion.
    iii. Incident and Problem debugging.
    iv. Incident and Problem resolution.
l. Provide the following IT security services:
    i. Assessment of the current state of the system including technical configuration and documentation.
    ii. Ongoing support to meet FAR 1852.204-76, *Security Requirements for Unclassified Information Technology Resources*.
    iii. Arrange for penetration testing in accordance with Agency requirements.
    iv. Provide requested data from specific end-user mailboxes in the case of IT security or safety Incidents, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-20).
m. Develop, maintain, and execute standard process and workflows for the NOMAD operational activities.
n. Provide an off-line address book and update it every 24 hours.
o. Provide outreach to the NOMAD end-user community for planned and unplanned activities.
p. Provide necessary interfaces between the NOMAD infrastructure and Contractor-provided Smartphone solutions.
q. Administer and manage the existing NOMAD server virtualization environment including the NOMAD development and test environment.

RELEASED - Printed documents may be obsolete; validate prior to use.

r. Provide the ability to simulate production services, as listed in the *NOMAD System Description Document* (available in the I^{3}P Technical Library for ACES), in a virtual environment for testing. Provide the capability to host up to one hundred (100) test accounts up to 1GB in size. Except for the test user mailboxes, all data shall be local to the virtual environment. Test user mailboxes shall be moved from the production mailbox server Storage Area Network (SAN) subsystem to the virtual environment disk subsystem and back after testing is completed.

s. Administer and manage Simple Mail Transfer Protocol (SMTP) Relays for NOMAD provided and managed SMTP gateways at each Center.

t. Perform the following tasks:
   i. Review change requests.
   ii. Test change requests as needed within the mean of the current environment.
   iii. Assess special system access approvals.
   iv. Monitor system logs.
   v. Ensure documentation is updated.
   vi. Attend weekly engineering/configuration management meetings.
   vii. Coordinate outreach questions and communication about security related items.

u. Refresh NOMAD infrastructure (see listing in the I^{3}P Technical Library for ACES) so that each piece of NOMAD equipment never exceeds five (5) years of age.

The Contractor shall obtain approval of all system modifications from the NOMAD Configuration Control Board and document the modifications prior to implementation.

4.1.2 Innovation Approach

4.1.2.1 General Requirements

The Contractor shall propose an innovation approach to providing collaborative e-mail and calendaring services across NASA. The innovation approach shall support the use of the clients listed in NASA-STD-2804x, *Minimum Interoperability Software Suite*, (with the exception of Outlook Web Access (OWA)) to provide access to the e-mail and calendaring services as well as support Web access. The clients and the server shall continuously synchronize data to ensure the e-mail and calendar information is current. The innovation approach shall also support the e-mail and calendaring features and functions of the Agency Smartphone seats. The e-mail and calendaring clients, Smartphones, and Web access shall be interoperable to ensure that users of the different clients and Smartphones can collaborate. The proposed solution shall be integrated with the NASA Consolidated Active Directory (NCAD).

The innovation approach shall meet the requirements listed in Sections 4.1.2.2, *Information Technology Security Requirements*, through 4.1.2.8, *Archiving Requirements*, and conform to Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-18).

The system shall provide reports in accordance with Attachment I-2, *DPD*, DRD IT-10, *NOMAD Services Reports*.

RELEASED - Printed documents may be obsolete; validate prior to use.

4.1.2.2 Information Technology Security Requirements

The Contractor shall meet all of the requirements of the Federal Information Security Management Act (FISMA). The proposed system shall meet the moderate security controls defined in the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53, *Recommended Security Controls for Federal Information Systems and Organizations*. The Contractor shall perform a security assessment on the proposed solution in accordance with NIST SP 800-53A, *Guide for Assessing the Security Controls in Federal Information Systems*, and shall successfully complete a security Certification and Accreditation (C&A), in accordance with NIST SP 800-37, *Guide for the Security Certification and Accreditation of Federal Information Systems*.

4.1.2.3 Transition Requirements

The Contractor shall provide for a transition from the in-house NOMAD system to the innovative solution. The transition requirements are as follows:

a. All legacy Exchange data, including mailboxes, calendars, notes, tasks, and contacts, shall be migrated for all user and resource accounts.
b. All existing Distribution Lists (DLs), query-based DLs, and external contacts shall be supported.
c. All existing directory views (e.g., view by all Centers, view by Center) shall be supported.
d. Individual users shall experience no more than a single night outage during data migration.
e. All client and Smartphone configuration settings shall be functionally preserved to ensure a transparent user experience.

4.1.2.4 Anti-Virus and Anti-Spam Requirements

The Contractor shall provide both Anti-Virus and Anti-Spam protection for all inbound and outbound messages. The Contractor shall regularly scan the server message stores for infected messages after virus definition files are updated. As detailed in the *NOMAD System Description Document* (available in the I^3P Technical Library for ACES), NASA currently uses Proofpoint and Trend Micro ScanMail to perform Anti-Virus and Anti-Spam scanning. The following are the detailed anti-spam and anti-virus requirements:

a. The system shall be capable of identifying spam by searching on specific predefined and Government-defined keywords.
b. The Contractor shall monitor the spam@nasa.gov function mailbox for messages submitted by users that were not detected as spam and use those messages to improve the automated identification process.
c. The system shall block messages from hosts whose IP addresses match predefined and Government-defined lists.
d. The system shall block messages from hosts whose hostnames match predefined or Government-defined lists.

RELEASED - Printed documents may be obsolete; validate prior to use.

e. The system shall block messages from Government-defined and user-defined sender e-mail addresses.
f. The system shall allow the Government to define lists of host IP addresses that do not get blocked by anti-spam countermeasures.
g. The system shall allow the Government to define lists of hostnames that do not get blocked by anti-spam countermeasures.
h. The system shall allow administrators and users to define lists of e-mail addresses which do not get blocked by anti-spam countermeasures.
i. The system shall provide automatic updates to spam signature filters.
j. The system shall provide the capability to perform reverse DNS lookup to allow rejection of IP addresses not resolved with DNS.
k. The system shall provide the capability to support both administrative and user quarantines to hold messages suspected as spam.
l. The system shall allow users to request e-mail digests sent on a regular basis containing messages that have been quarantined.
m. The system shall allow users to disposition messages that have been quarantined (e.g., release, delete, mark as not spam, etc.).
n. The system shall provide the capability to automatically delete quarantined messages not dispositioned after a Government-defined number of days.
o. The system shall provide a capability to tag messages as possible spam (e.g., prefix the word SPAM) on the "Subject:" line before delivery to the user.
p. The system shall support scoring thresholds that control the automatic disposition of messages (e.g., deliver, tag, quarantine, and block).
q. The system shall provide the capability to track actions performed on all messages.
r. The system shall provide detailed logs of the actions performed on all messages.
s. The system shall provide open relay protection.
t. The system shall provide anti-phishing protection.
u. The system shall provide anti-virus protection.
v. The system shall examine all files in unencrypted archives (e.g., zip, tar, and etc.). The system shall provide the capability to warn users when encrypted archives could not be scanned for virus.
w. The system shall block messages containing attachments with extensions that match a Government-defined list of banned file types.
x. The system shall provide automatic updates to virus definition databases.
y. The system shall provide the capability to support rate control and concurrent connection protections.

The system shall provide user access to controls and quarantines via a secure Web interface.

4.1.2.5 NASA Post Forwarder Requirements

The NASA Post Forwarder (NPF) system is the "front door" to the @nasa.gov domain and several Center legacy @center.nasa.gov domains and its primary function of the NPF system is to route all inbound and outbound e-mail for the Agency. The requirements for the NPF system are as follows:

RELEASED - Printed documents may be obsolete; validate prior to use.

a. The system shall be the Mail eXchanger (MX) record for the @nasa.gov domain accepting all inbound e-mail for that domain.
b. The system shall be the MX record for the legacy @center.nasa.gov domains accepting all inbound e-mail for those domains.
c. The system shall be capable of rejecting connections from specific IP addresses.
d. The system shall check recipient addresses against the translation database. If there is a matching record, the message shall be routed to the deliverable address of the record. If there is no matching record, and there is no specific delivery route for the recipient domain, a bounce message shall be returned to the sender.
e. The system shall check the Agency NASA Enterprise Directory (NED) processing FTP site for a candidate translation database every fifteen (15) minutes. If the date/time of the candidate translation database is newer than the production translation database on the NPF system, the candidate translation database shall be downloaded by the system for examination.
f. The system shall inspect the candidate translation database and perform "sanity checks" to ensure the file is correct and compete. If system detects an error, it shall reject the candidate translation database. In either situation, an e-mail shall be sent to a Government-provided list of recipients reporting success or failure. If the candidate translation database is good, the system shall archive the old production translation database and place the candidate translation database into production.
g. The system shall be capable of delivering messages with an average routing time of less than sixty (60) seconds per message.
h. The system shall be capable of handling peaks of double the average messaging traffic for any time of day without introducing queuing delays.
i. The system shall log all incoming and outgoing message traffic. These logs shall be accessible by designated NASA employees.

4.1.2.6 Center Simple Mail Transport Protocol (SMTP) Gateway Requirements

The Contractor shall provide SMTP Gateways for all Centers, excluding IVV, GISS, NSSC, WFF, and WSC. These SMTP Gateways shall be the single inbound and outbound relay for messaging traffic as controlled by Center firewalls. The requirements for the Center SMTP gateways are as follows:

a. The Gateways shall act as the relay for intra-Center SMTP traffic.
b. The Gateways shall act as the primary entry and exit for all SMTP traffic.
c. The Gateways shall allow any internal host to use it as the SMTP relay to any host outside the Center.
d. The Gateways shall restrict inbound traffic to a Center Postmaster-approved list of Center systems (e.g., hostname.center.nasa.gov).
e. The Gateways shall log all incoming and outgoing message traffic both locally and on a centralized logging server. These logs shall be accessible by designated NASA employees.
f. The Gateways shall support alias forwarding, as defined by Center Postmasters.

RELEASED - Printed documents may be obsolete; validate prior to use.

4.1.2.7 Large File Transfer (LFT) Requirements

The Contractor shall provide a means to perform large file transfers. As detailed in the *NOMAD System Description Document* (available in the I^{3}P Technical Library for ACES), NASA currently uses the Accellion product to provide LFT services. The requirements for LFT are as follows:

a. The system shall allow internal users to share files with internal and external users.
b. The system shall use the Agency User ID (AUID) and Active Directory password for authentication of internal users.
c. The system shall provide temporary accounts/passwords for the authentication of invited external users.
d. The system shall provide a Web-based user interface for all users.
e. The system shall utilize a Web-based upload/download process.
f. The system shall utilize a secure FIPS 140.2-compliant transfer protocol.
g. The system shall provide the capability to transfer files up to 10GB.
h. The system shall send e-mail to participants to inform them of file availability.
i. The system shall support NCAD DLs as participant lists.
j. The system shall support the capability to automatically remove uploaded files after a Government-defined amount of time.
k. The system shall support the capability to automatically remove uploaded files after successful download by the recipient.
l. The system shall support the capability to send automatic download receipts.
m. The system shall log all LFT activities. The logs shall be accessible by designated NASA employees.
n. The system shall support anti-virus scanning of upload files and regular scanning of stored data.
o. The system shall support the capability to limit the file types for upload.

4.1.2.8 Archiving Requirements

NASA has identified approximately three hundred (300) senior NASA managers for archival of all messages and calendar items for use by the NASA Records Manager. As detailed in the *NOMAD System Description Document* (available in the I^{3}P Technical Library for ACES), NASA currently uses Mimosa NearPoint to provide archiving services. The requirements for the archival services are as follows:

a. The system shall capture all messages and calendar changes for up to 300 senior managers.
b. The system shall require no user interaction.
c. The system shall support the capability to export data for specific users in an open non-proprietary format for transfer to the NARA.
d. The system shall support searches by keyword for a specific user.
e. The system shall support searches by keyword across all users.
f. The system shall support access control using Active Directory permissions.
g. The system shall support audit logging of all access changes and requests.

RELEASED - Printed documents may be obsolete; validate prior to use.

4.1.3 Response to E-mail Information and Audit Requests

For either of the approaches detailed in Sections 4.1.1 and 4.1.2, *Current NOMAD Service*, and *Innovation Approach*, respectively, upon official request from the NASA IT Security Manager(s) (Center or Agency), the NASA Office of Chief Counsel, the NASA SOC, the NASA OIG, or a Freedom of Information Act (FOIA) requestor, the Contractor shall perform any combination of the following:

a. Conduct targeted monitoring of user(s) for various periods of duration that will involve:
   i. Full export of user's current server mailbox data.
   ii. Restoration of all available server mailbox data from backup media (e.g., tapes or SANs). Restoration from tape is limited to the tape rotation period for nightly and weekly backups, as detailed in the *NOMAD System Description Document* (available in the I^{3}P Technical Library for ACES).
b. Remove from server mailboxes messages that have been determined to be phishing attempts that can be identified by sender, subject, or other unique searchable header(s) provided by the requestor.
c. Remove from server mailboxes messages that have been determined to contain classified material that can be identified by sender, subject, or other unique searchable header(s) provided by the requestor.
d. Remove from server mailboxes messages of unspecified nature that can be identified by sender, subject, or other unique searchable header(s) provided by the requestor.
e. Remove from restored mailboxes messages that were previously determined to be phishing attempts, contain classified material, or were otherwise identified by the requestor.
f. Provide support in using all search capabilities of the system used to satisfy the requirements of Section 4.1.2.8, *Archiving Requirements* (currently the Mimosa NearPoint Archiving system), hosting senior NASA manager mailboxes, as detailed in the *NOMAD System Description Document* (available in the I^{3}P Technical Library for ACES).
g. Provide routing information for selected messages that can be identified by sender, recipient, or other unique searchable header(s) provided by the requestor.
h. Extract log files from all Client Access Server (CAS) servers, as detailed in the *NOMAD System Description Document* (available in the I^{3}P Technical Library for ACES).
i. Extract traffic logs from the NPFs, as detailed in the *NOMAD System Description Document* (available in the I^{3}P Technical Library for ACES). The Contractor shall be required to extract a subset of the log data that can be identified by sender, recipient, subject, or other unique searchable header(s) provided by the requestor.
j. Initiate response to IT Security requests on a twenty-four (24) hours a day, seven (7) days a week (24/7) basis and complete the activity in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-20).

RELEASED - Printed documents may be obsolete; validate prior to use.

4.2 ACTIVE DIRECTORY SERVICES

The Contractor shall operate and maintain the NCAD infrastructure, as defined by and in accordance with NCAD requirements documents entitled *Baseline SMAD Training Plan, NAF-100 NCAD Concept of Operations, NAF-200 NCAD Training Plan, NAF-400 SOP-Configuration Change Board,* and *NAF Baseline Requirements,* which are available in the I^3P Technical Library for ACES. NCAD is a key component of NASA's Identity, Credential, and Access Management (ICAM) architecture and provides NASA with a single authentication forest for all Microsoft and Apple users, workstations, and Active Directory aware application resources (e.g., servers). NCAD consists of the following:

a. NASA Agency Forest (NAF): Collection of replicating domain controllers distributed to each Center.
b. Active Directory Management System (ADMS): Collection of servers that comprise the system administration tools for the NAF. Core locations for ADMS servers are NASA Marshall, NASA Goddard, NASA Johnson, and NASA Ames. A number of individual Centers may maintain a local ADMS server as well.
c. Security Monitoring for Active Directory: Collection of servers at MSFC that monitor the distributed NAF and ADMS to ensure in-depth security of the NCAD IT infrastructure.

The Contractor shall ensure the following operational requirements are met:

a. Maintain Active Directory (AD) accounts for all NASA personnel as requested by the Government and authorized through the NAMS. The total number of accounts is expected to be approximately 1.2 times the modified N2 count. The NCAD infrastructure currently supports approximately 60,000 accounts and all associated workstation, server, and policy objects for all Centers and supporting facilities (except JPL).
b. Interface with the ICAM team. This will require development effort to accommodate NAMS requirements for autoprovision, modification, and deprovision of accounts and maintenance of all targeted objects in the NAF with NAMS data. Manual maintenance of certain objects will be required until all automated interfaces are complete. When directed by the NAMS interface, provision and deprovision AD accounts in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Targets SD-21 and SD-22).
c. Backup each AD structure (e.g., Group Policy Objects and user accounts) daily without end-user service interruption. The retention period for backups shall meet NASA requirements as defined in NPR 1441.1*x*, *NASA Records Retention Schedules*, for this type of data.
d. Maintain and upgrade, and deploy additional Domain Controllers and associated management systems, as required, to Centers. The current size of the Directory Information Tree (DIT) is approximately 4 Gigabytes, and shall be able expand up to 50 percent without issue. Growth beyond this will require design review and likely upgrade of the hardware configuration.

RELEASED - Printed documents may be obsolete; validate prior to use.

e. Manage, maintain, and operate all Domain Controllers, management systems and other associated systems, and peripheral equipment.
   i. Upgrade and replace equipment as needed to meet operational need, e.g. performance, end-of-life issues, geographical expansion, or for growth of the DIT.
   ii. Maintain vendor or OEM Incident and engineering support appropriate to the criticality of the NCAD service.
f. Support use of the management software (currently NetIQ software) on behalf of authorized users. This includes deployment of group policy and other changes per approved workflow, and help desk support for issues related to use of the management software by authorized users.
g. Management, maintenance, and authoritative operations of the DNS for all records in the DNS namespace "ndc.nasa.gov" "underbar" zones that are related to proper operation of the NAF. This support shall require interface with the Internet Protocol Address Management (IPAM) Operations Team, which is part of the NICS contract. Specifically, the NAF Operations Team will:
   i. Support delegation for the underbar zones as directed by the IPAM Operations Team and NAF design.
   ii. Provide appropriate DNS forwarding operations to IPAM services for all queries for which the NAF is not authoritative.
h. Provide continuous monitoring for:
   i. Performance.
   ii. Resource exhaustion.
   iii. Incident and Problem debugging.
   iv. Incident and Problem resolution.
i. Provide the following IT security services:
   i. Assessment of the current state of the system including technical configuration and documentation (first assessment following assumption of duties, and yearly thereafter).
   ii. Ongoing support to meet FAR 1852.204-76, *Security Requirements for Unclassified Information Technology Resources*.
   iii. Arrange for penetration testing in accordance with Agency requirements..
   iv. Provide access to the User Authentication Logs in case of IT security Request.
j. Maintain and execute standard processes and workflows for all operational activities.
k. Provide outreach to the NCAD end-user community for planned and unplanned activities by producing e-mails about system activities and updating the NCAD Web site. Prepare the NASA community for any major infrastructure changes by developing and delivering presentations for the sites and tailoring those presentations as necessary to describe likely impacts and preparations required.
l. Provide an AD that supports FIPS-compliant, NASA-approved Smartcard authentication at all Centers.
m. Provide consistent access control to Agency AD aware resources at all NASA facilities.
n. Provide consistent accounting/auditing for Agency Active Directory resources at all NASA facilities.
o. Provide consistent Configuration Management for Agency Active Directory and resources at all NASA facilities.
p. Provide consistent synchronization with the ICAM infrastructure.

RELEASED - Printed documents may be obsolete; validate prior to use.

q. Provide authentication for the existing Agency-wide and program-specific resources that utilize AD native capabilities (e.g., Agency Messaging Service, Sharepoint, LCS, SQL Server, and Short Message Service (SMS)).
r. Develop and maintain an operational mechanism for the efficient deployment of Agency-issued Active Directory Group Policy.
s. Provide consistent Agency-wide reporting methodology for the verification and validation of Active Directory Group Policy.
t. Support information security defense in depth policies.
u. Implement the NASA-defined AD schemas across the NAF.
v. Participate in the NCAD Configuration Control Board.
w. Provide a central authentication source for supported non-Microsoft based computers.
x. Provide centralized domain membership for workstations and servers.
y. Provide the operations and maintenance of all NAF/ADMS/Security Monitoring for Active Directory (SMAD) servers housed in Center server facilities (domain controllers) and in locations with NISN connectivity (e.g., ADMS).
    i. Infrastructure support is twenty-four (24) hours by seven (7) days by three-hundred and sixty-five (365) days/year.
z. Provide day-to-day maintenance and operation of the NAF/ADMS/SMAD infrastructure to include such activities as hardware maintenance, software patching, system upgrades, and system activity monitoring.
    i. Complete installation of all patches in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Targets SMS-1 and SMS-2), unless otherwise specifically directed by NASA.
aa. Maintain system configuration on both the NAF/ADMS/SMAD infrastructures and implement any changes to system architecture as directed by NAF/ADMS/SMAD engineering.
bb. Develop Operational Level Agreements (OLAs) between ACES and other contractors and contracts, with NASA concurrence, to support delivery of service to end customers.
cc. Refresh NCAD infrastructure (see listing in the I^3P Technical Library for ACES) so that each piece of NCAD equipment never exceeds five (5) years of age.

All system modifications and upgrades shall be reviewed and approved by the NCAD Configuration Control Board and documented in the change request system.

4.3 LOANER POOL MANAGEMENT

The Contractor shall offer loaner pool management services for all Computing, Cellular, Pager, and Network Peripheral seat types. All types of seats (“S”, “M”, “B”, “T”, and Multi-Functional Device (MFD) seats) with a hardware platform can be purchased and designated for the loaner pool. The loaner pool management service in the Base Services provides for the management and distribution of these seats.

The Government will identify seats as “loaners” to be managed by the Contractor. The loaner seats will be subscribed to by the customer through the ESRS. The customer will designate which Center organizational unit(s) will have access to the seat. The Contractor shall be responsible for staffing, equipping, and managing the Loaner Pool. Each loaner seat shall be

RELEASED - Printed documents may be obsolete; validate prior to use.

managed in accordance with the seat type ordered. The costs to maintain the seat are paid through the seat subscription. The cost associated with Section 4.3 is only for the Loaner Management services as defined in this section.

The Contractor shall provide temporary MFD support on an as-needed basis. The Contractor shall deliver (including all appropriate supplies), install, set-up, ensure the temporary MFD is operational and removal of equipment after the event. Temporary MFD support may be required in a variety of geographical locations (e.g. conference support at hotels and locations off-center). The Contractor shall account for after-hours and weekend delivery and/or pick-up.

4.3.1 Loaner Pick-up and Drop-off

The Contractor shall provide loaner pick-up/drop-off services at up to three Government-specified sites per Center as locations for end-users to pick up and drop off loaner devices. The Contractor shall make loaners available for pickup, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-23). Customer-requested pickups with less than the required advance notice may be charged as a critical uplift, if pre-approved by the ACES CTM (as documented in a written communication to the Contractor). The Contractor shall document the justification for critical uplift in the ticket.

4.3.2 Loaner Services

The Contractor shall provide the following services for ACES seats that are identified as "loaners:"

a. Maintain Agency software Standard Load to NASA-STD-2804*x*.
b. Maintain software ordered through the APC in addition to the Standard Load.
c. Recharge and/or exchange batteries.
d. Ensure end-user-specific configurations are in place before loaner is issued (including the NASA Public Key Infrastructure (PKI) certificates or other user credentials).
e. Assist customers with set-up and operation of the loaner seat (e.g., remote access client (e.g., Virtual Private Network (VPN)), as needed.
f. When a loaner seat is returned by the customer, sanitize end-user data from the loaner device, then return the loaner to the Loaner Pool.

4.3.3 Loaner Tracking

The Contractor shall establish an online Loaner Pool tracking/request/sign-in/sign-out system that is approved by the Government. The Contractor shall use this tracking system to maintain the current status of all seats in the Loaner Pool. Records kept shall include the beginning and ending dates of each loan and the name of the person to whom each device was loaned. The Contractor shall also compile summary usage data for each type of loaner seat and each peripheral device. This status, loan history, and summary usage data shall be available to the ACES CTM or designee through online, read-only access.

RELEASED - Printed documents may be obsolete; validate prior to use.

4.3.4 Loaner Peripherals

All peripherals that come standard with a loaner device shall be provided with the loaner seat. In addition, the customer may request any or all of the following peripherals (e.g., international power adapter and extra batteries) that are compatible with or designed for the seat to accompany the loaner seat in the Loaner Pool.

4.4 PRINT QUEUE INFRASTRUCTURE MANAGEMENT

The Contractor shall create (in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-24)) and manage print queues and associated infrastructure for all ACES Network Peripheral seats and other network printers and multi-functional devices. The Contractor shall process requests to restrict end-user access to print queues. The Contractor shall clear print jobs that become held in the queue in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-25).

4.5 SECURITY MANAGEMENT

4.5.1 IT Security

The Contractor shall:

a. Implement and maintain a NASA enterprise-wide anti-malware solution (including anti-virus, anti-spyware, and anti-adware) for desktops and laptops that provides automated updates of anti-malware signatures at least once every 24 hours, software updates, and automated logging and reporting. Reporting from the anti-malware solution shall be in a common, parseable, electronic format (preferably Extensible Markup Language (XML)), at a minimum weekly, to the NASA SOC, in accordance with NASA policies and procedures.
b. Provide anti-malware client software and licenses for all NASA desktop and laptop computers that support such software, regardless of whether a computer is provided or supported by the Contract.
c. Deploy patches as follows, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Targets SMS-4 and SMS-5):
    i. Patch all ACES-provided/managed end-user systems and ACES-managed servers with applicable patches and hot-fixes to address functionality, stability, and security issues.
    ii. Successfully test all patches, before deployment, in an environment commensurate with the operating environment.
    iii. Apply to ACES-provided/managed end-user systems and ACES-managed servers all patches classified by the operating system or software vendor as “medium” or “low,” or vendor-defined equivalent, if deemed necessary by the Information System Owner (ISO) and according to a schedule determined by the ISO.
    iv. Use other mitigation tools and capabilities (such as firewall rules) when appropriate to protect ACES-provided/managed end-user systems and ACES-managed servers until patches can be applied.

RELEASED - Printed documents may be obsolete; validate prior to use.

v. For ACES-provided/managed end-user systems and ACES-managed servers in a configuration freeze, follow mission management direction if mission management decides to adjust the patch deployment schedule in accordance with mission requirements.

d. Provide access to the (unencrypted) user Desktop Files and Logs in case of IT security incident requests.

e. Ensure compliance of ACES systems with Agency-mandated security configurations (e.g., Federal Desktop Core Configuration (FDCC)), in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SMS-6).

f. Maintain low frequency of ACES-related security Incidents reported by the NASA SOC, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SMS-7).

g. Identify an IT Security point of contact per Center.

h. Ensure that each ACES information system provided or managed under the Contract is covered by an IT System Security Plan. In accordance with Addendum 1, *CF PWS*, the Contractor shall manage security and shall obtain C&A for the information systems listed in Table 4.5.1-1, *List of Systems for Which C&A is the Contractor's Full Responsibility*. The Contractor shall ensure on-time completion of C&A POA&M items, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SMS-3). Costs for independent Third Party certification (including system recertification every three (3) years and upon significant system change) shall be covered under Base Services. The Contractor shall obtain Government approval for each Third Party contractor to perform certifications. The Contractor shall consolidate the NAF and SMAD IT System Security Plans into one Plan, to reflect one information system that covers both NAF and SMAD.

Table 4.5.1-1. List of Systems for Which C&A is the Contractor's Full Responsibility

IT System Security Plan No.	FIPS 199 Security Categorization (Low/Moderate/High)	Information System	ACES Support Requirements
OA-9999-M-MSF-2601	Moderate	NAF	Update and consolidate (NAF and SMAD plans) and achieve C&A with a third party
OA-9999-M-MSF-2603	Moderate	SMAD	Update and consolidate (NAF and SMAD plans) and achieve C&A with a third party
OA-700-M-NSS-1002	Moderate	Consolidated IT System Security Plan for ODIN Desktops	Update and achieve C&A with a third party
OA-301-M-NSS-1003	Moderate	Consolidated IT System Security Plan for ODIN Help Desk	Update and achieve C&A with a third party (only responsible for Tier II and III requirements in security plan – Tier I will be address by ESD)
OA-801-M-NSS-1005	Moderate	Consolidated IT System Security Plan for ODIN Servers	Update and achieve C&A with a third party

RELEASED - Printed documents may be obsolete; validate prior to use.

IT System Security Plan No.	FIPS 199 Security Categorization (Low/Moderate/High)	Information System	ACES Support Requirements
TBD	Moderate	VTS	Update and validate that the vendor is utilizing security controls appropriate for a Moderate system. (The vendor will provide the Contractor with documentation; no plan will be developed by the Contractor, although the Contractor shall be responsible for ensuring that the documentation is updated and managed)
NN-999-M-NSS-1008	Moderate	MFD	To be handled in similar fashion as Network Printers (which are included in the Desktop System Security Plan)
OA-302-M-NSS-1010	Moderate	NOMAD	Update and achieve C&A with a third party

4.5.2 Data At Rest (DAR) Services

The Contractor shall provide DAR services that encrypt all data on each Agency desktop and laptop throughout the NASA environment (to the extent commercially available). The Contractor shall implement, operate, and maintain the DAR infrastructure and associated software on NASA devices, which includes obtaining, installing, and provisioning all hardware and software.

4.5.2.1 DAR Services Requirements

The Contractor shall implement, operate, and maintain a DAR solution, which may consist of multiple products, that:

a. Requires end-users to present credentials as part of the system startup process in both user ID/password and Smartcard modes.
b. Provides cross-platform support (e.g., Microsoft, Apple, Linux, and UNIX).
c. Provides client support for devices defined by NASA-STD-2804*x*, NASA-STD-2805*x*, and Addendum 3, *Minimum Hardware Requirements*.
d. Complies with FIPS 140-2, *Security Requirements for Cryptographic Modules*, and is Personal Identity Verification (PIV) II Smartcard compatible.
e. Uses AES-256 encryption algorithm.
f. Complies with NPR 2810.1*x*, *Security of Information Technology*.
g. Supports real-time encryption of hard drives and removable media as defined in OMB M-07-16, *Safeguarding Against and Responding to the Breach of Personally Identifiable Information (PII)*.
h. Provides full disk encryption for internal hard drives.
i. Provides content encryption capability for removable media/drives, flash drives, and memory sticks.

RELEASED - Printed documents may be obsolete; validate prior to use.

j. Provides system administrators with the capability to enable content encryption within their system computer group.
k. Is installable on systems that do not connect to a network.
l. Supports audit tracking (e.g., logging of failed login attempts).
m. Allows multiple authorized end-users to access a single protected device.
n. Supports remote locking and wiping of networked devices.
o. Develops and maintains end-user documentation to be provided to ACES and non-ACES system administrators.
p. Does not alter the operation of other applications (e.g., anti-virus and data backup).
q. Ensures that end-user systems do not lose capabilities when the DAR client is installed.
r. Synchronizes with the NASA Enterprise Directory (NED) for networked devices.
s. Populates user IDs through LDAP queries against the NED using service accounts.
t. Performs DAR administration centrally and provides configuration changes to support policy updates and password resets.
u. Reports encryption compliance status of in-scope network accessible computer systems and mobile devices.
v. Ensures high availability of the DAR services in accordance with Attachment I-3, *Retainage Pools and Performance Metrics*, Section 2.1.2, *Service Availability*.
w. Provides a Key Escrow. Supports key recovery at NASA sites as well as to end-users connecting remotely (both within the United States and international).
x. Provides a means for client systems to receive policy updates and upload auditing data.
y. Provides a means for client systems not connected to a NASA network to receive policy updates and to lock lost or stolen devices.
z. Provides a means for Disaster Recovery using servers located at geographically separate data centers. These servers shall continuously receive data replicated from the production servers.
aa. Includes a Disaster Recovery Proxy Server(s) collocated with the Disaster Recovery Servers that would be employed in the event the primary proxy server fails.

The Contractor shall serve as the primary point of contact for any operational issues associated with DAR servers to all NED connections.

4.5.2.2 Current DAR Solution

NASA's current DAR solution employs a standard encryption solution for all computer systems and external memory devices (e.g., thumb drive, external hard drive) with minimal impact to end-users. Its purpose is to protect data on NASA devices. The DAR solution provides pre-boot authentication that enables access to a previously encrypted hard drive prior to starting the operating environment. The Agency's DAR solution is currently McAfee Endpoint Encryption (MEE) (i.e., SafeBoot). This solution is in the process of being implemented and may change prior to final deployment. The Government will make available on the Wave 1 Implementation date 30,000 licenses until October 31, 2011. Effective with the Wave 1 Implementation date, the Contractor shall be responsible for supporting the current DAR solution and coordinating support between the incumbent Contractor until the Wave 3 Implementation date. The Contractor shall be responsible for providing any additional licensing and maintenance support necessary to

RELEASED - Printed documents may be obsolete; validate prior to use.

provide DAR services for any NASA employee, as defined in Section 4.0, that is requesting the DAR support.

The Contractor shall maintain and operate the current DAR infrastructure beginning with the Contract Implementation date for Wave 1 (see Attachment 14, *Phase-In Schedule*) until the Contractor's proposed solution is in place and accepted by the Government in accordance with NPR 7120.7, *NASA IT and Institutional Infrastructure Program and Project Management Requirements*. The current DAR solution is described in the ODIN NASA Data At Rest Solution Description document, which is provided in the I^3P Technical Library for ACES. For any remaining systems to which the DAR solution has not been applied and for which the application of the DAR solution has not been waived by the Government, the DAR solution shall be applied on the next system refresh. If the Offeror chooses to bring in new equipment, the DAR solution shall be applied at that time.

4.5.3 Physical Security

The Contractor shall implement a comprehensive physical security program consistent with NASA and Center-specific regulations and procedures for the performance of the Contract and the protection of assets and equipment that process NASA data. These regulations and procedures include NPR 1620.3, *Physical Security Requirements for NASA Facilities and Property*; NPD 1600.2*x*, *NASA Security Policy*; and NPR 1600.1, *NASA Security Program Procedural Requirements*.

4.5.4 Emergency Management

The Contractor shall provide a Disaster Recovery/Continuity of Operations Plan for each Center in accordance with NASA's policies and procedures (i.e., NIST SP 800-53, Rev. *x*, *Recommended Security Controls for Federal Information Systems and Organizations*). The Contractor shall comply with Center emergency management plans. The Contractor shall ensure that all applicable personnel are trained in emergency management operations in accordance with Attachment I-2, *DPD*, DRD IT-05, *Continuity of Operations Plan*.

The Contractor shall support NASA and Center Continuity of Operations Planning (COOP) activities, including planning, testing, and execution. The Contractor shall develop procedures and implementation plans to ensure that IT resources are protected and that man-made acts and acts of nature have been addressed, in accordance with NPR 2810.1*x* and Center disaster recovery requirements. For every information system, the Contractor shall develop, test, implement, and maintain contingency plans; establish clear roles and responsibilities for COOP; and provide COOP training to all applicable Contractor personnel in accordance with NPR 1040.1, *NASA Continuity of Operations (COOP) Planning Procedural Requirements*.

4.5.5 Emergency Preparedness and Response

The Contractor's obligation may include resolution of unusual or emergency situations. The Contractor may be required to assist NASA, within the general scope of work, but in currently unidentified ways, in preparation for, or in response to emergencies. Obligations under this

RELEASED - Printed documents may be obsolete; validate prior to use.

requirement shall only arise when one or more of the criteria in FAR 18.001, enabling NASA to utilize "Emergency Acquisition Flexibilities," are met. If the emergency preparedness and response requirements result in changes to the Contract, all Contract adjustments will be processed in accordance with the Changes clause of this Contract.

4.6 SOFTWARE LICENSE MANAGEMENT

The Contract includes three general categories of licensed software:

a. Software managed by floating license servers.
b. Software for which usage is so widespread (e.g., Microsoft Project or Adobe Acrobat) that bulk purchasing is done and tracked at the Agency level while distribution management is done at the Center level.
c. Software purchased through the APC.

The Contractor shall develop and implement a comprehensive software management program that supports the above three categories. This program shall track all software purchased or provided via the Contractor at both a Center and Agency level. The Contractor shall manage the distribution of all Government-provided software licenses that the ACES CTM identifies. The Contractor will be expected to work with the GAPM to deal with non-Center issues and to work with the ACES CTM to handle local distribution. All Government-provided licenses that are managed by the Contractor and licenses that are purchased via the Contract will remain the property of NASA. For system administration purposes, the Government-provided or Government-purchased software is considered Support Level 2 software (see Section 3.2.2, *Support Level 2: Agency-Provided and Licensed Software*).

The Contractor shall perform:

a. Performance and security monitoring and associated mitigation activities. The security monitoring required for license management shall be consistent with the Desktop IT System Security Plan that will be required under the Contract, in accordance with Addendum 1, *CF PWS*, and Attachment I-2, *DPD*, DRD CF-02, *Information Technology (IT) System Security Plan (SSP).*
b. Troubleshooting.
c. License manager(s) installation and maintenance.
d. Implementation and maintenance of updates/upgrades to subscription services and license managers.

The Contractor shall:

a. Provide a means for limiting the software distribution to a prescribed set of end-users defined by the ACES CTM.
b. Ensure that licensing and certificates on servers do not expire.
c. Ensure that all commercially released updates/upgrades and patches (non-security) are installed in accordance with Agency requirements for scheduling and Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-26).

RELEASED - Printed documents may be obsolete; validate prior to use.

d. Ensure that the licensed software is in operating condition, current, with up to date maintenance, and secure.
e. Install and make updates to the licensed software at times that will minimize the impact on end-user productivity.
f. Develop, maintain, and implement required test procedures or simulations to properly test software upgrades, modifications, and maintenance.
g. Offer and manage a pilot program for software updates/upgrades and patches, in accordance with Agency requirements for selection of updates/updates and patches for piloting, as well as scheduling.
h. Provide an ongoing program to evaluate new commercially available software and provide reports, including recommendations, to designated NASA management.
i. Ensure all operational licensed software modifications are installed, secure, operational as expected, and free of detected Problems.
j. Prepare a system software implementation test and release plan for each release or software package update and present it for approval of the ACES CTM.
k. Maintain subscriptions to the OEM system software services.
l. Review OEM Web sites for failure, security, and enhancement information and install updates or patches as appropriate.
m. Perform Configuration Management of all licensed software, standard operating procedures, and software license management documentation developed or maintained by and for the Contract; update software license management documentation after update/upgrade installation is completed, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-27).
n. Provide, update, augment, validate, and maintain current graphic depictions of issued licenses and relationships (e.g., communication paths) of servers, services, and functions of all supported software within the Agency, as well as maintain, store, and make available to the Government this documentation.
o. Provide a quarterly analysis of buying and usage patterns to help the Government more effectively manage the existing software licenses currently purchased while providing a more efficient and cost effective method for bulk purchases of new software.
p. Provide a method by which software license renewal can be managed to account for under or over usage of existing licenses as well as determine the distribution and usage of such licenses by:
    i. Informing the Government if license usage of any ACES-managed software exceeds eighty (80) percent at any Center to allow the Government time to review the need for future software license purchases.
    ii. Informing the Government if license usage of any ACES-managed software drops below twenty (20) percent at any Center to allow the Government time to review the need for future software license deletions.
    iii. Providing a Software Compliance and Analysis Report in accordance with Attachment I-2, *DPD*, DRD IT-11.
q. In the event an end-user needs a Licensed Software update/upgrade to be installed on their ACES seat earlier than the schedule determined by the CCB in order to maintain interoperability with a partner, and the end-user obtains the ACES CTM's approval, the Contractor shall:

RELEASED - Printed documents may be obsolete; validate prior to use.

i. Negotiate with the ACES CTM and the end-user on an accelerated update/upgrade schedule for that end-user and that software.
ii. Provide such update/upgrade according to the agreed upon accelerated schedule.
iii. Track accelerated updates/upgrades at the Center and Agency level.

r. In the event an end-user needs to avoid a Licensed Software update/upgrade that has been scheduled by the CCB in order to maintain interoperability with a partner, and the end-user obtains the ACES CTM's approval, the Contractor shall:
i. Negotiate with the ACES CTM and the end-user on an decelerated update/upgrade schedule for that end-user and that software.
ii. Provide such update/upgrade according to the agreed upon decelerated schedule.
iii. Track decelerated updates/upgrades at the Center and Agency level.

4.7 INSTANT MESSAGING SERVICES

4.7.1 Instant Messaging Requirements

The Contractor shall provide Instant Messaging (IM) services that allow access for end-users throughout the NASA environment and collaboration with external end-users. The IM services shall offer real-time text-based communication between two or more participants over the Internet and the NASA intranet (i.e., .NASA.GOV domain).

The Contractor shall provide a solution, which may consist of multiple products, that collectively meets the following IM service requirements:

a. Client support for devices and operating systems defined by NASA-STD-2804*x*, NASA-STD-2805*x*, and Addendum 3, *Minimum Hardware Requirements*. The solution shall provide support for Windows, Apple, and Linux devices. All devices with Internet access, including Smartphones, shall be supported.
b. Secure transport (e.g., Secure Sockets Layer (SSL)/Transport Layer Security (TLS)).
c. End-user control of Contact List.
d. Limit incoming IM messages to only the end-user's Contact List (e.g., Buddy List) participants.
e. Block IM messages from a specific end-user.
f. Presence Awareness.
g. User-settable status message.
h. Remote access from non-NASA networks.
i. Non-NASA end-users to use the NASA IM service.
j. Client-side logging/saving of IM conversations.
k. Group Discussions.
l. Capability to authenticate using NASA's Authentication and Authorization services.
m. Capability to enable and disable the following functions and capabilities.
n. File transfer between participants.
o. Application sharing.
p. Desktop sharing.
q. Audio/Voice capability.
r. Video capability.

RELEASED - Printed documents may be obsolete; validate prior to use.

s. Whiteboard sharing.
t. The Contractor shall meet all of the requirements of the FISMA. The system shall meet the Low security controls defined in NIST SP 800-53, *Recommended Security Controls for Federal Information Systems and Organizations*.

4.7.2 IM Transition Requirements

NASA's current IM solution is comprised of two components: (a) Microsoft Office Communicator/LCS and (b) Jabber. The current LCS infrastructure is located at NASA MSFC. The current Jabber infrastructure is located at NASA JPL. The infrastructure supporting the LCS is a part of the NOMAD service and will be provided as GFE. The Jabber infrastructure will not be provided as GFE.

The Contractor shall maintain and operate the current NOMAD LCS infrastructure beginning with the Contract Implementation date for Wave 1 (see Attachment 14, *Phase-In Schedule*) and provide a Jabber capability until the Contractor's proposed solution is in place and accepted by the Government in accordance with NPR 7120.7, *NASA IT and Institutional Infrastructure Program and Project Management Requirements*. The current IM service is described in the documents entitled *Instant Messenger for PC* and *Instant Messenger for Mac*, which are provided in the I^3P Technical Library for ACES.

4.8 TWO-FACTOR USER AUTHENTICATION SERVICE DISTRIBUTION

The Contractor shall provide Registration Authority functionality for the issuance of user authentication credentials and signing, encryption, and SSL/TLS (Web-based) certificates (excluding PIV Smartcard credentials). The Contractor shall provide the distribution of two-factor authentication hardware tokens (e.g., RSA SecurID tokens). As part of that responsibility, the Contractor shall:

a. Verify end-user identity information in accordance with NASA policy (using the NASA Registration Practice Statement) prior to issuing encryption, signing, and SSL certificates, hardware tokens, or other requested credentials.
b. Maintain and control inventory to ensure availability of Government-furnished hardware tokens.
c. Issue hardware tokens and certificates utilizing the NASA Identity Management and Account eXchange (IdMAX).
d. Distribute two-factor authentication hardware tokens to end-users, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-45).
e. Assist requestors with the process of activating their hardware tokens, and management of the life cycle of all certificates (e.g., request, key recovery, PKCS#12, and Web certificates), including installation of software updates to support these certificates.

RELEASED - Printed documents may be obsolete; validate prior to use.

5.0 SEAT SERVICES

This section identifies the operational characteristics of the different seats and supporting hardware to be delivered by the Contractor.

For all seats, the Contractor shall provide the following:

a. Installs, Moves, Adds, and Changes (IMACs) (including seat desubscriptions), as defined and required below (with the IMAC pricing included in the base seat cost).

Service Descriptions:

i. An install is a deployment of new or temporary Computing, Cellular, Pager, and Network Peripheral seats.
ii. A move is a physical or remote de-installation, move, and re-installation of system hardware or software. A move includes all necessary support to go from operational status at the old location to operational status at the new location, including preservation of end-user data and temporary storage en route as necessary. Seat moves include all attached peripherals.
iii. An add is the addition of non-Standard Load software and/or hardware augmentations to a seat at the desk sight location on which the Contractor has full administrative responsibilities.
iv. A change is one or more modifications to a Service Option (e.g., change to the Return To Service level) or configuration item (e.g., change to the funding organization or assigned end-user for a seat, and change to seat-related data that is stored in the CMDB).
v. A desubscription occurs when an ACES seat is deleted.

Requirements:

The Contractor shall:

i. Execute individual and group IMACs requiring physical access to the device through advance planning and coordination with the requestor and the appropriate organizational IT point of contact.
ii. Acknowledge a request for IMAC service.
iii. Coordinate with Center movers to schedule moves.
iv. Complete IMAC requests in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Targets SD-28, SD-29, SD-30, and SD-31).
v. Process the closure of IMAC requests in the ESRS.

b. End-User Training

The Contractor shall provide end-user familiarization training for ACES-provided/supported hardware and software products and services. Familiarization training is defined as training that acquaints the average-skilled end-user with the

RELEASED - Printed documents may be obsolete; validate prior to use.

features, capabilities, configuration (either as OEM-configured or as Contractor-configured, as applicable), and optional components of the product or service. This training shall be provided to ACES end-users who have just received their first ACES seat/system for all hardware and software included with the ordered ACES seat/service, and to existing ACES end-users for major upgrades to hardware and software. The Contractor shall detail its planned end-user training approach in Attachment I-19, *Management Plan*, prepared in accordance with Attachment I-2, *DPD*, DRD MA-01, *Management Plan*.

The Contractor shall offer a range of additional training courses covering the breadth of ACES-provided/supported products and services in the APC. Training facilities for both the familiarization and additional training types shall be located in a location convenient to individuals supported by ACES.

The Contractor shall provide assistance to end-users in the use of end-user-configurable services and settings for ACES-provided products and services, as well as guide them in the appropriate use of ACES-provided products and services.

c. End-User Documentation

The Contractor shall provide end-user documentation, which may take several forms, including but not limited to online help, help files, tutorials, Portable Document Format (PDF) documents, and printed manuals. This end-user documentation shall include documentation on the end-user's specific system hardware to explain the functions of buttons on their device(s) and how to program the system's programmable function keys. The Contractor shall provide online end-user documentation on all ACES provided services, including commercially available products (e.g., Microsoft Office user guide), where available from the vendor. The documentation will show how to use each function of the provided version of the product or service. The Contractor shall also create and provide ACES online documentation for ACES services, such as an APC user's guide. The Contractor shall make available for purchase hardcopy documentation for commercial products and ACES services through the APC.

5.1 COMPUTING SEATS

5.1.1 Computing Seats Description

The Contractor shall provide Computing seats, which, in combination with the Base Services detailed in Section 4.0, *Base Services*, shall provide all of the services needed to perform standard end-user computing related activities. Computing seats shall be comprised of three service parts:

a. The platform group providing the computing hardware (e.g., desktop, laptop), operating system (OS), monitor, docking station, and peripherals.
b. Computing seat services.
c. System administration.

RELEASED - Printed documents may be obsolete; validate prior to use.

Computing seats shall be made available in four types:

a. The "S" seat with a Standard set of pre-defined Services and Service Options.
b. The "M" seat with pre-defined Services and Modifiable (end-user-selectable) Service Options.
c. The "B" seat where services are "Built" to specific end-user requirements and Service Options.
d. The "T" seat where services are rendered through a thin client appliance with predefined Services and Service Options.

The term 'Service Option' is defined as the characteristics and metrics that define a particular type of support to be provided by the Contractor. Multiple Service Options, such as System Administration and Return To Service, may be needed to provide various types of support to the end-user.

5.1.2 Requirements for All Computing Seats

For all Computing seats, the Contractor shall:

a. Provide software requirements analysis, software product acquisition, testing of the software changes in relation to the rest of the software in the Standard Load, development and testing of the update deployment method at each Center, verification, and installation, in accordance with item (d) below.
b. Provide the required operating system and application software defined in Section 5.1.6.3.8, *Standard Load*. For the "B" seat only the Standard Load is optional.
c. Provide updates/upgrades and patches of the operating system and application software to more effectively and efficiently perform basic system and application objectives of the relevant seat (i.e., the "S," "M," "B," and "T" Computing seats that have subscribed to the Standard Load).
d. Provide a software refresh cycle of six (6) months based on the update cycle of NASA-STD-2804*x*, which is updated twice a year. The Contractor shall obtain approval by the Agency ACES CCB for software refresh installation for the Agency. The Contractor shall implement Standard Load changes on all Computing seats subscribed to the Standard Load Service Option, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-32).
e. Provide an Agency-wide technology refresh deployment methodology for Standard Load software.
f. Provide, as part of the existing seat cost, upgrade of the hardware platform when industry advances to Standard Load software require a hardware upgrade, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-33).
g. Provide removable storage devices (i.e., memory stick), in accordance with NASA-STD-2805*x*, that comply with NASA Data at Rest (DAR) requirements, as described in Section 4.5.2, *Data At Rest Services*. If the item fails, the Contractor shall replace the failing device at no additional cost to the Government. If the device is lost, stolen, or

RELEASED - Printed documents may be obsolete; validate prior to use.

damaged due to negligence, it is the responsibility of the Government to replace the device.

h. Provide necessary hardware and software to meet current NASA identity verification requirements (e.g., Smartcard readers) that meet the standards expressed in NIST SP 800-96, *PIV Card/Reader Interoperability Guidelines*.
i. Provide a fully operational network cable to connect the Computing seat to the NICS demarcation point (e.g., network jack) and install the cable at the time of an IMAC.
j. Follow Center naming guidelines until an Agency-wide naming convention is implemented, and follow the Agency naming convention once established.
k. Provide the capability to support dual monitors on each hardware platform where such capability exists.
l. Deliver new Computing seats to end-users, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Targets SD-34, SD-35, SD-36, and SD-37).
m. For those ACES Computing seats where the capability exists to remotely boot up devices that are powered down (e.g., vPro Intel chipset), this capability shall be provided.

5.1.3 "S" Computing Seat (Standard)

The "S" Computing seat is intended for overall general purpose computing in support of Center and Agency activities, and is packaged with a pre-defined set of Services and Service Options. It is intended to be the "best value" solution. Typical usage includes e-mail, Web browsing, standard office automation and desktop productivity enhancement software, including report preparation, presentation creation, meeting scheduling, spreadsheet generation, as well as general science and engineering application development and execution.

All "S" Computing seats shall be available in a desktop and a laptop version for both Microsoft and Apple operating systems. The "S" Computing seat shall not provide Service Options other than the ability to de-select the Monitor; however, user-purchased augmentations shall be available via the APC.

The Contractor shall allow the Government to change from an "S" to an "M" Computing seat. To accomplish this, the Government will alter any of the fixed "S" Computing seat SLAs away from the "S" Computing seat standards or change the operating system to Linux, thus moving the seat to a different classification.

5.1.4 "M" Computing Seat (Modifiable)

The "M" Computing seat provides functionality similar to the "S" Computing seat while giving the end-user the ability to select other Service Options for the hardware platform, seat services, and system administration. Additional capabilities available with the "M" Computing seat include a Linux operating system and additional monitor selections.

RELEASED - Printed documents may be obsolete; validate prior to use.

The Contractor shall allow the Government to change from an "M" to an "S" Computing seat if the hardware platform is a Desktop or Laptop (not Lightweight or Tablet). To accomplish this, the Government will select the Service Options that match the "S" Computing seat standards.

5.1.5 "B" Computing Seat (Build as Required)

The "B" Computing seat is intended for more specialized requirements that are not met by either the "S" or "M" Computing seats. The "B" Computing seat provides the ability to "build" a platform solution and system administration support. The "B" Computing seat shall provide the flexibility to meet the diverse range of end-user computing needs typically found across the breadth of NASA's missions, such as end-user systems that utilize unique hardware, operating system configurations, and unique discipline-specific software tools. Unique hardware might include enhanced motherboards, quad processors, specialized peripherals, and accelerated high-resolution graphics cards. The "B" Computing seat gives the end-user the ability to immediately access new technology as it comes to market. Functionality includes the capability of running commonly used office automation applications, although typically at higher levels of performance than those found in the other two Computing seat types.

Examples of "B" Computing seats include but are not limited to seats that require extensive program development, computationally intensive scientific and engineering program execution, development and execution of graphically intensive visualization, and resource intensive application development or execution. Additionally, "B" Computing seats can be "built" to provide a very low cost solution to meet minimal requirements, such as simple data entry.

To meet the requirement to "build" as required, the service parts (platform group, Computing seat services, and system administration) shall be offered separately with specialized "build" Service Options offered only for the "B" Computing seat.

Invoicing for the hardware component of the "B" Computing seat shall be available on a one-time basis or amortized over 36 months. If the one-time basis is chosen, the Government will take ownership of the hardware.

5.1.6 Computing Seats Services

5.1.6.1 "S" Computing Seats Standard Services

The Contractor shall provide "S" Computing seat standard services as identified in Table 5.1.6.2-1, *Computing Seat Services and Service Options*, and defined in Section 5.1.6.3, *Computing Seats Service and Service Option Definitions*.

The Contractor shall allow a concurrent APC order for a monitor upgrade at the time of an "S" Computing seat order or hardware refresh. The order shall be a one-time charge that includes the non-recurring initial cost difference between the original "S" Computing seat standard monitor and the upgraded monitor. The monthly "S" Computing seat cost shall remain unchanged.

RELEASED - Printed documents may be obsolete; validate prior to use.

5.1.6.2 Computing Seats Services and Service Options

The following Services and Service Options, defined in Section 5.1.6.3, *Computing Seats Service and Service Option Descriptions*, shall be available for Computing seats, if commercially available. An "X" in the seat column indicates that the Service Option shall be offered for that seat type. Each hardware platform for the "M" Computing seat shall be a subset of the hardware family proposed for the "B" Computing seat. Each hardware platform for the "S" Computing seat shall be a subset of the hardware family proposed for the "M" Computing seat.

Table 5.1.6.2-1. *Computing Seats Services and Service Options*

Type of Service/Service Options	"S" Seat	"M" Seat	"B" Seat	"T" Seat
Platform				
None			X	
Desktop	X	X		X
Laptop	X	X		X
Lightweight		X		
Tablet		X		
Workstation		X		
Build			X	
Payment Method				
Lump Sum			X	
Amortized			X	
Operating System				
None			X	
Microsoft	X	X	X	X
Apple	X	X	X	X
Linux		X	X	
UNIX (Workstation and Build only)		X	X	
Monitor				
None	X	X	X	X
NASA-STD-2805*x* Standard	X	X	X	X
NASA-STD-2805*x* + 10% minimum**		X	X	
NASA-STD-2805*x* + 20% minimum**		X	X	
Return To Service				
2 business hours		X	X	
8 business hours	X	X	X	X
None			X	
Hardware Technology Refresh Cycle				
None			X	
3 years	X	X		
5 years				X
System Administration				
None*			X	
Microsoft	X	X	X	X
Apple	X	X	X	X
Linux		X	X	
UNIX		X	X	

RELEASED - Printed documents may be obsolete; validate prior to use.

Type of Service/Service Options	"S" Seat	"M" Seat	"B" Seat	"T" Seat
Standard Load				
Included	X	X	X	X
None			X	
Docking Station Solution				
Microsoft/Linux	X	X	X	
Apple	X	X	X	
None		X	X	
Managed Virtual Machine Service				
Local Virtual Machine		X	X	
Remote Virtual Machine		X	X	X
None		X	X	
Backup Services				
None		X	X	
Included	X	X	X	

*The Contractor shall have no obligation for IT Security or C&A for any ACES-supported system ordered with "None" under System Administration. The end-user will be responsible for implementing any IT security requirements.
**Screen size rounded to the nearest whole number using standard rounding techniques.

5.1.6.3 Computing Seats Service and Service Option Definitions

All of the Service and Service Option definitions contained in this section apply to the "S," "M," "B," and "T" Computing seats, which are defined in Sections 5.1.3, *"S" Computing Seat (Standard)*; 5.1.4, *"M" Computing Seat (Modifiable)*; 5.1.5, *"B" Computing Seat (Build as Required)*, and 5.1.7, *"T" Computing Seat (Thin Client)*, respectively. Computing seats "M" and "B" may have data that changes some of the definition; those changes are addressed in the specific seat sections.

5.1.6.3.1 Platform

The Contractor shall provide services to ensure computer hardware (e.g., processor, memory, disk, and network interface card) is available to the specified Seat Type. Contractor services include requirements analysis, hardware and software acquisition, testing, verification, and installation in accordance with the specific technology refresh cycles. Each platform shall meet or exceed the hardware definition as defined in NASA-STD-2805*x*. Each platform shall meet or exceed the minimum configuration recommended by the software manufacturer for the software installed with each seat.

- *None*

No hardware shall be provided by the Contractor (only available for the "Build" seat).

RELEASED - Printed documents may be obsolete; validate prior to use.

- *Desktop*

The Contractor shall provide Desktops, which are computer platforms in an enclosure that allow for expansion and that can be placed on a desk or on the floor. The Contractor shall provide a single monitor, keyboard, mouse, and external speakers with each Desktop seat. The Contractor shall deliver the same desktop hardware platform for the "S" and the "M" Computing seats.

- *Laptop*

The Contractor shall provide Laptops with a docking station solution for end-users who require seat mobility, performance, and lighter weight. The Contractor shall provide a laptop carrying case with each Laptop seat. The laptop carrying case shall be capable of holding the laptop, mouse, power cord, charger/power supply, modem cable, Ethernet cable, a DVD-ROM sized device, Smartcard reader, and an extra battery. The end-user may opt out of the docking station solution for the "M" Computing seat. The Contractor shall deliver the same laptop hardware platform for the "S" and the "M" Computing seats.

- *Lightweight Laptop*

The Contractor shall provide Lightweight Laptops with a docking station solution for end-users who require seat mobility, less weight, and extended battery life over performance. The weight of the Lightweight Laptop shall adhere to NASA-STD-2805*x* requirements (excluding external peripherals) and shall include all features and functionality of the Laptop platform and commercially available lightweight/ultra portable laptops. The Contractor shall provide a laptop carrying case with each Lightweight Laptop seat. The laptop carrying case shall be capable of holding the lightweight laptop, mouse, power cord, charger/power supply, modem cable, Ethernet cable, a DVD-ROM sized device, Smartcard reader, and an extra battery. The end-user may opt out of the docking station solution.

- *Tablet*

The Contractor shall provide Tablets with a docking station solution for end-users who need the capability to convert their computing unit to a touch screen, note-taking device.

The Tablet shall include a display that can be folded down over the keyboard, connections for peripherals, a stylus, and a touch-based OS. The weight of the Tablet shall adhere to NASA-STD-2805*x* requirements.

The Contractor shall provide a tablet carrying case with each Tablet seat. The tablet carrying case shall be capable of holding the tablet, mouse, power cord, charger/power supply, modem cable, Ethernet cable, a DVD-ROM sized device, Smartcard reader, and an extra battery. The end-user may opt out of the docking station solution.

RELEASED - Printed documents may be obsolete; validate prior to use.

- *Workstation*

The Workstation is a multi-processor system intended for application development and execution of higher-performance scientific and engineering programs. Workstations offer additional expansion options utilizing high-speed peripherals, system expansion slots, and additional processor sockets. The Contractor shall provide a single monitor, keyboard, mouse, and external speakers with each Workstation seat.

- *Build*

The "Build" platform Service Option provides for fully customizable solutions for the Laptop (including multi-processors), Lightweight Laptop, Desktop, Tablet, and Workstation hardware platforms. The Contractor shall provide at least one hardware vendor's full product line for Microsoft Windows-compatible, Apple-compatible, Linux-compatible, and UNIX hardware systems. The Contractor shall provide the full product line at a percentage discount below the manufacturer's suggested retail price.

5.1.6.3.2 Payment Method

The "Payment Method" Service Option provides for the ability to pay for the hardware up front at time of purchase or amortized over 36 monthly payments. This Service Option applies to the "B" Computing seat only, which is defined in Section 5.1.5, *"B" Computing Seat (Build as Required)*.

- *Lump Sum (pay for hardware fully at time of purchase)*

- *Amortized (pay over time in 36 monthly payments)*

5.1.6.3.3 Operating System (OS)

The Contractor shall provide an OS that is compatible with and supports the various functions of the selected Computing seats. The Contractor shall provide an OS as requested by the end-user for the "M" and "B" Computing seats and assist in determining compatibility with the ordered hardware platform.

Services include requirements analysis, hardware and system software acquisition, testing, verification, and installation in accordance with the specific technology refresh cycles.

Each architecture shall follow the configuration requirements defined by the tables included in Addendum 2, *Software Standard Load*. (Note: These tables are a proper superset of NASA-STD-2804*x*.)

- *None*—No OS will be delivered by the Contractor (Only available for the "Build" seat).

- *Microsoft Windows*—The Contractor shall deliver a Microsoft Windows OS as specified in Addendum 2, *Software Standard Load*, Table 1-W.

RELEASED - Printed documents may be obsolete; validate prior to use.

- *Apple*—The Contractor shall deliver an Apple OS as specified in Addendum 2, *Software Standard Load*, Table 1-M.

- *Linux*—The Contractor shall deliver a compatible Linux OS for the "M" and "B" Computing seats as specified in Addendum 2, *Software Standard Load*, Table 1-L.

- *UNIX*—The Contractor shall deliver a compatible UNIX OS for "M" and "B" Computing seat workstation platforms, as specified in Addendum 2, *Software Standard Load*, Table 1-U.

5.1.6.3.4 Monitor

The Contractor shall provide monitors as specified in NASA-STD-2805*x*.

- *None*

- *NASA-STD-2805x Standard Monitor size*

- *NASA-STD-2805x + 10% minimum*

- *NASA-STD-2805x + 20% minimum*

5.1.6.3.5 Return To Service

The Contractor shall provide RTS, which is the restoration of an end-user's device to full operability when an Incident occurs that renders an ACES seat unstable or inoperable. RTS includes the tasks that are necessary to get an end-user's system back to an operational state within the scope of the Contractor's responsibility, including field services and any remote management. RTS is the primary objective of Incident Management.

For all "S" and "M" Computing seats, if the end-user's system is rendered unstable or inoperable and the system must be removed from the end-user's environment to perform the repair or the repair time will exceed the subscribed RTS Service Option, the Contractor shall offer the end-user a loaner system (outside of the Loaner Pool Management requirements addressed in Section 4.3, *Loaner Pool Management*). The loaner system shall be provided at no additional cost to the Government until the original system is made stable or operable again or replaced by a new system. The Contractor shall transfer any end-user required and recoverable data or software from the end-user's system to the loaner system to ensure continuity of the end-user's operations. The Contractor shall transfer any new data created during the loaner usage to the repaired or replaced system to ensure continuity of the end-user's operations.

To accomplish the RTS, the Contractor shall provide:

a. Hardware, System, and Standard Load application diagnostics and troubleshooting.
b. System and component maintenance.

RELEASED - Printed documents may be obsolete; validate prior to use.

c. Hardware, System, and Standard Load application configuration changes, tracking, and documentation.

For ACES seats located outside of Centers, the Contractor shall provide hardware maintenance services only. The Contractor shall provide the ordered service using drop ship methodology or other ACES COTR-approved method.

The Contractor shall maintain each seat to the selected 'Return To Service' Service Option:

- *2 business hours*
- *8 business hours*
- *None*

5.1.6.3.6 Hardware Technology Refresh Cycle

The Contractor shall provide scheduled hardware technology refresh, defined as replacement of system hardware and standard non-APC peripherals (e.g., keyboard, mouse, and monitor) associated with the seat with new equipment to meet the objectives of the relevant ACES Seat Type.

- *None*—There is no hardware technology refresh.
- *3 years*—Hardware technology refresh is provided every 3 years.

5.1.6.3.7 System Administration

The Contractor shall provide system administration services, such as platform network connectivity and management; printer setup and management; software installation, configuration, and update management; patch acquisition, testing, and deployment; and end-user assistance. The Contractor shall ensure that all systems are current with designated security patches.

The Contractor shall obtain any necessary security clearances and non-disclosure agreements and maintain the supporting documentation. The Contractor-supplied system administration services shall comply with NASA IT Security Requirements contained within NPR 2810.1*x*. Where system privileges are shared or the Government has exclusive rights, the Contractor shall provide guidance and assistance on the policies and procedures upon request by the ACES CTM to ensure interoperability and system integrity are communicated to the Government administrators. The Contractor shall provide Government end-users or designees the ability to have elevated user privileges in accordance with Section 3.13, *Elevated User Privileges*.

System Administration tasks include:

a. Network protocol administration.

RELEASED - Printed documents may be obsolete; validate prior to use.

b. Access to and management of Center's domain-available peripherals and services (e.g., network time and DNS).
c. Network security management.
d. User account management.
e. Provision of Configuration Guidelines and/or remote or on-site system software installed according to those guidelines.
f. Workstation host-level security, including information about and access to system/application security patches, network services access control mechanisms, and/or anti-virus mechanisms with installation guidelines and/or remote or on-site installation.
g. System software Problem resolution.
h. Hardware procurement configuration consultation.
i. Local, customized backup, restore, and archive service.
j. Site-specific license management for ACES Support Level 2 and 3 applications.
k. Direct on-site end-user education and assistance.
l. Site-specific consistent system configurations.
m. Site-specific system documentation.
n. Desk side system administration functions to support the installation and effective execution of organizational specific applications.
o. Daily system monitoring.
p. System-level performance monitoring, tuning, and optimization.
q. Site-specific client-server and network configuration management.
r. System account management (e.g., create, lock, and remove IDs).
s. Site-specific peripheral management.
t. Addressing ongoing and emerging life cycle system administration issues for the installed computing environment.

- *None*—The Contractor shall not perform any system administration tasks on the seat. This Service Option is only applicable to the "Build" seat.

- *Microsoft*—The Contractor shall be responsible for all system administration tasks on the seat.

- *Apple*—The Contractor shall be responsible for all system administration tasks on the seat.

- *Linux*—The Contractor shall be responsible for all system administration tasks on the seat.

- *UNIX*—The Contractor shall be responsible for all system administration tasks on the seat.

5.1.6.3.8 Standard Load

The Contractor shall provide the software defined in NASA-STD-2804*x* (Tables 3.3.1, 3.3.2, and 3.3.3) and Addendum 2, *Software Standard Load* (Tables 1-W, 2-W, 1-M, 2-M, 1-L, 2-L, 1-U,

RELEASED - Printed documents may be obsolete; validate prior to use.

and 2-U), for each Computing seat that has the Standard Load Service Option selected. ACES Support Level 1 software licenses shall be the property of the Contractor. The Contractor shall maintain agreements with the software vendor for any Support Level 1 software for which software assurance agreements are commercially available. The Contractor shall acquire, maintain, and manage the licenses for all software provided as part of the Standard Load, with the exception of any Government-owned software licenses that are provided to the Contractor for inclusion in the Standard Load. For such Government-owned licenses, the Contractor shall maintain and manage the licenses, but the Government retains ownership of the licenses. Any hardware technology refreshes or memory upgrades necessary to meet ACES Support Level 1 software requirements shall be performed at no additional cost to the Government.

The Contractor shall semi-annually (or upon Government request) evaluate the baseline configuration of ACES-supported software to identify potential updates and improvements (i.e., by applying maintenance or technology refresh enhancements). In effecting these evaluations, the Contractor shall:

a. Maintain interoperability among the various seat configurations.
b. Maintain interoperability (including testing and verification) with the existing baseline configuration after any software/hardware modification has been implemented.
c. Coordinate and integrate with all affected contractors to perform testing of the supported software packages.
d. Meet the Government implementation schedule.
e. Coordinate system, product, and service rollouts with the ACES COTR, ACES CTMs, and all affected contractors to facilitate implementation and minimize impact to end-users.
f. Provide test loads to the Government for validation.
g. Build and test deployment packages for each Center prior to Center-wide and Agency-wide deployment.
h. Document the process for upgrades and maintenance release.
i. Work to ensure that Government-supplied applications that were interoperable (as documented in vendor specifications) in the original baseline configuration are interoperable in the new baseline configuration.
j. Make available the Standard Load and test procedures to the Government to allow the Government to test and validate any additional software not covered by the Standard Load as defined in NASA-STD-2804*x*.

- *Included*—A standard software load and configuration will be included with the seat.

- *None*—No standard software load or configuration will be included with the seat.

5.1.6.3.9 Docking Station Solution

The Contractor shall provide a docking station solution, defined as a base station for a Laptop, Lightweight Laptop, or Tablet that provides the equivalent of a desktop system. It includes a docking station, a single monitor, keyboard, mouse, external speakers, and expansion ports. (Note: Port replicators are acceptable only when no base station solution exists.)

RELEASED - Printed documents may be obsolete; validate prior to use.

- *Docking Station Solution*—A docking station solution compatible with the delivered hardware and OS will be delivered.

- *None*—No docking station solution will be delivered.

5.1.6.3.10 Managed Virtual Machine Services

The Contractor shall provide the services and installation to ensure the capability for computers to run concurrent operating systems.. The virtual machine shall consist of two offerings: (1) Local Virtual Machine and (2) Remote Virtual Machine.

- *Local Virtual Machine*—This service, available on the "M" and "B" Computing seats, shall provide all the functionalities of an "S" Computing seat (Microsoft or Apple*) running concurrently with the host OS. This virtual service shall include the Agency Standard Load for the virtual machine(s) created by this service. The Local Virtual Machine shall be considered a service on the ACES seat and therefore have the same Service Options (e.g., return to service) assigned to the "M" or "B" seat with which it is associated. If System Administration is subscribed for the associated seat, system administration functions to support the virtual machine shall be included.

- *Remote Virtual Machine*—This service, available on the "M", "B," and "T" Computing seats, shall provide all the functionalities of an "S" Computing seat (Microsoft or Apple*) running on a server-based Virtual Desktop Infrastructure (VDI) provided and maintained by the Contractor. End-users will access the virtual desktop service over a network connection using a remote desktop client application or browser. The virtual desktop will be provided to the end-user via an application window displayed by their host OS. The Contractor shall ensure that all instances of the VDI delivered to the end-user have all Agency standard security patches and fixes installed. The VDI delivered to the end-user shall include the Agency Standard Load for the virtual machine(s) created by this service. The VDI shall provide a mechanism to allow storage of all end-user data and non-standard programs. The Contractor shall provide means for data backup and restore functions on an individual account basis.

  * If commercially available.

- *None*—Virtual Machine services are not included with the seat.

5.1.6.3.11 Data Backup and Restore

The Contractor shall provide a means for backup and restore services for a seat's local disk storage. The Contractor shall provide:

a. End-user-selectable frequency and time/day.
b. End-user-selectable data.

RELEASED - Printed documents may be obsolete; validate prior to use.

c. Data storage off-site and in a secure location.
d. Deleted files recoverable for a minimum of 60 days.
e. Capability for end-user to restore data on an individual file basis without Contractor involvement.
f. Protection of backed up data on an account basis.
g. Data backup validation and reporting, in accordance with Attachment I-2, *DPD*, DRD IT-09, *Data Backup and Restore Services Report*, and investigational support of problem resolution (i.e., contacting the end-user to resolve the issue (ITIL Incident Management)).
h. Backup of open files (e.g., e-mail PST files).
i. Government access to information, down to the user or group level, listed in Attachment I-2, *DPD*, DRD IT-09, *Data Backup and Restore Services Report*, Item 15.3.

- *Included*—The Contractor shall provide weekly (or at an alternate frequency set by the end-user) data backup services.

- *None*—Data backup services are not included with the seat.

5.1.7 "T" Computing Seat (Thin Client)

The Contractor shall provide an appliance that collaborates with a server to fulfill traditional computational roles. The Contractor shall be responsible for selecting the thin client appliance and the back-end server infrastructure, as well as developing the management and deployment plans. The Thin Client ("T") Computing seat shall be designed to be compatible with the VDI standards and protocols proposed by the Contractor for the Managed Virtual Machine (Remote) service described in Section 5.1.6.3.10, *Managed Virtual Machine Service*, and shall include the Managed Virtual Machine (Remote).

The Contractor shall provide "T" Computing seat standard services as identified in Table 5.1.6.2-1, *Computing Seats Services and Service Options*, and as defined in Section 5.1.6.3, *Computing Seats Services and Service Option Definitions*.

The Contractor shall ensure that the "T" Computing seat maintains a performance level equivalent to the "S" Computing seat (see Sections 5.1.3, *"S" Computing Seat (Standard)*, and 5.1.6, *Computing Seats Services*).

The Contractor shall allow a concurrent APC order for a monitor upgrade at the time of a "T" Computing seat order or hardware refresh. The order shall be a one-time charge that includes the non-recurring initial cost difference between the original "T" Computing seat standard monitor and the upgraded monitor. The monthly "T" Computing seat cost shall remain unchanged.

The Contractor shall refresh the "T" Computing seat every five (5) years.

RELEASED - Printed documents may be obsolete; validate prior to use.

5.2 CELLULAR SEATS

The Contractor shall provide Cellular seats according to two types: Cellular Phone (CELL) seats and Smartphone seats (such as BlackBerrys and iPhones). Prior to any installation of antenna systems, the Contractor shall coordinate with each Center Radio Frequency Spectrum Manager and obtain Government approval. The Contractor shall ensure nationwide coverage and end-user connectivity across all NASA facilities. The Contractor shall provide an Agency shared minute pooled voice plan (per provider) for domestic (not international) voice services. The Contractor shall allow for all calls within the same carrier with no deduction from the pooled minutes plan. The Contractor shall provide free evening and weekend minutes regardless of carrier. The Contractor shall inform the Government of the timeframe for free evening and weekend calling by carrier.

The Contractor shall provide unlimited text messaging services for all Cellular seats.

The Contractor shall deliver new Cellular seats to end-users, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Targets SD-38 and SD-39).

The Contractor shall maintain the current cellular numbers assigned to existing Cellular seats.

The Contractor shall make available a detailed report showing individual usage of all services for all Cellular seats, in accordance with Attachment I-2, *DPD*, DRD IT-01, *Agency Cellular Seat Detail Report*. Excess usage will be assessed through a process jointly determined by the ACES Project Office and the ACES CTMs. If the Government user-combined usage of the pooled minute services exceeds the pooled minutes by carrier, the Contractor shall invoice the Government for the excess usage as prescribed under Other General Services. The Contractor shall make available a report that enables the Government to sort the excess usage data by the individual and Center levels, in accordance with Attachment I-2, *DPD*, DRD IT-01, *Agency Cellular Seat Detail Report*.

All Cellular seats shall have the following minimum set of services:

- High Resolution Color screen (minimum 64K color palette)
- Voicemail
- Password protection and keyboard lock
- Silent/Vibrate notification mode
- Mute control
- Automatic redial
- Caller ID
- Caller waiting
- Wireless, hands-free capability (e.g., Bluetooth)
- Speaker Phone
- SMS/Text Messaging capable

The Contractor shall submit to the Government for review and approval an initial performance and operational analysis for each device. The Contractor shall deliver all devices to the end-user

RELEASED - Printed documents may be obsolete; validate prior to use.

fully configured for immediate use. The Contractor shall offer all Government-approved accessory options for each device in the APC. Any device battery found to be defective during the normal deployment cycle will be considered a warranty item and shall be replaced as part of the regular seat maintenance option.

The Contractor shall provide for scheduled technology refresh of Cellular seats and initial delivery of application software. The Contractor shall provide the Cellular seats with new versions, upgrades, and modifications associated with the system, and appropriate Cellular seat application software. Software patches are those that enhance the capabilities of the device or provide security and/or bug fixes. The Contractor shall include patch and upgrade acquisition, testing, verification, and installation. Software technology refresh of Cellular seats shall occur in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-40). The Contractor shall ensure that end-users are able to keep existing phone numbers when refreshing ACES Cellular seats. The Contractor shall transfer all contact information and other data stored on a Cellular seat from the old device to the new device at time of refresh.

5.2.1 Cellular Seats Services and Service Options

The Contractor shall provide the following Services and Service Options for all Cellular seats, if commercially available. An "X" in the seat column indicates that the Service Option shall be offered for that seat type.

Table 5.2.1-1 Cellular Seats Services and Service Options

Type of Service/Service Options	"S" Seat	"B" Seat
Voice Mail		
Included	X	X
None		X
International Calling Plan		
Included		X
None	X	X
Camera		
Included	X	X
None		X

5.2.1.1 Voice Mail

The Contractor shall provide the services required for a voice mail system with the following capabilities: recorded announcements; audio and visual indicators of messages awaiting retrieval; forwarding capability; as well as creation, deletion, and retrieval of messages.

5.2.1.2 International Calling Plan

The Contractor shall provide an international voice plan for voice communications outside of the United States. This voice plan shall provide the capability to both make and receive calls to and from the United States to foreign countries and carry the device to foreign countries and make

RELEASED - Printed documents may be obsolete; validate prior to use.

and receive calls to and from there. The Contractor shall make available to the end-user the information, costs, and guidelines associated with International Calling Plans. All costs associated with International Calling Plans shall be no greater than the current cellular carrier's published voice/data plan rates.

5.2.1.3 Camera

The Contractor shall ensure that the instrument delivered for Cellular seats is equipped with a camera unless the Government end-user specifically chooses to exclude this option for "Build" seat orders.

5.2.2 Cellular Phone Seat (CELL)

5.2.2.1 CELL Seat Definition/General Requirements

The Contractor shall provide a standard Cellular Phone (CELL) seat. The Contractor shall include any services or accessories that the OEM includes as part of the standard packaging. In addition, the Contractor shall provide the battery, wall and car chargers, carrying case (holster), and hands-free headset. The Contractor shall provide all required software licenses for the devices.

The "Build" platform Service Option provides for fully customizable solutions for Cellular Phone hardware. The Contractor shall provide two cellular carrier's hardware vendor's full consumer product line for "B" seat Cellular Phone seats. The Contractor shall provide the full product line for "B" CELL seats at a percentage discount below the manufacturer's suggested retail price.

5.2.2.2 CELL Seat Services and Service Options

In addition to the Cellular standard Service Options described in Section 5.2.1, *Cellular Seats Services and Service Options*, the following Service Options shall be available for the CELL seat, if commercially available. An "X" in the seat column indicates that the Service Option shall be offered for that seat type.

Table 5.2.2.2 CELL Seat Services and Service Options

Type of Service/Service Options	"S" Seat	"B" Seat
Instrument		
Cell Phone	X	
Product Line		X
Hardware Technology Refresh Cycle		
None		X
18 Month	X	
Domestic Calling Plan		
500 Anytime Voice Minutes	X	X
1,200 Anytime Voice Minutes		X
Unlimited Anytime Voice Minutes		X

RELEASED - Printed documents may be obsolete; validate prior to use.

Type of Service/Service Options	"S" Seat	"B" Seat
Return To Service		
2 business hours		X
8 business hours	X	X

5.2.2.3 CELL Seat Service Descriptions

5.2.2.3.1 Instrument

The Contractor shall provide a choice of color display cellular phones across multiple vendors.

5.2.2.3.2 Hardware Technology Refresh

The Contractor shall provide scheduled technology refresh of device hardware and required peripherals to more effectively and efficiently perform the objectives of the CELL seat type.

5.2.2.3.3 Domestic Calling Plan

The Contractor shall provide a domestic voice plan for anywhere in the Continental United States (CONUS) with no roaming or long distance charges.

5.2.2.3.4 Return To Service

The Contractor shall provide standard hardware and software maintenance services for the seat that includes: system diagnostics and troubleshooting; system and component maintenance; hardware configuration, tracking, and documentation; and appropriate CELL seat software, patch and upgrade acquisition, testing, verification, and installation.

5.2.3 Smartphone Seat

5.2.3.1 Smartphone Seats Definition/General Requirements

The Contractor shall provide a fully managed and supported Smartphone with wireless enterprise solution services capable of providing voice, Broadband/high-speed data transfer (e.g., SMS, Internet Browsing, and Multimedia Messaging Service (MMS)), Microsoft Exchange-based calendar and e-mail capable data communications, International voice/data communication, and Bluetooth capability. The Contractor shall include any services or accessories that the OEM includes as part of the standard packaging. In addition, the Contractor shall provide the battery, computer synchronization cable where necessary, wall and car chargers, cradle, carrying case (holster), and hands-free headset. The Contractor shall provide all required software licenses for the devices. In addition, the Contractor shall provide the appropriate software that supports synchronization between the Smartphone seat and the associated end-user's Computing seat. The Contractor shall maintain the device to be compatible with ACES Desktop/Laptop systems/software as it relates to the synchronization and transfer of data. All functionality of such a device shall be governed by the server-based policies as defined by the NOMAD service and a corresponding server-based environment that supports device-level policy enforcement and

RELEASED - Printed documents may be obsolete; validate prior to use.

device-level data encryption. The Contractor-provided device shall have Over-The-Air (OTA) provisioning capability for device-level software/firmware/patching. The Contractor shall provide hardware technology refresh of the devices according to the Service Option selected. The Contractor or device shall provide the applicable application software to enable the viewing of word processing, spreadsheets, presentation, and Portable Document Format (PDF) data files on such devices as defined in NASA-STD-2804*x*. The Contractor shall provide and support the necessary hardware, software, installation, server activation, and interface with the NOMAD service in support of the Cellular seats. The configured system(s) shall be incorporated into the ACES institutional IT support structure.

The Contractor shall ensure that any Smartphone device deployed to the end-users is compliant with NASA IT Security Requirements, as defined in NPR 2810.1*x* (e.g., password protection, keyboard lock, and S/MIME encryption) and is compatible with and able to support the NASA DAR solution. Data storage for this device, both internal and removable (e.g., microSD card), must conform and adhere to the current DAR standard/guideline (to be determined).

In addition to the minimal set of Cellular seat services, the Smartphone seat shall include the following feature set:

- QWERTY keyboard (physical or screen-based).
- Instant Messaging capable.
- Internet Browser.
- Internal or Removable Storage (such as SD or microSD card).
- OTA.
- Wireless, seamless, and near real-time data synchronization of the end-user's desktop e-mail, calendar, contacts, notes, and tasks.
- DAR compliant (Hardware and/or Software encryption capable).

The "Build" platform Service Option provides for fully customizable solutions for PDA hardware platforms. The Contractor shall provide a minimum of two cellular carrier's hardware vendor's full consumer product line for "Build" seat Smartphone hardware platforms. The Contractor shall provide the full product line at a Contractor-specified percentage discount below the manufacturer's suggested retail price and lower than any commercially available price for the "Build" Smartphone seat.

5.2.3.2 Smartphone Seats Services and Service Options

In addition to the Cellular standard Service Options described in Section 5.2.1, *Cellular Seats Services and Service Options*, the following Service Option definitions apply to the Smartphone seat, if commercially available. An "X" in the seat column indicates that the Service Option shall be offered for that seat type.

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 5.2.3.2-1 Smartphone Seats Services and Service Options

Type of Service/Service Options	"S" Seat	"B" Seat
Instrument		
None		X
Research-In-Motion (RIM)-based	X	X
Apple-based	X	X
Other Architecture		X
Hardware Technology Refresh Cycle		
None		X
18 Month	X	
Domestic Calling Plan		
Data Only		X
500 Voice Minutes	X	X
1,200 Voice Minutes		X
Unlimited Voice Minutes		X
Return To Service		
None		X
2 business hours		X
8 business hours	X	X
Tethering		
None	X	X
Included		X

5.2.3.3 Smartphone Seats Service Descriptions

5.2.3.3.1 Instrument

The Contractor shall provide a choice of color display devices, including but not limited to a RIM-based device, Apple-based device, or Windows Mobile capable device.

5.2.3.3.2 Hardware Technology Refresh

The Contractor shall provide for scheduled technology refresh of device hardware and required peripherals to more effectively and efficiently perform the objectives of the Smartphone seat type.

5.2.3.3.3 Domestic Calling Plan

The Contractor shall provide domestic voice plan for anywhere in the United States with no roaming or long distance charges. All service plans for the Smartphone seats shall include the unlimited data service plan.

RELEASED - Printed documents may be obsolete; validate prior to use.

5.2.3.3.4 Return To Service

The Contractor shall provide standard hardware and software maintenance services for the seat that includes: system diagnostics and troubleshooting; system and component maintenance; hardware configuration, tracking, and documentation; Smartphone operating system and appropriate Smartphone seat software; and patch and upgrade acquisition, testing, verification, and installation.

5.2.3.3.5 Tethering

The Contractor shall provide the capability to utilize a Smartphone as a cellular modem to access the Internet when connected to a Computing seat.

5.3 PAGER SEAT

5.3.1 Pager Seat Definition/General Requirements

The Contractor shall provide pager services that shall be made available via the ordering of Pager seats. Each Pager seat shall include a pager instrument that is appropriate to the Service Option ordered, a belt clip, and end-user documentation. The Contractor shall include the following elements within this service:

- Numeric, alphanumeric, and 2-way alphanumeric paging
- Statewide and nationwide coverage areas
- Voicemail notification
- Local and toll-free number services
- Return To Service features

The Contractor shall deliver Pager seats to end-users, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-41).

The Contractor shall maintain the current pager numbers assigned to existing pagers. For numeric and alphanumeric offerings, the Contractor shall include in the seat price up to 500 messages per month. For two-way alphanumeric offerings, the Contractor shall include in the seat price up to 500 message blocks per month (1 message block = 100 characters maximum). The Contractor shall identify, evaluate, and report to the Government any questionable or unusually high usage of pager services.

The following Service Options shall be available for the Pager seat, if commercially available.

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 5.3.1-1 Pager Seat Services and Service Options

Type of Service/Service Options
Instrument
Numeric (500 pages/month)
Alphanumeric (200 pages/month, e-mail) One-way/Alias
Alphanumeric (200 pages/month, e-mail) Two-way/Alias
Service Plan
Local Only
Statewide
Nationwide
800 Number
Voice Mail Notification
None
Sent to Pager
Octel Message Notification (Outcalling)
None
Enabled
Return To Service
2 business hours
8 business hours

5.3.2 Pager Seat Service and Service Option Descriptions

5.3.2.1 Instrument

The Contractor shall provide a choice of several pager devices across multiple vendors.

5.3.2.2 Service Plan

The Contractor shall provide the required communication service plan-based domestic usage for use anywhere in the continental United States with no roaming or long distance charges.

- *Local*—Unlimited messaging (local coverage)
- *Statewide*—Unlimited messaging (statewide coverage)
- *Nationwide*—Includes 500 pages/messages per month (CONUS coverage)
- *800 Number*—Toll-free pager number

5.3.2.3 Voice Mail

The Contractor shall provide the services required for the pager to receive notification from a voice mail system.

RELEASED - Printed documents may be obsolete; validate prior to use.

5.3.2.4 Octel Message Notification (Outcalling)

The Contractor shall provide the end-user with the capability to set up a telephone number where he or she is notified of messages received. The end-user can specify a time range to receive notification.

5.3.2.5 Return To Service

The Contractor shall provide standard hardware and software maintenance services for the seat that includes: System diagnostics and troubleshooting; system and component maintenance; hardware configuration, tracking, and documentation; appropriate pager seat software; and patch and upgrade acquisition, testing, verification, and installation.

5.4 NETWORK PERIPHERAL SEATS

The Contractor shall provide Network Peripheral seats, which are comprised of Network Printer (PRN) seats and Multi-Functional Device (MFD) seats. The Contractor shall provide Agency shared impression pools for Black and White (B&W) and Color impressions, respectively. The Contractor shall total all B&W impressions and all Color impressions monthly.

The Contractor shall make available a detailed report showing individual usage of all services for all Network Peripheral seats, in accordance with Attachment I-2, *DPD*, DRD IT-08, *Agency Network Peripheral Seats Detail Report*. Excess usage will be assessed through a process jointly determined by the ACES Project Office and the ACES CTMs. If the Government seat-combined usage of the pooled impression services exceeds the pooled impressions, the Contractor shall invoice the Government for the excess usage as prescribed under Other General Services. The Contractor shall make available a report that enables the Government to sort the excess usage data by seat and Center levels, in accordance with Attachment I-2, *DPD*, DRD IT-08, *Agency Network Peripheral Seats Detail Report*.

5.4.1 Network Peripheral Seats Definition/General Requirements

PRN and MFD seats include hardware, maintenance, support, and network connectivity, and can interface with authorized computers to provide, at a minimum, print functionality. The Contractor shall coordinate with the network provider to ensure the availability of connectivity for these devices. The subscriber will identify the specific physical location of each PRN/MFD seat and will identify each customer who will have operational access to each PRN/MFD seat. The Contractor shall provide a diagram of where the PRN and MFD seats are located at each Center.

The Contractor shall deliver new Network Peripheral seats to end-users, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Target SD-42).

Any newly deployed or refreshed hardware for PRN and MFD seats shall be furnished as new and shall not have been used at any other time prior to delivery after the manufacturing process. Equipment shall be delivered with 200 or less counts on the meter or printer record.

RELEASED - Printed documents may be obsolete; validate prior to use.

The Contractor shall be responsible for taking accurate meter readings (remotely, if possible) monthly of each machine at each MFD and PRN seat location during the last week of each month. Where physical access to machines located in restricted areas is necessary, the Contractor shall coordinate access with the ACES CTMs. Meter readings shall be taken for scan, fax, copy, and print services for MFD seats and print services for PRN seats. The Contractor shall report MFD and PRN meter readings to the Government, in accordance with Attachment I-2, *DPD*, DRD IT-08, *Agency Network Peripheral Seats Detail Report*.

The Contractor shall provide features for Network Peripheral seats as defined in Addendum 3, *Minimum Hardware Requirements*.

If the Contractor plans to replace the currently installed manufacturer/model for any installed PRN or MFD seat, the Contractor shall provide advance written notification of the proposed replacement to the ACES COTR or designee for approval.

For each PRN or MFD seat to be replaced, the replacement manufacturer/model shall meet or exceed the capabilities of the device being replaced and fit within the original device footprint unless waived by the ACES COTR or designee.

All Network Peripheral Seats shall be refreshed every 4 years (i.e. 4 year refresh cycle).

The Government is responsible for supplying paper for the PRN and MFD seats. The Contractor shall provide all other consumables needed to maintain the functionality of any PRN and MFD seat, including toner, staples, other replenishable items, and repair parts.

The Hardware Refresh cycle for Network Peripheral seats shall be 4 years.

5.4.1.1 Network Printer (PRN) Seats

The Contractor shall provide the PRN seats defined in Sections 5.4.1.1.1, *PRN B&W Seat*, and 5.4.1.1.2, *PRN Color Seat*. The Contractor shall provide PRN seats that meet the speed bands defined in Table 5.4.1.3-1, *Network Peripheral Seats Speed Bands*.

5.4.1.1.1 PRN B&W Seat

The Contractor shall provide a PRN B&W seat that is a high-performance black and white printer.

5.4.1.1.2 PRN Color Seat

The Contractor shall provide a PRN Color seat that is a high-performance color printer.

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 5.4.1.1-1. Network Printer Seats Services and Service Options

Type of Service/Service Options
Model Type B&W
Monthly Volume Band
5,000 B&W impressions per machine per month
Return To Service (4-hour RTS included)
2 business hours
Model Type Color
Monthly Volume Band
2,000 Color/5,000 B&W impressions per machine per month
Return To Service (4-hour RTS included)
2 business hours

5.4.1.2 Multi-Functional Device (MFD) Seats

The Contractor shall provide the mandatory minimum features for MFD seats as defined in Addendum 3, *Minimum Hardware Requirements*. The MFD base services provide functionality such as copying, printing, scanning, faxing, and the option of enabling multiple fax lines.

The Contractor shall provide two networkable MFD seat types (one black and white; and color with black and white capability) that are configured to perform copy, print, scan, and fax functions. A fully-functional, network-ready MFD seat is defined as follows: Upon activation of the start button, the MFD is able to perform the following requested functions:

- Copy hardcopy to hardcopy.
- Print hard copy from electronic source.
- Scan hardcopy to a designated location.
- Send and receive fax hardcopy to/from a designated telecommunication location.

The Contractor shall be responsible for reading the meter counters for invoicing and reports.

The Contractor shall deliver additional equipment minimum features by model type as well as mandatory minimum features for all MFD seats as follows:

5.4.1.2.1 B&W MFD Desktop Model

- No unique requirements.

5.4.1.2.2 Color MFD Desktop Model

- No unique requirements.

RELEASED - Printed documents may be obsolete; validate prior to use.

5.4.1.2.3 B&W MFD Floor Model

- No unique requirements.

5.4.1.2.4 Color MFD Floor Model

- No unique requirements.

5.4.1.2.5 Scanning

The Contractor shall provide the following scanning features for all MFDs:

- Scan from B&W, grayscale, and color (where supported by the hardware)
- Ability to scan single-sided or duplex originals without manual intervention
- Scans maximum paper size ledger at 600 dpi in 256 grayscale increments
- Scans "Off the glass" – job build multiple pages of various sizes into a single file
- Embedded scan to e-mail with Lightweight Directory Access Protocol (LDAP)
- Ability to use Simple Mail Transfer Protocol (SMTP) and SMTP authentication
- Ability to use PIV II Smartcard authentication

5.4.1.2.6 Facsimile

The mandatory minimum facsimile requirements are:

- Minimum one fax line
- Fax to fax
- Group dialing
- Quick dialing
- Page by page job status at the machine
- Transmission confirmation
- Ring tone adjustable
- G3 33.6 Kbps Modem with auto fallback
- Automatically stores incoming faxes in memory in the event paper or toner runs out or the machine experiences a jam

5.4.1.2.7 Printing

The Contractor shall provide drivers to the end-user systems, and shall maintain functional compatibility with ACES systems. The mandatory minimum printing requirement is to provide a secure print function, which permits the end-user to print using an identification code/name of up to 10 digits.

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 5.4.1.2-1. Networkable Black and White MFD Seat Services and Service Options

Type of Service/Service Options
Model Type Desktop
Monthly Volume Band
5,000 B&W impressions per machine/month
Return To Service (4-hour RTS included)
2 business hours
Model Type Floor
Monthly Volume Bands
Vol. Band 1 7,500 B&W impressions per machine/month
Vol. Band 2 15,000 B&W impressions per machine/month
Vol. Band 3 30,000 B&W impressions per machine/month
Return To Service (4-hour RTS included)
2 business hours
Fax Enabled (1 fax line included)
Added second fax line
Capacity Tray
Capacity Tray
Optional Large-Capacity Tray
2-Hole/3-Hole Punch
None
Optional 2-Hole/3-Hole Punch

Table 5.4.1.2-2. Networkable Color MFD Seat Services and Service Options

Type of Service/Service Options
Model Type Desktop
Monthly Volume Bands
2,000 Color/5,000 B&W impressions per machine/month
Return To Service (4-hour RTS included)
2 business hours
Model Type Floor
Monthly Volume Bands
Vol. Band 1 2,000 Color/7,500 B&W impressions per machine/month
Vol. Band 2 4,000 Color/15,000 B&W impressions per machine/month
Vol. Band 3 High-End Fiery Graphics 4,000 Color/15,000 B&W impressions per machine/month
Return To Service (4-hour RTS included)
2 business hours
Fax Enabled (1 fax line included)
Added second fax line
Large-Capacity Tray
Optional Large-Capacity Tray
2-Hole/3-Hole Punch
Optional 2-Hole/3-Hole Punch

RELEASED - Printed documents may be obsolete; validate prior to use.

5.4.1.3 Network Peripheral Seat Service and Service Option Definitions

5.4.1.3.1 Model

The Contractor shall provide two types of MFD models: (a) floor model (including cabinet) and (b) a desktop model.

5.4.1.3.2 Volume Bands

The Contractor shall provide volume bands, which determines the number of pages that the Contractor includes in the seat price. All pages up to the volume band are included in the seat price. The Contractor shall invoice the Government for all pages exceeding the volume band on a per-page cost. Although billed monthly for accounting and management purposes, unused impressions will be banked and any unused impressions at the end of the year will be adjusted against any monthly overages and credited back to the Government.

5.4.1.3.3 Speed Bands

The Contractor shall provide Network Peripheral seats that meet the speed bands defined in Addendum 3, *Minimum Hardware Requirements*. A solution that exceeds the pages per minute (PPM) listed for a particular speed band can be offered.

5.4.1.3.4 Return To Service

The Contractor shall provide a 4-hour Return To Service with an option for a 2-hour Return To Service, which determines the period of time allotted for repairs to be made to return the device to full operational status.

5.4.1.3.5 Additional Facsimile Line

The Contractor shall provide an option for a second facsimile line to be enabled for the service.

5.4.1.3.6 Large-Capacity Tray

The Contractor shall provide large-capacity tray options, which determines the number of sheets of paper available in the feeder tray. The large capacity tray shall provide at least 1,500 sheets.

5.5 VIRTUAL TEAM SERVICE (VTS) SEAT

5.5.1 VTS Seat Description

The Contractor shall provide and manage a VTS seat. The Contractor shall make the VTS service and seats available beginning with the Contract Implementation date for Wave 1 (see Attachment 14, *Phase-In Schedule*). The VTS seat shall provide a Web browser-based system that enables the NASA end-user community and external partners to conduct Web conferencing

RELEASED - Printed documents may be obsolete; validate prior to use.

discussions inclusive of Sensitive But Unclassified (SBU) data and materials regulated by International Traffic in Arms Regulations (ITAR) during Web conferencing.

The Contractor shall provide and deliver new VTS accounts to end-users for VTS seat subscriptions, in accordance with Attachment I-3, *Retainage Pools and Performance Metrics* (SLA Targets SD-43).

The Contractor shall support three types of VTS meetings:

a. Standard: Minimum credentials are required. Capability for end-users to communicate SBU or ITAR data is not required. VTS meetings shall be secured by protocol to allow participant access via a unique meeting number and password distributed with the meeting invitation without requiring additional authentication.
b. Authenticated: Requires authentication with NASA's electronic authentication service (currently Sun Access Manager Electronic Authentication). Authenticated meetings require participants to possess a NASA-issued credential to be used for identification and authentication.
c. Invitation Only: A sub-category of authenticated meetings in item (b) above in which only those who are invited may attend.

The VTS seat owner will be the primary seat host and delegator. Voice communications are accomplished via office telephones or any other means and are not within the scope of this service.

5.5.2 VTS Requirements

The Contractor shall provide a Virtual Team Service that meets the following functional requirements.

For Standard meetings, the VTS shall:

a. Provide the capability to conduct unauthenticated online meetings with participants (i.e., NASA and external end-users).
b. Provide the capability to add an invitee to a standard meeting while the meeting is in session.

For Authenticated meetings, the VTS shall:

c. Integrate into NASA eAuthentication service using the SAMLv2 protocol, thus ensuring only persons with a valid account in the NASA eAuthentication service are able to access authenticated meetings.
d. Provide the capability to add an invitee to a meeting while the meeting is in session, consistent with item (a) above.

RELEASED - Printed documents may be obsolete; validate prior to use.

For Invitation Only meetings, the VTS shall:

e. Integrate into NASA eAuthentication service using the SAMLv2 protocol, thus ensuring only persons with a valid account in the NASA eAuthentication service are able to access authenticated meetings.
f. Enable limited-access authenticated meetings by restricting meeting access to valid accounts in the NASA eAuthentication service, for invitee list attendees only.
g. Validate each invitee against the invitee list.
h. Provide the capability to add an invitee to a limited-access authenticated meeting while the meeting is in session, consistent with items (a), (b), and (c) above.
i. Prevent forwarded meeting notices from providing access to a meeting.

For all meetings, the VTS shall:

j. Require meeting invitations to be sent by the host from within the VTS Web-based interface.
k. Allow anyone in the NASA eAuthentication service to be a meeting participant.
l. Allow only seat owners to create and host meetings.
m. Integrate contact lists from NASA-STD-2804x-approved e-mail clients.
n. Provide seat owners with the capability to host, schedule, and delegate meetings.
o. Provide meeting attendees with a standard "Authorized Government System" usage banner during login.
p. Provide the capability to delegate meeting scheduling and hosting of meetings.
q. Make available monthly utilization and trend data by customer.
r. Provide secure (FIPS 140-2-compliant encryption applied to all sessions) and non-sensitive Web conferencing.
s. Ensure all infrastructure required to provide the service resides in the United States only in a segregated environment which meets FISMA requirements and is separate from other commercial environments. In addition, ensure support staff for the VTS are comprised of only United States citizens.
t. Provide secure online collaboration via any HTTPS Internet connection worldwide.
u. Support display of documents of all formats.
v. Support sharing of desktops and remote applications.
w. Provide unlimited minutes (i.e., no charge for amount of time spent in meeting).
x. Provide the capability to conduct meetings with up to 1,000 concurrent attendees.
y. Provide the capability to have additional concurrent meeting attendees beyond the meeting limitation (i.e., 1,000 concurrent attendees) on a per-attendee charge.
z. Provide the capability (and associated cost model) to accommodate planned events of up to a maximum of 3,000 concurrent meeting attendees in limited functionality mode only (no expectation of switching presenters between all 3,000 people).

5.5.3 Current NASA VTS Implementation

The current Virtual Team Service seat and service (currently known in NASA as Virtual Team Meeting), is described in the documents entitled *ODIN Virtual Team Meeting Service Description* and *ODIN VTM Infrastructure Upgrade Proposal (IUP) for eAuthentication*, which

RELEASED - Printed documents may be obsolete; validate prior to use.

are provided in the I^3P Technical Library for ACES. This service is a scalable Web collaboration system based on WebEx technology that enables the NASA end-user community and external partners to discuss SBU and ITAR data during Web conferencing.

RELEASED - Printed documents may be obsolete; validate prior to use.

AGENCY CONSOLIDATED END-USER SERVICES (ACES)

Addendum 1 to Attachment I-1

Cross Functional

Performance Work Statement

January 25, 2010

RELEASED - Printed documents may be obsolete; validate prior to use.

Table of Contents

RELEASED - Printed documents may be obsolete; validate prior to use.

RELEASED - Printed documents may be obsolete; validate prior to use.

RELEASED - Printed documents may be obsolete; validate prior to use.

RELEASED - Printed documents may be obsolete; validate prior to use.

Table of Figures

RELEASED - Printed documents may be obsolete; validate prior to use.

1. I³P Acquisitions

1.1 Introduction and Overview

To fulfill NASA's requirements for infrastructure improvement the Agency has directed the Office of the CIO (OCIO) to implement a program for providing more reliable and efficient Information Technology (IT) services.

As a result, NASA's OCIO established a major information technology (IT) improvement initiative in 2007, the IT Infrastructure Integration Program (I³P). Through I³P, the NASA OCIO intends to partner with industry to transform the way IT services are delivered and managed across the Agency.

The I³P strategy includes consolidating service demand across the Agency and working with trusted sourcing partners to deliver standardized, stable, secure, cost effective and high quality IT infrastructure and Enterprise Applications services to the NASA user community.

Specifically, the NASA I³P strategy intends to achieve the following benefits:

a. Enable Agency-wide collaboration through a seamless IT infrastructure;
b. Gain efficiencies in IT infrastructure operating costs;
c. Reduce the complexity of managing IT services across the Agency; and,
d. Improve IT security across the Agency's mission environment.

In addition, the Agency intends to use this improvement initiative to enable a more process-aligned service delivery model across the scope of I³P. This will be accomplished in part by the adoption of the IT Infrastructure Library (ITIL) framework. NASA expects selected IT Contractors to demonstrate their capabilities through the application of ITIL processes, specifically ITIL Version 3.0.

As this document is intended to be nearly identical for all I³P contracts, it frequently uses the plural terms "Contractors" and "I3P Contractors." For purposes of this ACES contract, the terms "Contractors" and "I3P Contractors," as well as "Contractor" shall mean the ACES Contractor only except where it is patently clear that a specific CF-PWS requirement is a joint responsibility of the five I³P Contractors (e.g., cooperation, coordination, etc.).

1.2 Concept of Operations

Central to NASA's I³P initiative is the recognition that responsibility for major elements of the Agency's 'As-Is' IT environment, which is currently supported by a variety of independent Agency- and Center-based contracts, will be consolidated into a smaller number of integrated Agency-wide I³P Contracts. Operations and service delivery must remain stable throughout

RELEASED - Printed documents may be obsolete; validate prior to use.

phase-in periods (i.e. transition) to assure that NASA customers do not experience disruption to business operations.

I^3P Contractors shall work with the Agency and with each other, in a collaborative and cooperative manner as prescribed by defined processes and assigned roles and responsibilities to transform NASA's fractured IT infrastructure and enterprise applications service delivery capabilities into a highly consolidated, integrated and secure IT Service Management (ITSM) environment.

The OCIO plans to manage this transformation through the I^3P acquisition strategy according to the following four key IT principles:

a. Mission Enabling: IT at NASA serves to achieve NASA's mission;
b. Integrated: NASA will implement IT that enables the integration of business (mission) process and information across organizational boundaries;
c. Efficient: NASA will implement IT to achieve efficiencies and ensure that IT is efficiently implemented; and,
d. Secure: NASA will implement and sustain secure IT solutions.

1.3 I^3P Success Criteria

Successful implementation of the NASA I^3P vision will result in significant benefits to the Agency. Specifically, NASA envisions a "To-be" state characterized by the following criteria:

a. NASA systems can be seamlessly deployed, utilized and secured across Center boundaries;
b. NASA consistently invests in the right IT solutions that provide the greatest benefit to the NASA mission;
c. NASA information is accessible, integrated, and actionable;
d. A reliable, efficient, secure and well-managed IT infrastructure is in place that customers rely on rather than compete with; and,
e. CIOs are seen as credible, trusted partners in solving business problems

1.4 Scope and Boundaries of Contracts

NASA spends approximately $1.8 billion dollars annually on Information Technology. Today, much of the infrastructure supporting NASA is decentralized including operations at NASA Headquarters, all ten NASA field Centers, and associated component locations. There are major challenges in IT management associated with a decentralized IT organization, such as lack of sufficient visibility into IT spending, inability to achieve economies of scale, inconsistent IT governance and numerous information security challenges.

RELEASED - Printed documents may be obsolete; validate prior to use.

NASA is consolidating IT service demand, transforming service delivery, aligning IT management and enhancing IT security through I³P. The five acquisitions making up I^3P include the following enterprise services:

a. ACES (Agency Consolidated End-user Services): End-User Services – to include NASA desktops, cell phones, Personal Digital Assistants (PDAs), Agency-wide Active Directory, e-mail and calendaring functionality;
b. NICS (NASA Integrated Communications Services): Communications Services – to include data, voice, video, LAN and WAN services;
c. NEDC (NASA Enterprise Data Center): Data Center Services – to include application/data hosting and housing;
d. WEST (Web Enterprise Service Technologies): Web Services – to include public-facing website hosting and applications; and,
e. EAST (Enterprise Applications Service Technologies): Enterprise Applications Services – to include applications services associated with the NASA Enterprise Applications Competency Center and Agency-wide collaboration services including NASA's Identity, Credentialing, and Access Management (ICAM) in addition to new intranet environments and applications.

Today, these services are provided under four Agency-wide service contracts and many additional Center IT Infrastructure contracts. Some of the existing contracts are identified in the Tables below.

Location	Contract Name	Contract Number	Contractor
HQ/OCIO	NASA Web Portal Services	GS-35F-0627P	eTouch
MSFC	Unified NASA Information Technology Services (UNITeS)	NNM04AA02C	SAIC
NSSC	Outsourcing Desktop Initiative for NASA (ODIN)	NAS5-98145	Lockheed Martin Govt. Services
NSSC	Outsourcing Desktop Initiative for NASA (ODIN)	NAS5-98144	Lockheed Martin Govt. Services/OAO

Table 1: Current Agency-wide Contracts

Location	Contract Name	Contract Number	Contractor
ARC	Ames-Consolidated IT Services Task Order (ACITS)	NNA04AA18B	QSS Group
DFRC	Research Facilities and Engineering Support Services (RF&ESS)	NAS4-00047	Arcata Assoc.
GRC	Professional, Administrative, Computational and Engineering Support Services (PACE III)	NNC08BA09B	DB Consulting Group, Inc

RELEASED - Printed documents may be obsolete; validate prior to use.

GSFC	Business Application and Sustaining Engineering (BASE)	NAS5-02038	Indus
HQ	Headquarters Information Technology Support Services (HITSS)	NNH06CC93B	InDyne
JSC	JSC Enabling Technology and Security (JETS)	NNJ04JA53C	MEI Technologies
JSC	JSC Information Management and Media Services (JIMMS)	NNJ04JA52C	Tessada
KSC	Information Management and Communication Support (IMCS)	NNK08OH01C	Abacus Technology
LaRC	Consolidated Information Technology Services (CONITS)	GSA GS-00T-99-ALD-0209	Raytheon
MSFC	United NASA Information Technology Services (UNITeS)	NNM04AA02C	SAIC
NSSC	NASA Shared Services Center (NSSC)	NNX05AA01C	CSC
SSC	Information Technology Services (ITS)	NNS04AB54T	CSC

Table 2: Current Center IT Infrastructure Contracts (Partial List)

The figure below represents how today's Agency-wide and Center IT infrastructure and support services contracts map into the I^{3}P acquisitions. The diagram is intended to represent the concept only and not specific contract scope decisions which are specified within each of the individual contracts.

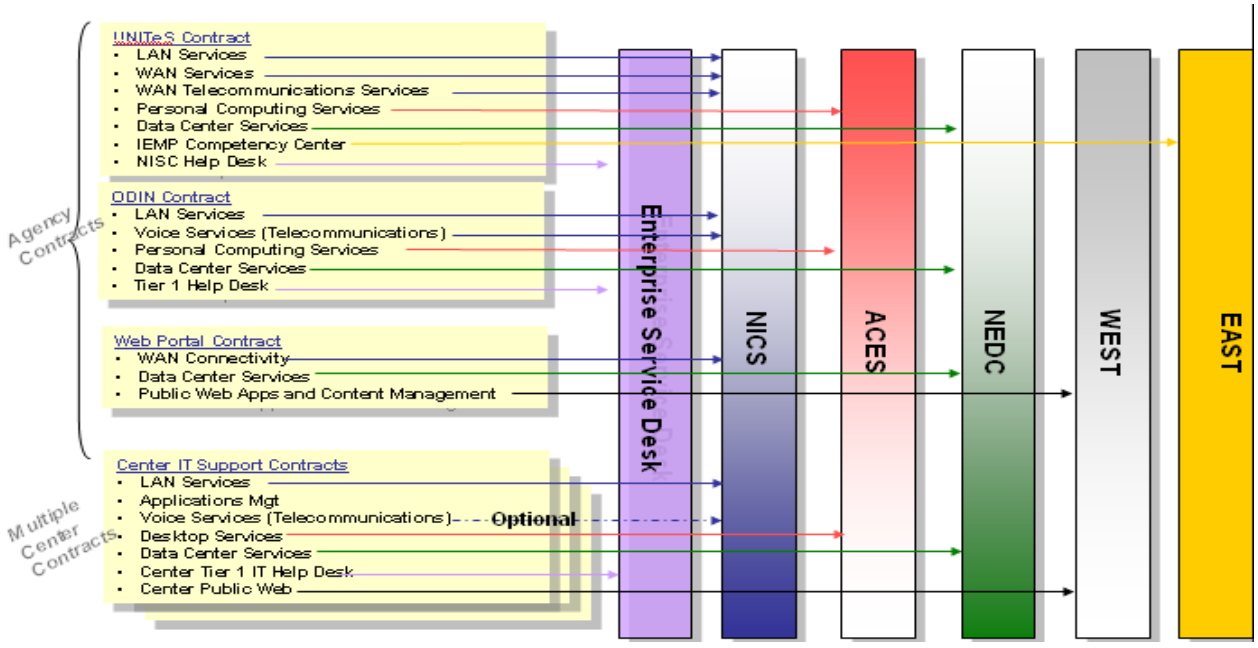

Figure 1: Concept of mapping current Agency and Center contracts to I^{3}P contracts

RELEASED - Printed documents may be obsolete; validate prior to use.

1.5 Client Facing and Support Services Contracts

ITIL defines client facing services as services that are delivered to end-users of the business (e.g., email, billing, etc.). Support services are defined as services necessary to support the operation of the delivered service (e.g., data center services, managed network service, etc.).

The relationship between Client Facing (Core) Services and Supporting Services is depicted in diagram below.

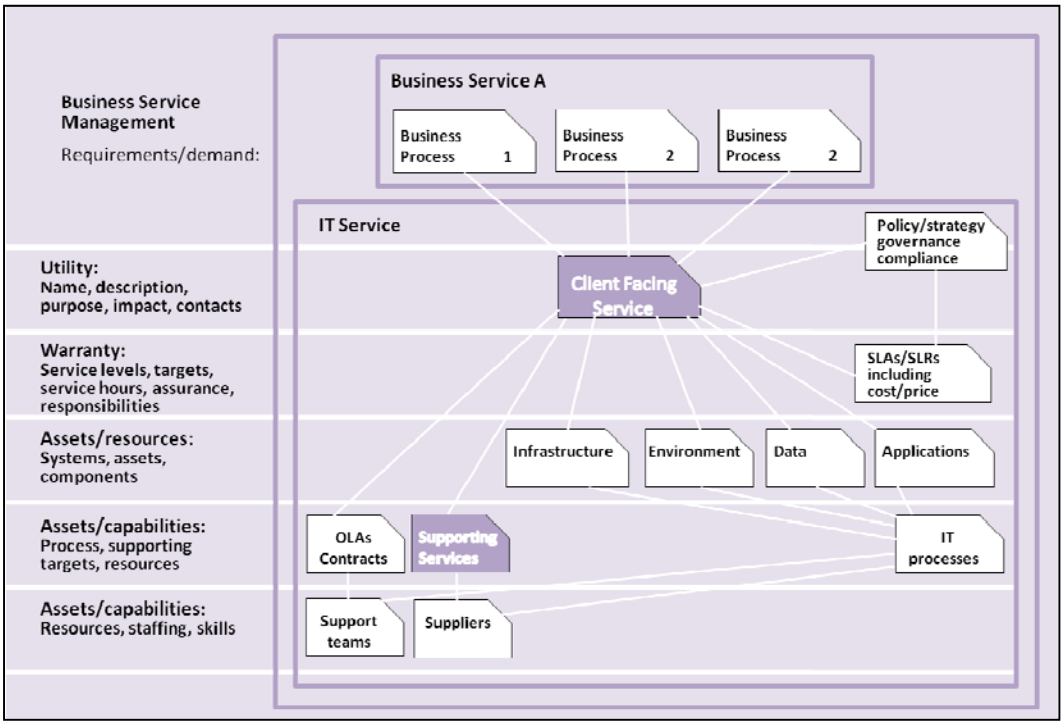

Figure 2: Relationship between client facing and supporting services

All I^{3}P contracts will provide some level of client-facing service delivery.For the purposes of general discussion, NASA's I^{3}P contracts are classified as client facing or support service contracts based on a significant majority of requirements being either client or support services as follows:

- Client Facing Contracts:
  1. ACES – End-user services
  2. EAST – Enterprise application services
  3. WEST – Web services
- Support Service Contracts:
  1. NEDC – Data center services

RELEASED - Printed documents may be obsolete; validate prior to use.

2. NICS – Communication services

1.6 Cross Functional and Collaboration Activities

Each of the five contracts includes a Performance Work Statement (PWS) consisting of defined work activities and Contractor requirements specific to each of NASA's five independent service contracts. These PWS's also define roles and responsibilities for the Contractor as they relate to NASA's requirements.

In addition to service-specific performance work statements, there are a number of Contractor work activities and responsibilities that cut across all five I^{3}P contracts. These Cross-Functional Performance Work Statement (CF-PWS) requirements, contained in this document, are common to each of the contracts. The CF-PWS defines NASA's requirements for synchronization of effort and solution integration across NASA and multiple contracts supporting the I^{3}P initiative. NASA has taken every effort to ensure that there are no conflicts between the CF-PWS and the contract-specific Performance Work Statement. If any conflicts do exist, the CF-PWS will take precedence.

Consistent application of these cross functional requirements is central to NASA's desire to standardize processes using the ITIL Version 3.0 framework and is essential to an effective, integrated enterprise service delivery.

1.7 Service Level Agreements

Service Level Agreements (SLAs) are an important aspect of NASA's service-based organization and the I^{3}P contracts. An SLA specifies the level, scope and quality of a service that will be provisioned, from the business customers' perspective. The SLA clarifies how the service provision will be measured, and the penalty to be exacted if the service is not delivered to the agreed level of service.

Service delivery under the NASA I^{3}P program will require the involvement of multiple providers to meet the SLAs established by the NASA business customer. Providers shall work together in the best interest of NASA as described in Section 3. The diagram below depicts how an SLA will be segmented into independent Contractor service levels. Contractor-specific service levels are specified in each of the I^{3}P contracts.

RELEASED - Printed documents may be obsolete; validate prior to use.

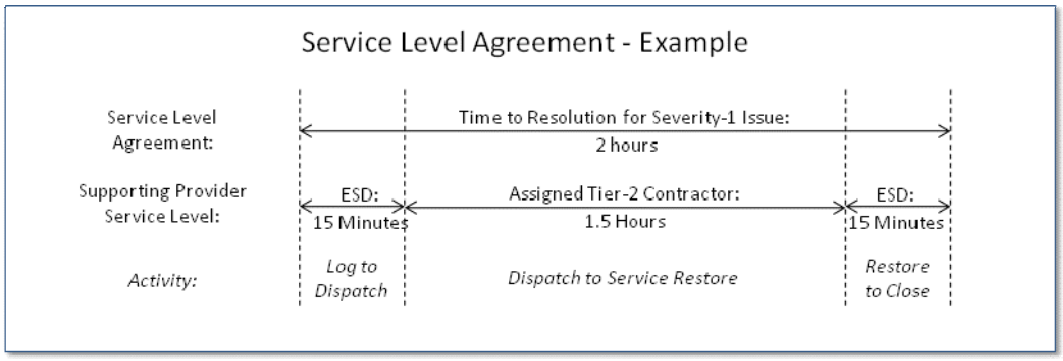

Figure 3: SLA Integration Concept

In the example diagram above, the SLA for restoration of service to the customer for a Severity 1 issue is two hours. The Enterprise Service Desk (ESD) would have a maximum time of fifteen minutes to escalate the call to the appropriate Tier 2 Contractor. At that point, as specified in the Tier-2 Contractor SLA, the Tier 2 Contractor would have a maximum of one and a half (1.5) hours to correct the problem and restore service before assigning the incident back to the ESD for call closure. After Tier 2 has reassigned the incident to the ESD, the ESD would again have a maximum of fifteen (15) minutes to verify service restoration with the customer and close the call. The sum of the ESD and Tier 2 Contractor SLAs (15 minutes + 1.5 hours + 15 minutes) would equal the customer Service Level (2 hours). In this example, only one Tier 2 Contractor is involved with the service restoration, but in some cases multiple Tier 2 providers may be involved. I^3P Enterprise Service Management leadership will coordinate service restoration efforts that span multiple providers. In all cases, Tier 2 providers are accountable only for the service level agreements specified within their individual contract.

RELEASED - Printed documents may be obsolete; validate prior to use.

2 IT Service Management: Organization and Governance within NASA

2.1 Introduction and Overview

NASA is transforming the Agency's IT infrastructure and applications services environment through I³P. This transformation requires changes in the way NASA manages IT across the Agency including the need to define and clarify roles and responsibilities within the NASA IT organization to assure success of the I³P initiative.

As with most organizations, the NASA IT organization is continually changing and maturing to better meet the evolving needs of the customer base it serves. This section outlines the roles and responsibilities across the IT organization within NASA. Two new elements are defined to support the transformation that is underway, including the establishment of enterprise service management (ESM) functions within the Agency CIO organization and the creation of Service Integration Management (SIM) within the Agency CIO's Architecture and Infrastructure Division. Contractors providing IT services to NASA shall establish appropriate roles and responsibilities in support of NASA's IT Service Management (ITSM) vision as described in this section.

2.2 The NASA IT Organization: Roles and Responsibilities

The NASA CIO established the Information Technology (IT) Infrastructure Integration Program (I^3P) and is responsible for overall direction and leadership of the program, within the larger context of NASA's IT organization. Before discussing the NASA IT Organization, it is important to understand the charter and purpose of I^3P:

> **I^3P Charter:** Provide a NASA Enterprise service support environment that optimizes the Information Technology Infrastructure Library (ITIL) best practice processes for implementing formal Information Technology Service Management (ITSM).
>
> **I^3P Purpose:** The I³P initiative seeks to standardize NASA's IT service management practices, align with industry best practices (e.g., ITIL), and yield a set of consistent, repeatable and measurable processes for service delivery to NASA OCIO customers.

The NASA IT organization is comprised of multiple elements serving Agency, Mission, and Center customers and organizations. The elements of the NASA IT organization are defined below, including an overview of the roles and responsibilities of each part of the organization.

2.2.1 Agency CIO

The NASA CIO is accountable for all aspects of IT within NASA as well as for the overall leadership of the NASA IT organization including the establishment of strategy, enterprise architecture, and operational policies and standards to support the NASA mission. To accomplish these functions, the NASA Office of the CIO is organized into 4 divisions including Architecture and Infrastructure, Enterprise Portfolio Management, IT Security, and Policy and Investments. Within this structure the NASA CIO has also established functions associated with

RELEASED - Printed documents may be obsolete; validate prior to use.

Enterprise Architecture (EA), Systems Engineering and Integration (SE&I), Project Executives (PEs), and Service Integration Management (SIM). Through integration with the SIM, the NASA Enterprise Service Desk (ESD) provides critical integration functions in support of Agency ESM. Finally, the NASA CIO is also accountable for establishing a NASA governance model that effectively interconnects the various components of the Agency-wide IT organization and enables effective decision making at all levels within that organization. This governance spans not only the elements of the Agency CIO's office, but also Center and Mission Directorate CIO organizations; these will be described later in this document.

2.2.2 Enterprise Service Management

To support effective delivery of enterprise IT services, an Enterprise Service Management (ESM) function is performed by the Architecture and Infrastructure Division (A&ID), interfacing with the other Agency CIO Divisions. ESM provides a NASA Enterprise service support environment that optimizes the Information Technology Infrastructure Library (ITIL) best practice processes for implementing formal Information Technology Service Management (ITSM). The purpose of ESM within NASA is to standardize NASA's IT service management practices, to align with industry best practices, and to yield a set of consistent, repeatable, and measureable processes for service delivery to NASA OCIO customers. Within the NASA IT structure, A&ID accountable for:

a. Service Strategy direction on how to design, develop and implement IT Service Management.
b. Service Design direction for the design and development of IT services and IT Service Management processes.
c. Service Operations direction on achieving effectiveness and efficiency in the delivery and support of IT services so as to ensure value for the customer and the IT service providers, including effective coordination across all service providers.
d. Continuous Service Improvement direction in creating and maintaining value for customers through better design, transition and operation of services.

Within the NASA Office of the CIO, A&ID is responsible for overseeing enterprise architecture, Systems Engineering and integration (SE&I), coordination of project executives (PE), implementation of service integration management (SIM), and coordination with the various I^3P project offices. Each of these areas will now be further described briefly, with additional detail available in the NASA Enterprise Service Management Concept of Operations document.

2.2.3 Enterprise Architecture (EA)

The OCIO Enterprise Architecture Office is responsible for articulating the mission supporting technologies and operational model to accomplish the IT goals. The EA Office develops baseline architecture and target architecture and their associated sequencing. The EA Office therefore, has responsibility for ensuring that the current-state service catalog evolves to meet future customers' expectations. As part of Service Strategy, the EA Office must work in concert with

RELEASED - Printed documents may be obsolete; validate prior to use.

the center CIOs, SIM, and PEs to ensure that SE&I customer' requests and opportunities for service improvement are effectively addressed in its service strategy efforts.

All I^{3}P service architectures will be developed and maintained by NASA enterprise, mission and service domain architects in partnership with the I^{3}P Contractors. These architectures shall follow enterprise or segment architectural policy, guidance, and standards defined by NASA[1] or the Office of Management and Budget[2] to achieve NASA's strategic IT target state goals as stated in the NASA Information Resources Management (IRM) Strategic Plan. The outcome of this approach will ensure that IT investments are aligned with NASA's vision for the future and that technology solutions are horizontally integrated across business domains.

In order to achieve viable service architectures, it is imperative that NASA and the I^{3}P Contractors collaborate in the analysis of emerging technologies, NASA requirements, and the as-is environment. The result of this collaboration shall be an innovative to-be state and an associated transition strategy for each service area that will position NASA and the I^{3}P Contractors for success both now and in the future.

Each service architecture shall address the service, systems and components (see Figure 4) required to provide the specific service and ensure integration with the other service architectures and the NASA enterprise architecture.

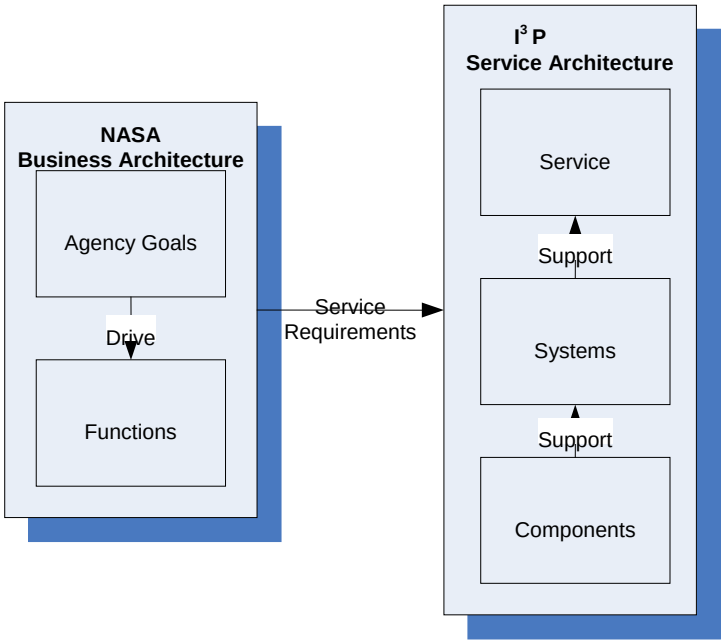

Figure 4: NASA Business and Service Architectures

[1] Examples include NASA NDP/NPR 2830.1 EA Policy, NASA-STD-2804 Minimum Interoperability Software Suite, and NASA-STD-2805 Minimum Hardware Configurations.

[2] Examples include the Federal Enterprise Architecture Framework (FEAF), FEA Core, Business Service, and Enterprise Service Segments, and the Practical Guide to Federal Service Oriented Architecture (PGFSOA) v1.1.

RELEASED - Printed documents may be obsolete; validate prior to use.

2.2.4 Systems Engineering and Integration (SE&I)

The OCIO A&ID organization's SE&I component is accountable for the design of new services including the development of cost estimates associated with these new offerings. The SE&I group also ensures that new and existing services are translated into the NASA technical reference model (TRM) and that all changes to the NASA enterprise IT environment are managed through the appropriate change advisory boards (CABs). These engineering and integration functions also include the establishment of service configuration and performance expectations, reflected in appropriate performance definitions, service metrics and evaluation criteria. Under the ESM concept, the SE&I group is responsible for risk assessments and impact analyses associated with the delivery of existing and new enterprise services. Finally, the SE&I group is responsible for the coordinated deployment of new and updated services.

2.2.5 Project Executives (PEs)

Project Executives are the actual service owners for the respective I^3P services for which they have responsibility. In this role as service owners, the PEs are accountable for the configuration of services and the vetting of these services through the appropriate change advisory and control boards within the Agency. PE's are responsible for the development of their specific service strategies and the budgetary requirements to implement these strategies if approved. In order to effectively carry out their responsibilities as Project Executives, each PE must actively engage the NASA user community. This customer relationship management function is essential in identifying issues and gaps in current service delivery to support the development of strategies that will enable continuous service improvement.

Each PE also handles contract performance escalation management in those situations where an issue cannot be resolved at the project office level, or when an issue may run across multiple enterprise services and resolution requires coordination at the ESM level. In addition, managing particularly high-impact service issues that impact day-to-day performance will also be escalated to the PE for communication and possible action. Finally, the PE is responsible for collaborating with the project office(s) responsible for the day-to-day management of service delivery to define service manager objectives and milestones.

2.2.6 Service Integration Management (SIM)

Service Integration Management (SIM) group is the ESM's transformation arm responsible for process architecture and design leading to the implementation of ITIL best practices across the enterprise. Its on-going functions are to execute ESM guidance and direction. The SIM will provide support for designing and implementing the NASA Information Technology Infrastructure Library (ITIL) processes and instituting formal Information Technology Service Management (ITSM) within NASA. The Purpose of the SIM is to improve the effectiveness and efficiency of NASA IT operations through the design, implementation, and operations of standardized IT service management practices. Primary functions of the SIM include:

RELEASED - Printed documents may be obsolete; validate prior to use.

a. Support strategic planning associated with defining and scoping the future ITIL-aligned Service organization;
b. Direct and coordinate implementation of the strategic plan: and,
c. Provide Continuous Service Improvement and ITIL process management for NASA's IT organization

The SIM will also provide Enterprise Service Desk (ESD) oversight and integration, along with the integration of performance metrics across all enterprise services. These metrics provided through ESD systems, Contractor deliverables, and customer surveys will be used by the SIM to obtain a 'big-picture' view of service performance, leading to service improvement recommendations. Additional information about the ESD is provided in the following section.

2.2.7 Enterprise Service Desk

The Mission of the ESD is to be the Single Point of Contact (SPOC) for Enterprise Services support, handling incidents and requests, and providing an interface for activities such as changes, problems, configuration, releases, service levels and IT Service Continuity Management. The importance of the ESD as a SPOC is to provide a single, consistent interface to the end-user community, which is a critical element of the business' determination of how well NASA IT is performing its job – one of the success criteria of the I^3P program.

The primary priorities of the ESD are:

a. To manage customer expectations by identifying and communicating I^3P services to customers. Route customers to the appropriate point of contact for those services not provided directly by the ESD or an I^3P service provider;
b. To return the customer to normal operations within Service Level Agreement (SLA) requirements and specifications;
c. To continuously improve service performance;
d. To perform consistent workflow enabling service request escalations across disparate IT infrastructure contracts;
e. To provide reliable communications coordination for Enterprise Service outages;
f. To collect, consolidate, analyze, and report performance metrics across the independent IT service providers for Enterprise Services provided to customers;
g. To provide the SIM with accurate and appropriate data that enables responsible operational decisions
h. To leverage existing NASA infrastructure to reduce costs; and
i. To provide integrated service support interfacing to functional areas of Procurement, Finance and Human Resources.

RELEASED - Printed documents may be obsolete; validate prior to use.

2.2.8 Project Offices

Located at each of the sites hosting an I^{3}P service contract, project offices are accountable for the day-to-day management and delivery of the enterprise services that they manage. Project offices are expected to coordinate across service managers, contracting officer's technical representatives (COTRs) and contracting officers (COs) to ensure the effective delivery of services across the Agency. While these offices are physically located at and managed by specific Centers, they perform an Agency function.

The project offices are also responsible for the management and synthesis of I^{3}P contract service performance and financial information, and communication of this information through the SIM and the appropriate PE. In terms of communication, the Project Office provides information to the Agency CIO, Project Executives, Service Integration Management, and to the Center and Mission Directorate CIOs to ensure that all levels of the NASA organization remain informed regarding important performance or service delivery issues.

Project offices manage the day-to-day financial transactions and issues associated with the services they manage, and will escalate complex contract and performance issues as required. Project offices will work closely with the I^{3}P service providers to manage technical issues as well as to ensure that contractual service levels are consistently being achieved.

Service Managers are responsible for each specific IT service contract under the I^{3}P services umbrella. They are the coordinator and Point of Contact (POC) for a specific service offering e.g. LAN services as opposed to WAN services. They are accountable for adherence to the day to day operational parameters for performance of the service as defined in the SLAs and facilitate service operation activities. The service manager performs oversight of service supplier activities (Contractor oversight) and communicates IT service performance issues to the PE. They provide customer relationship management support to the CIOs relative to Enterprise (Agency) services. Service Managers will function as associate members of the Enterprise Change Advisory Board (CAB).

In order to provide a coordinated and consolidated technical picture of the individual I^{3}P contracts each Project Office will designate an I^{3}P Integration Lead (I^{3}PIL). The I^{3}PIL supports the PE and SIM offices ensuring contracted service providers across the centers are working in accordance with (and to established) agency standards, regulations, processes and procedures. I^{3}PILs work with peer I^{3}PILs to ensure integration across contracts for projects and processes and support service performance monitoring and reporting to Service Managers, PEs and SIM in regards to individual contracts.

2.2.9 Center CIO

As with the overall NASA IT service delivery environment, the role to the Center CIO continues to evolve and mature. With the implementation of I^{3}P and the resulting shift from local to enterprise delivery of some services, the role of the Center CIO and the staff that they manage is evolving. Even as the roles and responsibilities shift to support the NASA IT strategy, the

RELEASED - Printed documents may be obsolete; validate prior to use.

Center CIOs maintain significant responsibility for local service delivery, and are acquiring new roles associated with enterprise service strategy and delivery. These roles and responsibilities are described in the following section.

Relative to local service delivery, Center CIOs are accountable for the day-to-day delivery of locally-provided IT services that are not provisioned as part of one of the Agency service contracts. This includes all aspects of managing these services including service design, implementation, monitoring, security, and continuous improvement. The Center CIO is also accountable for ensuring that any locally-provided services align with Agency strategy and policy. Center CIOs ensure the provisioning of local infrastructure to enable effective and efficient delivery of enterprise services while overseeing the Center's overall IT portfolio and managing demand for both local and enterprise services. The CIO is ultimately responsible for customer relationship management across all organizations at the Center, and ensures that requirements, issues, and concerns regarding IT services are captured, understood, and addressed. In terms of strategic leadership, each CIO is a member of the Center's executive leadership team responsible for solving business problems through the application of innovative IT solutions. In a similar manner, each Center CIO is a member of the Agency IT Management Board and is responsible for setting the Agency's strategic direction relative to information and information technology.

Center CIOs also have significant responsibility relative to enterprise service delivery. Because the Agency has such a highly-skilled IT workforce spread across all Centers, each CIO will identify subject matter experts (SMEs) to support each of the enterprise services at their respective Center. In addition to these SMEs, a Center Integration Lead will be identified to coordinate and manage issues involving integration across multiple services. These SMEs and Integration Leads will work closely with the associated Project Offices and the Agency SIM to effectively implement enterprise delivery of key services. As additional requirements are identified for new or improved services, Centers CIOs will also identify and provide technical experts to participate on Agency-level technical and architectural teams. Finally, the CIO will serve as the voice of the Center customers to Agency service providers while monitoring service integration and performance issues locally and participating in continuous service improvement efforts.

Those CIOs whose Centers host Project Offices have additional responsibilities including working with the Agency CIO to determine the resources required to manage and execute the project as agreed to with the Agency OCIO. Host Center CIOs also work with the appropriate PE(s) to define performance objectives for local staff members who are supporting enterprise service delivery and then manage the project office staff to ensure that the Center delivers on these Agency commitments.

2.2.10 Mission Directorate CIOs

Similar to Center CIOs, Mission Directorate CIOs represent the requirements of their respective missions, which cut across all NASA Centers. The Mission Directorate CIO has a unique understanding of the mission requirements related to information and information technology

RELEASED - Printed documents may be obsolete; validate prior to use.

and works with Center and Agency IT Service providers to ensure that these requirements are satisfied. Each Mission Directorate CIO is a member of the Agency IT Management Board and is responsible for helping to set the Agency's IT strategic direction and provides a critical customer relationship management function as the voice of the mission customer regarding all aspects of NASA IT services.

2.3 NASA IT Governance Process and Structure

Contractors shall adhere to the NASA OCIO governance strategy and framework as outlined in this section and discussed in greater detail within each respective I³P contract and associated performance work statements.

In conformance with NASA's IT governance process, Contractors shall:

- Support NASA's Mission via ongoing alignment and management of NASA's IT assets and processes with its mission requirements and strategic initiatives;
- Identify potential areas of investment redundancy and opportunities for consolidation, rationalization and cost efficiency; and,
- Support master planning at the Agency level to increase visibility of and better prioritize investments.

NASA's approach to IT governance is a structured, decision-oriented model that has critical linkages to NPR 7120.7 NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements and other NASA IT management processes such as capital planning and investment, information technology security planning, and enterprise architecture as defined in various IT-related policy documents (NPR 2800.1, Managing Information Technology, NPR 2810.1 Security of Information Technology, and NPR 2830.1 NASA Enterprise Architecture Procedures).

NASA's IT environment is organized into three major areas, or portfolios:

- IT infrastructure services;
- IT applications; and
- Highly-specialized IT, such as technology that supports real time control systems and on-board avionics.

While some cross-cutting IT processes, such as IT security, apply to all portfolios, the scope of IT governance described in this section applies primarily to IT infrastructure and application services.

RELEASED - Printed documents may be obsolete; validate prior to use.

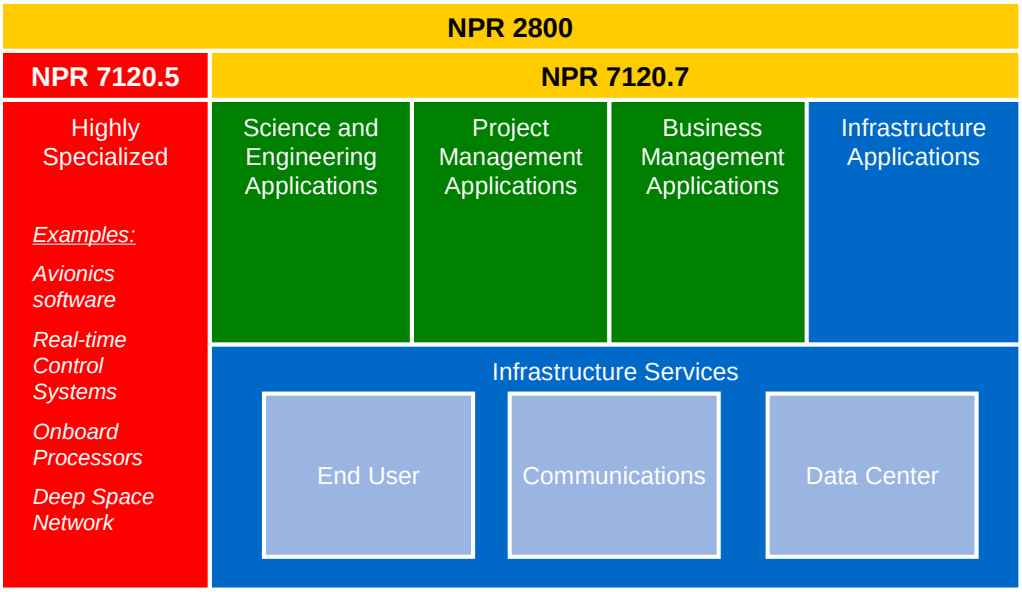

Figure 5: IT Portfolios and Governing Policies

To address the wide-ranging decisions which are likely to occur throughout the life cycle of the I³P contracts, at an Agency level NASA will employ a three-tiered board model where each board has a clear set of responsibilities as well as interfaces to the other governing bodies. This governance model shown below provides complete coverage of the life cycle of an IT investment from the initial decision to fund a proposed investment to the oversight of its implementation and operations and subsequent decommissioning. Each of these life cycle phases has associated with it unique milestones and metrics that require different activities and therefore different board oversight.

RELEASED - Printed documents may be obsolete; validate prior to use.

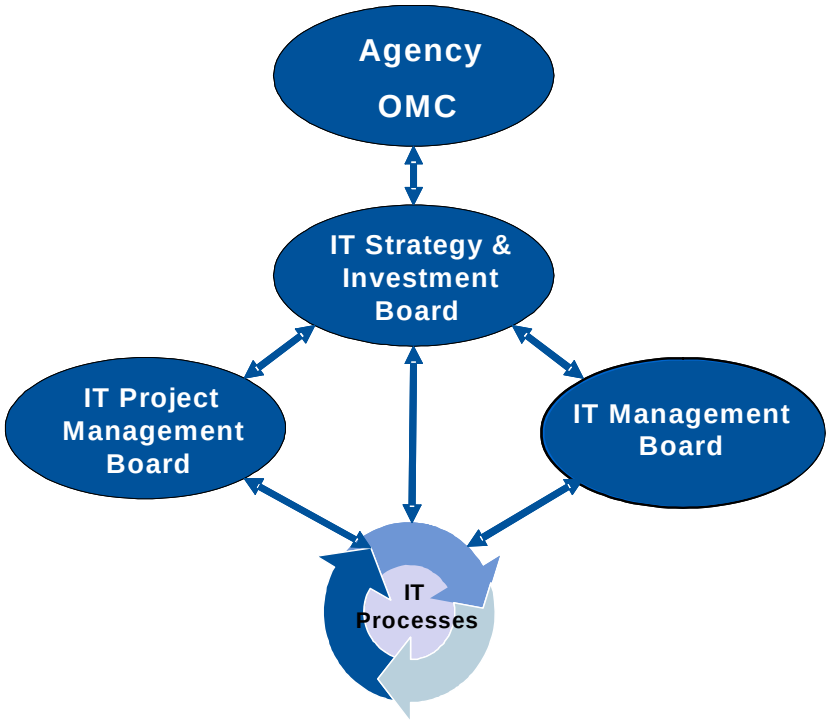

Figure 6: NASA IT Governance Structure

The scope and purview of each NASA board is further defined as follows:

- **IT Strategy and Investment Board (SIB)** – Decisions regarding IT strategy and related investments (prioritization and selection), Enterprise Architecture, and NASA-wide IT policies/processes. Members include senior level stakeholders from Mission Directorates, Mission Support Offices, and Centers.
- **IT Project Management Board (PMB)** – Decisions regarding application and infrastructure projects to ensure that investments approved by the IT Strategy and Investment board stay on track during formulation, design and implementation. Members include the Deputy CIO, one or more IT Strategy and Investment Board representatives, IT Operations Board Chair, Enterprise Architecture (EA) Lead, and representatives from Mission Directorates, Mission Support and Centers.
- **IT Management Board (ITMB)** – Decisions regarding operational performance and issues related to performance. Members include the Associate CIO for Architecture and Infrastructure, Center CIOs, the Deputy CIO for IT Security and the EA Lead. Mission Directorates may provide a representative at their discretion.

Although each governance board is chaired by a member of the OCIO, decisions are made in consultation with and in concurrence with key stakeholders. Should the need arise an escalation path exists to the Agency Operations Management Council (OMC) which can be invoked as necessary.

RELEASED - Printed documents may be obsolete; validate prior to use.

The governance structure described above operates at the Agency level and addresses major IT investments that cross Center and program boundaries. Centers are also implementing local governance structures that while customized to the unique organizational environment and culture at each Center, conform in spirit to the Agency governance structure and enable Center-specific investments to be addressed. Notwithstanding the existence of Agency or Center specific governance structures, it is expected that changes will need to be made over the life of the I³P Acquisition to address the full IT life cycle as described in NPR 7120.7.

NASA's approach to IT governance reflects the latest in industry best practices and is grounded in the strategic management principles for governing, managing, implementing, monitoring, and controlling the work of the Agency as set forth in the Strategic Management and Governance Handbook NPD 1000.0.

2.4 Contractor Responsibilities

In addition to working with NASA in concert with Agency level governance processes and structures, Contractors must work within other complementary contract and relationship management mechanisms as defined within each contract.

These additional governance processes and structures relate to the Contract administration and management activities that are specific to the individual NASA Centers responsible for procuring and overseeing delivery and performance as defined in the individual I³P performance work statements. Contractors should refer to the individual contracts for details of these complementary governance processes and structures.

The I^3P Contractors shall work closely with the ESM and SIM organizations to ensure adherence to NASA standard IT processes, monitor compliance, drive continuous service improvement and coordinate service operations to achieve an effective and efficient multi-sourced IT environment in support of Agency requirements. I^3P Contractors shall work closely with Center CIOs to understand requirements and to work local service delivery issues.

While specific requirements are captured in the cross-functional ITIL process requirements, an overview of these responsibilities associated with supporting ESM and SIM activities is provided below.

Policies and Procedures: Contractors shall support SIM identification, definition and implementation of changes to Agency IT policies and procedures that improve service delivery, streamline operations and reduce costs. Contractors shall do this through the identification and application of Industry best practices, methodologies and tools within the NASA ITSM environment.

RELEASED - Printed documents may be obsolete; validate prior to use.

Strategy Development: Contractors shall participate in the Agency's annual portfolio management process by providing design, cost, benefit, risk and other information necessary for the ESM to prioritize a list of projects aligned with user requirements.

Process Development: Contractors shall support service integration by defining and implementing service delivery processes and procedures identified in the Agency's Cross Functional Statement of Work and other Contractor processes that are complementary to NASA's ITIL v3 aligned processes.

Process Interface: Contractors shall ensure that cross-contract service integration and delivery touch-points are aligned with both Government and other I³P Contractors so that seamless service delivery and management occurs.

Compliance Monitoring: Contractors shall support the Agency in monitoring of service delivery to the end customer. Such monitoring shall include, but not necessarily be limited to, process quality assurance, escalating and resolving issues (inclusive of cross-contract/vendor), monitoring production control, and integrating actions, communications and exchanges of service supporting data activities across I³P Contractors to ensure customer support requirements are met (i.e. SLAs are met).

Operations Coordination: Contractors shall support NASA's management of the multi-sourcing environment by supporting coordination and oversight of operations.

Continuous Service Improvement: Contractors shall identify, define and implement continuous service improvement activities. Contractors shall benchmark projects as defined by SIM's continuous improvement processes.

2.5 Relationship Management

Contractors shall follow a robust Governance model to partner with NASA and manage both services delivery and contract performance. Relationship management focuses on actively managing relationships with NASA customers, stakeholders and other Contractors who are integral to the delivery of integrated IT service management (ITSM) under I³P. All relationship management practices are ongoing and entail the following set of activities:

- Managing interactions with NASA to ensure their effectiveness and to capture critical service level information;
- Formally managing relationships with NASA customers and Contractors by establishing relationship objectives and tracking performance of those objectives;
- Selecting suppliers and partners based on their ability to meet NASA business requirements;

RELEASED - Printed documents may be obsolete; validate prior to use.

- Obtaining feedback from NASA stakeholders, including employees, and Contractors on the nature and quality of key service and delivery relationships; and,
- Proactively identifying opportunities that will provide additional value to NASA.

The NASA IT governance structure is designed to encourage collaborative discussion of issues and ideas critical to the ongoing success of I³P and related IT transformation. As detailed in the individual I³P contracts, each party shall designate an individual to serve as a relationship manager who will be that party's single point of contact (SPOC) for all matters relating to the outsourcing contract. The Contractor's relationship manager shall:

- Be knowledgeable about NASA's I³P service requirements and each of the Contractor's and its sub-Contractors / partners products and services;
- Be experienced at running IT systems and networks, as they relate to the provision of services for which they are contracted, of similar size to NASA's current and anticipated business requirements;
- Have overall responsibility for directing all of the Contractor's activities; and,
- Be assigned to the NASA account for a significant portion of the contract term.

Contractors shall assist and contribute to setting the strategy and processes concerning NASA's technology and use over the life of each I³P contract. Contractors shall continually evaluate the technical environment, identifying potential enhancements that will reduce overall costs while delivering high quality and high availability services across the Agency.

RELEASED - Printed documents may be obsolete; validate prior to use.

3 Service Coordination and Collaboration

3.1 Introduction and Overview

The I³P Acquisitions involve more than management of five independent sourcing agreements. The effort will require coordination, collaboration and integrated management of key processes among Contractors and across contract boundaries.

It is in the coordination of multiple Contractors where the management of I^{3}P services differs from the management of five independent IT contracts. Coordination of services across these multiple contracts involves coordinated management of four sets of relationships:

a. Between NASA end users and individual Contractors;
b. Between NASA leadership and individual Contractors;
c. Between NASA's internal client facing and support organizations required to deliver IT services; and,
d. Between the I^{3}P Contractors.

It is important that Contractors work with NASA and with each other to establish and execute common management approaches and procedures to ensure that services are provided effectively and efficiently across the enterprise regardless of contractual boundaries.

3.2 Service Delivery Coordination and Collaboration

NASA recognizes the interdependencies of internal and external relationships and expects Contractors to work with the Agency and among themselves to proactively manage those interdependencies to support the overall mission, vision, and objectives of the OCIO.

Contractors shall ensure that processes and procedures are established and maintained to support service coordination and collaboration with NASA and other I^{3}P Contractors in the following delivery areas.

a. **Service Delivery Strategy** – Proactive management of NASA's service delivery strategy assumes that business conditions and customer requirements change over time requiring that initial strategies adapt to changes as they occur. By working with NASA to modify goals, priorities, policies and procedures as they affect one or more of the sourcing relationships, I^{3}P Contractors shall continuously improve how services are delivered to meet end user needs.

b. **Service Delivery Responsibility** – Management of service delivery can be complex when multiple Contractors are responsible for IT service delivery. I^{3}P Contractors shall know and understand who is responsible for each service delivery task, where touch-points or hand-offs are and how their responsibilities change as end-to-end service

RELEASED - Printed documents may be obsolete; validate prior to use.

delivery crosses contract boundaries. Process flows, cross-functional and contract-specific performance work statement elements all play a part in defining roles and responsibilities where coordination is required to ensure continuity of service and operations.

c. **Service Delivery Integration** – Coordination and collaboration across multiple Contractors demands that multiple Contractors work together and, as needed, shall co-develop processes that define the rules of engagement between various parties as well as how to manage the many touch-points and interface requirements between Contractors, end-users, and internal NASA organizational entities. Proactive management of delivery integration not only ensures that everything that needs to get done is accomplished, but that Contractors work together to identify, create and document any new procedures necessary to ensure seamless service delivery to NASA customers over time.

d. **Service Delivery Performance Assessment** – Proactive management of service performance processes are focused on verifying the facts of the relationship through coordination and cooperation among NASA I^3P and other supporting Contractors. The Contractor shall support service level evaluations, operational or security assessments, financial audits, and other assessments required by the OCIO in response to changing business conditions or governance requirements.

e. **Delivery Communication** – Proactive management of communications and feedback requires the transmission of information generated throughout service creation and service delivery processes. Contractor reporting shall address end-to-end service delivery requirements, ensure the right information is available to the right people at the right time, facilitate operational excellence and support NASA's decision making requirements.

NASA's Enterprise Service Management organization will be the focal point to ensure seamless IT service delivery.

RELEASED - Printed documents may be obsolete; validate prior to use.

4 NASA IT Infrastructure Library (ITIL) Version 3 Approach

4.1 Introduction and Overview

In support of the Agency Chief Information Officer's (CIO) vision for I^{3}P, various IT operational models were analyzed and the Information Technology Infrastructure Library (ITIL) version 3.0 framework was selected. Applicable ITIL v3 processes have been identified and prioritized for development and implementation within the NASA IT environment. It is recognized by the NASA Information Technology Management Board (ITMB) that a common and consistent Agency-wide IT organizational management structure is required to support centralized, Agency-provided IT services. The new ITIL processes will be designed to enable and support IT governance via performance metrics. The adoption of a standardized framework that includes a common terminology and process set will be an integral part of all I^{3}P support contracts. ITIL version 3.0 focuses on Service Management and seeks to align IT with business objectives. ITIL version 3.0 outlines a set of integrated processes that encompass the full scope of the IT service lifecycle. By defining a common set of ITIL version 3.0 aligned processes that are applied across all I^{3}P contracts, NASA strives to attain maximum efficiencies while ensuring seamless, integrated services for IT customers.

Adoption of ITIL will enable NASA's mission by:

a. Better integrating the Agency's people, processes, and information;

b. Improving security; and,

c. Achieving efficiencies.

4.2 Implementation Plan and Scope for I^{3}P

NASA has developed an implementation plan and roadmap based on the introduction of ITIL v3 as the Agency's process framework in support of I^{3}P. Prospective service providers shall have documented, repeatable ITIL processes with relevant metrics reporting capabilities. NASA requires prospective service providers to engage and align with NASA's IT organization and NASA's ITIL processes.

NASA's approach is based on a phased implementation of ITIL processes. Activities in support of this implementation have been prioritized according to the following Government criteria:

a. Processes having greater relative importance to I^{3}P Acquisition Governance and Strategy;

b. Processes that require extensive, multiple vendor coordination and integration; and,

c. Processes that industry experience and best practice suggest should be addressed earlier in an ITIL implementation

RELEASED - Printed documents may be obsolete; validate prior to use.

Twelve (12) of the ITIL v3 processes have been grouped into either Primary or Secondary implementation priorities.

Five (5) of these processes have been identified as primary implementation priorities. They include:

a. Change Management;

b. Incident Management;

c. Request Fulfillment;

d. Problem Management; and,

e. Service Level Management/Service Catalog Management*.

*Service level management is currently an ongoing process and will be revisited as a specific development at a later date based on reassessment and re-prioritization by the OCIO. A service catalog management basic process was developed in early 2009 and will be revisited with the secondary set of process developments.

These five (5) processes are considered primary I^3P implementation priorities for the following reasons:

a. They are foundational processes in that many of the remaining ITIL processes depend on them;

b. They have strong ties to the new Enterprise Service Desk (ESD) being established in support of the I^3P acquisition and cross all five (5) of the independent service contracts;

c. They tend to be ticket-management-heavy processes central to efficient and effective resolution of service interruptions and/or restoration of services to end-users;

d. There is stronger familiarity of these processes among the NASA technology groups; and,

e. There are significant opportunities associated with these processes for quick wins and/or accelerated achievement of I^3P objectives.

Seven (7) of the ITIL processes have been identified by NASA as secondary I^3P implementation priorities. They include:

a. Service Asset and Configuration Management;

b. Release and Deployment Management;

c. Capacity Management;

d. Strategy Generation;

e. Service Portfolio Management;

RELEASED - Printed documents may be obsolete; validate prior to use.

f. Service Catalog Management; and,

g. Supplier Management

These seven processes were targeted as secondary implementation priorities because:

a. Several (e.g. Release and Deployment Management and Capacity Management) require that Change Management be in place and operational prior to their implementation;

b. Several (Service Asset & Configuration Management and Service Catalog Management) require significant set-up and coordination across the I^3P contracts and delivery teams; and,

c. Several (Service Portfolio Management, Supplier Management and Strategy Generation) are critical to establishing strategic direction for I^3P and create momentum behind its execution.

The remaining fifteen (15) ITIL v3 processes are considered tertiary implementation priorities by NASA. Selection and prioritization of these for implementation will be evaluated and determined as the NASA ITIL framework matures. They include:

a. Demand Management;

b. IT Financial Management;

c. Information Security Management;

d. Availability Management;

e. Service Continuity Management;

f. Validation and Testing;

g. Transition Planning and Support;

h. Knowledge Management;

i. Event Management;

j. Access Management;

k. Operations Management;

l. Service Evaluation;

m. Service Improvement;

n. Service Reporting; and,

o. Service Measurement.

RELEASED - Printed documents may be obsolete; validate prior to use.

In summary, NASA's introduction of ITIL v3 processes in support of the Agency's I^3P Acquisition supports the Agency's goals of transforming NASA's current environment to a more highly integrated IT Service Management environment.

4.3 NASA Defined ITIL v3 Process Requirements

I^3P Contractors shall define and implement service delivery processes and procedures that are consistent with both individual service provider-specific and cross-functional performance work statement elements.

I^3P Contractors shall implement processes and procedures that are consistent and complementary to NASA ITIL v3 aligned processes. All Contractor-developed processes and procedures necessary for the execution of the service delivery requirement are considered non-proprietary and shall be provided to the Government upon request.

I^3P Contractor interfaces associated with NASA IT services shall support NASA's ITIL process requirements as detailed in the cross-functional PWS elements, as well as any standards as identified in the Government process and policy documents associated with each NASA IT process.

Contractors shall actively participate in supporting changes to NASA process and policy documents. Changes to NASA process and policy documents will be managed by the Office of the Chief Information Officer.

The Government Incident Management system operated by the ESD for tracking the status of Problems, Incidents, changes, etc. will be the primary system of record used by the Government to track the status and completion of actions associated with these processes.

RELEASED - Printed documents may be obsolete; validate prior to use.

5 I^{3}P Common Architecture Components

5.1 Introduction and Overview

NASA's strategic approach to the management of IT infrastructure is to provide Enterprise-wide infrastructure services to maximize efficiency, improve IT security, and provide the best possible user experience. These infrastructure services have been defined into five (5) different portfolios:

a. End-User Services
b. Network and Communications Services
c. Enterprise Data Center Services
d. Enterprise Applications, and
e. Web Services

Each of these portfolios provides a specific set of component services which comprise part of the NASA Enterprise Architecture as reflected in the NASA Enterprise Service Catalog. Common across these five (5) portfolio areas is the requirement for a TIER-0/1 Enterprise Service Desk (ESD) and an Enterprise Service Request System (ESRS). Finally, to reduce redundancy and promote interoperability and collaboration, applications within the NASA environment must be integrated through the NASA Application Portfolio Management process. Each of these elements of the NASA environment is further described below.

5.2 NASA Enterprise Architecture Repository

In support of the continual evolution of the NASA Enterprise Architecture (EA), a knowledge base known as the NASA Enterprise Architecture Repository (NEAR) has been developed. The NEAR supports the alignment of IT goals, services, systems, components and standards with Center, Mission Directorate, and Agency goals, while enabling more effective management of current assets and improved planning for new investments. In addition the NEAR will reduce information redundancy and improve data consistency while at the same time increasing flexibility and agility to provide a vision of the future state of the IT environment.

The NEAR is hosted within the NASA IT environment. The NEAR has been defined as the authoritative source for all I^{3}P related services and will contain all I^{3}P services definitions and attributes. The specific data requirements associated with the NEAR are documented in the NEAR Interface Definition Specification (IDS).

NASA's services are documented through a line-of-sight approach, i.e., from goals to functions to services to systems to components, with components as the lowest level of technical representation. I^{3}P Contractors shall provide and maintain, in the NEAR repository, system and component level data about their services based on the NEAR IDS (**DRD CF-13**.) In addition, the I^{3}P Contractors shall maintain a service diagram that depicts the major systems and

RELEASED - Printed documents may be obsolete; validate prior to use.

components of the service with relationships and dependencies (**DRD CF-13**). I^{3}P Contractors shall provide and maintain their respective service offerings and associated service data attributes in the NEAR.

Important NEAR reference information can be found in the following documents:

- NASA Enterprise Architecture Repository (NEAR) Interface Definition Specification
- NEAR Enterprise Service Catalog (also known as the NASA Enterprise Service Catalog)

5.3 NASA Enterprise Service Desk

The ESD is a foundational component of NASA's I^{3}P strategy for delivery of core IT infrastructure services. The ESD is located at and managed by NASA Shared Services Center (NSSC). The ESD serves as the single point of contact for Enterprise Services support providing a unified interface between the I^{3}P customers and the I^{3}P service providers (i.e. I^{3}P contracts – ACES, NICS, NEDC, EAST, and WEST). The primary functions provided by the ESD include management of the IT Service Management (ITSM) software suite and ESD/ESRS Configuration Management Data Base (CMDB), Tier 1 and Tier 0 incident management, service request processing, enterprise notification of planned/unplanned I^{3}P infrastructure outages, I^{3}P SLA metrics collection and reporting using the ITSM, and integration support to the SIM and I^{3}P Contractors for service continuity.

The Enterprise Service Desk will utilize the ITIL v3 framework and associated processes common to all I^{3}P service providers as outlined in the cross-functional PWS elements defined in this document. ITIL processes are divided between Service Delivery and Service Support with the Enterprise Service Desk being the primary point of contact between IT and users of IT services. The Service Integration Management organization in the OCIO Architecture and Infrastructure Division is responsible for the definition and development of all NASA ITIL v3 processes. Service Support provides for implementation of operational processes and day-to-day management of the environment. Service Delivery is associated with the tactical processes and planning processes.

I^{3}P Contractors shall interface with the ESD for a number of activities. These include (but are not limited to):

a) Building interfaces between the ESD Remedy system and the Contractor system during the transition period. If the Contractor chooses to use the ESD's Remedy system, the Contractor is responsible for all integration work with the NSSC;
b) Resolving, statusing, and closing escalated incidents that cannot be resolved at the Tier 1 or Tier 0 level;
c) Providing and updating knowledge articles used by the ESD call agents to resolve and/or triage I^{3}P Incidents that pertain to their specific contract service;
d) Providing notifications and community/organization lists for dissemination of planned and unplanned notices, service configuration changes affecting customers and/or other I^{3}P Contractors;

RELEASED - Printed documents may be obsolete; validate prior to use.

e) Providing status related to incident/problem resolution for those incidents assigned to their I^3P contract;
f) Providing information as to any configuration changes related to I^3P service provisioning assigned to their I^3P contract;
g) Providing and updating knowledge articles for the Tier 0 self-service I^3P Web site for commonly identified incidents and or user self service activities (DRD CF-14);
h) Providing a POC for ESD-to-I^3P-Contractor escalation processing of incidents/problem/service requests for both normal business and after hours;
i) Providing initial load of Configuration Items (CIs) to the ESD/ESRS CMDB during the transition period of the Contractor or in accordance with a specific contract Service Asset and Configuration Management Plan (DRD CF-03); and
j) Providing updates to the ESD/ESRS CMDB Configuration items (CIs) e.g., for those items that were modified during the resolution of an Incident or changed as a result of a scheduled refresh.

Important ESD reference information can be found in the following documents:

- Enterprise Service Desk Concept of Operations
- Enterprise Service Desk Performance Work Statement and associated Appendices
- ESD/ESRS Interface Definitions Specification
- ESD/ESRS 7120.7 Program/Project Systems Requirements documents

5.4 NASA Enterprise Service Request System

To facilitate a seamless user experience, another element of the I^3P common architecture is the NASA Enterprise Service Request System (ESRS). The ESRS will include:

a. A user-friendly, customer-facing interface to order all I^3P-provided services
b. The ability to provide pricing for services offered
c. Workflows to enable purchase authorization and verification of available funding
d. Workflows to enable the efficient distribution of component orders to the appropriate I^3P service provider(s)
e. An interface from the NASA Enterprise Service Catalog (ESC) to facilitate service ordering
f. The ability for users to track the status of all orders via the Tier 0 web site
g. A reporting capability to enable NASA leadership to monitor SLA performance and continuously improve service delivery
h. Integration with the Enterprise Service Desk to facilitate the aggregation of critical performance parameters with other I^3P metrics.

The ESRS utilizes the same IT Service Management software as the Enterprise Service Desk ticket system (BMC/Remedy 7.5) and will support the ITIL service request processes detailed in

RELEASED - Printed documents may be obsolete; validate prior to use.

the cross-functional section of this PWS. Services and their attributes offered through the ESRS are defined and obtained from the NASA Enterprise Architecture Repository (NEAR).

I^3P Contractors shall interface with the ESRS for a number of activities. These include:

- Building interfaces between the ESRS Remedy system and the Contractor system during the transition period. If the Contractor chooses to use the ESD's Remedy system, the Contractor is responsible for all integration work with the NSSC;
- Building interfaces between the NEAR and the Contractor system during the transition period;
- Fulfilling, statusing, and closing service requests and updating CIs in the ESD/ESRS CMDB;
- Providing a POC for ESRS-to-I^3P-Contractor interfacing/integration for both normal business and after hours incident/problem resolution/service fulfillment; and
- Populating and updating I^3P service system and component information in the NASA Enterprise Service Catalog (ESC) in accordance with the NEAR IDS.

I^3P Contractors shall receive I^3P service requests from the ESRS for fulfillment. The specific interface definition between the ESRS and I^3P contracts are defined in the ESD/ESRS Interface Definitions Specification.

The ESRS is anticipated to be operational and fully-functional to support the phase-in of all I^3P contracts. Contractors shall plan for a period of integration and testing to integrate any Contractor order fulfillment systems with the ESRS.

Important ESRS reference information can be found in the following documents:

- Enterprise Service Desk Concept of Operations
- Enterprise Service Desk Performance Work Statement and associated Appendices
- ESD/ESRS Interface Definitions Specification
- ESD/ESRS 7120.7 Program/Project Systems Requirements documents

5.5 NASA Application Portfolio Management (APM)

Another critical element of the NASA environment is the management of NASA's Application Portfolios. NASA APM provides a framework that informs and facilitates decision making regarding application investment, development, maintenance, and decommissioning. This is accomplished by providing knowledge about available applications, application business and technical performance, and total cost of ownership.

In order to assist in effectively managing the NASA application landscape, Section 7 of this document includes process requirements associated with the NASA APM initiative.

RELEASED - Printed documents may be obsolete; validate prior to use.

In addition Contractors shall comply with the following:

1. Provide an annual Application Inventory Cost report as documented in DRD CF-05.

2. Review the NASA System for Tracking and Registering Applications and Websites (STRAW) to verify if an existing application will satisfactorily fulfill the stated application requirements prior to purchasing or developing a new application/capability and inform the Responsible NASA Official of said existing application(s).

3. Utilize the documented NASA ITIL process framework to ensure that all new applications being developed and/or entered into service are documented in the NASA Application Repository and all applications being decommissioned/removed from service are so documented in the NASA Application Repository.

RELEASED - Printed documents may be obsolete; validate prior to use.

6 Common Information Technology Security Requirements

6.1 Introduction and Overview

In order to appropriately secure NASA systems and information, the following IT security requirements apply to all I^{3}P Contractors. Where the term "information system" is used this refers to any system that physically or logically is connected to a NASA network, or that stores, processes, or transmits NASA data. Referenced NASA, federal, or IT Security policies or procedures may be downloaded from the NASA IT Security documentation website at http://itsecurity.nasa.gov/policies/index.html. Additional IT Security requirements may be contained in each service-specific I^{3}P contract and shall be in addition to the requirements contained in this cross-functional section.

6.2 Common IT Security Requirements

a. All information systems provided and/or operated under this contract are federal information systems. (A federal information system is defined in NIST SP 800-37, Rev 1 (and subsequent revisions), *Guide for the Security Authorization of Federal Information Systems* and in 40 U.S.C., Sec. 11331, as an information system used or operated by a federal agency, or by a Contractor of a federal agency or by another organization on behalf of a federal agency.) The Contractor shall identify an IT Security point-of-contact (POC) for supporting IT security requirements for each I^{3}P contract. The Contractor shall demonstrate compliance with IT information system security requirements by documenting a system security plan (DRD CF-02.) The Contractor shall be responsible for meeting the requirements for security authorization, also known as certification and accreditation (C&A), of these information systems, consistent with FIPS 200 and NIST SP 800-37 (Rev 1). A NASA official, determined in accordance with NPR 2810.1, will perform the role of the authorizing official for all such information systems.
   1. The Contractor shall use NASA processes, as specified in NASA policy and procedures, to meet the requirements for security authorization of all such information systems.
   2. For all information systems provided under this contract that store, process or transmit NASA data, NASA will determine the system's FIPS 199 security categorization. For any other information systems provided under this contract or used in performing this contract, NASA will approve the system's FIPS 199 security category.
   3. The Contractor shall ensure that all systems institute information security controls in accordance with NIST SP 800-53.
   4. The Contractor shall support all applicable security assessments of each information system. At the discretion of the NASA authorizing official, the Contractor shall either perform or provide for the performance of system security assessments, or support independent system security assessments (e.g., third party certification, IG Audits, GAO audits, and self certification), as part of the security authorization and continuous monitoring process.

RELEASED - Printed documents may be obsolete; validate prior to use.

5. The Contractor shall track identified risks and security vulnerabilities for each information system in the NASA System Assessment and Authorization Repository (NSAAR) and remediate vulnerabilities on a schedule as determined by the NASA authorizing official.
6. All required system security documentation shall be entered into the NSAAR.

b. The Contractor shall document their approach to managing information security in an Information Security Management Plan according to DRD CF-01.

c. Some work performed by the I^3P contracts will require access to and/or generation of classified information, work in a secure area, or both, up to the level of Top Secret/ Secure Compartmented Information (TS/SCI). See Federal Acquisition Regulation clause 52.204-2 in this contract and DD Form 254 (refer to http://www.usaid.gov/policy/ads/500/dd254.pdf), Contract Security Classification Specification, Attachment I-13.
   1. The Contractor shall ensure that key Contractor IT security personnel have the appropriate security clearances, up to the level of TS/SCI, to receive classified IT security threat information, to implement security controls based on such information, or to support other activities that require access to classified information.

d. The Contractor shall configure and maintain operating system and software on all information systems provided under this contract in accordance with Federal and NASA security configuration policies and guidance.
   1. The Contractor shall apply all relevant Federal system and software security configurations, for example, the Federal Desktop Core Configuration, according to NASA guidance.
   2. All information systems shall be patched with all critical patches (as determined by the product vendor or NASA) in accordance with the NASA Organization Defined Values for NIST SP 800-53 Security Controls and subsequent revisions.
   3. In some rare circumstances, the NASA Deputy CIO for IT Security or designee may determine that a particular patch must be applied more urgently. In such cases, all information systems shall be patched in the timeframe specified by the NASA Deputy CIO for IT Security or designee.
   4. System configurations and patching status for all information systems provided under and in support of this contract shall be reported using the NASA patch reporting environment. Each computer shall run up-to-date NASA reporting agent software for automated reporting. For any computers that cannot run the reporting agent software, a NASA-approved waiver must be obtained in accordance with NASA policy and procedures.

e. All information systems shall be protected by the NASA enterprise anti-malware (including anti-virus, anti-spyware, etc.) solution, which provides automated updates of virus definitions at least once every 24 hours and automated logging and reporting. The NASA enterprise anti-malware solution for desktops and laptops is provided by the ACES contract. The NASA enterprise anti-malware solution for servers is provided by the NEDC contract. For any computer that cannot use the anti-malware solution or for which no anti-malware software exists, a NASA-approved waiver must be obtained in accordance with NASA policy and procedures.

RELEASED - Printed documents may be obsolete; validate prior to use.

1. The Contractor shall correct or mitigate detected vulnerabilities in accordance with NASA policy, unless directed otherwise by NASA for specific urgent issues.

f. All information systems provided under this contract or used in support of this contract shall be scanned for vulnerabilities in accordance with NASA policy.
   1. The Contractor shall make available all information systems located within the NASA network perimeter for network-based vulnerability scanning by NASA. NASA will coordinate scanning activities with the Contractor to the extent possible to ensure that vulnerability scanning creates minimal impact on operations.
   2. For all other information systems which process NASA data, the Contractor shall report to NASA the results of vulnerability scans and remediation, in accordance with NASA guidance.

g. For all software developed in support of this contract, the Contractor shall follow software security assurance practices to ensure that the software is designed and developed to operate at a level of security that is consistent with the potential harm that could result from the loss, inaccuracy, alteration, unavailability, or misuse of the data and resources that it uses, controls, and protects.
   1. The Contractor shall verify that all software developers have been successfully trained in secure programming techniques.
   2. The Contractor shall perform application security analysis and testing according to the verification requirements of an agreed-upon standard (such as the Open Web Application Security Project (OWASP) Application Security Verification Standard (ASVS)).
   3. For web applications, the Contractor shall ensure that the software shall not include any of the flaws described in the current “OWASP Top Ten Most Critical Web Application Vulnerabilities.”

h. The Contractor shall follow NASA IT security incident management procedures in accordance with NASA policies and ensure coordination of its incident response team with the NASA Security Operations Center (SOC). The Contractor shall report (DRD CF-12) to the NASA SOC any suspected computer or network security incidents occurring on any systems, in accordance with Federal mandates and NASA policies and procedures. The Contractor shall provide all necessary assistance and access to the affected systems so that a detailed investigation can be conducted, problems remedied, and lessons learned documented. Security logs and audit information shall be handled according to evidence preservation procedures.
   1. The Contractor shall make available logs from any information system to the NASA common logging environment, as requested by the NASA SOC. Electronic raw log data shall be forwarded from the source device to the NASA common logging environment, in accordance with NASA policies, procedures and guidance.
   2. The Contractor shall report the theft or loss of any device that may contain NASA information, in accordance with NASA incident reporting policy and procedures.

i. The Contractor shall provide a logging environment that centrally captures and retains logs from all information systems provided under this contract.

RELEASED - Printed documents may be obsolete; validate prior to use.

j. The Contractor shall provide to NASA real-time, electronic access to all asset information and configuration management information for all devices provided under this contract and in support of this contract.

k. The Contractor shall ensure that all individuals who perform tasks as a system administrator, or have authority to perform tasks normally performed by a system administrator, possess knowledge appropriate to those tasks, as demonstrated by holding industry-standard certifications. In addition, system administrators shall not be granted elevated privileges to information systems covered under this contract unless they are authorized and have met the training requirements in accordance with NASA policy.

l. Prior to deployment of any IT security services, the Contractor shall obtain approval from the NASA Deputy CIO for IT Security or designee. Any IT security services provided by the Contractor shall be coordinated and integrated with the NASA SOC.
   1. Monitoring NASA networks (NASA IP Address space) is an IT security service performed by the NASA SOC (both security monitoring of network traffic and monitoring of system logs) and will be done only by the SOC unless otherwise agreed upon by the I^3P Contractor and NASA and documented in the Contractor's Information Security Management Plan.

m. The Contractor shall support the integration of NASA SOC IT security services and technologies into systems provided under this contract and in support of this contract, in accordance with NASA guidance.

n. The Contractor shall work with the NASA OCIO and the incumbent Contractor to transfer responsibility for all IT security requirements for existing information systems within the scope of the contract from the incumbent Contractor to the successor Contractor. The Contractor will receive from NASA a list of the applicable information systems.

RELEASED - Printed documents may be obsolete; validate prior to use.

7 Cross Functional Performance Work Statement Elements

The NASA IT Infrastructure Integration Program (I^3P) requires coordination, collaboration, and ultimately co-management of key processes across I^3P Service Contractors and contract boundaries. To ensure a successful integrated IT service environment across NASA, it is essential that IT service providers adhere to the NASA ITIL framework. The purpose of the following CF-PWS Elements is to consolidate the requirements that must remain consistent across Contractor service agreements. The requirements contained in this section are the responsibilities of the Contractor or Contractors associated with the Cross Functional Services.

7.1 General Provisions

7.1.1 IT Infrastructure Library® Version 3 (ITIL® v3) Support

Contractor shall be responsible for:

a. Defining and implementing service delivery processes and procedures that are consistent with the requirements contained in this CF-PWS. Contractor processes used to provide services shall be consistent and complimentary with Government ITIL® v3 aligned processes.
b. Ensuring that interfaces with Government, I^3P Contractors and other Contractors are consistent with Government ITIL® v3 aligned processes.
c. Ensuring that changes are approved and authorized by Government in accordance with Government Change Management Process.
d. Providing information to support maintenance of Government Enterprise Service Catalog.

7.1.2 Understanding and Knowledge of ITIL®

Contractor shall be responsible for:

a. Ensuring that all Contractor personnel involved in delivery of services shall possess basic knowledge, understanding, and familiarity with foundational ITIL v3 concepts and processes.
b. Providing verification that Contractor personnel, required in delivery of services, are experienced and trained in ITIL.
c. Participating in an objective assessment of Contractor ITIL maturity.

7.2 Change Management

7.2.0 High-Level Process Flow Diagram, Goal, Purpose and General

Goal: The goals of Change Management are to: Respond to the customer's changing business requirements while maximizing value and reducing incidents, disruption and re-work; and respond to business and IT requests for change that will align services to business needs.

Purpose: The purpose of Change Management is to ensure that: Standardized methods and procedures are used for efficient and prompt handling of Changes; Changes to service assets and configuration items are recorded in the Configuration Management Data Base (CMDB); and overall business risk is optimized.

RELEASED - Printed documents may be obsolete; validate prior to use.

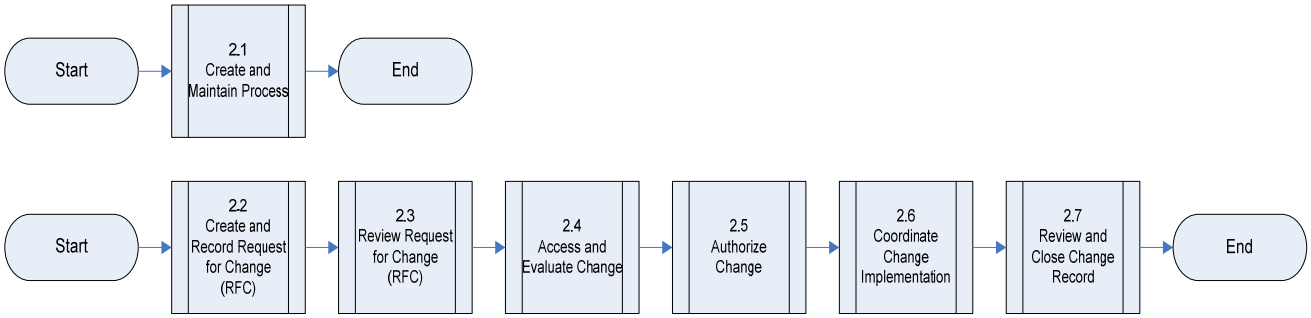

Figure 7: High-Level Change Management Process Flow Diagram

General Provisions:

Contractor shall be responsible for:

a. Designing and implementing Change Management procedures that align with Government Change Management Process**.**
b. Documenting, tracking and managing all Changes using a Contractor or Government provided Change Management system.
c. (When Contractors use a Contractor Change Management System) Providing integration between Contractor and Government Change Management systems including the integration of applicable software, e-mail and telephony in accordance with Government Change Management Process. All changes necessary to provide system integration shall be made at Contractor expense. Contractor solution shall provide an efficient transfer of information between systems (DRD CF-11).
d. Providing communications to users via Enterprise Service Desk and maintaining regular communications between all parties through resolution in accordance with Government Change Management Process.
e. Providing case ownership of Change Requests that are assigned to Contractor until Change record is closed or ownership is officially recorded and subsequently reassigned.
f. Participating in regularly scheduled Change Management meetings in accordance with Government Change Management Process.

7.2.1 Create and Maintain Change Management Process

Contractor shall be responsible for:

a. Complying with Government Change Management Process.
b. Performing continuous analysis of industry best practices or trends and inform Government of changes that could impact or improve Government Change Management process.

7.2.2 Create and Record Request for Change (RFC)

Contractor shall be responsible for:

a. Determining type of change request that is required in accordance with Government Change Management Process
b. Determining change procedures to be used in accordance with Government Change Management Process.

RELEASED - Printed documents may be obsolete; validate prior to use.

c. Completing request for change form(s) (e.g. performing data entry into the government's Service Request system thereby creating a Service Request ticket), with required documentation in accordance with Government Change Management Process.

7.2.3 Review Request for Change (RFC)

a. Contractor shall be responsible for providing information for preliminary review of requests for change.

7.2.4 Assess and Evaluate Change

Contractor shall be responsible for:

a. Providing information to support impact assessment of requests for change.
b. Providing information to support categorization and risk assessment of requests for change
c. Providing information to support assessment of the benefit of implementing requests for change.

7.2.5 Authorize Change

Contractor shall be responsible for:

a. Obtaining Government authorization for changes to services or underlying infrastructure supporting services in accordance with Government Change Management Process.
b. Participating in Change Advisory Board(s) in accordance with Government Change Management Process.

7.2.6 Coordinate Change Implementation

Contractor shall be responsible for:

a. Developing change implementation procedures in accordance with Government Change Management Policy.
b. Coordinating activities with Government, I^3P Contractors and other Contractors to implement approved changes.

7.2.7 Review and Close Change Record

a. Contractor shall be responsible for providing information and participating in review meetings for closure of change records and capture of lessons learned.
b. Contractor shall have responsibility for documenting in the government Service Request (SR) tracking system relevant SR closure information for which the Contractor had the lead in implementation.
c. Contractor shall be responsible for subsequent SR ticket closure updates.

7.3 Incident Management

7.3.0 High-Level Process Flow Diagram, Goal and General Provisions

Goal: The primary goal of Incident Management is to restore normal service operation as quickly as possible and minimize adverse impact on business operations, thus ensuring that the best possible levels of service quality and availability are maintained. "Normal service operation" is defined here as service operation within Service Level Agreement (SLA) limits.

Purpose: The purpose of Incident Management is to deal with all unplanned interruptions to an IT service or a reduction in the quality of IT service. This can include failures; questions or queries reported by users via telephone, email, face to face, or automatically detected and reported by event monitoring tools.

RELEASED - Printed documents may be obsolete; validate prior to use.

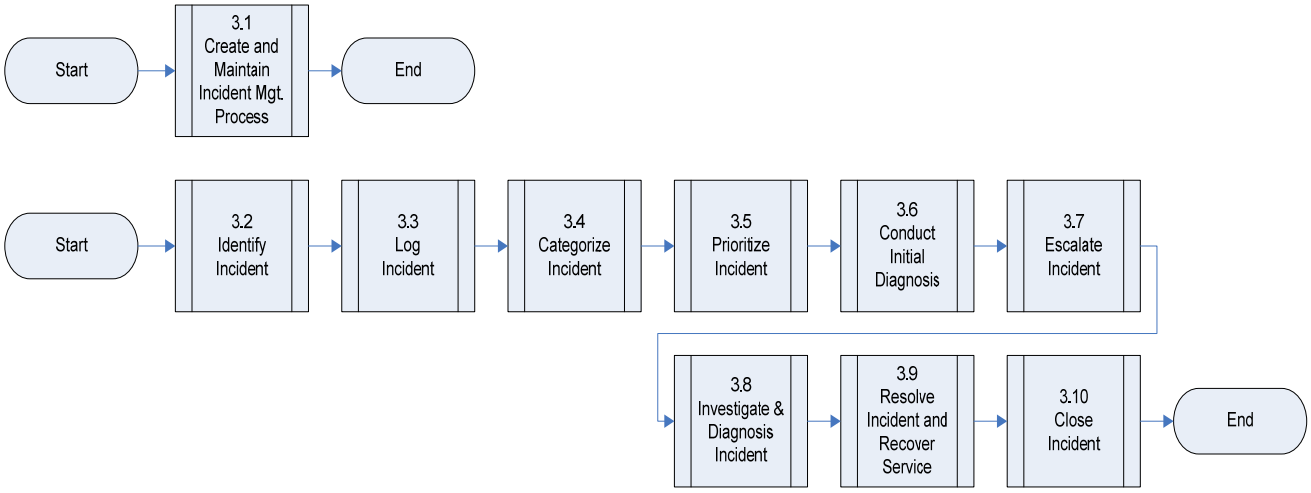

Figure 8: High-Level Incident Management Process Flow Diagram

General Provisions:

Contractor shall be responsible for:

a. Designing and implementing Incident Management procedures that align with Government Incident Management Process.
b. Documenting, tracking and managing all Incidents using a Contractor or Government provided Incident Management system.
c. (When Contractors use a Contractor Incident Management System) Providing integration between Contractor and Government Incident Management systems including the integration of applicable software, e-mail and telephony in accordance with Government Incident Management Process. All changes necessary to provide system integration shall be made at Contractor expense. Contractor solution shall provide an efficient transfer of information between systems (DRD CF-11).
d. Providing communications to users via Enterprise Service Desk and maintaining regular communications between all parties through Incident resolution in accordance with Government Incident Management Process.
e. Providing case ownership of Incidents that are assigned to Contractor until service is restored or ownership is reassigned.
f. Retaining ownership of each Incident assigned to Contractor by either the Enterprise Service Desk or the Government's Service Integration Management (SIM) office.
g. Assigning end-to-end responsibility of each Incident to a single point of contact in order to facilitate communications with Government until service is restored.
h. Resolving assigned Incidents in collaboration and coordination with Government, I^3P Contractors and other Contractors, and in accordance with Government Incident Management Process.
i. Complying with Government notification and escalation procedures in accordance with Government Incident Management Process.

RELEASED - Printed documents may be obsolete; validate prior to use.

j. Participating in daily Incident review meetings.
k. Implementing and supporting continuous improvement actions to reduce frequency and severity of reported Incidents.

7.3.1 Create and Maintain Incident Management Process

Contractor shall be responsible for:

a. Complying with Government Incident Management Process.
b. Performing continuous analysis of industry best practices or trends and inform Government of changes that could impact or improve Government Incident Management process.

7.3.2 Identify Incident

Contractor shall be responsible for:

a. Detecting Incidents via both manual and automated monitoring mechanisms.
b. Notifying Enterprise Service Desk of an Incident within 15 minutes of detection.

7.3.3 Log Incident

Contractor shall be responsible for:

a. Logging Incidents in accordance with Government Incident Management Process.
b. Providing information to Enterprise Service Desk to ensure Incidents are logged in accordance with Government Incident Management Process.

7.3.4 Categorize Incident

Contractor shall be responsible for:

a. Categorizing Incidents in accordance with Government Incident Management Process.
b. Providing information to Enterprise Service Desk to ensure Incidents are categorized in accordance with Government Incident Management Process.

7.3.5 Prioritize Incident

Contractor shall be responsible for:

a. Prioritizing Incidents in accordance with Government Incident Management Process.
b. Providing information to Enterprise Service Desk to ensure Incidents are prioritized in accordance with Government Incident Management Process.

7.3.6 Conduct Initial Diagnosis

Contractor shall be responsible for:

a. Conducting initial diagnosis of Incidents in accordance with Government Incident Management Process.
b. Providing information to Enterprise Service Desk to ensure initial diagnosis of Incidents is performed in accordance with Government Incident Management Process.

7.3.7 Escalate Incident

Contractor shall be responsible for:

a. Providing Tier 2 and Tier 3 Incident resolution and support.
a. Accepting Incident Lead role as assigned.
a. Providing a mechanism for expedited handling of Incidents that are of high business priority to Government in accordance with Government Incident Management Process.
a. Opening ‘Child’ Incident records for other I^3P Contractor(s).
a. Providing status updates to Government Incident Management System.

RELEASED - Printed documents may be obsolete; validate prior to use.

7.3.8 Investigate and Diagnose Incident

Contractor shall be responsible for:

a. Conducting incident investigation and diagnostic activities to identify root cause and develop Incident work-around(s).
b. Executing Incident Management in accordance with Government Incident Management Procedures.

7.3.9 Resolve Incident and Recover Service

Contractor shall be responsible for:

a. Applying resolution or work around to restore service as quickly as possible.
b. Accomplishing resolution and recovery of all Incidents reassigned to Tier 2 and/or Tier 3 for support.
c. Notifying Enterprise Service Desk via Incident Management System that service is restored.
d. Recommending implementation of measures to avoid reoccurrence of Incidents relating to Services in accordance with Incident Management Procedures.

7.3.10 Close Incident

a. Contractor shall be responsible for providing Incident closure information in accordance with Government Incident Management Process.
b. Contractor shall have responsibility for documenting in the government Incident Management tracking system relevant incident closure information for which the Contractor had the lead in implementation.
c. Contractor shall be responsible for subsequent incident closed ticket updates.

7.4 Request Fulfillment

7.4.0 High-Level Process Flow Diagram and General Provisions

Goal: The goals of Request Fulfillment are: provide a channel for users to request and receive standard services for which a pre-defined approval and qualification process exists; provide information to users and customers about the availability of services and the procedure for obtaining them; source and deliver components of requested standard services; and assist with general information, complaints or comments.

Purpose: The purpose of Request Fulfillment is to deal with Service Requests from users whether small (i.e., low risk, frequently occurring, low cost (e.g. a request to change a password, a request to install additional software onto a particular workstation, and a request to relocate some items of a desktop)) or large – higher risk, less frequently occurring, higher cost (e.g. a request to replace major infrastructure or other service components or a request to refresh major software components)).

RELEASED - Printed documents may be obsolete; validate prior to use.

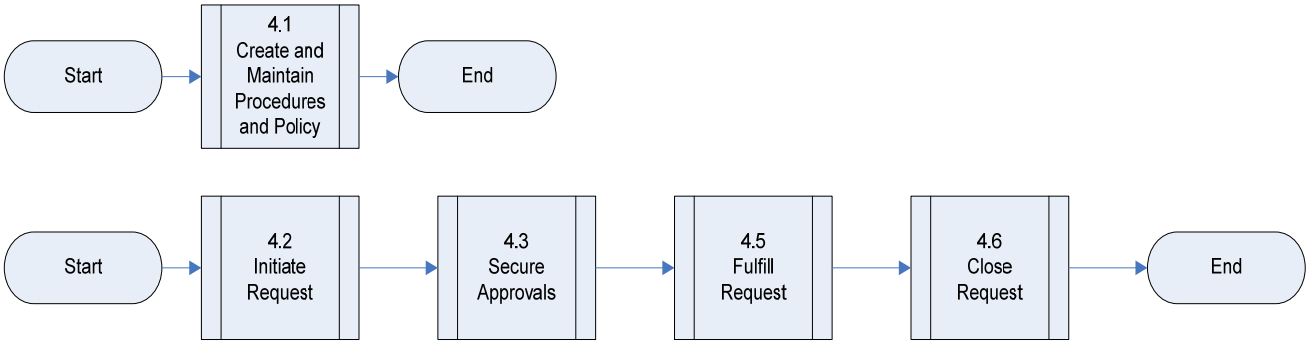

Figure 9: High-Level Request Fulfillment Process Flow Diagram

General Provisions:

Contractor shall be responsible for:

a. Designing and implementing Request Fulfillment procedures that align with Government Request Fulfillment Process.
b. Documenting, tracking and managing all Requests using a Contractor or Government provided Request Fulfillment system.
c. (When Contractors use a Contractor Request Fulfillment System) Providing integration between Contractor and Government Request Fulfillment systems including integration of applicable software, e-mail and telephony in accordance with Government Request Fulfillment Process. All changes necessary to provide system integration shall be made at Contractor expense. Contractor solution shall provide an efficient transfer of information between systems (DRD CF-11).
d. Maintaining communications regarding Request status with users via Enterprise Service Desk from time a Request is identified, through closure and through any follow-up communication.
e. Providing case ownership of Requests that are assigned to Contractor until Request is closed.
f. Participating in Request Fulfillment review meetings.
g. Implementing and supporting continuous improvement of Request Fulfillment through self-service or other mechanisms.

7.4.1 Create and Maintain Request Fulfillment Process

Contractor shall be responsible for:

a. Complying with Government Request Fulfillment Process.
b. Performing continuous analysis of industry best practices or trends and inform Government of changes that could impact or improve Government Request Fulfillment process.

7.4.2 Initiate Request

Contractor shall be responsible for:

a. Utilizing Government provided Enterprise Service Catalog to fulfill customer requests.
b. Providing a mechanism to receive non-standard requests from Request Fulfillment system in accordance with Government Request Fulfillment Process.

RELEASED - Printed documents may be obsolete; validate prior to use.

7.4.3 Secure Approvals

a. Contractor shall be responsible for providing supporting information on all standard and non-standard Requests in support of approvals in conformance with Government Request Fulfillment Process. Supporting information includes, but is not limited to, viable alternatives to fulfilling the Request, risk assessments, revised cost estimates, implementation timing, and dependencies.

7.4.4 Fulfill Request

Contractor shall be responsible for:

a. Fulfilling all standard Requests within Government Service Level Agreements as defined for each standard Request and in conformance with Government Request Fulfillment Process.
b. Fulfilling all non-standard Requests as mutually agreed and in accordance with Government Request Fulfillment Process.
c. Enabling fulfillment of a Request in collaboration and coordination with Government, I^3P Contractors and other Contractors and in accordance with Government Request Fulfillment Process.
d. Providing accurate and regular status updates for all Requests assigned to Contractor in accordance with Government Request Fulfillment Process.

7.4.5 Close Request

a. Contractor shall be responsible for providing Request closure information in accordance with Government Request Fulfillment Process.
b. The Contractor is responsible for subsequent closure updates to the Government Service Requests system regarding their assigned Request Fulfillment tickets and tasks.

7.5 Problem Management

7.5.0 High-Level Process Flow Diagram and General Provisions

Goal: The primary goals of Problem Management are: to prevent problems and resulting Incidents from happening, to eliminate recurring Incidents and to minimize the impact of Incidents that cannot be prevented.

Purpose: The purpose of Problem Management is to provide a pre-defined and approved process for managing the lifecycle of all Problems to include diagnosis, determination of resolutions to those Problems, implementing solutions through appropriate control and change management procedures and preventing Problem reoccurrence.

RELEASED - Printed documents may be obsolete; validate prior to use.

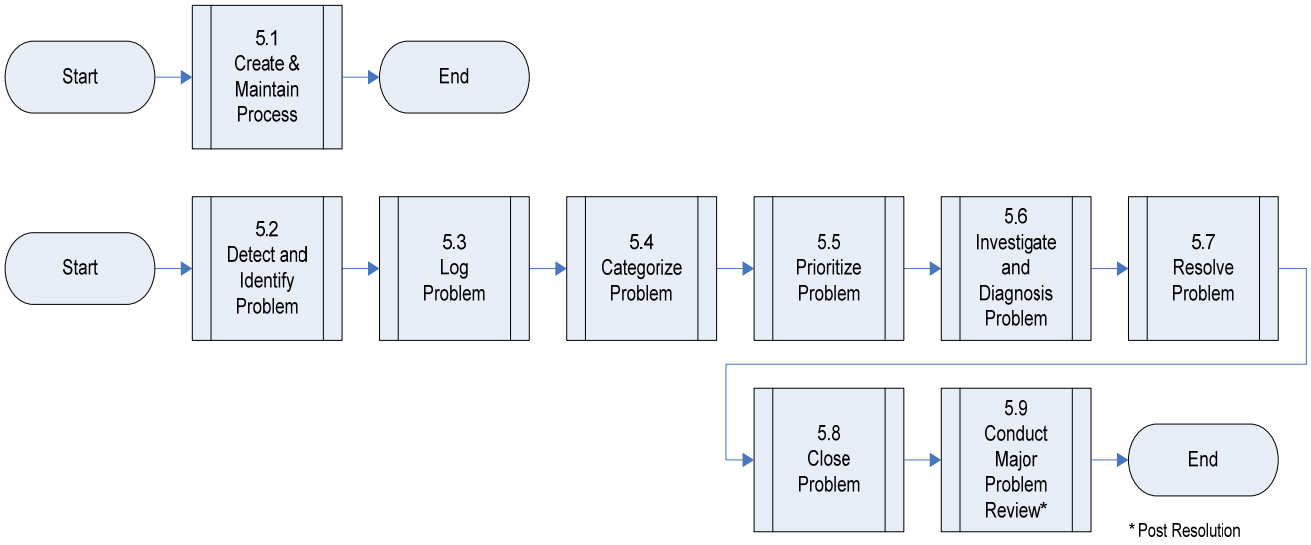

Figure 10: High-Level Problem Management Process Flow Diagram

General Provisions:

Contractor shall be responsible for:

a. Designing and implementing Problem Management procedures that align with Government Problem Management Process.
b. Documenting, tracking and managing all Problems in a Government Problem Management System.
c. (When Contractors use a Contractor Problem Management System) Providing integration between Contractor and Government Problem Management systems including integration of applicable software, e-mail and telephony in accordance with Government Problem Management Process. All changes necessary to provide system integration shall be made at Contractor expense. Contractor solution shall provide an efficient transfer of information between systems (DRD CF-11).
d. Retaining ownership of each problem assigned to Contractor by either Enterprise Service Desk or Government Service Integration Management (SIM) office.
    1) To the extent a Problem does not arise from or relate to the Contractor's Services:
        i. The Contractor shall notify Enterprise Service Desk in accordance with Government Problem Management Procedures.
        ii. The Contractor shall maintain responsibility for the Problem until the Problem is reassigned by Enterprise Service Desk or Government Service Integration Management (SIM) office.
e. Assigning end-to-end responsibility of each Problem to a single point of contact in order to facilitate communications with Government.
f. Monitoring, controlling and managing each Problem assigned to Contractor until it is closed by Enterprise Service Desk.
g. Resolving assigned Problems in collaboration and coordination with Government, I^3P Contractors and other Contractors and in accordance with Government Problem Management Process.

RELEASED - Printed documents may be obsolete; validate prior to use.

h. Complying with Government notification and escalation procedures in accordance with Government Problem Management Process.

7.5.1 Create and Maintain Problem Management Process

Contractor shall be responsible for:

a. Complying with Government Problem Management Process.
b. Performing continuous analysis of industry best practices or trends and inform Government of changes that could impact or improve Government Problem Management process.

7.5.2 Detect and Identify Problem

Contractor shall be responsible for:

a. Identifying Problems by proactively performing on-going trend analysis on Incident information.
b. Detecting Problems via both manual and automated monitoring mechanisms.

7.5.3 Log Problem

Contractor shall be responsible for:

a. Logging Problems in accordance with Government Problem Management Process.
b. Providing information to Enterprise Service Desk to ensure Problems are logged in accordance with Government Problem Management Process.

7.5.4 Categorize Problem

Contractor shall be responsible for:

a. Categorizing Problems in accordance with Government Problem Management Process.
b. Providing information to Enterprise Service Desk to ensure Problems are categorized in accordance with Government Problem Management Process.

7.5.5 Prioritize Problem

Contractor shall be responsible for:

a. Prioritizing Problems in accordance with Government Problem Management Process.
b. Providing information to Enterprise Service Desk to ensure Problems are prioritized in accordance with Government Problem Management Process.

7.5.6 Investigate and Diagnose Problem

Contractor shall be responsible for:

a. Conducting Problem investigation in accordance with Government Problem Management Process.
b. Conducting Problem diagnostics in accordance with Government Problem Management Procedures.
c. Providing status tracking information in Government Problem Management System in accordance with Government Problem Management Process.
d. Investigating and diagnosing Problems in collaboration and coordination with Government, I^3P Contractors and other Contractors and in accordance with Government Problem Management Process.
e. Validating Problem workarounds.
f. Providing communications to users via Enterprise Service Desk and maintaining regular communications between all parties through Problem resolution in accordance with Government Problem Management Process.

RELEASED - Printed documents may be obsolete; validate prior to use.

g. Performing Root Cause Analysis (RCA) in accordance with Government Problem Management Procedures.
h. Updating Known Error information in accordance with Government Problem Management Process
i. Documenting problem resolution in accordance with Government Problem Management Process.
j. Developing a Corrective Action Plan in accordance with Government Problem Management Process.

7.5.7 Resolve Problem

Contractor shall be responsible for:

a. Determining if initiation of Change Management Process is required.
b. Generating requests for change for permanent solutions and corrective action plans in accordance with Government Change Management Process.
c. Applying resolutions across the enterprise, as applicable.
d. Implementing the approved corrective action plan with follow-up to eliminate the fault from the operating environment.
e. Resolving Problems in collaboration and coordination with Government, I^3P Contractors and other Contractors and in accordance with Government Problem Management Process..
f. Developing supporting documentation, scripts, and procedures for Enterprise Service Desk to facilitate resolution of repetitive problems (**DRD CF-14**). These supporting elements shall be fully developed, documented and tested prior to release in accordance with ITIL v3 Change, Release, and Deployment processes.

7.5.8 Close Problem

a. Contractor shall be responsible for Providing Problem resolution and closure information in Government Problem Management System in accordance with Government Problem Management Process.
b. The Contractor is responsible for Problem Management system ticket closure and subsequent updates to the government Problem Management system regarding previously assigned and closed Problem Management tickets.

7.5.9 Conduct Major Problem Review

Contractor shall be responsible for:

a. Participating in major Problem reviews.

b. Providing Problem resolution details.

7.6 Service Level Management (SLM)

7.6.0 High-Level Process Flow Diagram, Goal, Purpose and General Provisions

Goal: The goal of Service Level Management is to ensure that an agreed upon level of service is provided for all IT services, and that future services are delivered in accordance with Service Level Agreements. Proactive measures are also taken to seek and implement improvements to the level of service delivered.

RELEASED - Printed documents may be obsolete; validate prior to use.

Purpose: The purpose of Service Level Management is to ensure that all operational services and their performance are managed in a consistent manner throughout the IT organization to meet the needs of the business and customers.

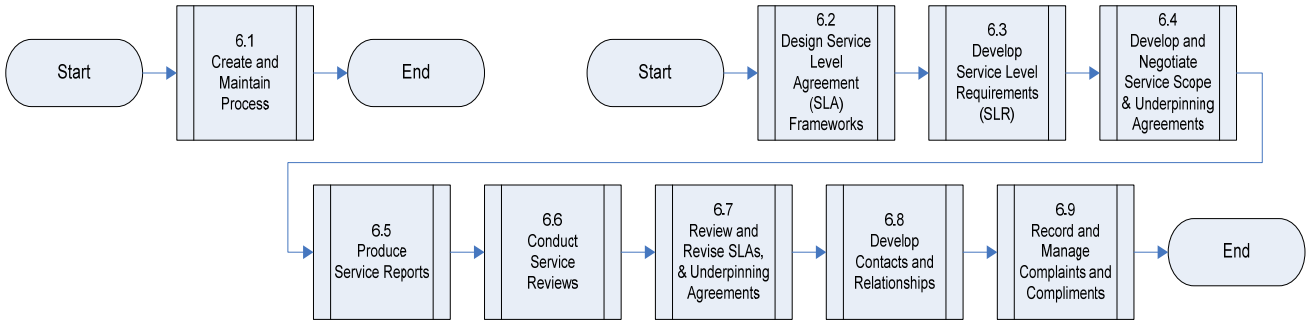

Figure 11: High-Level Service Level Management Process Flow Diagram

General Provisions:

Contractor shall be responsible for designing and implementing SLM procedures that align with Government SLM Process.

7.6.1 Create and Maintain SLM Process

Contractor shall be responsible for:

a. Complying with the approved Government SLM Process.
b. Performing continuous analysis of industry best practices or trends and inform Government of changes that could impact or improve Government SLM process.

7.6.2 Design Service Level Agreement (SLA) Frameworks

a. Contractor shall be responsible for providing information to support design and development of Service Level Agreement frameworks .

7.6.3 Develop Service Level Requirements (SLR)

a. Contractor shall be responsible for providing information to support Government with developing Service Level Requirements and gaining agreement with Government IT services customers.

7.6.4 Develop and Negotiate Service Level Scope and UnderpinningAgreements

a. Contractor shall be responsible for providing information to support Government with developing and drafting service level scope and underpinning agreements.

7.6.5 Produce Service Level Reports

a. Contractor shall be responsible for providing information to support Government reporting of Service Levels in accordance with Government SLM Process.

7.6.6 Conduct Service Reviews

a. Contractor shall be responsible for supporting Government service reviews (e.g., meetings) in accordance with Government SLM Process.

7.6.7 Review and Revise Service Level Agreements and Underpinning Agreements

a. Contractor shall be responsible for providing information to support Government with reviewing and revising Service Levels and underpinning agreements.

RELEASED - Printed documents may be obsolete; validate prior to use.

7.6.8 Develop Contacts and Relationships

a. Contractor shall be responsible for providing information to support Government with developing customer relationships as it relates to IT services, service performance, and service agreements.

7.6.9 Record and Manage Customer Service Level Feedback

Contractor shall be responsible for:

a. Providing information to Enterprise Service Desk regarding customer Service Level feedback in accordance with Government SLM Process.
b. Providing information to support Government with assigning and dispositioning actions related to customer feedback.

7.7 Service Asset and Configuration Management (SACM)

7.7.0 High-Level Process Flow Diagram, Goal, Purpose and General Provisions

Goal: The goals of SACM are to: support the business and customer's control objectives and requirements; support efficient and effective Service Management processes by providing accurate configuration information to enable people to make decisions at the right time (e.g., to authorize change and releases and to resolve incidents and problems faster); minimize the number of quality and compliance issues caused by improper configuration of services and assets; and optimize service assets, IT configurations, capabilities and resources.

Purpose: The purpose of SACM is to: identify, control, record, report, audit and verify Service Assets and Configuration Items, including versions, baselines, constituent components, and their attributes and relationships; account for, manage, and protect the integrity of Service Assets and Configuration Items (and where appropriate, those of their customers) throughout the service lifecycle.

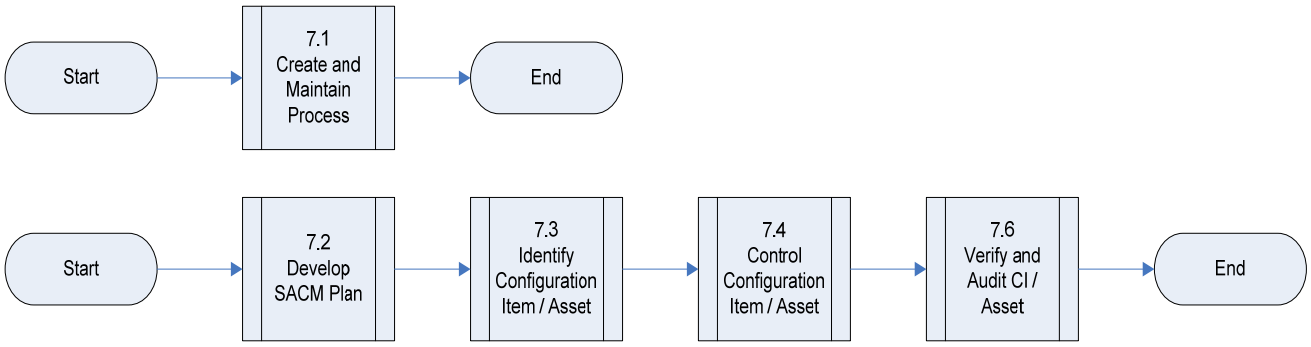

Figure 12: High-Level Service Asset and Configuration Management Process Flow Diagram

RELEASED - Printed documents may be obsolete; validate prior to use.

General Provisions:

Contractor shall be responsible for:

a. Defining and implementing Contractor SACM procedures in accordance with Government SACM Process.
b. Documenting, tracking and managing all Service Assets and Configuration Items in Government CMDB in accordance with Government SACM Process.
c. (When Contractors use a Contractor CMDB System) Providing integration between Contractor and Government CMDB systems including integration of applicable software, e-mail and telephony in accordance with Government SACM Process. All changes necessary to provide system integration shall be made at Contractor expense. Contractor solution shall provide an efficient transfer of information between systems (DRD CF-11).
d. The Government CMDB is the official and authoritative system of record for all Configuration Items (CI) where it is determined to be in the best interests of the government to track such. The Contractor is responsible for creating, maintaining, and updating (to include proper removal) of CMDB records in the government CMDB for CIs under their purview. Archival records shall be maintained for all CIs deleted from the CMDB.

7.7.1 Create and Maintain Service Asset and Configuration Management (SACM) Process

Contractor shall be responsible for:

a. Complying with Government SACM Process.
b. Performing continuous analysis of industry best practices or trends and inform Government of changes that could impact or improve Government SACM process.

7.7.2 Develop Service Asset and Configuration Management (SACM) Plan

a. Contractor shall be responsible for developing and maintaining SACM Plan in collaboration and coordination with Government, I^3P Contractors and other Contractors and in accordance with DRD CF-03.

7.7.3 Identify Configuration Item / Asset

Contractor shall be responsible for:

a. Developing a strategy for ensuring identification of all Configuration Items in accordance with Government SACM Process.
b. Identifying and labeling, as applicable, all Configuration Items in accordance with Government SACM Process
c. Assigning unique identifiers to each Configuration Item in accordance with Government SACM Process.
d. Specifying relevant attributes, relationships, owner and baselines for each Configuration Item in accordance with Government SACM Process.

7.7.4 Control Configuration Item / Asset

Contractor shall be responsible for:

a. Identifying when a change to a Configuration Item is necessary and initiating a request for change in accordance with Government Change Management Process.
b. Determining and reporting the root cause, impact, and actions to prevent recurrence of an unauthorized change in collaboration and coordination with Government, I^3P Contractors and other Contractors and in accordance with Government SACM Process.

7.7.5 Verify and Audit Configuration Item / Asset

Contractor shall be responsible for:

RELEASED - Printed documents may be obsolete; validate prior to use.

a. Participating in Government audit activities to ensure conformity between documented Configuration Items and actual Configuration Items in accordance with Government SACM Process.
b. Providing audit Configuration Item data and Release documentation in accordance with Government SACM Process.
c. Implementing corrective actions in accordance with Government SACM Process.
d. Providing information to support audit reporting in accordance with Government SACM Process.

7.8 Release and Deployment Management (RDM)

7.8.0 High Level Process Flow Diagram, Goal, Purpose and General Provisions

Goal: The goal of Release and Deployment Management is to deploy releases into production and establish effective use of the service.

Purpose: The purpose of Release and Deployment Management is to: define and agree on release and deployment plans with customers and stakeholders; ensure that integrity of a release package and its constituent components is maintained throughout the transition activities and recorded accurately in the Configuration Management Database (CMDB); ensure that all release and deployment packages can be tracked, installed, tested, verified, and/or uninstalled or backed out if appropriate; and ensure that customers and stakeholder change is managed during Release and Deployment activities.

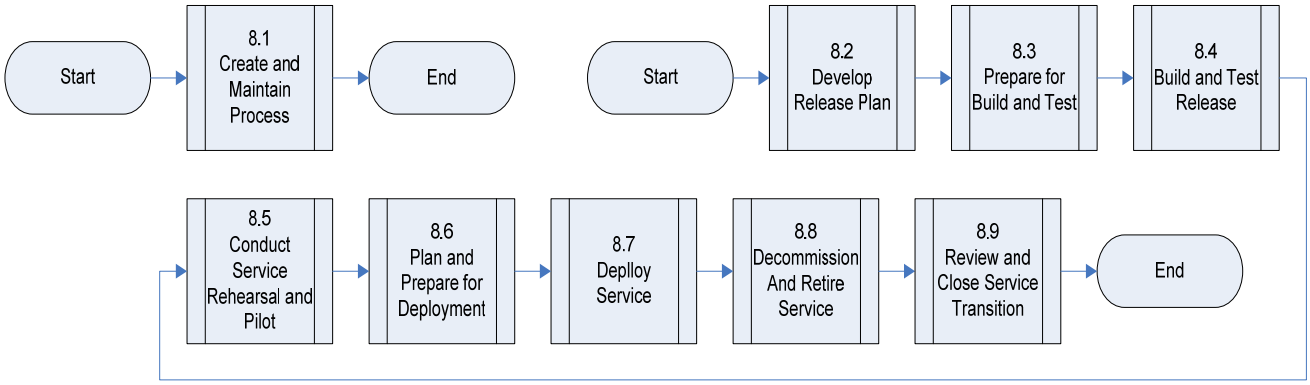

Figure 13: High-Level Release and Deployment Management Process Flow Diagram

General Provisions:

Contractor shall be responsible for performing Releases in accordance with Government Release and Deployment Process.

7.8.1 Create and Maintain Release and Deployment Management Process

Contractor shall be responsible for:

a. Complying with Government RDM Process.

RELEASED - Printed documents may be obsolete; validate prior to use.

b. Performing continuous analysis of industry best practices or trends and inform Government of changes that could impact or improve Government RDM Process.
c. Conducting an annual inventory of applications being used to support NASA services, and report this data, including the cost to develop, operate, enhance and maintain applications as specified in DRD CF-05.
d. Reviewing the NASA Application Repository to verify if an existing application will satisfactorily fulfill the stated application requirements prior to purchasing or developing a new application/capability and inform the Responsible NASA Official of said existing application(s).

7.8.2 Develop Release Plan

a. Contractor shall be responsible for developing and maintaining RDM Plan in collaboration and coordination with Government, I^{3}P Contractors, and other Contractors and in accordance with DRD CF-04.

7.8.3 Prepare for Release Build and Test

a. Contractor shall be responsible for preparing for release build and test in collaboration and coordination with Government, I^{3}P Contractors and other Contractors.

7.8.4 Build and Test Release

Contractor shall be responsible for:

a. Building and testing releases in collaboration and coordination with Government, I^{3}P Contractors and other Contractors and in accordance with Government RDM Process.
b. Developing release documentation in accordance with Government RDM Process.
c. Creating test scenario and acceptance criteria and submitting them for review in accordance with Government RDM Process.
d. Managing Release build and test environments.

7.8.5 Conduct Service Rehearsal and Pilot

a. Contractor shall be responsible for conducting service rehearsals and pilots in collaboration and coordination with Government, I^{3}P Contractors and other Contractors and in accordance with Government RDM Process.

7.8.6 Plan and Prepare for Deployment

Contractor shall be responsible for:

a. Planning and preparing for deployment in collaboration and coordination with Government, I^{3}P Contractors and other Contractors and in accordance with Government RDM Process.
b. Assessing the need for and planning for a release stabilization period in collaboration and coordination with Government, I^{3}P Contractors and other Contractors and in accordance with Government RDM Process.

7.8.7 Deploy Service

Contractor shall be responsible for:

a. Deploying services in collaboration and coordination with Government, I^{3}P Contractors and other Contractors and in accordance with Government RDM Process.
b. Verifying successful service deployment in collaboration and coordination with Government, I^{3}P Contractors and other Contractors and in accordance with Government RDM Process.
c. Executing back-out plan, if necessary, in collaboration and coordination with Government, I^{3}P Contractors and other Contractors and in accordance with Government RDM Process.

RELEASED - Printed documents may be obsolete; validate prior to use.

7.8.8 Decommission and Retire Service

a. Contractor shall be responsible for decommissioning and retiring services in collaboration and coordination with Government, I^{3}P Contractors and other Contractors and in accordance with Government RDM Process.

7.8.9 Review and Close Service Release Deployment

a. Contractor shall be responsible for closing release deployment in accordance with Government RDM Process.

7.9 Capacity Management

7.9.0 High-Level Process Flow Diagram, Goal, Purpose and General Provisions

Goal: The goal of Capacity Management process is to ensure IT capacity in all areas of IT is matched to the needs of the Government's business.

Purpose: The purpose of Capacity Management is to provide a point of focus and management for all capacity and performance related issues, relating to both services and resources.

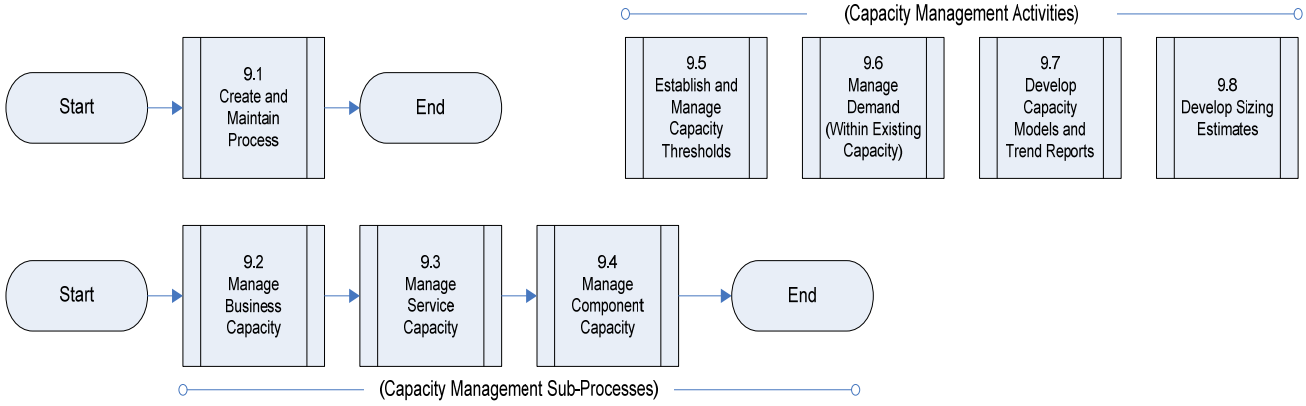

Figure 14: High-Level Capacity Management Process Flow Diagram

General Provisions:

Contractor shall be responsible for:

a. Designing and implementing Capacity Management procedures that align with Government Capacity Management Process.
b. Developing and maintaining Capacity Management Plan in collaboration and coordination with Government, I^{3}P Contractors, and other Contractors and in accordance with DRD CF-06.
c. Conducting annual reviews of projected capacity requirements for infrastructure and related services, and providing recommendations based upon information provided by Government Portfolio Management Process as part of Government's normal business planning cycle.

RELEASED - Printed documents may be obsolete; validate prior to use.

7.9.1 Create and Maintain Capacity Management Process

Contractor shall be responsible for:

a. Complying with Government Capacity Management Process.
b. Performing continuous analysis of industry best practices or trends and inform Government of changes that could impact or improve Government Capacity Management Process.

7.9.2 Manage Business Capacity

Contractor shall be responsible for:

a. Providing impact assessment of potential business capacity issues based on Government business direction.
b. Prototyping and sizing capacity impact solutions, including:
    1) Developing and maintaining standard templates for capacity test plans in collaboration and coordination with Government, I^3P Contractors and other Contractors.
    2) Coordinating tests with Government, I^3P Contractors and other Contractors to provide end-to-end testing.
    3) Testing and sizing models for capacity impacts.
c. Developing plans for required changes to existing capacity in accordance with DRD CF-06.

7.9.3 Manage Service Capacity

Contractor shall be responsible for:

a. Providing Service Manager with information regarding Service Capacity and issues.
b. Monitoring Service Capacity including:
    1) Collecting Service Capacity performance data, at a minimum, per the following schedule:
        i. Daily data collection for volatile and dynamic systems.
        ii. Weekly data collection for variable and stable systems.
    2) Maintaining Services aligned with Government Enterprise Service Catalog.
c. Analyzing Service Capacity, including:
    1) Providing service capacity performance reports in accordance with DRD CF-07.
d. Tuning Service performance, including changing capacity, to take corrective action or adjust for more effective usage.
e. Establishing capacity thresholds and making adjustments based on Government requirements.
f. Responding to Government requests for capacity impact statements within 30 days.

7.9.4 Manage Component Capacity

Contractor shall be responsible for:

a. Providing Service Manager with information regarding component capacity and issues.
b. Monitoring component capacity usage, including:
    1) Maintaining components aligned with Government Enterprise Service Catalog.
c. Analyzing component usage, including:
    1) Reviewing component capacity data.
    2) Determining if proactive changes are needed.
    3) Determining if tuning or replacing a component can provide for a more effective use of the component.
d. Tuning or replacing components, including:
    1) Adjusting or balancing component capacity to provide more effective usage.

RELEASED - Printed documents may be obsolete; validate prior to use.

2) Changing component capacity to correct utilization issues.
3) Replacing components in compliance with Change Management Process.
4) Collecting and providing component capacity data based on Government-specified standards and metrics.

e. Providing component capacity reports in accordance with DRD CF-07.
f. Reviewing, validating and updating component baselines and profiles in the CMDB.

7.9.5 Establish and Manage Capacity Thresholds

a. Contractor shall be responsible for monitoring and generating alerts and warnings associated with capacity and performance thresholds.

7.9.6 Manage Demand (within existing capacity)

a. Contractor shall be responsible for providing information and support to manage demand within existing capacity levels.

7.9.7 Develop Capacity Models and Trend Reports

a. Contractor shall be responsible for providing capacity models and trend reports in accordance with DRD CF-07.

7.9.8 Develop Sizing Estimates

a. Contractor shall be responsible for developing sizing estimates to support capacity planning.

7.10 Availability Management

7.10.0 High-Level Process Flow Diagram, Goal, Purpose and General Provisions

Goal: The Goal of Availability Management is to ensure that the level of service availability delivered in all services is matched to the requirements of the Government's business.

Purpose: The Purpose of Availability Management is to provide a point of focus and management for all availability-related issues, relating to both services and resources, ensuring that availability targets in all areas are measured and achieved.

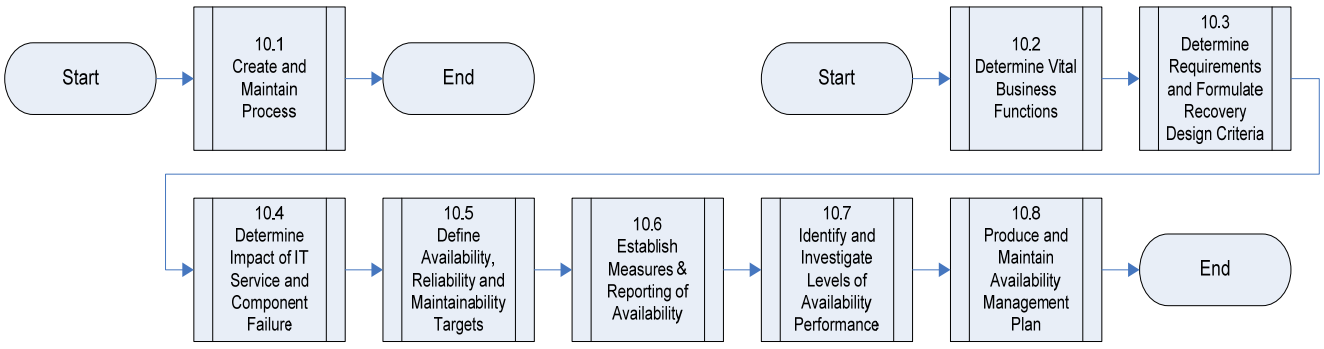

Figure 15: High-Level Availability Management Process Flow Diagram

General Provisions:

RELEASED - Printed documents may be obsolete; validate prior to use.

Contractor shall be responsible for designing and implementing Availability Management procedures that align with Government Availability Management Process.

Identifying planned downtime and scheduling downtime in collaboration and coordination with Government, I^3P Contractors and other Contractors and in alignment with Government Mission Flight Requirements.

7.10.1 Create and Maintain Availability Management Process

Contractor shall be responsible for:

a. Complying with Government Availability Management Process.
b. Performing continuous analysis of industry best practices or trends and inform Government of changes that could impact or improve Government Availability Management Process.

7.10.2 Determine Vital Business Functions

a. Contractor shall be responsible for providing information to support Government with identifying vital business functions.

7.10.3 Determine Requirements and Formulate Recovery Design Criteria

a. Contractor shall be responsible for providing information to support Government with defining availability requirements.
b. Providing information to support Government with formulating recovery design criteria

7.10.4 Determine Impact of IT Service and Component Failure

a. Contractor shall be responsible for providing information to support Government with conducting business and service impact analysis and component failure impact analysis related to availability.

7.10.5 Define Availability, Reliability and Maintainability Targets

a. Contractor shall be responsible for providing information to support Government with developing and maintaining availability, reliability and maintainability targets and measures that align with applicable Service Level Agreements.

7.10.6 Monitor and Analyze Availability, Reliability and Maintainability

Contractor shall be responsible for:

a. Establishing service metrics and tools for measuring availability, reliability and maintainability in accordance with Government Availability Management Process.
b. Deploying tool sets and/or interfaces to permit end-to-end measurement of availability.
c. Collecting and recording availability, reliability and maintainability data.
d. Monitoring availability, reliability and maintainability elements with respect to Service Levels.
e. Conducting analysis for compliance with availability, reliability and maintainability Service Levels.
f. Reporting results of monitoring and analysis in accordance with DRD CF-09.
g. Providing information to assist in Problem analysis related to service availability.

7.10.7 Identify and Investigate Levels of Availability Performance

Contractor shall be responsible for:

a. Identifying Availability performance that fails to meet Government Service Level Agreements.
b. Investigating availability performance that fails to meet Government Service Level Agreements.

RELEASED - Printed documents may be obsolete; validate prior to use.

c. Initiating actions to ensure availability performance complies with Government Service Level Agreements.

7.10.8 Produce and Maintain Availability Management Plan

Contractor shall be responsible for:

a. Developing and maintaining Availability Management Plan in collaboration and coordination with Government, I^{3}P Contractors and other Contractors and in accordance with DRD CF-08.
b. Addressing end-to-end availability requirements in any designs to ensure compliance with Government design and architecture standards.
c. Addressing end-to-end availability requirements in defining and executing any test plans.
d. Identifying planned downtime and scheduling downtime in collaboration and coordination with Government, I^{3}P Contractors and other Contractors and in accordance with applicable Service Level Agreements.
e. Implementing requested changes to availability metrics and Service Level Agreement in accordance with Government SLM Process.

7.11 IT Service Continuity Management (ITSCM)

7.11.0 High-Level Process Flow Diagram, Goal, Purpose and General Provisions

Goal: The goal of ITSCM is to support the overall Business Continuity Management process by ensuring that required IT technical and service facilities (including computer systems, networks, applications, data repositories, telecommunications, environment, technical support and Service Desk) can be resumed within required business timeframes.

Purpose: The purpose of ITSCM is to establish and maintain required ongoing recovery capability within required IT services and their supporting components.

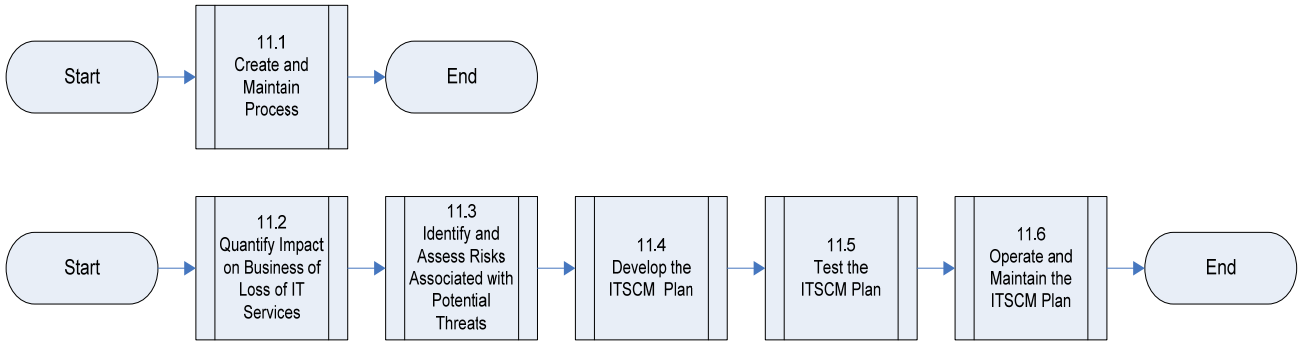

Figure 16: High-Level IT Service Continuity Management Process Flow Diagram

RELEASED - Printed documents may be obsolete; validate prior to use.

General Provisions:

Contractor shall be responsible for:

a. Designing and implementing ITSCM Management procedures that align with Government ITSCM Process.
b. Providing ITSCM Services to mitigate the impact of a disaster or major failure in accordance with Government ITSCM Process.
c. Developing, documenting and maintaining procedures (e.g., Disaster Recovery checklists) in collaboration and coordination with Government, I^3P Contractors and other Contractors to meet Government requirements (e.g., Recovery Time Objectives (RTO) and Recovery Point Objectives (RPO)).

7.11.1 Create and Maintain IT Service Continuity Management Process

Contractor shall be responsible for:

a. Complying with Government ITSCM Process.
b. Performing continuous analysis of industry best practices or trends and inform Government of changes that could impact or improve Government ITSCM process.

7.11.2 Quantify Impact on Business of Loss of IT Services

Contractor shall be responsible for:

a. Providing information to support analysis of the impact of continuity scenarios.
b. Providing information to support identification and impact of contingency options and mitigation actions.

7.11.3 Identify and Assess Risks Associated with Potential Threats

Contractor shall be responsible for:

a. Providing information to support identification of risk responses and proposed countermeasures.
b. Participating in IT risk assessment activities in order to reduce vulnerability to the business.

7.11.4 Develop the IT Service Continuity Management (ITSCM) Plan

Contractor shall be responsible for:

a. Developing and maintaining ITSCM Plan in collaboration and coordination with Government, I^3P Contractors and other Contractors and in accordance with DRD CF-10.
b. Supporting business criticality classification in accordance with Government Enterprise Service Catalog.

7.11.5 Test the IT Service Continuity Management (ITSCM) Plan

Contractor shall be responsible for:

a. Developing test scenarios in collaboration and coordination with Government, I^3P Contractors and other Contractors in support of conducting testing of ITSCM Plan in accordance with Government ITSCM Process.
b. Conducting walkthrough, full, partial and scenario tests in accordance with Government ITSCM Process.

7.11.6 Operate and Maintain the ITSCM Plan

Contractor shall be responsible for:

a. Participating in Government ITSCM reviews in accordance with Government ITSCM Process.

RELEASED - Printed documents may be obsolete; validate prior to use.

b. Invoking ITSCM plan in accordance with Government ITSCM Process.
c. Performing training functions including:
   1) Developing and updating Contractor ITSCM training plans and material.
   2) Training Contractor recovery team members.
d. Maintaining local work procedures and contact lists.
e. Performing ITSCM Plan gap analysis and response planning and updating Contractor ITSCM Plan accordingly.
f. Documenting all contingency services provided in Government Service Level Agreements.
g. Executing recovery plans and restoring Service to normal operation.
h. Supporting ITSCM evaluation efforts following disaster events, including providing evaluations and lessons learned and updating Contractor ITSCM Plan as needed.

7.12 Knowledge Management

7.12.0 High-Level Process Flow Diagram, Goal, Purpose and General Provisions

Goal: The goal of Knowledge Management is to enable organizations to improve the quality of management decision making by ensuring that reliable and secure information and data is available throughout the service lifecycle.

Purpose: The purpose of Knowledge Management is to ensure that the right information is delivered to the appropriate place or person at the right time to enable informed decision making.

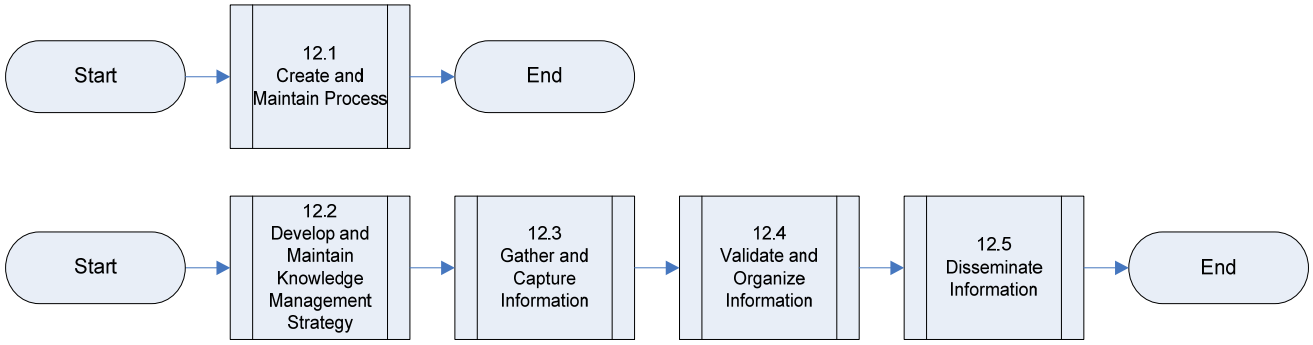

Figure 17: High-Level Knowledge Management Process Flow Diagram

General Provisions:

Contractor shall be responsible for:

a. Designing and implementing knowledge management procedures and tools to support knowledge capture and dissemination in accordance with Government Knowledge Management Process.

RELEASED - Printed documents may be obsolete; validate prior to use.

b. Managing and maintaining knowledge and information assets in collaboration and coordination with Government, I³P Contractors and other Contractors, and in accordance with Government Knowledge Management Process. This captured developed, generated, and created knowledge and information and related information elements generated as a result of this process shall become the Government Knowledge Base.

7.12.1 Create and Maintain Knowledge Management Process

Contractor shall be responsible for:

a. Complying with Government's Knowledge Management Process.
b. Performing continuous analysis of industry best practices or trends and inform Government of changes that could impact or improve Government Knowledge Management process.

7.12.2 Develop and Maintain Knowledge Management System

a. Contractor shall be responsible for providing the Government with information to support develop and maintain of the Government Knowledge Management system.

7.12.3 Gather and Capture Information

a. Contractor shall be responsible for gathering and capturing information in accordance with Government Knowledge Management Process.

7.12.4 Validate and Organize Information

a. Contractor shall be responsible for validating and organizing information in accordance with Government Knowledge Management Process.

7.12.5 Disseminate Information

a. Contractor shall be responsible for disseminating information in accordance with Government Knowledge Management Process.
b. Contractor shall make all Knowledge Base information developed, gathered, generated, and or otherwise created under this contract available to the NASA OCIO and ESD in electronic form compliant with the NEAR requirements and specifications.

7.13 Information Security Management (ISM)

7.13.0 High-Level Process Flow Diagram, Goal and Purpose

Goal: The goal of ISM is to align IT security with business security and ensure that information security is effectively managed across all service management and service delivery activities.

RELEASED - Printed documents may be obsolete; validate prior to use.

Purpose: The purpose of ISM is to provide a point of focus and management for all aspects of IT security.

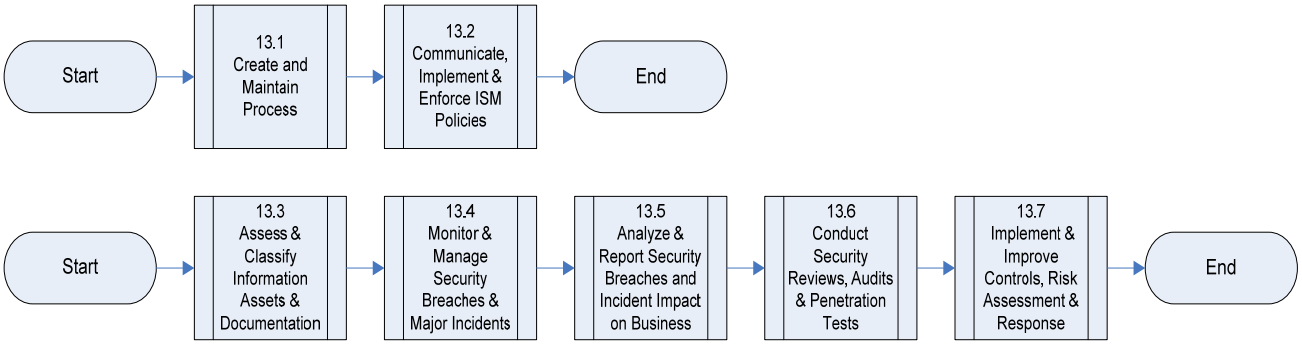

Figure 18: High-Level Information Security Management Process Flow Diagram

7.13.1 Create and Maintain Information Security Management (ISM) Process

Contractor shall be responsible for:

a. Complying with Government's ISM policies and procedures. Examples include Federal Information Security Management Act (FISMA) and National Institute of Standards and Technology (NIST). See Section 6, Common Information Technology Security Requirements, in this document.
b. Performing continuous analysis of industry best practices or trends and informing Government of changes that could impact or improve Government ISM process.

7.13.2 Communicate, Implement and Enforce Information Security Management (ISM) Procedures

Contractor shall be responsible for:

a. Implementing Government ISM policies (e.g., FISMA) for all Contractor services provided.
b. Supporting Government's ISM policy enforcement efforts and providing details of Information security practices to Government.

7.13.3 Assess and Classify Information Assets and Documentation

Contractor shall be responsible for:

a. Providing information to Government to support information asset identification and documentation in accordance with Government's ISM policy.
b. Providing information to Government to support information asset review activities regarding completeness, accuracy, and vulnerability.
c. Providing information to Government to support classification of information assets in accordance with Government's ISM policy.

7.13.4 Monitor and Manage Security Breaches and Major Incidents

Contractor shall be responsible for:

a. Monitoring and reporting security breaches and security incidents in accordance with Government's ISM procedures.

RELEASED - Printed documents may be obsolete; validate prior to use.

b. Providing information to Government to support investigation of any security breach and/or security Incident.
c. Providing information to Government to support resolution of any security breach and/or security Incident (DRD CF-12).

7.13.5 Analyze and Report Security Breaches and Incident Impact on Business

a. Contractor shall be responsible for participating in review and analysis of security breaches and security Incidents and providing detailed information to Government to support analysis of business impact and creation of security breach and security Incident report.

7.13.6 Conduct Security Reviews, Audits and Penetration Tests

Contractor shall be responsible for:

a. Conducting security reviews and regular audits of information and technology assets under Contractor's control in accordance with Government's ISM policy.
b. Participating in periodic Government security audits as requested by Government and coordinating audit activities of Third Parties as required or requested by Government.
c. Conducting and supporting security penetration testing as required or when requested by Government in accordance with Government's ISM policy.

7.13.7 Improve Security Controls, Risk Assessment and Responses

Contractor shall be responsible for:

a. Providing information to Government to support the assessment of security risks.
b. Participating in development and maintenance of security improvement plans in accordance with Government's ISM policy.

RELEASED - Printed documents may be obsolete; validate prior to use.

8 Common Project Management Guidelines

8.1 Introduction and Overview

I^3P work includes projects that have been approved by the NASA IT governance process to transform elements of the NASA infrastructure. NASA's strategic approach to the management of IT projects is documented in NPR 7120.7, *NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements*. The Contractor shall perform approved projects in compliance with the requirements of the NPR 7120.7 life cycle which includes formulation, implementation, and transition to operation.

8.2 Applicability of NPR 7120.7

The scope of IT projects that are subject to NPR 7120.7 is as follows:

a. The project includes the development of new IT systems or capabilities and is $500K or greater for the total development and implementation cost or affects more than one Center.
b. The project includes the modification to or enhancement of existing IT systems or capabilities and is $500K or greater for the total modification/enhancement cost, regardless of how many Centers are affected.

Some NASA Centers have developed frameworks for the management of projects of smaller scope or size. These frameworks specify a subset of NPR 7120.7 reviews and requirements that are suitable for these smaller projects as determined by the NASA CIO or the CIO of the implementing Center. Such a decision may be made, for example, for reasons related to risk, importance, or visibility of the program or project. For these projects, the Contractor's project and technical management methodology shall ensure compliance with the applicable elements of 7120.7.

RELEASED - Printed documents may be obsolete; validate prior to use.

9 Glossary of Terms

Activity	A set of actions designed to achieve a particular result. Activities are usually defined as part of Processes or plans, and are documented in procedures.
Asset	Any resource or capability. Assets of a Contractor include anything that could contribute to the delivery of a service. Assets can be one of the following types: Management, Organization, Process, Knowledge, People, Information, Applications, Infrastructure, and Financial Capital.
Asset Management	Asset Management is the Process responsible for tracking and reporting the value and ownership of financial Assets throughout their Lifecycle. Asset Management is part of an overall Service Asset and Configuration Management Process.
Availability	The ability of a Configuration Item or IT Service to perform its agreed function when required.
Availability Management	The Process responsible for defining, analyzing, planning, measuring and improving all aspects of the availability of IT Services. Availability Management is responsible for ensuring that all IT infrastructure, Processes, tools, roles etc are appropriate for the agreed Service Level Targets for availability.
Capacity	The maximum throughput that a Configuration item or IT Service can deliver while meeting agreed Service Level Targets. For some types of CI, Capacity may be the size or volume, for example a disk drive.
Capacity Management	The Process responsible for ensuring that the capacity of IT Services and the IT infrastructure is able to deliver agreed Service Level Targets in a cost effective and timely manner. Capacity Management considers all resources required to deliver the IT Service and plans for short, medium and long term business requirements.
Change	The addition, modification or removal of anything that could have an effect on IT Services. The scope of any Change should include all IT Services, Configuration Items, Processes, documentation etc.
Change Management	The Process responsible for controlling the Lifecycle of all changes. The primary objective of Change Management is to enable beneficial changes to be made with minimum disruption to IT Services.
Component	A general term used to mean one part of something more complex. For example, a computer system may be a Component of an IT Service; an Application may be a Component of a Release unit. Components that are managed as part of an IT Service should be Configuration Items and managed as part of the enterprise Configuration Management Process.

RELEASED - Printed documents may be obsolete; validate prior to use.

Configuration Item (CI)	Any component that needs to be managed in order to deliver an IT Service. Information about each CI is recorded in a configuration record within the Configuration Management System and is maintained throughout its Lifecycle by Configuration Management. CIs are under the control of Change Management. CIs typically include IT Services, hardware, software, buildings, people and formal documentation such as Process documentation and SLAs.
Configuration Management	The Process responsible for maintaining information about Configuration Items required to deliver an IT Service, including their relationships. This information is managed throughout the Lifecycle of the CI. Configuration Management is part of an overall Service Asset and Configuration Management Process.
Continual Service Improvement	A stage in the Lifecycle of an IT Service. Continual Service Improvement is responsible for managing improvements to IT Service Management Processes and IT Services.
Contractor Management	The Process responsible for ensuring that all Contracts with Contractors support the needs of the business, and that all Contractors meet their contractual commitments.
Customer	Someone who buys goods or services. The Customer of an IT Service Contractor is the person or group that defines and agrees the Service Level Targets.
Deployment	The Activity responsible for movement of new or changed hardware, software, documentation, Process, etc., to the live environment. Deployment is part of the Release and Deployment Management Process.
Enterprise Service Desk	The Single Point of Contact (SPOC) between Users and Contractors responsible for receiving, logging, escalating, monitoring and closing tickets associated with managing Incidents and Service Requests. Also responsible for communicating with Users regarding the status of Incidents and Service Requests and on-going measurement of Customer satisfaction.
Government	The National Aeronautics and Space Administration (NASA) enterprise along with the collective business units making up the IT Infrastructure and Service delivery environment defined to be in-scope for purposes of the IT Infrastructure Integration Program (I^3P) Acquisition.
Incident	An unplanned interruption to an IT Service or a reduction in the quality of an IT Service. Failure of a Configuration Item that has not yet impacted service is also an Incident. For example failure of one disk from a mirror set.
Incident Management	The Process responsible for managing the Lifecycle of all Incidents. The primary objective of Incident Management is to return the IT Service to Users as quickly as possible.

RELEASED - Printed documents may be obsolete; validate prior to use.

Information Security Management	The Process that ensures the confidentiality, integrity and availability of an organization's assets, information, data and IT Services. Information Security Management usually forms part of an organizational approach to security management which has a wider scope than the IT Service Contractor, and includes handling of paper, building access, phone calls etc., for the entire Organization.
IT Infrastructure	All of the hardware, software, networks, facilities, etc., that are required to develop, test, deliver, monitor, control or support IT Services. The term IT Infrastructure includes all of the information technology but not the associated people, Processes and documentation in support of IT Services.
IT Service	A service provided to one or more Customers by an IT Service Contractor. An IT Service is based on the use of information technology and supports the Customer's business Processes. An IT Service is made up from a combination of people, Processes, and technology and should be defined in a Service Level Agreement.
IT Service Contractor	A Service Provider/Supplier responsible for supplying goods or services that are required to deliver IT Services. These may include commodity hardware and software vendors, network and telecom suppliers and IT outsourcing service providers.
IT Service Continuity Management	The Process responsible for managing risks that could seriously impact IT Services. ITSCM ensures that the IT Service Contractor can always provide minimum agreed Service Levels, by reducing the risk to an acceptable level and planning for the recovery of IT Services. ITSCM should be designed to support business continuity management.
IT Service Management (ITSM)	The implementation and management of quality IT Services that meet the needs of the business. IT Service Management is performed by Contractors in concert with the client enterprise through an appropriate mix of people, Process and information technology.
Knowledge Management	The Process responsible for gathering, analyzing, storing and sharing knowledge and information within an organization. The primary purpose of Knowledge Management is to improve efficiency by reducing the need to rediscover knowledge.
Known Error	A Problem that has a documented root cause and a workaround. Known Errors are created and managed throughout their Lifecycle by Problem Management. Known Errors may be identified by Users, Customers or IT Service Contractors.

RELEASED - Printed documents may be obsolete; validate prior to use.

Lifecycle	The various stages in the life of an IT Service, Configuration Item, Incident, Problem, Change etc. The Lifecycle defines the categories for status and the status transitions that are permitted. For example: • The Lifecycle of an application includes requirements, design, build, deploy, operate, and optimize. • The expanded Incident Lifecycle includes detect, respond, diagnose, repair, recover, restore. • The lifecycle of a server may include: ordered, received, in test, live, disposed etc.
Operational Level Agreement (OLA)	An agreement between an enterprise IT organization and another part of the same organization. An OLA supports the enterprise IT organization's delivery of IT Services to Customers through IT Service Contractors. The OLA defines the goods and services to be provided and the responsibilities of both parties. Performance expectations are documented in SLAs and other Underpinning Contracts.
Performance Work Statement (PWS)	A document containing all requirements for a product purchase, or a new or changed IT Service.
Problem	A cause of one or more Incidents. The cause is not usually known at the time a problem record is created. The Problem Management Process is responsible for further investigation of the Problem.
Problem Management	The Process responsible for managing the Lifecycle of all Problems. The primary objectives of Problem Management are to prevent Incidents from happening and to minimize the impact of Incidents that cannot be prevented.
Process	A structured set of Activities designed to accomplish a specific objective. A Process takes one or more defined inputs and turns them into defined outputs. A Process may include any of the roles, responsibilities, tools and management controls required to reliably deliver the outputs. A Process may define policies, standards, guidelines, Activities, and work instructions if they are needed.
Recovery Point Objective (RPO)	The maximum amount of data that may be lost when an IT Service is restored after an interruption. Recovery Point Objective is expressed as a length of time before the failure.
Recovery Time Objective (RTO)	The maximum time allowed for recovery of an IT Service following an interruption. Recovery Time Objective is expressed as a length of time from the failure to restoration of the IT Service.
Relationship Manager	Relationship Manager is the person responsible for managing the interaction between the Contractor service provider and NASA customers.

RELEASED - Printed documents may be obsolete; validate prior to use.

Release	A collection of hardware, software, documentation, Processes or other Components required to implement one or more approved Changes to IT Services. The contents of each Release are managed, tested and deployed as a single entity.
Release and Deployment Management	The Process responsible for both Release Management and Deployment.
Release Management	The Process responsible for planning, scheduling and controlling the movement of releases to test and live environments. The primary objective of Release Management is to ensure that the integrity of the live environment is protected and that the correct components are released. Release Management is part of the Release and Deployment Management Process.
Request For Change (RFC)	A formal proposal for a Change to be made. An RFC includes details of the proposed Change, and may be recorded on paper or electronically.
Request Fulfillment	The Process responsible for managing the Lifecycle of all Service Requests.
Service Asset & Configuration Management	The Process responsible for both Configuration Management and Asset Management.
Service Level	Measured and reported achievement against one or more Service Level Targets.
Service Level Agreement (SLA)	An agreement between a Contractor and a Customer. The Service Level Agreement describes the IT Service, documents Service Level Targets, and specifies the responsibilities of the IT Service Contractor and Customer. A single SLA may cover multiple IT Services or multiple Customers
Service Level Management	The Process responsible for negotiating Service Level Agreements, and ensuring that these are met. SLM is responsible for ensuring that all IT Service Management Processes, Operational Level Agreements, and Underpinning Contracts, are appropriate for the agreed Service Level Targets. SLM monitors and reports on Service Levels, and holds regular Customer reviews.
Service Level Targets	Service Level Targets are performance commitments documented in a Service Level Agreement. Service Level Targets are based on Service Level Requirements agreed to with the business and ensure IT Service design is aligned with results.

RELEASED - Printed documents may be obsolete; validate prior to use.

Service Request	A request from a user for information, advice, a standard Change or for access to an IT Service. For example - to reset a password, or to provide standard IT Services for a new user. Service Requests are usually handled by a Service Desk and do not require an RFC (Request For Change) to be submitted.
Single Point of Contact (SPOC)	A designated single, consistent way to communicate with an individual, business entity or enterprise.
Tier 0 (Self Help)	A level of support provided to users via a web-based portal. This Self-Help level of support assists Users resolve lower level of difficulty Incidents and/or Service Requests. The Incidents and/or Service Requests handled at this level of support typically can be resolved through the direct effort of Users, rather than through the effort of resources associated with the Enterprise Service Desk.
Tier 1 Support	The first level in a hierarchy of support groups involved in the resolution of Incidents. Each level contains a more specialized skill, knowledge, time or resource in support of their responsibilities. Tier 1 is typically defined as the Enterprise Service Desk (ESD).
Tier 2 Support	The second level in a hierarchy of support groups involved in the resolution of Incidents and investigation of Problems. Each level contains a more specialized skill, knowledge, time or resource in support of their responsibilities. Tier 2 would be the next level of dispatch/escalation from Tier 1 (ESD) support.
Tier 3 Support	The third level in a hierarchy of support groups involved in the resolution of Incidents and investigation of Problems. Each level contains a more specialized skill, knowledge, time or resource in support of their responsibilities. Tier 3 would be the next level of dispatch/escalation from Tier 2 support.
Touch-point	The point or points in the execution of a NASA ITIL process where communication or exchange of information between service providers, customers, and end-users occur.
Underpinning Contract	A Contract between an IT Service Contractor and a third party. The third party provides goods or services that support the delivery of an IT Service to a Customer. The Underpinning Contract defines targets and responsibilities that are required to meet agreed Service Level Targets in an SLA.
Users	A person who uses the IT Service on a day-to-day basis. Users are distinct from Customers, as some Customers do not use the IT Service directly.

RELEASED - Printed documents may be obsolete; validate prior to use.

10 Referenced Document List

The following documents are applicable to the cross functional requirements.

a. NASA Enterprise Service Management Concept of Operations
b. NPR 7120.7 NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements
c. NPR 2800.1, Managing Information Technology
d. NPR 2810.1 Security of Information Technology
e. NPR 2830.1 NASA Enterprise Architecture Procedures
f. NPD 1000.0 NASA Strategic Management and Governance Handbook
g. NASA Enterprise Service Desk Concept of Operations
h. NASA Enterprise Service Desk Performance Work Statement
i. NASA Enterprise Architecture Repository (NEAR) Interface Definition Specification
j. Government Availability Management Process
k. Government Capacity Management Process
l. Government Change Management Process
m. Government Incident Management Process
n. Government Information Security Management procedures and policy
o. Government IT Service Continuity Management Process
p. Government Knowledge Management Process
q. Government Problem Management Process
r. Government Release and Deployment Management (RDM) procedures
s. Government Release Plan (part of Government's Release and Deployment Management (RDM) procedures and policy)
t. Government Request Fulfillment Process
u. Government Service Asset and Configuration Management (SACM) Process
v. Government Service Level Management Process
w. Government Supplier Management Process

RELEASED - Printed documents may be obsolete; validate prior to use.

ADDENDUM 2 TO ATTACHMENT I-1
STANDARD LOAD SOFTWARE

Table 1-W. Standard Load – Microsoft Windows (W)

Functionality	Application	Interface Standard	Required Settings	Version	Authoritative Source
.NET	.NET 1.1 & .NET 2.0			2.0 SP1	
Audio/video player	Adobe Shockwave Player	Adobe Director Apps	Browser Plug-in	11.0. *x*	
	Microsoft Windows Media Player	Windows Media Files	Default for all supported formats	11.0.*x*	
	VLC	Various Multimedia		0.9	
FTP/SFTP Client	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract
Automated Patch / Software deployment	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract
CD/DVD Creation with playback capability	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract
PDF writer	MS Office 2007 PDF plug-ins				
Advance file archive extractor/creator	WinZip			12.0	

Table 2-W. Non-ACES Contractor / NASA Procured – NASA Owned Software – Windows

Functionality	Application	Interface Standard	Required Settings	Version	Authoritative Source
Software Refresh Portal					
Back up Client	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract
VPN Client	NICS Defined				NICS Contract
Virtual Team Service (VTS) Client	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1-M. Standard Load – Apple OS X (M)

Functionality	Application	Interface Standards	Required Settings	Version	Authoritative Source
Audio/video player	Adobe Shockwave Player	Adobe Director Apps	Browser Plug-in	11.0. *x*	
	VLC	Various Multimedia		0.9	
FTP/SFTP Client	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract
Automated Patch / Software deployment	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract

Table 2-M. Non-ACES Contractor/NASA Procured – NASA Owned Apple Software

Functionality	Application	Interface Standards	Required Settings	Version	Authoritative Source
Software Refresh Portal					
Backup Client	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract
VPN Client	NICS Defined				NICS Contract
Virtual Team Service (VTS) Client	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1-L. Standard Load – Linux (L)

Functionality	Application	Interface Standards	Required Settings	Version	Authoritative Source
Operating System	Red Hat Enterprise Linux Desktop with Workstation option		CIS Benchmarks	5.3 or later	NASA-STD-2804

Table 2-L. Non-ACES Contractor/NASA Procured – NASA Owned Linux Software

Functionality	Application	Interface Standards	Required Settings	Version	Authoritative Source
Software Refresh Portal					
Backup Client	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract
VPN Client	NICS Defined				NICS Contract
Virtual Team Service (VTS) Client	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1-U. Standard Load – UNIX (U)

Functionality	Application	Interface Standards	Required Settings	Version	Authoritative Source
Operating System	Sun SOLARIS		CIS Benchmarks		
Firewall	Bundled		Control inbound and outbound connections enabled by default	Bundled	
Anti-Virus	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract
Anti-Malware	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract
Web Browser	Mozilla Firefox	W3C and industry standards, including the following: HTML 4.01 XHTML 1.0, CSS 2 (Cascading Style Sheets) ECMAscript (JavaScript) capability to run Java 2 applets, SSL version 2 and 3 supporting the requirements of NASASTD-2820, *Encryption and Digital Signature Standards*.		2.0.*x*	
Office Automation	OpenOffice	Microsoft Office 97-2003 file		2.4.*x*	
Word Processing	OpenOffice Writer	Microsoft Word 97-2003 file	Configure to use Microsoft Word 97-2003 file by default	2.4.*x*	
Spreadsheet	OpenOffice Calc	Microsoft Excel 97-2003 file	Configure to use Microsoft Excel 97-2003 file by default	2.4. *x*	
Presentation	OpenOffice Impress	Microsoft Powerpoint 972003 file	Configure to use Microsoft Powerpoint 97-2003 file by default	2.4. *x*	
Electronic Mail	Thunderbird	NASA-STD-2805, IMAP4, SMTP, IMAP over SSL/TLS	Configured for access to NOMAD	2.0. *x*	

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 2-U. Non-ACES Contractor/NASA Procured – NASA Owned UNIX Software

Functionality	Application	Interface Standards	Required Settings	Version	Authoritative Source
Smartcard authentication	ActivIdentity ActivClient	ActivIdentity Proprietary	HDI specified8	Not Available	EAST Contract / HSPD12
PKI	Entrust			Not Available	EAST Contract
Trusted CA Certificates	See Section 3.6	X.509			EAST Contract
Data at Rest Encryption	SafeBoot		Configured to use central policy and key escrow service	Not Available	
Patch Reporting	PatchLink (Update)	Lumension Proprietary	Configuration for Server info	6.4. *x*	
Access to centrally served Windows applications	Citrix ICA Client			10.00. *x*	
Electronic Forms	FileNet Desktop E-Forms		NASA Distribution Center	4.2	
Software Refresh Portal					
VPN Client	NICS Defined				NICS Contract
Virtual Team Service (VTS) Client	Vendor Proposed	**Redacted**	**Redacted**	**Redacted**	ACES Contract

Table 3. Commonly Used, Multi-Platform Software

Functionality	Windows	Mac OS X	Linux	Software Procurement Vehicle
3270 client	QWS3270	tn3270	tn3270	Catalog
Remote access to Windows systems	MS Remote Desktop Connection	MS Remote Desktop Connection	Bundled	
X-window system server	eXceed & eXceed 3D	Apple X11	Bundled	
PDF creator	Adobe Acrobat, Pro	Adobe Acrobat Pro	Scribus	
PDF writer/converter	PrimoPDF	Bundled	Bundled	
Project Management	MS Project 2007	OmniPlan	Intellisys Project Desktop	
Flowchart Software	MS Visio / MS Visio Pro	OmniGraffle	dia	Bulk
Eudora Compatibility	Eudora Pro	Eudora Pro		

RELEASED - Printed documents may be obsolete; validate prior to use.

Functionality	Windows	Mac OS X	Linux	Software Procurement Vehicle
NASA Integrated Enterprise Management (IEM) Fat Client	SAP GUI			
NASA IEM Fat Client	Brio Client			
TelNet / SSH Client	PuTTY	Bundled	Bundled	
PDF writer	PrimoPDF	Bundled		
CAD Software	AutoCAD			
Circuit Board Design	Mentor Graphics			
3-D Modeling	Pro-E, Catia, Unigraphics			
Geographic Information System	ESRI ArcGIS	…		
Image Processing	ERDAS Imagine	…		
Satellite Tool-kit	STK…	…		
Simulation Tools	MatLab, MathCAD, Labview			
	NASTRAN/PATRAN			
	University of Michigan…			
Virtual Machine	VMware	VMWare Fusion		
	FreeFlyer			
Compilers	C, C++, FORTRAN			
	Mathmatica			
Specialized Editors				
Voice Recognition Software	Emacs, EDT, LaTex			
	Solidworks			
Specialized Applications	IDL, IRAF, Supermongo			

RELEASED - Printed documents may be obsolete; validate prior to use.

ADDENDUM 3 TO ATTACHMENT I-1
MINIMUM HARDWARE REQUIREMENTS

The following tables establish the minimum hardware configurations that will support the Agency-wide interoperability software suite as defined in NASA-STD-2804.

*Table 1. Minimum Hardware Requirements for **Cellular Phones ("S" Seat)***

	Specification	**Comments**
Cellular Connectivity	Domestic/International	
Cellular Mode	Multi-Band that supports cellular and data service for both US and International calls (where required)	
Internal Memory	128 MB RAM / 256 MB ROM	
Screen Resolution	176 x 220 65k TFT	
Data Storage	2 GB card (MicroSD or Mini SD)	
Battery	1040 mAh	
Service Notification	Ringtone/Vibrate/Silent	
Geographical/Location Services	E911, GPS and/or cellular triangulation	
Device Navigation	Touch screen or built-in pointing device (i.e., 4-way, trackball, scroll pad, optical track pad)	
Data Input	Numeric keypad with alpha input	
Voice Input/output	Integrated earpiece/ microphone/speakerphone, 3.5mm stereo headset enabled, Bluetooth headset enabled	
Productivity	Calendar, Tasks, Contacts, and Phonebook (500 name min.)	
Multimedia	Audio, Video, Images	
Internet Browsing	HTML compatible Web browser	
Connectivity	Bluetooth 2.0, USB (Standard, Micro, or Mini)	
Messaging	SMS and MMS	
Camera	Enabled	
508 Compliance	TTY/TDD compatible	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 2. Minimum Hardware Requirements for **SmartPhones ("S" Seat)***

	Specification	**Comments**
Cellular Connectivity	Domestic / International	
Cellular Mode	Multi-Band that supports cellular and data service for both US and International calls	
Internal Memory	128 MB RAM / 256 MB ROM	
Screen Resolution	320 x 240 65k TFT	
Data Storage	Internal memory or external 8 GB card (SD, MicroSD or Mini SD)	
Battery	1100 mAh	
Service Notification	Ringtone/Vibrate/Silent	
Geographical/Location Services	E911, GPS and/or cellular triangulation	
Device Navigation	Touch screen or built-in pointing device (i.e., trackball, scroll pad, or optical track pad)	
Data Input	QWERTY style keyboard (physical, screen based or both)	
Voice Input/output	Integrated earpiece/ microphone/speakerphone, 3.5mm stereo headset enabled, Bluetooth headset enabled	
Mail Attachment / Document support	Microsoft Word, Excel, PowerPoint, Adobe PDF, HTML, Images (JPEG at a minimum)	
Productivity	E-mail, Calendar, Tasks, and Contacts	
Data Synchronization	Server Based (e.g., Microsoft Exchange/ActiveSync or Blackberry Enterprise)	
Multimedia	Audio, Video, Images	
Internet Browsing	HTML compatible Web browser	
Connectivity	Bluetooth 2.0, USB (Standard, Micro, or Mini)	
Device Security	Hardware (Password enabled) and AES, Triple DES, or FIPS 140-2 compliant	
Data Encryption	Hardware based with optional S/mime	
Wi-Fi	802.11g	
Messaging	SMS and MMS	
Camera	Enabled	
508 Compliance	TTY/TDD compatible	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 3. Minimum Hardware Requirements for **Pager Seats***

	Specification	**Comments**
Cellular Connectivity	Domestic	
Cellular Mode	Single Band	
Message Storage	10 messages minimum	
Display	Date and Time	
Backlight	Yes	
Indicator/Alerts	Alarm/Low battery/Messages	
Service Notification	Ringtone/Vibrate/Silent	
Messaging Display	Time Stamp/# of Messages/Indicator	
Device Navigation	Button(s)	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 4. Minimum Hardware Requirements for **B&/W Network Printer Seats***

	Specification	**Comments**
Connectivity	10Base-T/100Base-TX, 1 Gig	
Networking	Designed and ready to connect to the network	
Monthly Printing Volume Band	5,000 B&W impressions per machine/month	
Printing Speed	35 pages per minute (ppm) B&W	
Print Resolution	Minimum 600 dpi	
Duplex Printing	Automatic duplex printing	
Paper Handling	50-sheet Auto Document Feeder (capable of handling up to legal-sized paper)	
Paper Sizes	Letter and legal	
Paper Capacity	Minimum of two (2) adjustable paper trays with a minimum of 250-sheet capacity each for various paper sizes (minimally letter and legal)	
Output Tray	Output tray selection	
Page Description Language	PCL6, PCL5e, Adobe Postscript 3	Support for other emerging standards
Security	Clearing/overwriting an image after completion of each job per NIST SP 800-88 and NIST SP 800-36	
Surge Protection	Built-in surge protection devices or surge protectors provided by the Contractor	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 5. Minimum Hardware Requirements for **Color Network Printer Seats***

	Specification	**Comments**
Connectivity	10Base-T/100Base-TX, 1 Gig	
Networking	Designed and ready to connect to the network	
Monthly Printing Volume Band	2,000 Color/5,000 B&W impressions per machine/month	
Printing Speed	20 pages per minute (ppm) Color 35 pages per minute (ppm) B&W	
Print Resolution	Minimum 600 dpi	
Duplex Printing	Automatic duplex printing	
Paper Handling	50-sheet Auto Document Feeder (capable of handling up to legal-sized paper)	
Paper Sizes	Letter and legal	
Paper Capacity	Minimum of two (2) adjustable paper trays with a minimum of 250-sheet capacity each for various paper sizes (minimally letter and legal)	
Output Tray	Output tray selection	
Page Description Language	PCL6, PCL5e, Adobe Postscript 3	Support for other emerging standards
Security	Clearing/overwriting an image after completion of each job per NIST SP 800-88 and NIST SP 800-36	
Surge Protection	Built-in surge protection devices or surge protectors provided by the Contractor	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 6. Minimum Hardware Requirements for **MFD B&W Desktop Seat***

	Specification	**Comments**
Connectivity	10Base-T/100Base-TX, 1 Gig	
Networking	Designed and ready to connect to the network	
Monthly Printing Volume Band	5,000 B&W impressions per machine/month	
Printing Speed	35 pages per minute (ppm) B&W	
Print Resolution	Minimum 600 dpi	
Input Resolution	Minimum 600 dpi (for Scan, Copy, and Fax)	
Duplex Printing	Automatic duplex printing	
Paper Handling	50-sheet Auto Document Feeder (capable of handling up to legal-sized paper)	
Paper Sizes	Letter and legal	
Paper Capacity	Minimum of two (2) adjustable paper trays with a minimum of 250-sheet capacity each for various paper sizes (minimally letter and legal)	
Output Tray	Output tray selection	
Bypass Tray	Letter and legal	
Page Description Language	PCL6, PCL5e, Adobe Postscript 3	Support for other emerging standards
Scan	Scan to desktop, Scan to e-mail, Scan to Network	Refer to PWS 5.4.1.2.5 for scanning requirements
Scan File Formats	PDF, JPEG, TIFF, and Multi-page TIFF	
Copy	- Copy Options: 1-1, 1-2, 2-2, and 2-1 - Reduction and enlargement pre-set and zoom - Reproduce pages from bound documents, such as case bound books and magazines without distortion	
Fax	1fax line included; Option to activate second line	Refer to PWS 5.4.1.2.6 for facsimile requirements
Hard Drive	Minimum 40GB	
Memory (RAM)	Minimum 1GB	Capability to augment
Ports	USB port (1 minimum port available for general use)	
Security	- Clearing/overwriting an image after completion of each job per NIST SP 800-88 and NIST SP 800-36 - An enabled card reader that meets the minimum requirements of NIST SP 800-96, *PIV Card to Reader Interoperability Guidelines*, and works with NASA-issued PIV-compliant Smartcards	
Surge Protection	Built-in surge protection devices or surge protectors provided by the Contractor	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 7. Minimum Hardware Requirements for **MFD B&W Floor Seat Volume Band 1***

	Specification	**Comments**
Connectivity	10Base-T/100Base-TX, 1 Gig	
Networking	Designed and ready to connect to the network	
Monthly Printing Volume Band	7,500 B&W impressions per machine/month	
Printing Speed	35 pages per minute (ppm) B&W	
Print Resolution	Minimum 600 dpi	
Input Resolution	Minimum 600 dpi (for Scan, Copy, and Fax)	
Duplex Printing	Automatic duplex printing	
Paper Handling	50-sheet Auto Document Feeder (capable of handling up to legal-sized paper)	
Paper Sizes	Letter, legal, and ledger	
Paper Capacity	- Minimum of two (2) adjustable paper trays with a minimum of 500-sheet capacity each for various paper sizes (minimally letter and legal) - Optional large-capacity tray (minimum of 1,500 sheets)	
Output Tray	Output tray selection	
Bypass Tray	Letter, legal, and ledger	
Finishing	- Automatic stapling that can staple a minimum of 30 sheets of 20 lb paper - Multiple position automatic stapling for portrait/landscape documents - Sort/stack documents - Optional 2-hole/3-hole punch	
Page Description Language	PCL6, PCL5e, Adobe Postscript 3	Support for other emerging standards
Scan	Scan to desktop, Scan to e-mail, Scan to Network	Refer to PWS 5.4.1.2.5 for scanning requirements
Scan File Formats	PDF, JPEG, TIFF, and Multi-page TIFF	
Copy	- Copy Options: 1-1, 1-2, 2-2, and 2-1 - Reduction and enlargement pre-set and zoom - Reproduce pages from bound documents, such as case bound books and magazines without distortion	
Fax	1fax line included; Option to activate second line	Refer to PWS 5.4.1.2.6 for facsimile requirements
Hard Drive	Minimum 40GB	
Memory (RAM)	Minimum 1GB	Capability to augment
Ports	USB port (1 minimum port available for general use)	
Security	- Clearing/overwriting an image after completion of each job per NIST SP 800-88 and NIST SP 800-36 - An enabled card reader that meets the minimum requirements of NIST SP 800-96, *PIV Card to Reader Interoperability Guidelines*, and works with NASA-issued PIV-compliant Smartcards	
Surge Protection	Built-in surge protection devices or surge protectors provided by the Contractor	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 8. Minimum Hardware Requirements for **MFD B&W Floor Seat Volume Band 2***

	Specification	**Comments**
Connectivity	10Base-T/100Base-TX, 1 Gig	
Networking	Designed and ready to connect to the network	
Monthly Printing Volume Band	15,000 B&W impressions per machine/month	
Printing Speed	45 pages per minute (ppm) B&W	
Print Resolution	Minimum 600 dpi	
Input Resolution	Minimum 600 dpi (for Scan, Copy, and Fax)	
Duplex Printing	Automatic duplex printing	
Paper Handling	50-sheet Auto Document Feeder (capable of handling up to legal-sized paper)	
Paper Sizes	Letter, legal, and ledger	
Paper Capacity	- Minimum of two (2) adjustable paper trays with a minimum of 500-sheet capacity each for various paper sizes (minimally letter and legal) - Optional large-capacity tray (minimum of 1,500 sheets)	
Output Tray	Output tray selection	
Bypass Tray	Letter, legal, and ledger	
Finishing	- Automatic stapling that can staple a minimum of 30 sheets of 20 lb paper - Multiple position automatic stapling for portrait/landscape documents - Sort/stack documents - Optional 2-hole/3-hole punch	
Page Description Language	PCL6, PCL5e, Adobe Postscript 3	Support for other emerging standards
Scan	Scan to desktop, Scan to e-mail, Scan to Network	Refer to PWS 5.4.1.2.5 for scanning requirements
Scan File Formats	PDF, JPEG, TIFF, and Multi-page TIFF	
Copy	- Copy Options: 1-1, 1-2, 2-2, and 2-1 - Reduction and enlargement pre-set and zoom - Reproduce pages from bound documents, such as case bound books and magazines without distortion	
Fax	1fax line included; Option to activate second line	Refer to PWS 5.4.1.2.6 for facsimile requirements
Hard Drive	Minimum 40GB	
Memory (RAM)	Minimum 1GB	Capability to augment
Ports	USB port (1 minimum port available for general use)	
Security	- Clearing/overwriting an image after completion of each job per NIST SP 800-88 and NIST SP 800-36 - An enabled card reader that meets the minimum requirements of NIST SP 800-96, *PIV Card to Reader Interoperability Guidelines*, and works with NASA-issued PIV-compliant Smartcards	
Surge Protection	Built-in surge protection devices or surge protectors provided by the Contractor	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 9. Minimum Hardware Requirements for **MFD B&W Floor Seat Volume Band 3***

	Specification	**Comments**
Connectivity	10Base-T/100Base-TX, 1 Gig	
Networking	Designed and ready to connect to the network	
Monthly Printing Volume Band	30,000 B&W impressions per machine/month	
Printing Speed	55 pages per minute (ppm) B&W	
Print Resolution	Minimum 600 dpi	
Input Resolution	Minimum 600 dpi (for Scan, Copy, and Fax)	
Duplex Printing	Automatic duplex printing	
Paper Handling	50-sheet Auto Document Feeder (capable of handling up to legal-sized paper)	
Paper Sizes	Letter, legal, and ledger	
Paper Capacity	- Minimum of two (2) adjustable paper trays with a minimum of 500-sheet capacity each for various paper sizes (minimally letter and legal) - Optional large-capacity tray (minimum of 1,500 sheets)	
Output Tray	Output tray selection	
Bypass Tray	Letter, legal, and ledger	
Finishing	- Automatic stapling that can staple a minimum of 30 sheets of 20 lb paper - Multiple position automatic stapling for portrait/landscape documents - Sort/stack documents - Optional 2-hole/3-hole punch	
Page Description Language	PCL6, PCL5e, Adobe Postscript 3	Support for other emerging standards
Scan	Scan to desktop, Scan to e-mail, Scan to Network	Refer to PWS 5.4.1.2.5 for scanning requirements
Scan File Formats	PDF, JPEG, TIFF, and Multi-page TIFF	
Copy	- Copy Options: 1-1, 1-2, 2-2, and 2-1 - Reduction and enlargement pre-set and zoom - Reproduce pages from bound documents, such as case bound books and magazines without distortion	
Fax	1fax line included; Option to activate second line	Refer to PWS 5.4.1.2.6 for facsimile requirements
Hard Drive	Minimum 40GB	
Memory (RAM)	Minimum 1GB	Capability to augment
Ports	USB port (1 minimum port available for general use)	
Security	- Clearing/overwriting an image after completion of each job per NIST SP 800-88 and NIST SP 800-36 - An enabled card reader that meets the minimum requirements of NIST SP 800-96, *PIV Card to Reader Interoperability Guidelines*, and works with NASA-issued PIV-compliant Smartcards	
Surge Protection	Built-in surge protection devices or surge protectors provided by the Contractor	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 10. Minimum Hardware Requirements for **MFD Color Desktop Seat***

	Specification	**Comments**
Connectivity	10Base-T/100Base-TX, 1 Gig	
Networking	Designed and ready to connect to the network	
Monthly Printing Volume Band	2,000 Color/5,000 B&W impressions per machine/month	
Printing Speed	20 pages per minute (ppm) Color 35 pages per minute (ppm) B&W	
Print Resolution	Minimum 600 dpi	
Input Resolution	Minimum 600 dpi (for Scan, Copy, and Fax)	
Duplex Printing	Automatic duplex printing	
Paper Handling	50-sheet Auto Document Feeder (capable of handling up to legal-sized paper)	
Paper Sizes	Letter and legal	
Paper Capacity	Minimum of two (2) adjustable paper trays with a minimum of 250-sheet capacity each for various paper sizes (minimally letter and legal)	
Output Tray	Output tray selection	
Bypass Tray	Letter and legal	
Page Description Language	PCL6, PCL5e, Adobe Postscript 3	Support for other emerging standards
Scan	Scan to desktop, Scan to e-mail, Scan to Network	Refer to PWS 5.4.1.2.5 for scanning requirements
Scan File Formats	PDF, JPEG, TIFF, and Multi-page TIFF	
Copy	- Copy Options: 1-1, 1-2, 2-2, and 2-1 - Reduction and enlargement pre-set and zoom - Reproduce pages from bound documents, such as case bound books and magazines without distortion	
Fax	1fax line included; Option to activate second line	Refer to PWS 5.4.1.2.6 for facsimile requirements
Hard Drive	Minimum 40GB	
Memory (RAM)	Minimum 1GB	Capability to augment
Ports	USB port (1 minimum port available for general use)	
Security	- Clearing/overwriting an image after completion of each job per NIST SP 800-88 and NIST SP 800-36 - An enabled card reader that meets the minimum requirements of NIST SP 800-96, *PIV Card to Reader Interoperability Guidelines*, and works with NASA-issued PIV-compliant Smartcards	
Surge Protection	Built-in surge protection devices or surge protectors provided by the Contractor	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 11. Minimum Hardware Requirements for **MFD Color Floor Seat Volume Band 1***

	Specification	**Comments**
Connectivity	10Base-T/100Base-TX, 1 Gig	
Networking	Designed and ready to connect to the network	
Monthly Printing Volume Band	2,000 Color/7,500 B&W impressions per machine/month	
Printing Speed	20 pages per minute (ppm) Color 35 pages per minute (ppm) B&W	
Print Resolution	Minimum 600 dpi	
Input Resolution	Minimum 600 dpi (for Scan, Copy, and Fax)	
Duplex Printing	Automatic duplex printing	
Paper Handling	50-sheet Auto Document Feeder (capable of handling up to legal-sized paper)	
Paper Sizes	Letter, legal, and ledger	
Paper Capacity	- Minimum of two (2) adjustable paper trays with a minimum of 500-sheet capacity each for various paper sizes (minimally letter and legal) - Optional large-capacity tray (minimum of 1,500 sheets)	
Output Tray	Output tray selection	
Bypass Tray	Letter, legal, and ledger	
Finishing	- Automatic stapling that can staple a minimum of 30 sheets of 20 lb paper - Multiple position automatic stapling for portrait/landscape documents - Sort/stack documents - Optional 2-hole/3-hole punch	
Page Description Language	PCL6, PCL5e, Adobe Postscript 3	Support for other emerging standards
Scan	Scan to desktop, Scan to e-mail, Scan to Network	Refer to PWS 5.4.1.2.5 for scanning requirements
Scan File Formats	PDF, JPEG, TIFF, and Multi-page TIFF	
Copy	- Copy Options: 1-1, 1-2, 2-2, and 2-1 - Reduction and enlargement pre-set and zoom - Reproduce pages from bound documents, such as case bound books and magazines without distortion	
Fax	1fax line included; Option to activate second line	Refer to PWS 5.4.1.2.6 for facsimile requirements
Hard Drive	Minimum 40GB	
Memory (RAM)	Minimum 1GB	Capability to augment
Ports	USB port (1 minimum port available for general use)	
Security	- Clearing/overwriting an image after completion of each job per NIST SP 800-88 and NIST SP 800-36 - An enabled card reader that meets the minimum requirements of NIST SP 800-96, *PIV Card to Reader Interoperability Guidelines*, and works with NASA-issued PIV-compliant Smartcards	
Surge Protection	Built-in surge protection devices or surge protectors provided by the Contractor	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 12. Minimum Hardware Requirements for **MFD Color Floor Seat Volume Band 2***

	Specification	**Comments**
Connectivity	10Base-T/100Base-TX, 1 Gig	
Networking	Designed and ready to connect to the network	
Monthly Printing Volume Band	4,000 Color/15,000 B&W impressions per machine/month	
Printing Speed	25 pages per minute (ppm) Color 45 pages per minute (ppm) B&W	
Print Resolution	Minimum 600 dpi	
Input Resolution	Minimum 600 dpi (for Scan, Copy, and Fax)	
Duplex Printing	Automatic duplex printing	
Paper Handling	50-sheet Auto Document Feeder (capable of handling up to legal-sized paper)	
Paper Sizes	Letter, legal, and ledger	
Paper Capacity	- Minimum of two (2) adjustable paper trays with a minimum of 500-sheet capacity each for various paper sizes (minimally letter and legal) - Optional large-capacity tray (minimum of 1,500 sheets)	
Output Tray	Output tray selection	
Bypass Tray	Letter, legal, and ledger	
Finishing	- Automatic stapling that can staple a minimum of 30 sheets of 20 lb paper - Multiple position automatic stapling for portrait/landscape documents - Sort/stack documents - Optional 2-hole/3-hole punch	
Page Description Language	PCL6, PCL5e, Adobe Postscript 3	Support for other emerging standards
Scan	Scan to desktop, Scan to e-mail, Scan to Network	Refer to PWS 5.4.1.2.5 for scanning requirements
Scan File Formats	PDF, JPEG, TIFF, and Multi-page TIFF	
Copy	- Copy Options: 1-1, 1-2, 2-2, and 2-1 - Reduction and enlargement pre-set and zoom - Reproduce pages from bound documents, such as case bound books and magazines without distortion	
Fax	1fax line included; Option to activate second line	Refer to PWS 5.4.1.2.6 for facsimile requirements
Hard Drive	Minimum 40GB	
Memory (RAM)	Minimum 1GB	Capability to augment
Ports	USB port (1 minimum port available for general use)	
Security	- Clearing/overwriting an image after completion of each job per NIST SP 800-88 and NIST SP 800-36 - An enabled card reader that meets the minimum requirements of NIST SP 800-96, *PIV Card to Reader Interoperability Guidelines*, and works with NASA-issued PIV-compliant Smartcards	
Surge Protection	Built-in surge protection devices or surge protectors provided by the Contractor	

RELEASED - Printed documents may be obsolete; validate prior to use.

*Table 13. Minimum Hardware Requirements for **MFD Color Floor Seat Volume Band 3 High-End Fiery Graphics***

	Specification	**Comments**
Connectivity	10Base-T/100Base-TX, 1 Gig	
Networking	Designed and ready to connect to the network	
Monthly Printing Volume Band	4,000 Color/15,000 B&W impressions per machine/month	
Printing Speed	30 pages per minute (ppm) Color 55 pages per minute (ppm) B&W	
Print Resolution	Minimum 600 dpi	
Input Resolution	Minimum 600 dpi (for Scan, Copy, and Fax)	
Color Graphics	High-End Fiery graphics print controller	
Duplex Printing	Automatic duplex printing	
Paper Handling	50-sheet Auto Document Feeder (capable of handling up to legal-sized paper)	
Paper Sizes	Letter, legal, and ledger	
Paper Capacity	- Minimum of two (2) adjustable paper trays with a minimum of 500-sheet capacity each for various paper sizes (minimally letter and legal) - Optional large-capacity tray (minimum of 1,500 sheets)	
Output Tray	Output tray selection	
Bypass Tray	Letter, legal, and ledger	
Finishing	- Automatic stapling that can staple a minimum of 30 sheets of 20 lb paper - Multiple position automatic stapling for portrait/landscape documents - Sort/stack documents - Optional 2-hole/3-hole punch	
Page Description Language	PCL6, PCL5e, Adobe Postscript 3	Support for other emerging standards
Scan	Scan to desktop, Scan to e-mail, Scan to Network	Refer to PWS 5.4.1.2.5 for scanning requirements
Scan File Formats	PDF, JPEG, TIFF, and Multi-page TIFF	
Copy	- Copy Options: 1-1, 1-2, 2-2, and 2-1 - Reduction and enlargement pre-set and zoom - Reproduce pages from bound documents, such as case bound books and magazines without distortion	
Fax	1fax line included; Option to activate second line	Refer to PWS 5.4.1.2.6 for facsimile requirements
Hard Drive	Minimum 40GB	
Memory (RAM)	Minimum 1GB	Capability to augment
Ports	USB port (1 minimum port available for general use)	
Security	- Clearing/overwriting an image after completion of each job per NIST SP 800-88 and NIST SP 800-36 - An enabled card reader that meets the minimum requirements of NIST SP 800-96, *PIV Card to Reader Interoperability Guidelines*, and works with NASA-issued PIV-compliant Smartcards	
Surge Protection	Built-in surge protection devices or surge protectors provided by the Contractor	

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA PROCUREMENT DOCUMENT NO.	ISSUE
N/A	**RFP**

NNX10272008R
CONTRACT/RFP

I-2
ATTACHMENT NUMBER

Agency Consolidated End-user Services (ACES)
PROJECT/SYSTEM

DATA PROCUREMENT DOCUMENT

Contractor
CONTRACTOR

October 8, 2010
DATE

National Aeronautics and
Space Administration

MSFC - Form 3461 (Rev September 1989)

RELEASED - Printed documents may be obsolete; validate prior to use.

National Aeronautics and Space Administration **DOCUMENT CHANGE LOG**					DATA PROCUREMENT DOC. NO. ISSUE *N/A* **RFP**	
INCORPORATED REVISIONS OUTSTANDING REVISIONS					AS OF: 10-02-09	SUPERSEDING: PAGE:
AUTHORITY	PORTION AFFECTED - PAGE NO./NO.				REMARKS	
(DPD Revision)	INTRO	SGR	DRL	DRD		

RELEASED - Printed documents may be obsolete; validate prior to use.

1.0 INTRODUCTION

1.1 Scope: Subject to the Rights in Data clause, this Data Procurement Document (DPD) sets forth the data requirements in each Data Requirements Description (DRD) and shall govern that data required by the DPD for the Contract. The Contractor shall furnish data defined by the DRDs listed on the Data Requirements List (DRL) by category of data, attached hereto, and made a part of this DPD. Such data shall be prepared, maintained, and delivered to NASA in accordance with the requirements set forth within this DPD. In cases where data requirements are covered by a Federal Acquisition Regulation (FAR) or NASA FAR Supplement (NFS) clause, that clause shall take precedence over the DPD, consistent with clause FAR 52.215-8.

1.2 DPD Description: This DPD consists of a Document Change Log, an Introduction, a Statement of General Requirements, DPD maintenance procedures, a DRL, and the DRDs.

1.2.1 General Requirements: The general requirements, as specified in paragraph 2.0 of this DPD, prescribe those requirements applicable to the preparation, maintenance, and delivery of data that are better defined in aggregate than in the individual DRDs.

1.2.2 Data Requirements List (DRL): Throughout the performance of the Contract, the DRL provides a listing by data category of the data requirements of the DPD.

1.2.3 Data Requirements Descriptions (DRDs)

1.2.3.1 Each data requirement listed on the DRL is given complete definition by a DRD. The DRD prescribes content, format, maintenance instructions, and submittal requirements.

1.2.3.2 For the purpose of classification and control, DRDs of this DPD are grouped into the following broad functional data categories:

CATEGORY SYMBOL	DESCRIPTION
CF	Cross Functional
MA	Management
SA	Safety
IT	Information Technology

1.2.3.3 The symbols representing these data categories form part of the prefix of the DRD identification number.

1.2.3.4 To facilitate the usage and maintenance of the DPD, the DRDs have been sectionalized in accordance with the above data categories.

1.2.3.5 The DRDs are filed by data category and are in alpha-numeric sequence as listed on the DRL page (or pages) that precedes the DRDs.

1.2.4 Document Change Log (DCL): The Document Change Log chronologically records all revision actions that pertain to the DPD.

1.2.5 DPD Maintenance Procedures: Maintenance procedures define the detailed methods to be employed in maintaining the DPD. Detailed maintenance procedures are specified in paragraph 3.0 of this DPD.

1.3 Data Types for Contractual Efforts: The types of data and their contractually applicable requirements for approval and delivery are:

TYPE	DESCRIPTION
1*	All issues and interim changes to those issues require written approval from the requiring organization before formal release for use or implementation.
2*	NASA reserves a time-limited right to disapprove in writing any issues and interim changes to those issues. The Contractor shall submit the required data to NASA for review not less than forty-five (45) calendar days** prior to its release for use. The Contractor shall clearly identify the release target date

RELEASED - Printed documents may be obsolete; validate prior to use.

in the "submitted for review" transmittal***. If the data is unacceptable, NASA will notify the Contractor within forty-five (45) calendar days** from the date of submission, regardless of the intended release date***. The Contractor shall resubmit the information for reevaluation if disapproved. The submittal is considered approved if the Contractor does not receive disapproval or an extension request from NASA within forty-five (45) calendar days**.

3 These data shall be delivered by the Contractor as required by the Contract and do not require NASA approval. However, to be a satisfactory delivery, the data shall satisfy all applicable contractual requirements and be submitted on time.

4 These data are produced or used during performance of the Contract and are retained by the Contractor. They shall be delivered only when NASA requests in writing and shall be delivered in accordance with the instructions in the request. The Contractor shall maintain a list of these data and shall furnish copies of the list to NASA when requested to do so.

5 These data are incidental to Contract performance and are retained by the Contractor in those cases where contracting parties have agreed that formal delivery is not required. However, the Contracting Officer or the Contracting Officer's Technical Representative shall have access to and can inspect this data at its location in the Contractor's or subcontractor's facilities, or in an electronic database accessible to the Government.

* Note: Type 1 and Type 2 data may be placed under NASA configuration management control when designated by NASA. CM control requires the Contractor to submit Type 1 and Type 2 data updates through Engineering Change Proposals (ECPs).

** Note: This time limit may be tailored for individual DRDs to meet the requirements of the procuring activity.

*** Note: If the Contractor does not identify a release target date or if the intended release date is shorter than forty-five (45) calendar days from the date of submission, the forty-five (45) calendar days review cycle stands (or the tailored Type 2 time limitation for the specific procurement).

2.0 STATEMENT OF GENERAL REQUIREMENTS

2.1 Applicable/Reference Documents: Documents included as applicable documents in this DPD are the issue specified in Attachment I-1, *Performance Work Statement* (PWS) or PWS Addendum 1, *Cross Functional Performance Work Statement* (CF PWS), and form a part of the DPD to the extent specified herein. Applicable documents listed in Item 15.2 of a DRD are applicable only to the preparation of the deliverable documentation described by that DRD.

References to documents other than applicable documents in the data requirements of this DPD may sometimes be utilized, and will be indicated in Item 13 of the DRD. These do not constitute a contractual obligation on the Contractor. They are to be used only as a possible example or to provide related information to assist the Contractor in developing a response to that particular data requirement.

2.2 Subcontractor Data Requirements

2.2.1 The Contractor shall specify to subcontractors and vendors, if any, the availability source of all data required for the satisfactory accomplishment of their contracts. The Contractor shall validate these requirements for documents when appropriate; where the requirement concerns other Contractor data, the Contractor shall provide his subcontractor or vendor with the necessary documents. All such requests shall be accomplished under the auspices of the Contractor.

2.2.2 Reference to subcontractor data in the Contractor's responses is permissible, providing the references are adequate and include such identification elements as title, number, revision, etc., and a copy of the referenced data is supplied with the response document at time of delivery to NASA.

RELEASED - Printed documents may be obsolete; validate prior to use.

2.3 Data Distribution, Format, Data Restriction Marking, and Transmittal

2.3.1 Distribution: Distribution of required documentation shall be in quantities determined by the Contracting Officer. Recipient names and e-mail (if applicable) addresses shall be noted on a separate distribution list to be furnished by the Contracting Officer. The Contracting Officer's letter may include other information pertinent to delivery of data, as required.

2.3.2 Format

2.3.2.1 Electronic Format: Electronic submission of data deliverables is required. Electronic deliverables shall be printable. Data deliverables shall be delivered to NASA in the format specified below unless a specific format is required by a DRD. Data submittals shall consist of a single Adobe Acrobat PDF file and the native format electronic file(s). The preferred native formats include Microsoft Office Open XML file format (e.g., Microsoft Word, Excel, PowerPoint, Project, and Visio) or AutoCAD drawing plot file, as appropriate. Where a single native format file is not possible, multiple files may be integrated into a single ZIP file for submission. The organization of the contents of the integrated ZIP file shall be made readily apparent to the reader, and each file within the integrated product shall be clearly identifiable and traceable within the organization of the integrated product. If files are fragmented, file names shall be labeled logically and contiguously, and the files shall be easily reassembled or merged (e.g., 1 filename, 2 filename, 2a filename, etc.). The software versions shall be confirmed prior to submittals.

2.3.2.2 Hardcopy Format: In addition to the electronic submittal, one hardcopy package of specific data deliverables shall be delivered to the NASA Contracting Officer for the Government Contract file. This requirement is indicated in Item 15.4, *Format* of each DRD. The hardcopy package shall consist of the Contractor's Transmittal Memo and one copy of the data deliverable.

2.3.3 Data Restriction Marking

2.3.3.1 Data Restriction Determination and Marking Requirements: The Contractor shall determine the data restriction that applies to each data deliverable and mark the data restriction on the data coversheet, or indicate the data restriction in the data transmittal package if the data format precludes identification of data restriction directly in the data. The Contractor shall make a determination for each individual data deliverable item, and shall not apply a default or blanket data restriction marking to all data deliverables (e.g., "data may be export restricted"). If NASA does not agree with the Contractor applied data restriction, the NASA Contracting Officer shall return the data to the Contractor, cancel the markings, or ignore the markings consistent with the procedures set forth in the "data rights" clause(s) contained in the Contract.

2.3.3.2 Data Restriction Categories and Marking Statements: The Contractor shall consider the following data restriction categories, as a minimum, and utilize specified marking statements.

If data delivered under this Contract is subject to the International Traffic in Arms Regulations (ITAR), the data shall contain an "ITAR Notice" as follows:

International Traffic in Arms Regulations (ITAR) Notice

This document contains information which falls under the purview of the U.S. Munitions List (USML), as defined in the International Traffic in Arms Regulations (ITAR), 22 CFR 120-130, and is export controlled. It shall not be transferred to foreign nationals, in the U.S. or abroad, without specific approval of a knowledgeable NASA export control official, and/or unless an export license/license exemption is obtained/available from the United States Department of State. Violations of these regulations are punishable by fine, imprisonment, or both.

If data delivered under this Contract is subject to the Export Administration Regulations (EAR), the data shall contain the "EAR Notice" as follows:

RELEASED - Printed documents may be obsolete; validate prior to use.

Export Administration Regulations (EAR) Notice

This document contains information within the purview of the Export Administration Regulations (EAR), 15 CFR 730-774, and is export controlled. It may not be transferred to foreign nationals in the U.S. or abroad without specific approval of a knowledgeable NASA export control official, and/or unless an export license/license exception is obtained/available from the Bureau of Industry and Security, United States Department of Commerce. Violations of these regulations are punishable by fine, imprisonment, or both.

If the Contract contains FAR 52.227-14 *Alternate II*, the "Limited Rights Notice" may be applicable to data (other than computer software) delivered under this Contract.

If the Contract contains FAR 52.227-14 *Alternate III*, the "Restricted Rights Notice" may be applicable to computer software delivered under this Contract.

If the Contract contains FAR 52.227-20, the "SBIR Rights Notice" may be applicable to SBIR data delivered under this Contract.

If the Contract contains NFS 1852.237-73, a sensitive information legend may be applicable to information delivered under this Contract.

In accordance with the applicable data clause (e.g., FAR 52.227-14(c) or FAR 52.227-20(c)), the Contractor may be able to assert a copyright claim in data delivered under this Contract. When claim to copyright is made, the Contractor shall affix the applicable copyright notices of 17 U.S.C. 401 or 402 and acknowledgment of Government sponsorship (including contract number) to the data when such data are delivered to the Government.

2.3.4 Transmittal

2.3.4.1 Data shall be transmitted to NASA by e-mail, CD or DVD, hardcopy, or other mechanism agreed to by the Contracting Officer, COTR, and Project representatives who are responsible to receive, index, and store the data deliverables.

2.3.4.2 If e-mail is used to transmit data deliverables, the e-mail size shall be 10 Megabytes or less to ensure receipt by the NASA e-mail servers. Encrypted e-mail format shall be used to transmit data which has been judged sensitive by the Contractor or by NASA (e.g., export controlled, limited rights data, SBIR, restricted computer software, copyrighted, etc.).

2.3.4.3 Data Transmittal Package: Each data transmittal package shall include:

a. Transmittal memorandum that specifies the meta-data below for each data transmittal:
   1. Contract number.
   2. Data Requirements Description (DRD) number.
   3. DRD data type (specified in Item 3 on the DRD).
   4. Submission date or milestone being satisfied.
   5. Document number and revision.
   6. Document title.
   7. File names of all files being delivered; file naming convention shall clearly identify the document being delivered.
   8. Distribution (as defined by the Contracting Officer's letter).
   9. Requested response date.
   10. Contractor assigned data restriction (export controlled, limited rights data, SBIR, restricted computer software, copyrighted, etc.) if not marked on data.
   11. NASA Records Retention Schedule (NRRS) number, if applicable. (See NPR 1441.1, *NASA Records Retention Schedules*).
b. Printable electronic files or hardcopy data.

2.4 Printing: All printing, duplicating, or binding shall be in accordance with NFS 1852.208-81, *Restrictions on Printing and Duplicating*. Printing of formal reports and Type 1 and 2 data in book format shall be in accordance with the following general specifications:

RELEASED - Printed documents may be obsolete; validate prior to use.

a. Method of reproduction – offset/xerography.
b. Finished size – 8 1/2" X 11".
c. Paper – 20-pound opaque bond.
d. Cover – Litho cover stock.
e. Pages shall be printed on both sides; blank pages shall be avoided when possible.
f. Oversize pages shall be avoided when possible, but if necessary shall be folded to 8 1/2" X 11".
g. Binding shall be the most economical method commensurate with the size of the report and its intended use.

2.5 Contractor's Internal Documents: The Contractor's internal documents shall be used to meet the data requirements of this DPD unless a specific format is required by the applicable DRD.

2.6 Document Identification: Type 1 and 2 documents published by the Contractor and submitted in response to the data requirements of this DPD shall be identified within an organized identification numbering system prescribed to NASA by the Contractor and, if applicable, as approved by NASA. For all data types, the document number, change legend, date, and title constitute the minimum identification of the specific document and shall appear on the cover and title page. The contract number shall also appear on the cover and title page as separate markings. The originator and organization shall be included on the title page. The document number, change legend, and date shall appear on each page of the document. In the front matter of each document, identify the DPD number and applicable DRD number(s) required for document preparation. Successive issues or revisions of documents shall be identified in the same manner as the basic issue and shall have appropriate change identification. Drawings and ECPs are excluded from the marking provisions of this paragraph. All Type 1 documentation, excluding configuration management requirements, shall be marked "PRELIMINARY PENDING NASA APPROVAL," and once approved shall be reissued with "APPROVED BY NASA" and the date and approval authority annotated on the cover.

2.7 Reference to Other Documents and Data Deliverables in Data Submittals: All referenced documents shall be made readily available to the cognizant NASA organization upon request. The Contractor should make sure that the references are available to NASA in a manner which does not incur delays in the use of the response document. Reference may be made, within one data submittal, to other data submittals delivered in response to this DPD in those cases where the data required by one DRD may have been delivered by the Contractor in response to another DRD. The reference to previously submitted data shall include the applicable DRD number, data submittal version date, and location within the referenced document.

2.8 Maintenance of Type 1 Document Submittals

2.8.1 Revisions of Type 1 documentation may be accomplished either by individual page revision or by a complete reissue of the document identified in accordance with requirements of paragraph 2.7 above, with the exception of drawings (which shall be revised in accordance with contract configuration management requirements).

2.8.2 Individual page revisions shall be made as deemed necessary by the Contractor or as directed by the Contracting Officer.

2.8.3 A Type 1 document shall be completely reissued when, in the opinion of the Contractor and/or NASA, the document has been revised to the extent that it is unusable in its present state, or when directed by the Contracting Officer. When complete reissues are made, the entire contents of the document shall be brought up to date and shall incorporate revised pages. All revisions shall be recorded. A revision log shall identify complete reissues except for periodic reports and documents which are complete within themselves as final.

2.8.4 Changes of a minor nature to correct obvious typing errors, misspelled words, etc., shall only be made when a technical change is made, unless the accuracy of the document is affected.

2.8.5 All revised pages shall be identified by a revision symbol and a new date. Each document shall contain a log of revised pages that identify the revision status of each page with the revision symbol. This list shall follow the table of contents in each document. The line or lines revised on a given page shall be designated by the use of vertical line in the margin of the page, and the change authority shall be indicated adjacent to the change.

RELEASED - Printed documents may be obsolete; validate prior to use.

2.8.6 Contractor Type 1 documents shall not be submitted containing pen and ink markups which correct, add to, or change the text, unless schedule problems exist and approval is obtained in writing from the Contracting Officer. Such markups, however, shall not exceed twenty (20) percent of the page content and shall be acceptable provided that the reproduced copies are legible. In addition, hand-drawn schematics, block diagrams, data curves, and similar charts may be used in original reports in lieu of formally prepared art work, as long as legibility of copies is not impaired. Acceptability shall be determined by the Contracting Officer.

3.0 DPD MAINTENANCE PROCEDURES

3.1 NASA-Initiated Change: New and/or revised data requirements shall be incorporated by contract modification to which the new or revised portion of the DPD shall be appended. The Contractor shall notify the Contracting Officer in the event a deliverable data requirement is imposed and is not covered by a DRD, or when a DRD is changed by a contract modification and for which no revision to DPD is appended. In such cases, the Contractor shall submit the requested changes to NASA for approval. See paragraph 3.3.1 for change procedures.

3.2 Contractor-Initiated Change: Contractor-proposed data requirements or proposed changes to existing requirements shall be submitted to NASA for approval.

3.3 DPD Change Procedures

3.3.1 Changes to a contractual issue of this DPD shall be identified by NASA on the Document Change Log.

3.3.2 The date of the DPD shall be entered under the “as of” block of the Document Change Log. The date that was in the “as of” block shall be entered in the “Superseding” block.

3.3.3 The Document Change Log entitled “Incorporated Revisions” shall be changed to indicate the modification number, portions affected, and remarks. All changes to the DPD/DRDs shall be identified in the “Remarks” column.

3.4 DPD Reissues

3.4.1 The DPD shall be reissued by NASA for each contract modification that affects the DPD and shall supersede the existing DPD in its entirety. Reissues shall be issued by contractual direction. The issue symbol, which shall commence with “A” and progress through “Z,” shall be entered in the DPD identification block of each DRD page of the DPD.

RELEASED - Printed documents may be obsolete; validate prior to use.

Agency Consolidated End-user Services (ACES)
Data Requirements List

DRD	DATA TYPE	INITIAL SUBMISSION	SUBMISSION FREQUENCY	TITLE	OPR
CF – Cross Functional					
CF-01	2	With proposal	One time; revise as required	I^{3}P Information Security Management Plan	XD030
CF-02	1	Within thirty (30) days after Contract Phase-In start date for Wave 1 and as required by NASA C&A process, in coordination with information system's NASA authorizing official	Varies	I^{3}P Information Technology (IT) System Security Plan (SSP)	XD030
CF-03	2	Draft 60 days after Contract implementation date for Wave 1	Preliminary 120 days after Contract implementation date for Wave 1; Baseline 180 days after Contract implementation date for Wave 1; update as required	I^{3}P Service Asset and Configuration Management (SACM) Plan	XD030
CF-04	2	Draft 60 days after Contract implementation date for Wave 1	Preliminary 120 days after Contract implementation date for Wave 1; Baseline 180 days after Contract implementation date for Wave 1; update as required	I^{3}P Release and Deployment Management (RDM) Plan	XD030
CF-05	3	60 days after Contract implementation date for Wave 1	Annually	I^{3}P Application Inventory (AI) Report	XD030
CF-06	2	Draft 60 days after Contract implementation date for Wave 1	Preliminary 120 days after Contract implementation date for Wave 1; Baseline 180 days after Contract implementation date for Wave 1; update as required	I^{3}P Capacity Management Plan	XD030
CF-07	3	10 days following completion of first monthly reporting period	Monthly within 10 days after the end of each cal. month	I^{3}P Service and Component Capacity Report	XD030
CF-08	2	Draft 60 days after Contract implementation date for Wave 1	Preliminary 120 days after Contract implementation date for Wave 1; Baseline 180 days after Contract implementation date for Wave 1; update as required	I^{3}P Availability Management (AM) Plan	XD030

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD	DATA TYPE	INITIAL SUBMISSION	SUBMISSION FREQUENCY	TITLE	OPR
CF-09	3	10 bus. days after completion of first monthly reporting period	Monthly within 10 bus. days after the end of each cal. month	I^{3}P Availability, Reliability, and Maintainability (ARM) Analysis Report	XD030
CF-10	2	Draft 60 days after Contract implementation date for Wave 1	Preliminary 120 days after Contract implementation date for Wave 1; Baseline 180 days after Contract implementation date for Wave 1; update annually thereafter	I^{3}P IT Service Continuity Management (ITSCM) Plan	XD030
CF-11	3	60 days after Contract implementation date for Wave 1	One time, revise as required	I^{3}P Interface Definition Agreement (IDA)	XD030
CF-12	1	Upon discovery of an IT security Incident	In accordance with NASA Incident response requirements and on request	I^{3}P Information Technology (IT) Security Incident Report	XD030
CF-13	3	30 days after Contract Phase-In start date for Wave 1	One time, revise as required	I^{3}P NASA Enterprise Service Catalog Data Requirements	XD030
CF-14	3	30 days after Contract Phase-In start date for Wave 1	One time, revise as required	I^{3}P Problem Documentation	XD030
MA – Management					
MA-01	1	With proposal	One time, revise as required	Management Plan	XD030
MA-02	2	60 days after Contract implementation date for Wave 1	One time, revise as required	Property Management Plan	XD030
MA-03	1	With proposal	Updated Plan 10 days after Contract award	Phase-In Plan	XD030
MA-04	3	10 bus. days after Contract implementation date for Wave 1	Monthly	Employee Listing	XD030
MA-05	2	90 bus. days after Contract implementation date for Wave 1	Annually	Records Management Program Plan	XD030
MA-06	2	90 bus. days after Contract implementation date for Wave 1	Annually	Inventory of Records Holdings	XD030
MA-07	3	5 cal. days after completion of first monthly reporting period	MRP: 5 bus. days following the end of each calendar month PRP and SBUP: 30 days following the close of each performance period	Retainage Pools and Performance Metrics Report	XD030
MA-08	3	January 15, 2011	Annually	Environmental and Energy Consuming Product Compliance Reports	XD030

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD	DATA TYPE	INITIAL SUBMISSION	SUBMISSION FREQUENCY	TITLE	OPR
MA-09	1	In accordance with Section III, 14.0, *Organizational Conflict of Interest*, (d)(3)	As needed	Organizational Conflict of Interest Plan	XD030
SA – Safety					
SA-01	2	With proposal	Updated 10 days after Contract implementation date for Wave 1	Safety and Health Plan	XB000
IT – Information Technology					
IT-01	3	One month after Contract implementation date for Wave 1	Monthly on 10th bus. day of month	Agency Cellular Seat Detail Report	XD030
IT-02	3	30 days after Contract implementation date for Wave 1	One time, revise as required	Toner and Waste Disposal Plan	XD030
IT-03	3	One month after Contract implementation date for Wave 1	Monthly on 10th bus. day of month; immediate verbal notification at time of incident discovery with follow-up interim written report within 24 hours of incident discovery	Lost, Damaged, and Stolen Property Report	XD030
IT-04	1	On Contract implementation date for each Wave	Quarterly	Technology Refresh Plan	XD030
IT-05	1	60 days after Contract implementation date for Wave 1	Annually	Continuity of Operations Plan (COOP)	XB000
IT-06	1	90 days after Contract implementation date for Wave 1	Annually and as requested (no more than two times/year)	Asset Transition Value Report	XD030
IT-07	2	With proposal	Within 1 month of the each baseline release of NASA-STD-2805*x*, or every 6 months, whichever is first	Vendor Product Performance Specifications	XD030
IT-08	3	1 month after Contract implementation date for Wave 1	Daily for fleet management data; monthly on 10th bus. day of month for other data elements	Agency Network Peripheral Seats Detail Report	XD030
IT-09	3	1 month after Contract implementation date for Wave 1	Monthly on 5th bus. day of month	Data Backup and Restore Services Report	XD030
IT-10	3	1 month after Contract implementation date for Wave 1	Daily, weekly on 1st bus. day of week, and monthly on 5th bus. day of month as detailed in Item 12	NOMAD Services Reports	XD030

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: CF-01
3. **DATA TYPE**: 2
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: I^{3}P Information Security Management Plan

7. **DESCRIPTION/USE**: To describe the Contractor's methodology for managing all aspects of information security, including addressing the cross-functional and service-specific information security requirements.

8. **OPR**: XD030 9. **DM**: XD030

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION**: With the proposal.

12. **SUBMISSION FREQUENCY**: One time; revise as required.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: I^{3}P Cross Functional Performance Work Statement, Section 6.2.b

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Information Security Management Plan provides the Contractor's proposed management approach for meeting cross-functional and service-specific information security requirements.

15.2 **APPLICABLE DOCUMENTS**:

FIPS 199 *Standards for Security Categorization of Federal Information and Information Systems*

15.3 **CONTENTS**: The Information Security Management Plan shall include, at a minimum, the following:

a. Contractor's information security POC(s) and roles and responsibilities for the POC(s).
b. Proposed grouping of information systems provided under the Contract into IT System Security Plans (IT-SSP) and anticipated FIPS 199 security category of each information system.
c. Process for meeting security authorization requirements, including development and maintenance of IT-SSPs, implementation and validation of controls, security assessments, remediation, authorization, continuous monitoring, etc.
d. Processes for addressing all applicable information security requirements, including vulnerability scanning and mitigation, maintaining secure system configurations, patch/configuration management and reporting, and malware protection
e. Process for information security incident management and response, including coordination with NASA Security Operations Center (SOC) and IT Security Managers, Privacy Act Managers, etc.
f. Process for providing required data to the NASA SOC.
g. Process for ensuring that Contractor employees meet information security requirements, such as IT security awareness training, qualifications for system administrators and others with elevated user privileges, etc., and that Contractor employees are knowledgeable of NASA information security policies and procedures.

15.4 **FORMAT**: Contractor format is acceptable with NASA approval.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP 2. **DRD NO.**: CF-02
3. **DATA TYPE**: 1 4. **DATE REVISED**:
5. **PAGE**: 1/2
6. **TITLE**: I^{3}P Information Technology (IT) System Security Plan (SSP)

7. **DESCRIPTION/USE**: To provide the Contractor's compliance with the IT security requirements in NFS 1852-204-76 (as modified by NASA Procurement Information Circular 08-09, dated May 1, 2008), Section 6 of the Cross Functional PWS, and any additions/augmentations described in NPR 2810.1, *Security of Information Technology*. This document will be used as part of the NASA IT security certification and accreditation process and to identify IT system inventories and appropriate Contractor IT security points of contact.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION**: Within thirty (30) days after Contract Phase-In start date for Wave 1 and as required by the NASA C&A process, in coordination with the information system's NASA authorizing official.

12. **SUBMISSION FREQUENCY**: The IT SSP shall be reviewed and updated on a continual basis and after any significant changes to the IT System or Contractor personnel point of contact (POC) information. Updated copies shall be submitted upon any significant changes or every three (3) years, whichever comes first.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: I^{3}P Cross Functional Performance Work Statement, Section 6.2.a

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Information Technology (IT) System Security Plan includes a description of the IT system and its implementation of security controls, risk assessment, self assessment of security plans, and contingency plan, in compliance with NIST SP 800-18 and NIST SP 800-53.

15.2 **APPLICABLE DOCUMENTS**:

FIPS 200	*Minimum Security Requirements for Federal Information and Information Systems*
FIPS 199	*Standards for Security Categorization of Federal Information and Information Systems*
NFS 1852.204-76	*Security Requirements for Unclassified Information Technology Resources (as modified by NASA Procurement Information Circular 08-09, dated May 1, 2008)*
NPR 2810.1	*Security of Information Technology*
NIST SP 800-18	*Guide for Developing Security Plans for Federal Information Systems*
NIST SP 800-30	*Risk Management Guide for Information Technology Systems*
NIST SP 800-34	*Contingency Planning Guide for Information Technology Systems*
NIST SP 800-61	*Computer Security Incident Handling Guide*
NIST SP 800-37	*Guide for the Security Certification and Accreditation of Federal Information Systems*
NIST SP 800-53	*Recommended Security Controls for Federal Information Systems*
NIST SP 800-53A	*Draft Guide for accessing the Security Controls in Federal Information Systems*

15.3 **CONTENTS:** The Information Technology (IT) System Security Plan shall include the following:

a. The IT System Security Plan shall be written in accordance with NASA FAR 1852.204-76 (as modified by NASA Procurement Information Circular 08-09, dated May 1, 2008) and NIST SP 800-18, and following the process defined in NIST SP 800-37. It should also address all the required security controls defined in the latest revision of the NIST SP 800-53 based upon the security categorization (per FIPS 199).

b. Risk Assessment: The IT Risk Assessment report shall be written in accordance with NASA FAR 1852.204-76 (as modified by NASA Procurement Information Circular 08-09, dated May 1, 2008) and following the guidelines of NIST SP 800-30.

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD Continuation Sheet

TITLE: I^3P Information Technology (IT) System Security Plan (SSP) **DRD NO.**: CF-02

DATA TYPE: 1 **PAGE**: 2/2

15.3 **CONTENTS (CONTINUED)**:

c. Self Assessment: The self-assessment shall be conducted and provided in the format defined by NIST SP 800-53A.

d. Contingency Plan: The IT Contingency Plan shall be written in accordance with NASA FAR 1852.204-76 and following the guidelines of NIST SP 800-34.

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3.

15.5 **MAINTENANCE**: Changes shall be incorporated by change page or complete reissue.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP 2. **DRD NO.**: CF-03
3. **DATA TYPE**: 2 4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: I^{3}P Service Asset and Configuration Management (SACM) Plan

7. **DESCRIPTION/USE**: To describe the Contractor's approach for managing and protecting the integrity of Service Assets and Configuration Items.

8. **OPR**: XD030 9. **DM**: XD030

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION**: Draft sixty (60) days after Contract implementation date for Wave 1.

12. **SUBMISSION FREQUENCY**: Preliminary one-hundred-twenty (120) days after the Contract implementation date for Wave 1; Baseline one-hundred-eighty (180) days after the Contract implementation date for Wave 1; update as required.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 2.3; I^{3}P Cross Functional Performance Work Statement, Sections 5.3 and 7.7.2

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The SACM Plan provides the Contractor's proposed management approach for managing and protecting the integrity of Service Assets and Configuration Items throughout the service lifecycle.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The SACM Plan shall include, at a minimum, the following:
- a. Process for identifying and maintaining Configuration Items/Service Assets (including relevant attributes, relationships, baselines and detail, and status and changes thereto) in the Government CMDB.
- b. Process for verifying and auditing Configuration Items and Service Assets.
- c. Process for implementing corrective actions to resolve Configuration Item/Service Asset discrepancies.

15.4 **FORMAT**: Contractor format is acceptable with NASA approval.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: CF-04
3. **DATA TYPE**: 2
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: I^{3}P Release and Deployment Management (RDM) Plan

7. **DESCRIPTION/USE**: To describe the Contractor's approach for managing release packages and their constituent components and deployment into production and establishing effective use of the service(s).

8. **OPR**: XD030 9. **DM**: XD030

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION**: Draft sixty (60) days after Contract implementation date for Wave 1.

12. **SUBMISSION FREQUENCY**: Preliminary one-hundred-twenty (120) days after the Contract implementation date for Wave 1; Baseline one-hundred-eighty (180) days after the Contract implementation date for Wave 1; update as required.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: I^{3}P Cross Functional Performance Work Statement, Section 7.8.2

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The RDM Plan provides the Contractor's approach for managing release packages and their constituent components and deployment into production and establishing effective use of the service(s).

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The RDM Plan shall include, at a minimum, the following:

a. Process for performing RDM in coordination and collaboration with Government, I^{3}P Contractors, and other Contractors.
b. Process for notifying the Enterprise Service Desk regarding release and deployment activities.
c. Process for building, testing, piloting (if required), and packaging of releases.
d. Process for planning for pass/fail situations and executing a back-out plan (if required).
e. Process for verifying deployment, stabilizing service(s), and closing deployment.

15.4 **FORMAT**: Contractor format is acceptable with NASA approval.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: CF-05
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: I^{3}P Application Inventory (AI) Report
7. **DESCRIPTION/USE**: To collect and provide an inventory of applications being used to support NASA services and their associated cost elements.
8. **OPR**: XD030 9. **DM**: XD030
10. **DISTRIBUTION**: Per Contracting Officer's letter
11. **INITIAL SUBMISSION**: Sixty (60) days after Contract implementation date for Wave 1.
12. **SUBMISSION FREQUENCY**: Annually.
13. **REMARKS**:
14. **INTERRELATIONSHIP**: I^{3}P Cross Functional Performance Work Statement, Sections 5.5 and 7.8.1.c
15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The AI Report includes all applications being used to support NASA services.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The AI Report shall include, at a minimum, the following:

a. Application Name (as documented in the NASA System for Tracking and Registering Applications and Websites (STRAW)
b. Unique Application ID (as documented in the NASA System for Tracking and Registering Applications and Websites (STRAW)
c. Application Owner (Responsible NASA Government official)
d. Technical POC for the application (Individual with the most technical knowledge about the application, i.e., Government or Contractor)
e. Application Description / Services Provided
f. Total Annual Cost: Development, Maintenance, Enhancement or Steady State to include:
   i. Total Hardware Costs, e.g., server(s), storage, upgrades, application specific hardware devices
   ii. Total Software Licensing/Purchase Fees
   iii. Total Recurring Maintenance and Support Agreement Fees
   iv. Total Application Data Center Hosting Costs, e.g., infrastructure, facilities, HVAC, power, labor
   v. Total Contractor Work Year Equivalent Cost (required to directly support the application)

15.4 **FORMAT**: Contractor format is acceptable with NASA approval.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update annually to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: CF-06
3. **DATA TYPE**: 2
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: I^3P Capacity Management Plan

7. **DESCRIPTION/USE**: To describe the Contractor's methodology and approach for managing capacity and associated performance issues.

8. **OPR**: XD030 9. **DM**: XD030

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION**: Draft sixty (60) days after Contract implementation date for Wave 1.

12. **SUBMISSION FREQUENCY**: Preliminary one-hundred-twenty (120) days after the Contract implementation date for Wave 1; Baseline one-hundred-eighty (180) days after the Contract implementation date for Wave 1; update as required.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: I^3P Cross Functional Performance Work Statement, Sections 7.9.0.c and 7.9.2.c

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Contractor's Capacity Management Plan describes Contractor's methodology and approach for managing capacity and associated performance issues.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The Capacity Management Plan shall include, at a minimum, the following:

a. Process for identifying service and component capacity including trends and profiles.
b. Process for recommending effective use of existing capacity.
c. Standard templates to support capacity planning.
d. Process for coordinating and collaborating with Government, I^3P Contractors, and other Contractors to support capacity planning.
e. Process for providing advice on new technologies.
f. Process for notifying the Enterprise Service Desk regarding potential issues.

15.4 **FORMAT**: Contractor format is acceptable with NASA approval.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: CF-07
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: I^{3}P Service and Component Capacity Report
7. **DESCRIPTION/USE**: To collect and provide service and component capacity data showing trends and utilization.
8. **OPR**: XD030 9. **DM**: XD030
10. **DISTRIBUTION**: Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Ten (10) days following completion of the first monthly reporting period.
12. **SUBMISSION FREQUENCY**: Monthly within ten (10) days after the end of each calendar month.
13. **REMARKS**:
14. **INTERRELATIONSHIP**: I^{3}P Cross Functional Performance Work Statement, Sections 7.9.3.c, 7.9.4.e, and 7.9.7.a
15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Service and Component Capacity Report provides monthly data showing capacity utilization, volumes, and historical trends against forecasts and baselines.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The Service and Component Capacity Report shall provide statistics for the current month as well as the two (2) previous months and shall be reported by NASA location and as a total for NASA. The report shall include, at a minimum, the following:

a. Results of performance monitoring, service capacity analysis, and service performance tuning.
b. Current, historical, and projected capacity thresholds.
c. Reporting against Government established standards and metrics.
d. Results of formal reviews of projected capacity requirements.
e. Capacity and performance trends and volumes against forecasts and baselines.
f. Results of prototyping and sizing exercises.
g. Testing and sizing models for capacity impacts.

15.4 **FORMAT**: Contractor format is acceptable with NASA approval.

15.5 **MAINTENANCE**: None required.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: CF-08
3. **DATA TYPE**: 2
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: I^{3}P Availability Management (AM) Plan

7. **DESCRIPTION/USE**: To describe the Contractor's methodology for managing all availability-related issues, relating to both services and resources, ensuring that availability targets in all areas are measured and achieved.

8. **OPR**: XD030 9. **DM**: XD030

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION**: Draft sixty (60) days after Contract implementation date for Wave 1.

12. **SUBMISSION FREQUENCY**: Preliminary one-hundred-twenty (120) days after the Contract implementation date for Wave 1; Baseline one-hundred-eighty (180) days after the Contract implementation date for Wave 1; update as required.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: I^{3}P Cross Functional Performance Work Statement, Section 7.10.8.a

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The AM Plan provides the Contractor's proposed approach for managing availability of services and systems.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The AM Plan shall include, at a minimum, the following:

a. Process for managing product and service availability.
b. Process for notifying the Enterprise Service Desk regarding potential issues.
c. Process for defining availability, reliability, and maintainability (ARM) targets and measures; and aligning measures with underpinning service agreements.
d. Process for establishing service metrics, and tools for measuring and monitoring ARM and associated changes.
e. Process for conducting analysis for compliance to ARM Service Levels.
f. Process for assisting in identifying, investigating and resolving service availability issues.
g. Process for collecting and analyzing ARM data.
h. Process for complying with ARM Service Levels.
i. Process for evaluating availability improvement opportunities and associated costs.
j. Process for meeting Government design and architecture standards, end-to-end service availability requirements and continuity plans.
k. Process for supporting end-to-end availability validation test plans.
l. Process for planning and scheduling downtime.

15.4 **FORMAT**: Contractor format is acceptable with NASA approval.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP 2. **DRD NO.**: CF-09
3. **DATA TYPE**: 3 4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: I^3P Availability, Reliability, and Maintainability (ARM) Analysis Report

7. **DESCRIPTION/USE**: To collect and provide Availability, Reliability, and Maintainability data showing service availability historical trends, including service and component failure results and compliance with Service Level Agreements.

8. **OPR**: XD030 9. **DM**: XD030

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** Ten (10) business days following completion of the first monthly reporting period.

12. **SUBMISSION FREQUENCY**: Monthly within ten (10) business days after the end of each calendar month.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: I^3P Cross Functional Performance Work Statement, Section 7.10.6.f

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The ARM Analysis Report provides data showing service availability, historical trends, including service and component failure results and compliance with Service Level Agreements.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The ARM Analysis Report shall include, at a minimum, the following:
- a. Service availability issues, investigative results, and resolution status.
- b. Historical trends showing service and component failure results (e.g., uptime statistics, Mean Time between Failures/frequency of outage, and Mean Time to Repair/duration of outage).
- c. Historical trends showing compliance with Service Level Agreements.

15.4 **FORMAT**: Contractor format is acceptable with NASA approval.

15.5 **MAINTENANCE**: Refer to Item 12 Submission Frequency.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: CF-10
3. **DATA TYPE**: 2
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: I^{3}P IT Service Continuity Management (ITSCM) Plan

7. **DESCRIPTION/USE**: To describe the Contractor's method for establishing and maintaining ongoing recovery capability for required IT services and their components.

8. **OPR**: XD030 9. **DM**: XD030

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION**: Draft sixty (60) days after Contract implementation date for Wave 1.

12. **SUBMISSION FREQUENCY**: Preliminary one-hundred-twenty (120) days after the Contract implementation date for Wave 1; Baseline one-hundred-eighty (180) days after the Contract implementation date for Wave 1; update annually thereafter.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: I^{3}P Cross Functional Performance Work Statement, Section 7.11.4.a

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The ITSCM Plan provides the Contractor's proposed management approach for establishing and maintaining ongoing recovery capability for IT services and their supporting components.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The ITSCM Plan shall include, at a minimum, the following:

a. Process for managing product and service continuity.
b. Process for notifying the Enterprise Service Desk regarding potential issues.
c. Process for identifying contingency options and impact mitigation actions and strategies.
d. Process for enabling the effective identification, analysis, and management of risk responses.
e. Process for development, production, testing, maintenance, and training of the Plan.
f. Process, including criteria, for invoking the Plan, executing recovery plans, restoring Service to normal operation, and leading and/or coordinating recovery efforts.
g. Process for testing and documenting results of disaster recovery testing.
h. Process for identifying required ITSCM contingency services that impact the required IT services.

15.4 **FORMAT**: Contractor format is acceptable with NASA approval.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update annually to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: CF-11
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: I^{3}P Interface Definition Agreement (IDA)

7. **DESCRIPTION/USE**: To collect and provide data showing interface requirements between Government and Contractor provided computer systems.

8. **OPR**: XD030 9. **DM**: XD030

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** Sixty (60) days after Contract implementation date for Wave 1.

12. **SUBMISSION FREQUENCY**: One time, revise as required.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: I^{3}P Cross Functional Performance Work Statement, Sections 7.2.0.c, 7.3.0.c, 7.4.0.c, 7.5.0.c, and 7.7.0.c

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: An IDA is required whenever a Contractor chooses to use a non-Government computer system to support their provision of services, e.g., Change Management, Incident Management, Request Management, Problem Management, and Service Asset and Configuration Management.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The IDA shall include, at a minimum, the following:
- a. A short description of the computer systems being addressed.
- b. Cross reference matrix of Government to Contractor data elements, e.g., name, size, format, description, and relationship.

15.4 **FORMAT**: Contractor format is acceptable with NASA approval.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP 2. **DRD NO.**: CF-12
3. **DATA TYPE**: 1 4. **DATE REVISED**:
5. **PAGE**: 1/1

6. **TITLE**: I^{3}P Information Technology (IT) Security Incident Report

7. **DESCRIPTION/USE**: Report to NASA Security Operations Center (SOC).

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** Upon discovery of an IT Security Incident.

12. **SUBMISSION FREQUENCY**: In accordance with NASA Incident response requirements and on request

13. **REMARKS**:

14. **INTERRELATIONSHIP**: I^{3}P Cross Functional Performance Work Statement, Sections 6.2.g and 7.13.4.c

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Information Technology (IT) Security Incident Report shall report all IT Security Incidents in accordance with NPR 2810.1 and NPR 1382.1.

15.2 **APPLICABLE DOCUMENTS**:

NPR 1382.1	*NASA Privacy Procedural Requirements*
NPR 2810.1	*Security of Information Technology*
NIST SP 800-61	*Computer Security Incident Handling Guide*

15.3 **CONTENTS**: The IT Security Incident Report shall comply with the reporting requirements of NIST SP 800-61.

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3.

15.5 **MAINTENANCE**: None.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP 2. **DRD NO.**: CF-13
3. **DATA TYPE**: 3 4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: I^{3}P NASA Enterprise Service Catalog Data Requirements

7. **DESCRIPTION/USE**: The NASA Enterprise Service Catalog (ESC) (also known as the NASA Enterprise Architecture Repository (NEAR)) is the authoritative source for all OCIO IT Service offerings and associated service data attributes.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** Thirty (30) days after Contract Phase-In start date for Wave 1.

12. **SUBMISSION FREQUENCY**: One time, revise as required.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: I^{3}P Cross Functional Performance Work Statement, Section 5.2

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: NASA ESC data requirements encompass a broad range of information necessary to describe the various Service offerings of I^{3}P. Examples include: systems, components and service diagrams that depict the major systems and components of the service with relationships and dependencies.

15.2 **APPLICABLE DOCUMENTS**:
NASA Enterprise Architecture Repository Interface Definition Specification (IDS)

15.3 **CONTENTS**: The NASA ESC data requirements include, at a minimum, the following:
a. A short description of each service offering.
b. An architectural breakdown and itemization of the service offering down to the service's systems, and components.
For example: Service Domain: Data Center Services, Data Storage Services, SAN, and SAN Storage Frame
c. Diagrams and charts presenting the service interfacing to other service providers' services.
d. Service Components data to the granularity level required for the ESC entry to differentiate components and enable the ESD/ESRS to identify the service provider components and thereby properly display for selection by catalog users the Service, System or component.

15.4 **FORMAT**: Defined in the NEAR IDS.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: CF-14
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/1

6. **TITLE**: I^{3}P Problem Documentation

7. **DESCRIPTION/USE**: To provide documentation, scripts, and procedures for the Enterprise Service Desk to facilitate the resolution of Problems.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** Thirty (30) days after Contract Phase-In start date for Wave 1.

12. **SUBMISSION FREQUENCY**: As required.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: I^{3}P Cross Functional Performance Work Statement, Sections 5.3.g and 7.5.7.f

15. **DATA PREPARATION INFORMATION**: The documentation, scripts and procedures shall be fully developed, documented and tested prior to release in accordance with ITIL v3 Change, Release, and Deployment processes.

15.1 **SCOPE**: Applies to all cross-functional and service-specific Problems.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The Enterprise Service Desk documentation, scripts and procedures shall include, at a minimum, the following:

a. Documentation:
   1. Problem description
   2. Problem characteristics/key indicators that enable quick identification
   3. Actual/potential applicability and resolution guidance once Problem determination is made
b. Scripts: Specific guidance, e.g., Frequently Asked Questions, for Enterprise Service Desk or end user to enable the identification/determination and resolution of Problems
c. Procedures: Step-by-step guidance for identifying, assigning resolution responsibility and resolving the Problem

15.4 **FORMAT**: For Tier 0 input, the ESD will define the format. For other input, Contractor format is acceptable with NASA approval.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: MA-01
3. **DATA TYPE**: 1
4. **DATE REVISED**:
5. **PAGE**: 1/1

6. **TITLE**: Management Plan

7. **DESCRIPTION/USE**: To describe the Contractor's approach for managing all contract responsibilities.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** With the proposal

12. **SUBMISSION FREQUENCY**: One time, revise as required

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Section I, 6.17 (d); Performance Work Statement, Sections 2.1, 2.3.2.1, 2.6, 2.8, and 5.0

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Management Plan is used to describe the Contractor's approach for managing all aspects of the Contract.

15.2 **APPLICABLE DOCUMENTS**:

NPD 7120.4*x*	*Program/Project Management*
NPR 7120.7	*NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements*

15.3 **CONTENTS**: The Management Plan shall describe the Contractor's management practices, approaches, plans, and schedules necessary for accomplishing (managing and controlling) the services described in the PWS. The Contractor shall state how their Management Plan complies with the guidelines stated in NPD 7120.4*x* and NPR 7120.7. The Plan shall include, at a minimum, the following sections:

a. Program Management Approach.
b. Contract Management Approach.
c. Financial Management Approach.
d. Staffing Approach.
e. Total Compensation Approach.
f. Quality Assurance Approach.
g. Communication Approach, including an Outage Communications Approach. The Outage Communications Approach shall address and include:
    1. Outage Scope—e.g., Agency/Center(s), type of outage, duration, and severity.
    2. Outage Participant Roles and Responsibilities—Contractor, ACES COTR, ACES CTMs, and affected end-users.
    3. Scheduling Requirements—Prior notification, repeat notifications, and closure/resolution notification.
    4. Types of Customer Notification—e.g., e-mail, voicemail, in person, written memoranda, and posted bulletins.
    5. Outage process flow from original outage identification to final outage closure message.

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: MA-02
3. **DATA TYPE**: 2
4. **DATE REVISED**:
5. **PAGE**: 1/1

6. **TITLE**: Property Management Plan

7. **DESCRIPTION/USE**: To describe the Contractor's approach for controlling and managing all ACES IT assets and Government-provided property.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** Sixty (60) days after Contract implementation date for Wave 1

12. **SUBMISSION FREQUENCY**: One time, revise as required

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 2.3

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Property Management Plan defines a Contractor's methods of care, accounting, and control of all property within its possession.

15.2 **APPLICABLE DOCUMENTS**: FAR Part 45 and NFS Part 18-45

15.3 **CONTENTS**: The Property Management Plan shall include the following:

a. Property management
b. Acquisition
c. Receiving
d. Identification
e. Records
f. Movement
g. Storage
h. Physical inventories
i. Reports
j. Consumption
k. Utilization
l. Maintenance
m. Subcontractor control
n. Disposition
o. Contract close-out

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP 2. **DRD NO.**: MA-03
3. **DATA TYPE**: 1 4. **DATE REVISED**:
5. **PAGE**: 1/2
6. **TITLE**: Phase-In Plan

7. **DESCRIPTION/USE**: To provide a detailed description of the Contractor's phase-in for transitioning IT services from the ODIN contracts to ACES.

8. **OPR**: XD030 9. **DM:** XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION**: With the proposal

12. **SUBMISSION FREQUENCY**: Updated Phase-In Plan ten (10) days after Contract award.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 2.4

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Phase-In Plan describes in detail the Contractor's plan for transitioning IT services from the ODIN contract to ACES.

15.2 **APPLICABLE DOCUMENTS**:

NPR 8000.4	*Risk Management Procedural Requirements*
NPR 7120.5x	*NASA Program and Project Management Processes and Requirements*
OMB Circular A-13	*Management of Federal Information Resources*

15.3 **CONTENTS**: The Phase-in Plan shall provide a description of the Contractor's approach for transitioning IT services from the ODIN contracts to ACES. The plan and integrated schedule shall clearly identify critical tasks, duration, key milestones, responsible parties, associated risks, and risk mitigation strategies. The Phase-In Plan shall include the following:

a. Services to be transitioned.
b. Major tasks and activities.
c. The Contractor's approach for smoothly transitioning the work from the incumbent without disrupting end-user services within the NASA community.
d. The Contractor's approach for ensuring that non-ODIN Center contracts with services transitioning to ACES are not adversely impacted and affected services are seamlessly integrated into ACES.
e. The Contractor's approach for ensuring all documentation necessary to perform the requirements of this Contract will be in place at the end of the phase-in period.
f. Detailed plans for establishing staffing levels for optimally meeting service delivery requirements
g. Policies and procedures associated with this plan.
h. Transition Team members, roles, and responsibilities:
    1. Contractor vs. Government.
    2. Contractor assignment of work and responsibilities.
    3. Contractor management oversight and issue escalation process.
i. Identification of risks, likelihood of occurrence, potential impacts to the customer, and mitigation plans.
j. Configuration and change management documentation process.

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD Continuation Sheet

TITLE: Phase-In Plan **DRD NO.**: MA-03
DATA TYPE: 1 **PAGE**: 2/2

15.3. **CONTENTS (CONTINUED)**:

k. Timeline identifying key phase-in activities, duration of phase-in activities, major phase-in milestones, and responsible parties, including any:

1. Review milestones (e.g., Preliminary Design Review (PDR), Critical Design Review (CDR), and Operational Readiness Review (ORR)).
2. Transition milestones (e.g., equipment installation, conversion, and deployment).
3. Training and associated documentation.
4. Planning/coordination status meetings.
5. Constraints.
6. Dependencies on Government and on incumbent contractors.
7. Critical Path.

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3.

15.5 **MAINTENANCE:** Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: MA-04
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: Employee Listing
7. **DESCRIPTION/USE**: Contractor report used for various security and physical access to facility requirements.
8. **OPR**: XD030 9. **DM**: XD042
10. **DISTRIBUTION**: Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Ten (10) business days after Contract implementation date for Wave 1
12. **SUBMISSION FREQUENCY**: Monthly
13. **REMARKS**: Contractor shall provide information in accordance with Line 15
14. **INTERRELATIONSHIP**: Performance Work Statement, Section 2.8
15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Employee Listing shall provide a listing of ACES on-site and off-site employees for use with various security and administrative requirements.

15.2 **APPLICABLE DOCUMENTS**:
NPR 1600.1*x* *NASA Security Program Procedural Requirements*

15.3 **CONTENTS**: The Employee Listing shall include the following:
a. A separate report for each Center.
b. A rolled up Agency report.
c. The number of ACES on-site and off-site employees (headcount) by company to include all ACES subcontractors, if on-site.
d. Information for each employee: employee's name, position, location (building/room number), shift assignment, supervisor's name, and supervisor's location (building/room number).
e. An Agency report that includes the total number of employees: employee's name, position, Center location, and area of support (local Center support vs. Enterprise support).
f. Non-disclosure agreements for all on-site and off-site Contractor and sub-contractor employees in the initial report and updates on those employees who have left and joined the Contract in the last reporting period.

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3.

15.5 **MAINTENANCE**: None required.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: MA-05
3. **DATA TYPE**: 2
4. **DATE REVISED**:
5. **PAGE**: 1/2
6. **TITLE**: Records Management Program Plan
7. **DESCRIPTION/USE**: Describes the Contractor's plan for managing Government-owned records.
8. **OPR**: XD030 9. **DM**: XD042
10. **DISTRIBUTION**: NASA Center records manager
11. **INITIAL SUBMISSION:** Ninety (90) business days after Contract implementation date for Wave 1
12. **SUBMISSION FREQUENCY**: Annually
13. **REMARKS**: The following definitions are provided for clarification purposes:

a. **Government-owned Records**.
Except as provided in paragraph (c) of this clause, all records acquired or generated by the Contractor in its performance of this Contract shall be the property of the Government and shall be delivered to the Government or otherwise disposed of by the Contractor either in accordance with the NASA Procedural Requirements (NPR) 1441.1 NASA Records Retention Schedules, or as directed by the NASA Center records manager upon completion or termination of the Contract.

b. **Vital Records.**
Essential Agency or Center records identified as necessary for continuing critical operations during or immediately following national security emergencies or other emergency or disaster conditions (Emergency Operating Records) or to protect the legal and financial rights of the Government or those affected by Government Activities (Legal and Financial Rights Records).

c. **Contractor-owned records.**
The following records are considered the property of the Contractor and are not within the scope of paragraph (a) of this clause.
   i. Employment-related records (such as workers compensation files; employee relations records, records on salary and employee benefits; drug testing records, labor negotiation records, records on ethics, employee concerns, and other employee-related investigations conducted under an expectation of confidentiality; employee assistance program records; and personnel and medical/health-related records and similar files.
   ii. Confidential Contractor financial information, and correspondence between the Contractor and other segments of the Contractor located away from the NASA center (e.g., the Contractor's corporate headquarters);
   iii. Records relating to any procurement action by the Contractor, (confidential financial information and correspondence obtained by the Contractor for use in its subcontracts; source selection and other confidential, pre-decisional, or similar documents relating to the Contractor's deliberative process in selecting subcontractors) except for records that fall under 48 CFR Chapter 18 that may apply to NASA;
   iv. Legal records, including legal opinions, litigation files, and documents covered by the attorney-client and attorney work product privileges;
   v. The following categories of records maintained pursuant to the technology transfer clause of this Contract.
      1. Executed license agreements, including exhibits or appendices containing information on royalties, royalty rates, other financial information, or commercialization plans, and all related documents, notes and correspondence.
      2. The Contractor's protected Cooperative Research and Development Agreement (CRADA) information and appendices to a CRADA that contain licensing terms and conditions, or royalty or royalty rate information.
      3. Patent, copyright, mask work, and trademark application files and related Contractor invention disclosures, documents and correspondence, where the Contractor has elected rights or has permission to assert rights and has not relinquished such rights or turned such rights over to the Government.

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD Continuation Sheet

TITLE: Records Management Program Plan **DRD NO.**: MA-05
DATA TYPE: 2 **PAGE**: 2/2

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 2.10

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: These requirements pertain to the management of all government-owned records generated, held, or maintained by the Contractor in the course of performing government business activities. Applicability includes records of subcontractor partners to the Contract.

15.2 **APPLICABLE DOCUMENTS**:

44 U.S.C. Chapters 29, 31, 33	
44 U.S.C. 3501 et seq.	*Paperwork Reduction Act*
36 CFR Parts 1220-1238	
5 U.S.C. 552	*The Freedom of Information Act as amended*
5 U.S.C. 552a	*The Privacy Act of 1974 as amended*
OMB Circular A-130	*Management of Federal Information Resources*
OMB Circular A-123	*Internal Control Systems*
Executive Order 12656	*Assignment of Emergency Preparedness Responsibilities, Sections 201, 202, 1901, and 2001 (November 18, 1988), as amended*
FAR 52.227-14/52.2227-16	
NPD 1440.6 (As revised)	*NASA Records Management*
NPR 1441.1 (As revised)	*NASA Records Retention Schedules*
NPD 2190.1 (As revised)	*NASA Export Control Program*

15.3 **CONTENTS**: The Records Management Program (RMP) plan shall describe the implementation of a records management program in accordance with compliance requirements above. The plan shall set forth an approach that demonstrates an understanding of the requirements, addressing the following areas, where applicable:

a. Program Management
   i. Program authorization and organization
   ii. Guidance and training
   iii. Internal Evaluations
   iv. Procedures and Processes
b. Records Creation/Recordkeeping Requirements
   i. Creation of records/adequacy of documentation
   ii. Contractor Records
c. Records Maintenance
   i. General
   ii. Legacy Records
   iii. Contractor-created Records
d. Management and Control of Records
   i. Paper-based Records
   ii. Electronic Records
   iii. Audiovisual Records
   iv. Cartographic and Architectural Records
   v. Micrographic Records
e. Records Retention Schedule Implementation
f. Vital Records

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3.

15.5 **MAINTENANCE**: None required.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: MA-06
3. **DATA TYPE**: 2
4. **DATE REVISED**:
5. **PAGE**: 1/1

6. **TITLE**: Inventory of Records Holdings

7. **DESCRIPTION/USE**: Serves as inventory of Contractor-held Government-owned records and associated information.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: NASA Center records manager

11. **INITIAL SUBMISSION:** Ninety (90) business days after Contract implementation date for Wave 1

12. **SUBMISSION FREQUENCY**: Annually

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 2.10

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: These requirements pertain to the management of all Government-owned records generated, held, or maintained by the Contractor in the course of performing Government business activities. Applicability includes records of subcontractor partners to the Contract.

15.2 **APPLICABLE DOCUMENTS**:
NPD 1440.6 (As revised) *NASA Records Management*
NPR 1441.1 (As revised) *NASA Records Retention Schedules*
NPD 2190.1 (As revised) *NASA Export Control Program*

15.3 **CONTENTS**: The inventory shall provide an index of all Government-owned Contractor-held records holdings. The inventory shall be submitted in the format required by the NASA Center records manager and shall include, at a minimum, the following data:

a. Agency Filing Scheme (AFS) #: In accordance with NPR 1441.1.
b. Schedule Item #: from NPR 1441.1.
c. Record Title: Record Series description, a description of the record and its function.
d. Office of Record: Office responsible for retiring the record at end of lifecycle.
e. Location: Physical or virtual location of records.
f. Retention/Disposition: The period of time the record shall be kept, and how it is disposed at the end of its active lifecycle, as prescribed by the Schedule Item
g. Permanent vs. Temporary: Designation of permanent or temporary status of records
h. Vital Status: Records identified as Vital if necessary for continuing operations immediately following an emergency.
i. The Contractor shall submit a volume to accompany the final inventory, indicating the total quantity of records held by the Contractor. The volume shall be listed in cubic feet for hard copy records, and in megabytes for records in electronic formats. The Center records manager will provide guidance on how to calculate the volume of hard copy records.

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3.

15.5 **MAINTENANCE**: None required.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: MA-07
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: Retainage Pools and Performance Metrics Report

7. **DESCRIPTION/USE**: To provide a single source for reporting Contractor performance against performance metrics established in the Contract.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** Five (5) calendar days following completion of the first monthly reporting period.

12. **SUBMISSION FREQUENCY**: Monthly report (Metrics Retainage Pool (MRP)) due five (5) business days following the end of each calendar month. Semi-annual report (Performance Retainage Pool (PRP)) and annual report (Small Business Utilization Pool (SBUP)) due thirty (30) days following the close of each performance period.

13. **REMARKS**: The Contractor shall archive Retainage Pools and Performance Metrics reports and provide access to the current and archived reports to the ACES COTR.

14. **INTERRELATIONSHIP**: Section I, 2.9; Performance Work Statement, Section 3.7; Attachment I-3

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Report identifies established metrics, Contractor performance against those metrics, and a Contractor self-assessment.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The Retainage Pools and Performance Metrics report covers a specific reporting period, and shall include the following:

a. Identification of each applicable metric and required Performance Standard.
b. Performance against each Performance Standard for all seats and services.
c. Performance against each Performance Standard, segregated by seat types and services by Center.
d. Performance against each Performance Standard, segregated by seat types and services at the Agency.
e. Narrative self-assessment of performance during the reporting period to include any mitigating circumstances.
f. Corrective and preventive actions.
g. Calculation of retainage pool (percentage) earned.
h. Cumulative trending reports for all submitted periods and all required metrics.

15.4 **FORMAT**: Online format is acceptable following guidelines in 15.3.

15.5 **MAINTENANCE**: None required.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP 2. **DRD NO.**: MA-08
3. **DATA TYPE**: 3 4. **DATE REVISED**:
5. **PAGE**: 1/2

6. **TITLE**: Environmental and Energy Consuming Product Compliance Reports

7. **DESCRIPTION/USE**: Contractor reports used to complete the annual report to NASA HQ on affirmative procurement, waste reduction, energy efficient product procurement, and ozone depleting substances.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** January 15, 2011

12. **SUBMISSION FREQUENCY**: Annually, by fiscal year, to each Center Environmental Officer. Fiscal year is the Federal Government fiscal year and is defined as October 1 through September 30.

13. **REMARKS**: NASA tracks this information in NETS, to which each Center environmental officer has access

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 2.5

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**:

I. **Annual Affirmative Procurement Report**—The Contractor shall track and report, each January 15 to the Center Environmental Offices, information regarding the purchase by the Contractor (including subcontracts) of all products on the U.S. Environmental Protection Agency's Comprehensive Procurement Guideline list and items on the USDA Farm Bill Biobased list.

II. **Waste Reduction Activity Report**—The Contractor shall track and report each January 15 to the Center Environmental Offices any new process improvements for programs undertaken by the Contractor (or subcontractors) that have contributed to waste reduction during the previous fiscal year.

III. **Annual Energy Efficiency Product Procurement Report**—The Contractor shall report to the Center Energy Managers, January 15 of each year, information on purchases of energy consuming products made by the Contractor (including subcontracts) beginning upon contract start. This includes the purchase of premium efficiency motors and efficiency lighting covered by the Energy Policy Act of 2005.

IV. **Ozone Depleting Substances (ODS) Reports—**The Contractor shall track and report each January 15 to the Center Environmental Offices information from the previous fiscal year related to the ODS equipment that the contractor purchases, owns, operates, maintains, or repairs on-site.

15.2 **APPLICABLE DOCUMENTS**: None.

15.3 **CONTENTS**: The Annual Affirmative Procurement Report shall include the following:

a. The total amount of each listed item purchased during the previous fiscal year in dollar value.
b. The total amount of each listed item purchased during the previous fiscal year that contained at least the minimum recommended percentages of recycled content during the fiscal year in dollar value.
c. The total amount of each listed item purchased during the previous fiscal year that contained some recycled content or biobased content but less than the minimum recommended percentages of recycled content or biobased content during the fiscal year in dollar value.
d. The number of waivers and the name of the item each waiver was requested for submitted to the Environmental Office during the previous fiscal year.
e. The total amount purchased for each waivered item during the previous fiscal year in dollar value.
f. A narrative explanation of constraints for purchasing each item that did not meet affirmative procurement or biobased content requirements during the previous fiscal year.

RELEASED - Printed documents may be obsolete; validate prior to use.

15.3. **CONTENTS (CONTINUED)**:

The Waste Reduction Activity Report shall include the following:

a. A description of the activity.
b. The materials or wastes reduced.
c. An estimated volume or weight of reduction.
d. A contact name and phone number for a person knowledgeable about the reduction activity.

The Annual Energy Efficiency Product Procurement Report shall include the following:

a. A list of all energy consuming products purchased during the previous fiscal year.
b. The total purchase cost of each item on the list.
c. A designation of which items were Energy Star or Federal Energy Management Program (FEMP)-sanctioned.
d. For each Energy Star or FEMP-sanctioned product purchased provide:
   i. The simple payback value as determined by the contractor's life cycle cost analysis.
   ii. The annual savings in dollars and BTUs due to the purchase of the item
e. Metrics which show the effectiveness of the contractor's purchases
   i. Percentage of purchased products that are Energy Star and FEMP-sanctioned against the total number of energy consuming products purchased.
   ii. Total dollar value of the purchased products that are Energy Star and FEMP-sanctioned against the total dollar value of all energy consuming products purchased.

The Ozone Depleting Substances (ODS) Reports shall include the following:

a. A list of the names of all the EPA-Certified service technicians employed and their certification dates.
b. A list of any ODS recovery/recycling equipment that will be used and copy of the 40 CFR 82.162 EPA registration.
c. A list of any refrigeration/air conditioning units with a full charge of more than 50 pounds, not previously reported, including:
   i. Any identifying equipment numbers
   ii. The locations of the equipment (building/room)
   iii. The owning organization or contract name and number
   iv. A narrative description of the equipment.
   v. Refrigeration or air conditioning equipment with a full charge of >50 pounds, permanently removed from service during the year.

For the Annual Affirmative Procurement Report and Annual Energy Efficiency Product Procurement Report, where the Contractor does not purchase any designated product during the fiscal year, the report shall be a statement to that effect.

For Ozone Depleting Substances (ODS) Reports, if the Contractor does not purchase, own, operate, maintain, or repair ODS equipment on-site, the report shall be a statement to that effect.

15.4 **FORMAT**: The Contractor shall provide all detail records of Environmental and Energy Consuming Product Compliance Reports information electronically and via the Contractor's Web-based reporting tool (e.g. SharePoint site).

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: MA-09
3. **DATA TYPE**: 1
4. **DATE REVISED**:
5. **PAGE**: 1/2

6. **TITLE**: Organizational Conflict of Interest Plan

7. **DESCRIPTION/USE**: To demonstrate to the Government that the Contractor will avoid, neutralize, or mitigate organizational conflicts of interest and ensure that the Contractor provides unbiased impartial advice and adequately protects sensitive, proprietary data belonging to other contractors. Having an acceptable OCI Plan as defined by this DRD is required to be eligible for award.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: As determined by the Contracting Officer per Data Requirements Matrix

11. **INITIAL SUBMISSION:** In accordance with Section III, 14.0, *Organizational Conflict of Interest*, (d)(3)

12. **SUBMISSION FREQUENCY**: As needed

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Section I, 6.29

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Organizational Conflict of Interest (OCI) Plan describes the Contractor's approach to identify, resolve, and report potential OCI issues. The purpose of this DRD is to provide information detailing the Contractor's methods for resolving potential OCIs.

15.2 **APPLICABLE DOCUMENTS**:
FAR 9.5 *Organizational and Consultant Conflicts of Interest*

15.3 **CONTENTS**: The Organizational Conflict of Interest (OCI) Plan should include (1) the Contractor's approach to identify, resolve, and report potential OCI issues and (2) an appendix of specific mitigation strategies for resolving identified OCIs. At a minimum, the plan shall:

a. Demonstrate an understanding of (1) OCI principles and (2) the full breadth of OCI issues and the types of harm that can result.
b. Define company roles, responsibilities, and procedures for screening (i.e., identifying/recognizing, analyzing/evaluating, resolving, and reporting) existing and new business opportunities for actual/potential OCIs.
c. Identify any affiliated companies/entities (e.g., a parent company or a wholly-owned subsidiary) and procedures for coordinating OCIs with such affiliated companies/entities.
d. Explain how subcontractors will identify, resolve, and report OCIs.
e. Establish and require entrance training for new employees, refresher training for existing employees, and exit training for departing employees.
f. Define organizational and employee sanctions for violations of established OCI procedures/requirements/guidelines.
g. Require periodic self-audits to ensure compliance with established OCI procedures/requirements/guidelines.
h. Define records related to the OCI plan (e.g., training and audit records) that will be made available to the Government upon request.
i. Identify the strategy for resolving each OCI that is either identified in the solicitation or created by the requirements of the solicitation/contract and explain the effect of such strategy on performance of the contract. Specific resolution strategies shall be appended to the plan.
k. Require the reporting of all potential/actual OCIs during performance of the contract. An OCI report shall include (1) a description of the conflict, (2) the plan for avoiding, neutralizing, or mitigating the conflict, and (3) the benefits/risks vis-à-vis contract performance associated with plan approval/acceptance. Specific resolution strategies shall be appended to the plan upon approval by the Government.

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD Continuation Sheet

TITLE: Organizational Conflict of Interest Plan **DRD NO.**: MA-09
DATA TYPE: 1 **PAGE**: 2/2

15.4 **FORMAT**: Contractor format is acceptable.

15.5 **MAINTENANCE**: Changes shall be incorporated as required by change page(s) or complete reissue.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP 2.**DRD NO.**: SA-01
3. **DATA TYPE**: 2 4. **DATE REVISED**:
5. **PAGE**: 1/2

6. **TITLE**: Safety and Health Plan

7. **DESCRIPTION/USE**: The Safety and Health Plan describes the Contractor's approach to assuring compliance with NASA safety and health core program requirements. The Contractor's Plan shall describe how the Contractor will (1) prevent employee fatalities, (2) reduce the number of incidents, (3) reduce the severity of employee injuries and illnesses, and (4) protect the environment through the ongoing planning, implementation, integration and management control of the Contractor's industrial safety, occupational health, and environmental program in accordance with NFS 1852.223-73.

8. **OPR**: XB000 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** With the proposal

12. **SUBMISSION FREQUENCY**: Updated ten (10) days after Contract implementation date for Wave 1

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 2.5

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Safety and Health Plan describes the Contractor's methods of planning, implementing, and controlling industrial safety, occupational health, and environmental requirements.

15.2 **APPLICABLE DOCUMENTS**:

29 CFR Part 1903	*Inspections, Citations, and Proposed Penalties*
29 CFR Part 1910	*Department of Labor; Occupational Safety and Health Administration Standards for General Industry*
29 CFR Part 1926	*Department of Labor; Occupational Safety and Health Administration Standards for Construction Industry*
CFR Title 40 Parts 1-1068	*Protection of Environment*
NFS 1852.223-73	*Safety and Health Plan*
NFPA Standards National Fire Codes	
NASA-STD-8719.11	*Safety Standard for Fire Protection*
NPR 8715.3	*NASA General Safety Program Requirements*
Any associated Center safety and health requirements	

15.3 **CONTENTS**: The Contractor's Safety and Health Plan shall clearly describe their approach and methods for assuring compliance with the Agency's and Centers' safety and health care program requirements. The Plan shall include the following:

a. A description of the Contractor's policy and management's commitment to: (1) provide a safe and healthful workplace for personnel (i.e., employees, customers, and public), (2) protect the property and the environment, and (3) assure compliance with Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), NASA, and other document requirement.

b. A description of the techniques implemented by the Contractor to assure: (1) management and employees are held accountable and fully understand their roles and responsibilities to perform their jobs/tasks in a safe and healthful manner while protecting the environment and (2) these roles and responsibilities are flowed-down to all subcontractors, when applicable.

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD Continuation Sheet

TITLE: Safety and Health Plan **DRD NO.**: SA-01
DATA TYPE: 2 **PAGE**: 2/2

15.3 **CONTENTS (CONTINUED)**:

c. A description of the actions taken or the disciplinary program implemented by the Contractor when management or employees are discovered not performing their jobs/tasks in a safe and healthful manner or protecting the environment and how these actions are flowed-down to subcontractors, when applicable.

d. A description of the Contractor's safety, health, environmental awareness programs that includes documented safety meetings and safety awareness training for employees.

f. Identify, by title, the individual assigned by the Contractor to be responsible for implementing the Contractor's safety and health program elements and who will serve as the day-to-day SHE Point of Contact (POC) for this contracted effort.

g. A description of how the safety and health plan is maintained current with Contract, NASA, and requirements, and updated as necessary.

h. A description of how the Contractor assures potentially hazardous conditions are identified in the work area and operations (e.g., hazard analysis, safety assessment, risk assessment and employee identified concerns).

i. A description of how the Contractor assures potentially hazardous conditions are controlled in the work area or in an operation. This can include the generation of plans, procedures, and other working documents that clearly identify the hazardous conditions and the necessary cautions taken to mitigate the hazards.

j. A description of how the Contractor assures: (1) the procurement, storage, issuance, and use of hazardous chemicals and materials and (2) the recycling and disposal of any hazardous waste generated under this Contract.

k. A description of the Contractor's emergency management program and a list of Contractor emergency points of contact located onsite.

l. A description of how the Contractor assures all mishaps and close calls are investigated to the extent necessary to determine root cause and such analyses are documented and reported to the COTR.

m. A description of how Contractor employees are trained and given the authority to suspend work where safety, health or environmental conditions warrant such action in accordance with 29 CFR 1903.

n. A description of how each Contractor employee is trained to: (1) recognize hazards, (2) avoid accidents, (3) know the hazards specific to their job, and (4) fully understand the Contractor's disciplinary program in accordance with 29 CFR Part 1903.

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3

15.5 **MAINTENANCE**: Changes shall be incorporated by change page or complete reissue.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: IT-01
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/2

6. **TITLE**: Agency Cellular Seat Detail Report

7. **DESCRIPTION/USE**: To provide a record of the beginning and ending date and time of all telephone calls in electronic format.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** One (1) month after the Contract implementation date for Wave 1

12. **SUBMISSION FREQUENCY**: Monthly, on the tenth (10^{th}) business day of the month

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 5.2

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: Call detail records associated with a particular call shall be maintained on-line and downloaded monthly to CDROM for further separation and processing.

This information shall be maintained in such a way as to provide all inbound and outbound call details. Data file format shall be provided to authorized personnel.

Call detail records shall be handled in accordance with established Privacy Act regulations. Records shall be retained in accordance with NASA General Records Schedule and NASA NPR 1441.1*x* and any Center-specific guidelines pertaining to release of such information.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The following fields of the Call Detail Records shall be required for all calls and separated by Carrier for each Center. This information shall be maintained by the Contractor and made available to personnel as authorized by the ACES COTR:

a. Name assigned to the PCELL or Smartphone seat
b. Originating phone number
c. Terminating (Destination) phone number (up to 15 digits)
d. Destination number type (domestic, international, or unknown)
e. Length of Call (minutes: seconds)
f. Time of call (hour: minutes)
g. Month/day/year of call
h. City, State, Country Called
i. Organization Code assigned to the Calling Number
j. Date/Time Period covered by Report
k. Center Total Pooled Minutes
l. Center Total Used Minutes
m. Center Total Unused Minutes
n. Center Total Video Streaming usage
o. Center Total Multimedia messaging usage
p. Center Total Text messaging usage
q. Agency Total used minutes sorted by domestic, international, or unknown
r. Agency Total pooled minutes
s. Agency total Video Streaming usage

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD Continuation Sheet

TITLE: Agency Cellular Seat Detail Report **DRD NO.**: IT-01
DATA TYPE: 3 **PAGE**: 2/2

15.3 **CONTENTS (CONTINUED)**:

t. Agency total Multimedia messaging usage
u. Agency total Text messaging usage

15.4 **FORMAT**: The Contractor shall provide all call detail records of all incoming and outbound calls electronically and via Web-based reporting tool (e.g. SharePoint site).

15.5 **MAINTENANCE**: None required.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: IT-02
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: Toner and Waste Disposal Plan
7. **DESCRIPTION/USE:** To describe how used toner and equipment parts from Network Printer seats and MFD seats will be disposed of by the Contractor**.**
8. **OPR**: XD030 9. **DM**: XD030
10. **DISTRIBUTION**: Per Contracting Officer's letter
11. **INITIAL SUBMISSION:** Thirty (30) days after Contract implementation date for Wave 1
12. **SUBMISSION FREQUENCY**: One time, revise as required
13. **REMARKS**: NASA Center waste disposal sites are not available to the Contractor as disposal locations.
14. **INTERRELATIONSHIP**: Performance Work Statement, Section 2.5
15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Plan describes the Contractor's processes for disposal of used toner and equipment parts.

15.2 **APPLICABLE DOCUMENTS**:
NPD 8500.1*x* *NASA Environmental Management*

15.3 **CONTENTS**: The Toner and Waste Disposal Plan shall meet the requirements of Executive Order 13101, dated September 14, 1998, *Greening the Government through Waste Prevention, Recycling and Federal Acquisition*. This information shall be current, updated, and maintained by the Contractor. The Plan shall include, at a minimum:

a. Points of contact.
b. Pick up locations by Center.
c. Processes for handling of toner and equipment parts.
d. Recycling locations, including manufacturer, address, and telephone number.

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: IT-03
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: Lost, Damaged, and Stolen Property Report

7. **DESCRIPTION/USE:** To monitor and reconcile property owned and managed by the Contractor, including Contractor-owned assets that are lost, stolen, or damaged.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** One (1) month after Contract implementation date for Wave 1

12. **SUBMISSION FREQUENCY**: Monthly, on the 10th business day the month. For loss or theft of equipment, the ACES CTM or designee will receive immediate (within two (2) hours) verbal notification at time of incident discovery. After verbal notification of loss or theft, an interim written report will be provided within twenty-four (24) hours of incident discovery to the ACES CTM or designee.

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Section I, 2.11 and 5.9

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Contractor shall develop and maintain records to substantiate both the nature of property losses and reimbursement costs, and to document Contractor-owned assets brought on-site and disposed for Stevenson-Wydler Act activities.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The Contractor shall report Lost, Damaged, and Stolen Property data for each Center separately, including the following, in a single, complete submission:
Contractor-provided assets provided to the Government in performance of this Contract that are lost, stolen, damaged, or destroyed, including, but not limited to:

a. Identification of the item by description and inventory number
b. Name of the employee to whom the equipment was assigned
c. Center-specific organization to which equipment was assigned
d. Date of the event
e. Nature of loss (loss, theft, damage, or destruction)
f. Brief explanation of what happened/where/how it was lost or damaged
g. Value of loss/theft/damage/destruction
h. Current liability (cumulative by month and yearly)
i. Summary showing total Asset Value of loss/theft/damage/destruction (sorted by type of asset)
j. Summary of current liability (sorted by type of asset)

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3.

15.3 **MAINTENANCE**: None required.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: IT-04
3. **DATA TYPE**: 1
4. **DATE REVISED**:
5. **PAGE**: 1/1

6. **TITLE**: Technology Refresh Plan

7. **DESCRIPTION/USE**: To describe how ACES Computing seats, Cellular seats, and Network Peripheral seats will be refreshed throughout the life of the Contract.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** On the Contract implementation date for each Wave

12. **SUBMISSION FREQUENCY**: Quarterly

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 3.5

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The Contractor shall detail in their plan how technology refreshes for Computing seats, Cellular seats, and Network Peripheral seats will adhere to the refresh schedules specified in the PWS and be implemented across the Agency.

15.2 **APPLICABLE DOCUMENTS**:

NASA-STD-2804*x*	*Minimum Interoperability Software*
NASA-STD-2805*x*	*Minimum Hardware Configurations*
NPR 2810.1*x*	*Security of Information Technology*

15.3 **CONTENTS**: The Contractor's Technology Refresh Plan shall provide the following:
The refresh activities, respective calendar dates, and a scheduled technology refresh period for Computing seats, Cellular seats, and Network Peripheral seats by Center, to cover the next six (6) months of technology refreshes. This includes:

a. The percentage of and schedule for systems to be refreshed until the next scheduled submission of this DRD.
b. A list of ACES seats due for refresh by Center, to include:
   i. User name.
   ii. Organizational code.
   iii. Building and room number.
   iv. ACES tag number.
   v. Hardware platform.
   vi. Service Level Agreements (SLAs) associated with seat.
   vii. Operating system platform (if applicable).
   viii. Software for the seat purchased from the ACES Product Catalog (APC) or transitioned from the ODIN contract.
   ix. Peripherals for the seat purchased from the APC or transitioned from the ODIN contract.
   x. Any Computer/Electronic Accommodations Program (CAP) items associated with the seat.
   xi. A list of technology refreshes actually completed by Center.
   xii. A list of end-users requesting a deferment by Center.
   xiii. A list of outstanding deferments including status and impact, if any.

15.4 **FORMAT**: Contractor format is acceptable following guidelines in 15.3. However, a more suitable format as required by the Government may be submitted after initiation of the project.

15.5 **MAINTENANCE**: None.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: IT-05
3. **DATA TYPE**: 1
4. **DATE REVISED**:
5. **PAGE**: 1/2

6. **TITLE**: Continuity of Operations Plan (COOP)

7. **DESCRIPTION/USE**: To support NASA's comprehensive COOP program for ensuring the continuity of essential operations under all emergency circumstances in those areas under the scope and responsibilities of the ACES Contractor

8. **OPR**: XB000 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** Sixty (60) days after the Contract implementation date for Wave 1

12. **SUBMISSION FREQUENCY**: Annually

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 4.5.4

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The goal of COOP is to (1) ensure continuous performance of NASA's mission-essential operations and functions during an emergency situation; (2) protect mission-essential NASA facilities, equipment, vital records, and other assets; (3) reduce or mitigate disruptions to mission-essential operations; (4) reduce loss of life; (5) minimize damage and losses; and (6) resume full, normal essential operations to our customers through a timely and orderly recovery from an emergency.

15.2 **APPLICABLE DOCUMENTS**:

NPD 1040.4	*NASA Continuity Of Operations*
NPR 1040.1	*NASA Continuity Of Operations Planning Procedural Requirments*
NPD 8710.1	*Emergency Preparedness Program*
EO 12656	*Assignment of Emergency Preparedness Responsibilities*
PDD 63	*Critical Infrastructure Protection*
PDD 67	*Enduring Constitutional Government and Continuity of Government Operations*

15.3 **CONTENTS**: The COOP plan shall include (as pertains to the ACES scope and responsibilities):

a. Delineated mission-essential operations and functions.
b. Risk management approach.
c. Order of succession for key leadership positions.
d. Identified minimal communications capabilities required to support COOP.
e. Identified essential and vital records and databases required to support essential operations and functions, and steps for protecting them as well as procedures for backup, storage, recycling, and retrieval.
f. Decision process for determining appropriate actions in implementing COOP procedures.
g. Roster of fully equipped and trained continuity team personnel with the authority to perform mission-essential operations and functions, and procedures for training these personnel on an annual basis in the roles to be performed under COOP implementation.
h. Plans and procedures for employee advisories, alerts, and COOP activation, with instructions for relocation to predesignated facilities, with or without warning, during duty and nonduty hours.
i. Plans and procedures for ensuring personnel accountability and safety throughout the duration of the emergency.
j. Plans and procedures for attaining functional capability, within 12 hours.
k. Processes and procedures to acquire the resources necessary to continue mission-critical essential operations and sustain mission-essential operations for a minimum of 30 days.
l. Processes and procedures to identify and transition to alternate operational locations if the need arises.

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD Continuation Sheet

TITLE: Continuity of Operations Plan (COOP) **DRD NO.**: IT-05
DATA TYPE: 1 **PAGE**: 2/2

15.3 **CONTENTS (CONTINUED)**:

m. Process to integrate existing emergency preparedness and IT security plans to ensure consistency in overall emergency preparedness program approaches.

n. Process to provide for annual exercises or tests to ensure viability.

15.4 **FORMAT**: Contractor format is acceptable.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: IT-06
3. **DATA TYPE**: 1
4. **DATE REVISED**:
5. **PAGE**: 1/2

6. **TITLE**: Asset Transition Value Report

7. **DESCRIPTION/USE**: Identifies residual asset transition values for all seats purchased under the Contract.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** Ninety (90) days after Contract implementation date for Wave 1

12. **SUBMISSION FREQUENCY**: Annually and as requested (no more than two times per year)

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Section I, 4.5

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: Identifies residual asset transition values for all seats purchased under the Contract.

15.2 **APPLICABLE DOCUMENTS**: None

15.3 **CONTENTS**: The Contractor shall report property data for each Center separately, including the following, in a single, complete submission:

Asset Transition Value (ATV): The ATV applies to Contractor assets used in the performance of providing ACES seat services and may include hardware, software, contracted or prepaid maintenance or services contracts. The ATV includes items leased, owned, or otherwise acquired by the Contractor without reimbursement from the Government. The ATV does not include any Government-furnished or institutionally provided property or equipment, any infrastructure items (for which title resides with the Government), and any ACES Product Catalog (APC) products and services (except where otherwise bilaterally agreed upon).

The ATV Report applies to all seat categories of ACES services. In preparing the ATV, the attached table identifies specific items that shall be considered, but is not all-inclusive. The ATV Report shall contain descriptions and quantities of all hardware and software (desktop and diagnostic), all infrastructure hardware and software components, and any other assets used to provide ACES services.

Hardware items are to be separately listed in the report with a unique identification number (such as a serial number or an ACES property number). For items that have no unique identification number, the Contractor shall provide a means of identification for listing them in the report.

For assets that use the initial purchase price as the basis for calculating the ATV, the report shall include the following information for each item: Item Name, Item Seat Type, Item Description, Unique ID Number, Purchase Date, Initial Purchase Price, and Projected Undepreciated Value. For identical items purchased at the same time and price, the ATV may bundle these into one listing. The specific content and format of the ATV Report will be bilaterally agreed upon within the negotiation. In addition, the Report shall provide a separate listing of APC items, but the values of these items are not to be included in the ATV. The asset transition value of APC items shall be included in the APC price of the item (except where otherwise bilaterally agreed upon).

The report shall identify Contractor-provided assets provided to the Government in performance of this, including, but not limited to the following data:

a. Identification of the item by description and inventory number
b. Name of the employee to whom the equipment was assigned
c. Center-specific organization to which equipment was assigned

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD Continuation Sheet

TITLE: Asset Transition Value Report **DRD NO.**: IT-06
DATA TYPE: 1 **PAGE**: 2/2

15.3 **CONTENTS (CONTINUED)**:

d. Date of deployment
e. Purchase value
f. Purchase value of asset – depreciation value
g. Summary showing total purchase value (sorted by type of asset)
h. Summary purchase value of asset – depreciation value (sorted by type of asset)

15.4 **FORMAT**: Submitted electronically in Microsoft Excel format. The report shall also be accessible from the Contractor's Web site.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: IT-07
3. **DATA TYPE**: 2
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: Vendor Product Performance Specifications

7. **DESCRIPTION/USE**: Demonstrates that all Contractor-proposed ACES seats meet either:
   - The NASA-STD-2805*x* Performance Characteristic Minimum Value for each NASA-STD-2805*x* Performance Characteristic; or,
   - The PWS Addendum 3 Performance Characteristic Minimum Value for each item to be defined.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION:** Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** With the proposal

12. **SUBMISSION FREQUENCY**: Within one (1) month of the each baseline release of NASA-STD-2805*x*, or every six (6) months, whichever is first.

13. **REMARKS**: The Contractor shall collect seat performance specifications from both NASA-STD-2805*x* and PWS Addendum 3. If a conflict exists between seat information contained in both NASA-STD-2805*x* and Addendum 3, NASA-STD-2805*x* shall be considered the authoritative source of seat information.

    The Government will migrate Addendum 3 seat performance specifications to NASA-STD-2805*x* over time with the anticipation that NASA-STD-2805*x* will be the single authoritative source of ACES seat performance specifications.

14. **INTERRELATIONSHIP**: Performance Work Statement, Addendum 3

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: Identifies the Performance Specifications for all ACES seats (except as noted in Item 15.3 below) that the Contractor will deliver during the performance of the Contract.

15.2 **APPLICABLE DOCUMENTS**:
NASA-STD-2805*x* *Minimum Hardware Configurations*

15.3 **CONTENTS**: The following Performance Specifications information shall be required for each ACES seat (excluding the "B" Computing seat, "B" Cell Phone seat, "B" Smartphone seat, "T" Computing seat, and "M" Computing seat) provided through the Contract:
   a. Vendor Name.
   b. Product Name.
   c. Product Model Number.
   d. Product Description.
   e. NASA-STD-2805*x* (or PWS Addendum 3) Performance Characteristic (Ram, Disk Size, etc.).
   f. NASA-STD-2805*x* (or PWS Addendum 3) Performance Characteristic Minimum Value (4GB, 500 GB, etc.).
   g. Proposed Product Performance Specification Minimum Value.

15.4 **FORMAT**: Subsequent to initial submission with the proposal, the Contractor shall submit a format, for Government approval, that is compatible with NASA-STD-2805*x* and PWS Addendum 3 and meets the guidelines in 15.3.

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue if new ACES seats are added to the scope of the Contract or if new data is used to identify performance specifications for any ACES seat. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: IT-08
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: Agency Network Peripheral Seats Detail Report

7. **DESCRIPTION/USE**: Identifies Network Peripheral seats utilization data to monitor and administer Network Peripheral performance, location, volume band usage statistics and analysis, fleet management, history, service report, and equipment down-time in support of volume band utilization, verification and billing.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** One (1) month after the Contract implementation date for Wave 1

12. **SUBMISSION FREQUENCY**: Daily for fleet management data; monthly on the tenth (10^{th}) business day of the month for the other data elements

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 5.4

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The data shall consist of detail records associated with a particular Network Peripheral seat including data history, maintenance history, and usage history to include meter reads of all print, copy, scan, and fax outputs. The customer should be able to request a range of data by calendar period from date to date. This information shall be maintained in such a way as to provide all information related to a specified Center. The COTR and CO shall have access to all Centers' information.

15.2 **APPLICABLE DOCUMENTS**: None.

15.3 **CONTENTS**: The following fields of the Network Peripheral Seats Detail Report shall be required for all Network Peripheral seats. This information shall be maintained by the Contractor and made available to personnel as authorized by the ACES COTR:

a. Name assigned to the Network Peripheral seat.
b. Equipment location by Center, building, and room.
c. Equipment serial number and Model type.
d. Type of incident (e.g., jam, print, scan, fax, network, toner, supply, and equipment failure).
e. Date and time of incident.
f. Date and time of repair.
g. Total down time for each machine by business hours (or part of an hour).
h. Summary description of incident.
i. Summary of equipment down time (business hours) per month.
j. Summary meter read number by Network Peripheral of each category: Print (copies made), Copy (copies made), Scan (pages scanned), and Fax (outbound faxed pages sent).
k. Center Total Pooled B&W impressions.
l. Center Total Pooled Color impressions.
m. Center Total Unused B&W impressions.
n. Center Total Unused Color impressions.
o. Agency Total Pooled B&W impressions.
p. Agency Total Pooled Color impressions.
q. Agency Total Unused B&W impressions.
r. Agency Total Unused Color impressions.

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD Continuation Sheet

TITLE: Agency Network Peripheral Seats Detail Report **DRD NO.**: IT-08
DATA TYPE: 3 **PAGE**: 2/2

15. **DATA PREPARATION INFORMATION (CONTINUED)**:

15.4 **FORMAT**: The Contractor shall provide all detail records of Network Peripheral operations information electronically and via the Contractor's Web-based reporting tool (e.g. SharePoint site).

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: IT-09
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/1
6. **TITLE**: Data Backup and Restore Services Report

7. **DESCRIPTION/USE**: Provides a summary report to the Government that describes the success and failure of the end-users' data backup and restore services. Demonstrate the effectiveness and consistency of the Contractor's planning and execution of backup and recovery solutions.

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** One (1) month after the Contract implementation date for Wave 1

12. **SUBMISSION FREQUENCY**: Monthly on the fifth (5^{th}) business day of the month

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 5.1.6.3.11

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**: The report shall consist of detailed information pertaining to the success or failure of the end-user's data backup and restore, open file restores for end-users, and data loss.

15.2 **APPLICABLE DOCUMENTS**: None.

15.3 **CONTENTS**: The following fields of the Data Backup and Restore Services report shall be required for all ACES seat services (at the user level):

a. Summary of successful backups.
b. Summary of partial backups.
c. Summary of unsuccessful backups.
d. Summary of successful restores.
e Summary of unsuccessful restores.
f. Summary of successful backup and restore validations.
g. Summary of unsuccessful backup and restore validations.
h. Summary of backup and restore problem resolutions.

15.4 **FORMAT**: The Contractor shall provide this report electronically and via the Contractor's Web-based reporting tool (e.g. SharePoint site).

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

DATA REQUIREMENTS DESCRIPTION (DRD)

1. **DPD NO.**: N/A **ISSUE**: Final RFP
2. **DRD NO.**: IT-10
3. **DATA TYPE**: 3
4. **DATE REVISED**:
5. **PAGE**: 1/3
6. **TITLE**: NOMAD Services Reports

7. **DESCRIPTION/USE**: To ensure compliance with NOMAD Service Level Agreements (SLAs) and enable Center Postmasters to manage the Center use of NOMAD resources. The following reports are included:
   a. Exchange Mailbox Report
   b. Exchange Summary Report
   c. Exchange Distribution List (DL) and Dynamic DL Report
   d. NOMAD Availability Report
   e. NASA Post Forwarder Report
   f. OneNASA Translation Database Update Report
   g. Anti-Virus/Spam Processing Report
   h. Large File Transfer System Report

8. **OPR**: XD030 9. **DM**: XD042

10. **DISTRIBUTION**: Per Contracting Officer's letter

11. **INITIAL SUBMISSION:** One (1) month after the Contract implementation date for Wave 1

12. **SUBMISSION FREQUENCY**: Daily, weekly on the first (1^{st}) business day of the week, and monthly on the fifth (5^{th}) business day of the month as detailed below:
   a. Exchange Mailbox Report (Weekly)
   b. Exchange Summary Report (Monthly)
   c. Exchange DL and Dynamic DL Report (Weekly)
   d. NOMAD Availability Report (Monthly)
   e. NASA Post Forwarder Report (Daily)
   f. OneNASA Translation Database Update Report (up to 3/Workday)
   g. Anti-Virus/Spam Processing Report (Daily)
   h. Large File Transfer System Report (Weekly)

13. **REMARKS**:

14. **INTERRELATIONSHIP**: Performance Work Statement, Section 4.1

15. **DATA PREPARATION INFORMATION**:

15.1 **SCOPE**:
   a. The Exchange Mailbox Report shall contain detailed information about each user and resource mailbox.
   b. The Exchange Summary Report shall contain a historical monthly snapshot of the total number of users, resources, DLs, BlackBerry accounts, and ActiveSync enabled mailboxes, along with Center views of all accounts, including mailbox sizes and quotas.
   c. The Exchange DL and Dynamic DL Report provides detailed information about each DL.
   d. The NOMAD Availability Report provides availability statistics on all NOMAD systems during the reporting period.
   e. The NASA Post Forwarder Report provides message routing details of all incoming and outgoing messages for the Agency.
   f. The OneNASA Translation Database Update Report provides synchronization status between the NASA Enterprise Directory (NED) and the NASA Post Forwarder subsystem.
   g. The Anti-Virus/Spam Processing Report provides message action details on all incoming and outgoing messages.
   h. The Large File Transfer System Report provides system usages details on all uploaded and downloaded files

15.2 **APPLICABLE DOCUMENTS**: NOMAD System Description Document.

RELEASED - Printed documents may be obsolete; validate prior to use.

15.3 **CONTENTS (CONTINUED)**:

a. Exchange Mailbox Report:
   i. Display Name
   ii. Account Name (e.g., ndc\jqpublic)
   iii. Mailbox Name (e.g. john.q.public@mail.nasa.gov)
   iv. Last Logon Time
   v. Last Logoff Time
   vi. Mailbox Size
   vii. Mailbox Limit
   viii. Storage Limit Status (e.g., below, issue warning, prohibit send)
   ix. BES Status
   x. ActiveSync Status

b. Exchange Summary Report – The Contractor shall provide the following by Agency and by Center. The report shall include the previous twelve (12) months of data:
   i. Total Number of Users
   ii. Total Number of Resources
   iii. Total DLs
   iv. Total BES accounts
   v. Total ActiveSync Policy accounts

c. Exchange Distribution List (DL) and Dynamic DL Report:
   i. Display Name
   ii. Type (group or dynamic)
   iii. E-Mail Address
   iv. Target Address
   v. Owner
   vi. Center

d. NOMAD Availability Report – The Contractor shall provide the following availability data on each NOMAD system for the reporting period:
   i. Total Users—Average total number of users
   ii. Impacted Users—Number of users impacted for each outage (multiple fields)
   iii. Outage Minutes—Number of minutes for each outage
   iv. Impact Minutes—(sum of Impacted Users * Outage Minutes for each outage)
   v. Period Minutes—Number of minutes in the period
   vi. Activity Minutes—Total scheduled activity minutes
   vii. Total Minutes—((Period Minutes-Activity Minutes) * Total Users)
   viii. Availability—% (1- (Impact Minutes/Total minutes))

e. NASA Post Forwarder Report:
   i. Total messages received, delivered, deferred, bounced, and rejected by hour and day
   ii. Total bytes received and delivered by hour and day
   iii. Total number and total size of messages and size delivered by host/domain
   iv. Total number and total size of messages received by host/domain
   v. Top twenty (20) senders by message count
   vi. Top twenty (20) recipients by message count
   vii. Top twenty (20) senders by aggregate message size
   viii. Top twenty (20) recipients by aggregate message size

f. OneNASA Translation Database Update Report
   i. Pass/Fail status of update operation

g. Anti-Virus/Spam Processing Report – Daily Chart and hourly table of the following:
   i. Message Disposition (e.g., Delivered, Deferred, Discarded, and Bounced)
   ii. Quarantine Action (e.g., Release, Delete, and Report as Not Spam)
   iii. Top twenty (20) Attachment Types
   iv. Attachment Volume/Size Trends

RELEASED - Printed documents may be obsolete; validate prior to use.

DRD Continuation Sheet

TITLE: NOMAD Services Reports **DRD NO.**: IT-10
DATA TYPE: 3 **PAGE**: 3/3

15.3 **CONTENTS (CONTINUED)**:

v. Top Actions (e.g., Add-Header, Discard, Quarantine, and Reject)
vi. Top Reasons Message Quarantined
vii. Connection Volume
viii. Message Size
ix. Message Volume
x. Top twenty (20) Virus Recipients
xi. Top twenty (20) Virus Senders
xii. Top twenty (20) Virus Types
xiii. Top twenty (20) Spam Recipients
xiv. Top twenty (20) Spam Senders
xv. Top twenty (20) Message Recipients
xvi. Top twenty (20) Sending Hosts
xvii. Top twenty (20) Sender Addresses
xviii. Message Throughput
xix. Dashboard Summary of the Above

h. Large File Transfer System Report—Weekly chart and daily table of the following:
   i. Number of files uploaded
   ii. Number of files downloaded
   iii. Average size of files uploaded
   iv. Total storage usage
   v. Total bandwidth usage
   vi. Number of active users

15.4 **FORMAT**: The Contractor shall provide the following reports in Excel format and posted to the Contractor's Web-based reporting tool (e.g., SharePoint site) accessible by the Government:

a. Exchange Mailbox Report
b. Exchange Summary Report
c. Exchange DL and Dynamic DL Report
d. NOMAD Availability Report

The Contractor shall provide the following reports via e-mail to a NASA-provided DL:

e. NASA Post Forwarder Report
f. OneNASA Translation Database Update Report
g. Anti-Virus/Spam Processing Report
h. Large File Transfer System Report

15.5 **MAINTENANCE**: Changes shall be incorporated by complete reissue. Update as required to maintain current with program changes.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-3
RETAINAGE POOLS AND PERFORMANCE METRICS

TABLE OF CONTENTS

RELEASED - Printed documents may be obsolete; validate prior to use.

1.0 RETAINAGE POOLS

To ensure maximum performance efficiency of the Contract, the Government will maintain, at the Agency level, a retainage pool equal to twelve (12) percent from the total monthly price payable to the Contractor. (The 12 percent is not retained on a monthly basis.) These funds will be set aside in three different Agency pools that contain the critical service levels. The three pools are: the Metrics Retainage Pool (MRP), the Performance Retainage Pool (PRP), and the Small Business Utilization Pool (SBUP). The MRP is further divided into seven areas. The award determination of any retainage pool by the Agency CIO or designee is final (i.e. non-contestable).

1.1 Metric Retainage Pool

An Agency Metric Retainage Pool (MRP) will be established for the Contract. The MRP will be comprised of eight (8) percent of the total monthly costs allocated between seven individual areas: (1) Service Delivery, (2) Service Availability Non-Base Services, (3) Service Availability Base Services, (4) Customer Satisfaction, (5) Security Management Services, (6) Incident Management, and (7) Asset Management Effectiveness. Allocation of the 8-percent MRP is identified in Table 1-1, *ACES Critical Service Level Metrics*.

The MRP will be calculated monthly in accordance with the schedule outlined in RFP Section I, 2.9, *Retainage Pools and Performance Metrics.* During the first four (4) months after the Contract implementation date for Wave 1 (see Attachment I-14, *Phase-in Schedule*), the MRP will not be applied. However, metrics performance against the Performance Standards (see Table 1-1) will be a factor in determining the initial PRP award. Subsequently, the Contractor shall meet the Performance Standards for award of the MRP.

The MRP disbursement will be determined by the Contractor achieving the Performance Standard for the individual areas at each of the Centers. If the Contractor fails to meet the Performance Standard of an individual area at any Center, the Contractor is ineligible to receive the total percentage of MRP associated with that individual area. Failure to meet an individual area, however, does not preclude the Contractor from receiving the remaining MRP percentage associated with the other individual areas. If the Contractor fails to meet the Performance Standard for three consecutive months in a particular area, the Contractor shall be assessed an additional fifty (50) percent retainage in that area. For example, if the Service Delivery area is missed for (three) 3 consecutive months, the retained percentage is increased from (two) 2 percent to (three) 3 percent. The Contractor shall develop and implement an ACES Corrective Action Plan (ACAP) to correct the performance deficiencies. Once the Contractor has entered into the ACAP phase, the Contractor's performance towards mitigating the service deficiencies will be measured. If the Contractor has successfully mitigated all performance deficiencies during the (two) 2-month ACAP period, the additional retainage pool will be ceased for the upcoming period. If the Contractor does not mitigate the performance deficiencies during the ACAP phase, an additional (two) 2 months of the increased retainage percentage will continue until the mitigations have been successfully implemented and sustained during the ACAP phase.

RELEASED - Printed documents may be obsolete; validate prior to use.

1.2 Performance Retainage Pool

An Agency Performance Retainage Pool (PRP) will be established for the Contract. The PRP will be comprised of three (3) percent of the total monthly costs based on overall Contractor performance with emphasis on two individual areas: (1) Relationship and Contract Management and (2) Problem Management.

The PRP will also help ensure Contractor coordination and collaboration with the Government, the EAST, NEDC, NICS, WEST, and ESD Contractors, and other contractors to achieve the cross-functional integration requirements of ACES. The PRP will be calculated semi-annually after the Contract implementation date for Wave 1 (see Attachment I-14, *Phase-in Schedule*). The PRP award disbursement will be made on a discretionary basis (e.g., on an all, partial, or none basis).

1.3 Retainage Pool Retention Process

On a monthly basis, the Contractor shall invoice for the services provided. Payment will be made in accordance with the payment terms specified in FAR 52.212-4 (i), *Payment*. Once a retainage determination (either the MRP for that month, the PRP for the previous six (6) months, or the SBUP for the previous year) has been made, if there is an amount to be retained due to performance failure from one or more of the pools, that amount will be deducted from the Contractor's full invoice for the following month after the retainage determination has been made.

Also, for the ACAP stemming from the MRP, if the Contractor fails to correct the performance deficiencies, the amount of the previous three (3) months of increased retainage pool withheld will be deducted from the Contractor's full invoice amount for the following month.

1.4 Small Business Utilization Pool

An Agency Small Business Utilization Pool (SBUP) will be established for the Contract. The SBUP will be comprised of one (1) percent of the total monthly costs. This fund will be retained by the Government and will be used to evaluate the Contractor's ability to meet its small business goals. The SBUP will be available for disbursement annually after the Contract implementation date for Wave 1 (see Attachment I-14, *Phase-in Schedule*).

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1-1. ACES Critical Service Level Metrics

Critical Service Level Metrics	Performance Standard	Retainage
Metrics Retainage Pool (MRP)		**8.00%**
Service Delivery	96.00%	2.00%
Service Availability Non-Base Services	98.00%	0.50%
Service Availability Base Services	99.95%	0.50%
Customer Satisfaction	94.00%	1.50%
Incident Management	All four (4) targets met	1.50%
Security Management Services	All seven (7) targets met	1.50%
Service Asset and Configuration Management	98.50%	0.50%
Performance Retainage Pool (PRP)		**3.00%**
Relationship and Contract Management		discretionary
Problem Management		discretionary
Small Business Utilization Pool (SBUP)		**1.00%**
Ability to meet subcontracting goals in the Contractor's approved Subcontracting Plan	100.00%	1.00%
Total Standard Metrics Retainage Pool		**12.00%**

2.0 METRICS AND SERVICE LEVEL AGREEMENTS

The Contractor shall meet or exceed the metrics and Service Level Agreements (SLAs) specified in Sections 2.1 through 2.3.

2.1 MRP Metrics and SLAs

The Contractor shall calculate and report metrics for all functional service areas including: computing, cellular, pagers, network peripherals, virtual team services, e-mail and collaborative calendaring, instant messaging, active directory, ACES Product Catalog (APC), Tier 2 service support, and security management services.

2.1.1 Service Delivery

This metric measures the Contractor's effectiveness in providing services within the Contract-required timeframes.

Table 2.1.1-1. Service Delivery Metric

Service Delivery Metric	
Definition	The percentage of customer requests successfully resolved by the Contractor in accordance with the SLA.
Time Applicability	During principal period of performance.
Expectation	Successfully complete all customer requests for all functional areas identified in Attachment I-3, Section 2.1.1, in accordance with SLAs.
Performance Standard	96.00%. See Table 2.1.1-2, *Service Delivery Metric SLA Targets*.

RELEASED - Printed documents may be obsolete; validate prior to use.

Service Delivery Metric	
Measurement Method and Data Sources	As reported through the Enterprise Service Request System (ESRS), as verified by Attachment I-20, *Surveillance Plan*.
Performance Measurement Window	Monthly
Calculation Formula	Number of service requests successfully completed (within SLA) for all Service Delivery SLAs / Number of service requests for all Service Delivery SLAs
Incentives/Disincentives	If Contractor has not met the Service Delivery Metric, then no metric fee shall be awarded for that element. If any metric is missed for 3 consecutive periods, the ACAP phase shall be initiated.
Exceptions and Exclusions	Requests for waivers for time delays outside of Contractor control shall be submitted to the ACES COTR or designees for approval.

Table 2.1.1-2. Service Delivery Metric SLA Targets

Service Delivery Metric SLA Targets Note: SLAs are < = unless otherwise indicated				
SLA Target No.	**PWS Section**	**PWS Section Title**	**SLA Description**	**SLA**
SD-1	2.3	Service Asset and Configuration Management	Time to sanitize devices of all data, after pickup	= 30 cal. days
SD-2	2.3.2.1	Scheduled Outages	Time to notify affected end-users of scheduled outages, in advance	3 bus. days
SD-3	2.5	Safety, Health, and Environmental Management	Submit mishaps and safety statistics reports to NASA Incident Reporting Information System (IRIS) or use Center-specific forms provided by each Center and facility's Safety and Mission Assurance Directorate/Office, or their electronic equivalent	24 hours after occurrence
SD-4	3.1	Tier 2/3 Service Desk Support	Time to respond to an Incident, after ticket for a seat subscribed to 2-business-hour Return to Service received	30 min.
SD-5	3.1	Tier 2/3 Service Desk Support	Time to respond to an Incident, after ticket for a seat subscribed to 8-business-hour Return to Service received	2 hrs.
SD-6	3.1	Tier 2/3 Service Desk Support	Time to supply temporary replacement ACES seat for out-of-service repairs or security mitigation for either IT security Incidents or to support audits, after end-user verbal request	1 hr.
SD-7	3.1.1	Priority Service Support	Time to respond to an Incident, after critical uplift ticket received	15 min.
SD-8	3.3	ACES Product Catalog (APC) Services	Time to deliver ACES Product Catalog (APC) items, after approved order received	5 cal. days
SD-9	3.3	ACES Product Catalog (APC) Services	Time to respond to a request for quote, including price and delivery date, after request received	2 bus. days
SD-10	3.4	Software Right To Use	Availability of take home software, after request received	1 bus. day
SD-11	3.5	Technology Refresh	Time to complete hardware technology refresh	Scheduled date

RELEASED - Printed documents may be obsolete; validate prior to use.

Service Delivery Metric SLA Targets Note: SLAs are < = unless otherwise indicated				
SLA Target No.	**PWS Section**	**PWS Section Title**	**SLA Description**	**SLA**
SD-12	3.5	Technology Refresh	Time to return to service after start of a hardware technology refresh	4 hrs.
SD-13	3.9	Temporary Seats	Time to deliver temporary seat <= 10	2 bus. days
SD-14	3.9	Temporary Seats	Time to deliver temporary seat > 10	Negotiated*
SD-15	3.17	Other General Services	Time to request ACES Center Technical Monitor (CTM) authorization to proceed with a request for Service Delivery or Incident Management during Non-Prime Time hours, after service request received	30 min.
SD-16	3.17	Other General Services	Time to initiate work on a request for Service Delivery or Incident Management during Non-Prime Time hours, after ACES CTM authorization	2 hrs.
SD-17	3.19	Response to Information and Audit Requests	Time to provide requested data in response to Freedom of Information Act (FOIA) requests and requests from the NASA Office of Inspector General (OIG) and other official sources	20 bus. days
SD-18	4.1.1; 4.1.2.1	Current NOMAD Service; General Requirements	Time to delete e-mail accounts after notification from NAMS	= 30 cal. days
SD-19	4.1.1	Current NOMAD Service	Time to create distribution list	2 bus. days
SD-20	4.1.1; 4.1.3	Current NOMAD Service; Response to E-mail Information and Audit Requests	Time to provide requested data for specific end-user mailboxes or complete activity in response to IT Security requests or IT security or safety Incidents (unless altered by the ACES LTM)	48 hrs.
SD-21	4.2	Active Directory Services	Time to provision Active Directory (AD) accounts	2 bus. days
SD-22	4.2	Active Directory Services	Time to deprovision AD accounts	30 bus. days
SD-23	4.3.1	Loaner Pick-up and Drop-off	Time to make a loaner seat available for pick-up, after ticket received	4 bus. hrs.
SD-24	4.4	Print Queue Infrastructure Management	Time to create print queues	8 bus. hrs.
SD-25	4.4	Print Queue Infrastructure Management	Time to clear print jobs that become held in the queue, after notification from ESD	15 min.
SD-26	4.6	Software License Management	Time to install all commercially released updates/upgrades and patches, after Agency ACES CCB approval	Scheduled date
SD-27	4.6	Software License Management	Time to update software license management documentation, after update/upgrade installation completed	2 bus. days
SD-28	5.0	Seat Services	Time to complete IMAC if <= 5, after service request approved	2 bus. days
SD-29	5.0	Seat Services	Time to complete IMAC if 6-24, after service request approved	5 bus. days

RELEASED - Printed documents may be obsolete; validate prior to use.

Service Delivery Metric SLA Targets Note: SLAs are < = unless otherwise indicated				
SLA Target No.	**PWS Section**	**PWS Section Title**	**SLA Description**	**SLA**
SD-30	5.0	Seat Services	Time to complete IMAC if 25-50, after service request approved	10 bus. days
SD-31	5.0	Seat Services	Time to complete IMAC if > 50, after service request approved	Negotiated*
SD-32	5.1.2	Requirements for All Computing Seats	Time to implement Standard Load changes on all Computing seats subscribed to the Standard Load Service Option, after the Standard Load change is approved	3 months
SD-33	5.1.2	Requirements for All Computing Seats	Provide upgrade of hardware platform on Computing seats when industry advances to Standard Load software require a hardware upgrade, after Agency ACES CCB approval	Begun within 90 days; completed within 6 months of start date
SD-34	5.1.3	"S" Computing Seat (Standard)	Time to deliver new "S" Computing seat, after service request approved	2 bus. days
SD-35	5.1.3; 5.1.4	"S" Computing Seat (Standard); "M" Computing Seat (Modifiable)	Time to deliver new "M" Computing seat, after service request approved, and time to deliver new "S" Computing seat with augmentation(s), after service request approved	5 bus. days
SD-36	5.1.5	"B" Computing Seat (Build as Required)	Time to deliver new "B" Computing seat, after service request approved	10 bus. days
SD-37	5.1.7	"T" Computing Seat (Thin Client)	Time to deliver new "T" Computing seat, after service request approved	2 bus. days
SD-38	5.2	Cellular Seats	Time to deliver new "S" Cellular seat, after service request approved	2 bus. days
SD-39	5.2	Cellular Seats	Time to deliver new "B" Cellular seat, after service request approved	3 bus. days
SD-40	5.2	Cellular Seats	Time to complete software technology refresh on Cellular seats	90 days after ACES COTR approval
SD-41	5.3	Pager Seat	Time to deliver new Pager seat, after service request approved	2 bus. days
SD-42	5.4	Network Peripheral Seats	Time to deliver new Network Peripheral seat, after service request approved	10 bus. days
SD-43	5.5	Virtual Team Service (VTS) Seat	Time to provision and deliver a new VTS account, after service request approved	2 bus. days
SD-44	Attachment I-2, *DPD*	Data Requirements Descriptions	Time to deliver DRD deliverables	As defined in DRDs
SD-45	4.8	Two-Factor User Authentication Service Distribution	Time to deliver new two-factor user authentication token to end-user, after service request approved	3 bus. days

*Negotiated – A mutually agreed upon time is established. Metric applies to this negotiated timeframe.

= Must be completed on that day.

RELEASED - Printed documents may be obsolete; validate prior to use.

2.1.2 Service Availability

This metric measures the Contractor's effectiveness in Service Availability, which is achieved when all the seats/services used by ACES end-users are fully operational and standard/normal service-recipient activities experience only pre-established interruption (e.g., scheduled outages). Availability is defined as the ability of a component or service to perform its required function at a stated instant or over a period of time. The Government will establish the period of downtime acceptable for both hardware- and software-related service instances.

Service Availability metrics are comprised of Non-Base Services and Base Services. A non-Base Services component affects only one end-user (e.g., a Smartphone device). A Base Services component has other services dependent upon it (e.g., a BlackBerry enterprise server).

If the ACES CTM defers any repair of a system that has failed, downtime shall be suspended, operational use time shall accrue for the entire period that the ACES CTM defers the repair, and no Performance Metrics relating to this failure shall be collected.

If the Contractor repairs a failed system or component and there is a second or subsequent Incident of the same failure within three (3) business days of the previous repair due to factors fully in the control of the Contractor, as determined by the ACES COTR, the system downtime shall accrue from the first Incident until a repair finally corrects the malfunction.

The Contractor shall record all scheduled and unscheduled outages attributed to the Contractor's scope of work, record the number of end-users affected by Base Services failures for each ACES service, and report these through the ACES service desk for later use in computing metrics.

Table 2.1.2-1. Service Availability Non-Base Services Metric

Service Availability Non-Base Services Metric	
Definition	The percentage of time any non-Base Services component of an ACES seat/system or service is working such that the end-user can utilize the ordered ACES-provided services. A seat/system or service is defined as unavailable from the time the ACES Contractor has received the Incident ticket until the time the Incident is closed.
Time Applicability	Prime Time hours
Expectation	The seats/systems and services are to be functional, accessible, and usable at all times.
Performance Standard	98.00%
Measurement Method and Data Sources	As reported through the Government Incident Management system, as verified by Attachment I-20, *Surveillance Plan*.
Performance Measurement Window	Monthly
Calculation Formula	[1 - [Total number of hours down during Prime Time hours across all seats / (Number of ACES seats * 12 * Number of business days in the month)]] * 100%
Incentives/Disincentives	If Contractor has not met the Service Availability Metric, then no metric fee will be awarded. If any metric is missed for 3 consecutive months, the ACAP phase will be initiated.

RELEASED - Printed documents may be obsolete; validate prior to use.

Service Availability Non-Base Services Metric	
Exceptions and Exclusions	Events not within the control of the Contractor will not be calculated as downtime. Any availability failure that is caused by the EAST, NEDC, NICS, WEST, and ESD Contractors or other contractors will not count for this metric.

Table 2.1.2-2. Service Availability Base Services Metric

Service Availability Base Services Metric	
Definition	The percentage of time ACES Base Services seats/systems and services are working such that the end-user can utilize the ordered ACES-provided services. A seat/system or service is defined as unavailable from the time the ACES Contractor has received the Incident ticket until the time the Incident is closed.
Time Applicability	24x365 minus scheduled down time
Expectation	The seats/systems and services are to be functional, accessible, and usable at all times.
Performance Standard	99.95%
Measurement Method and Data Sources	As reported through the Government Incident Management system, as verified by Attachment I-20, *Surveillance Plan*.
Performance Measurement Window	Monthly
Calculation Formula	Hours during the Time Applicability Window that services are available / Hours in the Time Applicability Window
Incentives/Disincentives	If Contractor has not met the Service Availability Metric, then no metric fee will be awarded. If any metric is missed for 3 consecutive months, the ACAP phase will be initiated.
Exceptions and Exclusions	Events not within the control of the Contractor will not be calculated as downtime. Any availability failure that is caused by the EAST, NEDC, NICS, WEST, and ESD Contractors or other contractors will not count for this metric.

2.1.3 Customer Satisfaction

This metric measures the Contractor's effectiveness in providing quality services and support from the end users' vantage point. The Government will conduct sampling surveys of ACES end-users to determine their satisfaction with the ACES services received. The sample size, survey frequency, aspects of services to assess, and survey distribution process and method will be determined by the Government.

Table 2.1.3-1. Customer Satisfaction Metric

Customer Satisfaction Metric	
Definition	The percentage of returned surveys that reflect Very Good or higher satisfaction (both objective and subjective) with the quality of services provided under the Contract.
Time Applicability	24x365
Expectation	Customer satisfaction is consistently rated Very Good or higher.
Performance Standard	94.00%.
Measurement Method and Data Sources	Daily sampling of ACES end-user surveys.

RELEASED - Printed documents may be obsolete; validate prior to use.

Customer Satisfaction Metric	
Calculation Formula	Number of customer satisfaction surveys meeting Very Good or higher / total number of completed surveys.
Frequency	Monthly
Incentives/Disincentives	If Contractor has not met the Customer Satisfaction Metric, then no metric fee will be awarded. If any metric is missed for 3 consecutive months, the ACAP phase will be initiated.
Exceptions and Exclusions	None.

2.1.4 Incident Management

This metric measures the Contractor's effectiveness in managing Incidents in accordance with subscribed SLAs.

Table 2.1.4-1. Incident Management Metric

Incident Management Metric	
Definition	The percentage of Incident tickets successfully resolved by the Contractor in accordance with the SLA requirements.
Time Applicability	Principal period of performance.
Expectation	Incidents are resolved in accordance with the SLAs.
Performance Standard	All four (4) targets met. See Table 2.1.4-2, *Incident Management Metric SLA Targets*.
Measurement Method and Data Sources	As reported through the Government Incident Management system, as verified by Attachment I-20, *Surveillance Plan*.
Frequency	Monthly
Calculation Formula	% of Incidents for Base Services = Number of Base Services Incidents resolved within 4 hours return to service / number of Base Services Incidents reported % of Incidents for Critical Services = Number of Incidents reported on seats subscribed to two (2)-business-hour Return to Service level resolved within two (2) business hours return to service / number of two (2)-business hour return to service Incidents reported % of Incidents for Standard Services = Number of Incidents reported on seats subscribed to eight (8)-business-hour Return to Service level resolved within eight (8) business hours return to service / number of eight (8)-business hour return to service Incidents reported % of Incidents for Priority Tickets = Number of critical uplift tickets resolved within two (2) hours / number of critical uplift tickets received
Incentives/Disincentives	If Contractor has not met the Incident Management Metric, then no metric fee will be awarded. If any metric is missed for three (3) consecutive months, the ACAP phase will be initiated
Exceptions and Exclusions	Incidents outside scope of ACES services.

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 2.1.4-2. Incident Management Metric SLA Targets

Incident Management Metric SLA Targets Note: SLAs are < = unless otherwise indicated					
SLA Target No.	**PWS Section**	**PWS Section Title**	**SLA Description**	**Value**	**Performance Metrics**
IM-1	3.1	Tier 2/3 Service Desk Support	Time to restore Base Services, after ticket received	4 hrs.	98%
IM-2	3.1	Tier 2/3 Service Desk Support	Time to restore service for seat subscribed to 2-business-hour Return to Service, after ticket received	2 hrs.	95%
IM-3	3.1	Tier 2/3 Service Desk Support	Time to restore service for seat subscribed to 8-business-hour Return to Service, after ticket received	8 bus. hrs.	95%
IM-4	3.1.1	Priority Service Support	Time to restore service, after critical uplift ticket initiated	2 hrs.	95%

2.1.5 Security Management Services

This metric measures the Contractor's effectiveness in providing efficient security management services. This includes compliance with NASA security policy, procedure, and requirements; timely completion of Certification and Accreditation (C&A) requirements; timely deployment of patches; timely updates of anti-malware protection; and minimal IT security Incidents that are preventable under the terms of the Contract. Preventable Incidents under the terms of the Contract are defined as Incidents resulting from the Contractor's lack of patch deployment.

Table 2.1.5-1. Security Management Services Metric

Security Management Services Metric	
Definition	The percentage of time the Contractor provides effective and efficient security management services. This includes the performance of services implemented to protect NASA data and IT resources from potential threats to confidentiality, reliability, integrity, and availability.
Time Applicability	24/7 x 365
Expectation	End-users' systems have the latest patches, have timely updates of anti-malware protections, and have no security compromises or vulnerabilities (i.e., no security Incidents or vulnerabilities reported) that are preventable under the terms of the Contract. In addition, the Contractor shall comply with NASA security policy, procedure, and requirements, including Agency-mandated IT security controls, when performing all services under the Contract.
Performance Standard	All seven (7) targets met. See Table 2.1.5-2, *Security Management Services Metric SLA Targets*.
Measurement Method and Data Sources	Surveillance plan auditing (i.e., sample of systems to assess timely deployment of patches and anti-malware updates) performed by the Government; survey of completion of C&A Plan of Action and Milestones (POA&M) items; review of Agency IT security Incident and vulnerability scan reports from the Agency Reporting Tool (currently PatchLink).
Frequency	Monthly

RELEASED - Printed documents may be obsolete; validate prior to use.

Security Management Services Metric	
Calculation Formula	See Performance Standard above.
Incentives/Disincentives	If Contractor has not met the Security Management Services Metric, then no metric fee will be awarded. If any metric is missed for three (3) consecutive months, the ACAP phase will be initiated.
Exceptions and Exclusions	Security Incidents and compromises caused by end-users, and patching delays directly resulting from configuration freezes.

Table 2.1.5-2. Security Management Services Metric SLA Targets

Security Management Services Metric SLA Targets Note: SLAs are < = unless otherwise indicated				
SLA Target No.	**PWS Section**	**PWS Section Title**	**SLA Description**	**SLA**
SMS-1	4.2	Active Directory Services	Time to initiate mitigation by initiating installation of all patches, after severity occurrence	Critical: 1 cal. day High: 5 bus. days Medium/Low: 10 bus. days
SMS-2	4.2	Active Directory Services	Time to successfully complete installation of all patches	Critical: 14 cal. days High: 20 bus. days Medium/Low: 40 bus. days
SMS-3	4.5.1	IT Security	On-time completion of C&A POA&M items	95%
SMS-4	4.5.1	IT Security	On-time completion of all "critical"* patches installed on ACES systems, after patch release	90% 30 cal. days
SMS-5	4.5.1	IT Security	Patching of all "expedited"** patches, after announcement by Deputy CIO for IT Security or designee (usually NASA Security Operations Center)	90% 7 cal. days
SMS-6	4.5.1	IT Security	Percentage of ACES systems in compliance with Agency-mandated security configurations (e.g., Federal Desktop Core Configuration)	90%
SMS-7	4.5.1	IT Security	Number of ACES-related security Incidents reported by the SOC per month	1

*NASA considers the highest vendor rating of patches as equal to the "critical" rating because some vendors use other names for their highest patch rating (e.g., "high"). For Microsoft patches, all patches deemed by Microsoft to be "critical" or "important" fall into this category.
**The NASA Deputy CIO for IT Security or designee may designate certain patches as "expedited" because they are determined to present a serious and/or urgent threat to the security posture of the Agency.

2.1.6 Service Asset and Configuration Management

This metric measures the Contractor's effectiveness in managing ACES service assets and configuration items used by ACES end-users. This includes timely asset pickup, removal and processing, asset inventory, asset data management, and asset valuation. At the end of an asset's lifecycle and prior to its disposal, all NASA data shall be purged from the asset in accordance with National Institute of Standards and Technology (NIST) Special Publication (SP) 800-88, *Guidelines for Media Sanitization*. Upon request, the Contractor shall provide certification to the

RELEASED - Printed documents may be obsolete; validate prior to use.

Government that an asset has been successfully purged of NASA data. The Contractor shall provide, implement, and maintain an Agency-wide asset management tracking system to manage these assets and data. The Contractor shall adhere to NASA Policy Directive (NPD) 9250.1, *Identifying Capital Assets and Accumulation of Cost*, and shall identify capital assets and accumulation of costs.

Table 2.1.6-1. Service Asset and Configuration Management

Service Asset and Configuration Management Metric	
Definition	The percentage of time the Contractor effectively and efficiently picks up ACES service assets and configuration items no longer in use; sanitizes all NASA data from ACES devices that the Contractor picks up; and provides accuracy, completeness, and currency of service asset and configuration item data as well as the completeness of asset valuation.
Time Applicability	24x7 for service asset and configuration item data management and valuation; during principal period of performance, except for pre-scheduled downtime, for service asset and configuration item pickup, processing, and inventory.
Expectation	ACES service assets and configuration items no longer in use are removed and all data are sanitized promptly as required by NASA policy; periodic inventories of service assets and configuration items provide accurate, complete, and timely data updates to support ongoing data management; data is maintained properly to provide continual service asset and configuration item management reports that are accurate, complete, and current; and the recorded values of service assets and configuration items are complete.
Performance Standard	98.50%
Measurement Method and Data Sources	As reported through the Government Service Asset and Configuration Management system, as verified by Attachment I-20, *Surveillance Plan*.
Frequency	Monthly: Service asset and configuration item pickup and processing, data management, and valuation.
Calculation Formula	((Number of systems that were removed within the SLA target) + (Number of systems that were sanitized within the SLA target)) / ((Number of systems that were refreshed) + (Number of systems that were desubscribed) + (Number of systems to be sanitized)) Percentage of records that are accurate, complete, and current as validated by Government sampling.
Incentives/Disincentives	If Contractor has not met the Service Asset and Configuration Management Metric, then no metric fee will be awarded. If any metric is missed for three (3) consecutive months, the ACAP phase will be initiated.
Exceptions and Exclusions	Submitted Waivers that have been approved by the ACES CTM.

Table 2.1.6-2. Service Asset and Configuration Management Metric SLA Targets

Service Asset and Configuration Management Metric SLA Targets Note: SLAs are < = unless otherwise indicated				
SLA Target No.	**PWS Section**	**PWS Section Title**	**SLA Description**	**SLA**
SACM-1	2.3.1	Configuration Item/Resource Tracking	Time to develop system architectures and as-built diagrams, after authorization to operate	30 bus. days

RELEASED - Printed documents may be obsolete; validate prior to use.

Service Asset and Configuration Management Metric SLA Targets Note: SLAs are < = unless otherwise indicated				
SLA Target No.	**PWS Section**	**PWS Section Title**	**SLA Description**	**SLA**
SACM-2	2.3.1	Configuration Item/Resource Tracking	Time to update system architectures and as-built diagrams, after an approved change	10 bus. days
SACM-3	2.3.1	Configuration Item/Resource Tracking	Time to update the CMDB with current information after receiving, installing, refreshing, excessing, or moving configuration items	3 bus. days
SACM-4	2.3.2	Configuration Freeze	Time to notify the GAPM or designee and the affected ACES CTMs of configuration freezes, in advance	3 bus. days

2.2 PRP Metrics

The Government will assess the Contractor's performance on PRP Metrics semi-annually.

2.2.1 Relationship and Contract Management

This metric measures the Contractor's effectiveness and efficiency in maintaining successful working relationships with the Government and other contractors; and implementing contract management activities, including having the right technology, technical expertise, and processes in place; recommending technology infusion that is aligned with NASA's mission and objectives; and offering suggestions for cost-savings initiatives.

Table 2.2.1-1. Relationship and Contract Management

Relationship and Contract Management Metric	
Definition	Maintenance of successful working relationships with the Government and other contractors in delivering integrated IT services to customers.
Time Applicability	Principal period of performance
Expectation	Following the completion of the agreed-upon contract transition process and schedule, relationship and contract management will be monitored and evaluated on a regular basis, and the Contractor shall perform in this metric category at maximum effectiveness. Any unwarranted attribution of issues to the Government and other contractors will reflect negatively in overall scoring of this area.
Performance Standard	Performance evaluation will be based upon the degree to which: • Open and collaborative participation in program coordination activities as well as effective collaboration with the Government and other contractors is realized; • Invoices accurately reflect appropriate services delivered; • Requests for analysis and information relating to services, such as business analysis and budget information, are responded to in a timely manner; • Outstanding ACAP elements are completed on time; • Technology infusion/transformational plans, are brought forward; • Communication and outreach activities are successfully implemented; • Cost-savings initiatives are brought forward under the Shared Savings clause; • Major system upgrades are effectively performed.

RELEASED - Printed documents may be obsolete; validate prior to use.

Relationship and Contract Management Metric	
Measurement Method and Data Sources	Attachment I-20, *Surveillance Plan*.
Frequency	Semi-annually
Incentives/Disincentives	The PRP amount will be determined and disbursed on a discretionary basis.
Exceptions and Exclusions	None

2.2.2 Problem Management

This metric measures the Contractor's performance in managing Problems. Problems are identified through analysis of Incidents as part of Incident Management activities. Problem management aspects of special interest include the number of Problems open for longer than a set period (e.g., 14 business days), the number of 'stalled' Problems (i.e., no further action possible at this time), and the number of times the same Problem is fixed before a permanent fix is implemented.

Table 2.2.2-1. Problem Management

Problem Management Metric	
Definition	Successful and timely resolution and closure of Problems, prevention of recurring Incidents, and minimization of Incidents that cannot be prevented; proactive versus reactive Problem resolution.
Time Applicability	Principal period of performance
Expectation	Problems are analyzed promptly to identify their root causes and workarounds and permanent resolutions. The most optimal permanent solutions are proposed to the Government prior to their implementation.
Performance Standard	100% of Problems reported are successfully solved or accepted by the Government; Zero (0) reoccurrences of known Problems with resolution.
Measurement Method and Data Sources	Self-reporting feedback mechanism through the ACES service desk support system, as well as Attachment I-20, *Surveillance Plan*.
Frequency	Semi-annually
Calculation Formula	Number of Problems successfully resolved / number of Problems reported; No reoccurrence during the evaluation period of known Problems with resolution.
Incentives/Disincentives	The PRP amount will be determined and disbursed on a discretionary basis.
Exceptions and Exclusions	None.

2.3 Contractor-Defined Metrics

The Contractor shall define, calculate, and report Contractor-Defined Metrics to the Agency and each Center on a monthly or quarterly basis. The frequency of these reports (i.e., monthly or quarterly) will be at the Contractor's discretion. The Contractor shall provide to the Government a table for each Contractor-Defined Metric that documents the metric's definition, time applicability, expectation, Performance Standard, measurement method and data sources, frequency, calculation formula, and proposed incentives and disincentives, and exceptions and exclusions.

RELEASED - Printed documents may be obsolete; validate prior to use.

Government Furnished Facilities

	Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
ARC	# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
	120	401	2,242	1,500	60	300	*None*	*N/A*	*N/A*	*NA*	

	Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
DFRC	# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
	73	838	1,400	300	2,900	1,024	225	Dryden Aircraft Operations Facility (DAOF)	Palmdale, CA 93550	30	Dryden Flight Research Center is located on Edwards AFB a DoD facility.
							15	Aero Institute	Palmdale, CA 93550	30	

	Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
GRC	# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
Lewis Field	140	350	3,000	1,695	-	1,707	3	Cleveland Federal Executive Board	Down Town Cleveland	15	Some facilities have restricted access due to safety or security considerations
Plum Brook	4	6,400	109	110	-	-					

RELEASED - Printed documents may be obsolete; validate prior to use.

GSFC

Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
63	1,121	7,317	3,655	-	-	907	Wallops	Wallops Island, VA	158	Some facilities have restricted access due to safety or security considerations
						73	White Sands - TDRDSS1	Las Cruces, NM	2,029	
						211	White Sands - TDRDSS2	Las Cruces, NM	2,029	
						39	GISS	New York, NY	219	
						145	IV&V	Fairmont, WV	230	

HQ

Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
1	N/A	1,800	4,645	1,063	-	25	JPL	Pasadena, CA 91109	2,600	Some facilities have restricted access due to safety or security considerations
						3	Paris	Paris, France	3,800	
						3	APL	Laurel, MD 20723	32	
						2	Tokyo	Tokyo, Japan	6,800	
						1	LaRC	Hampton, VA 23681	180	
						1	GSFC	Greenbelt, MD 20771	15	

JPL

Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
116	177	5,500	100	100	-	*None*	*N/A*	*N/A*	*NA*	Some facilities have restricted access due to safety or security considerations

RELEASED - Printed documents may be obsolete; validate prior to use.

JSC

Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
163	1,581	14,598	1,350	-	-	374	JSC (Ell Field)	Houston, TX	8	
60	17,290	706	270	750	1,000	395	JSC (SCTF)	Houston, TX	8	
						12	WSSH	New Mexico	60	

KSC

Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
450	220 sq miles	14,000 +	5,274 - KSC charges for the sq footage use of space. It is not provided free of charge.	Existing Contractor provides its own warehouse space off Center - it is not Government Furnished	2,491 - KSC charges for the sq footage use of space. It is not provided free of charge.*	51 5 5 1 1 1 1 2 14 250	VAFB Decatur KARS Park GRC Sterling Chandler LA, AFDB Huntington Beach Littleton Titusville	Vandenberg, CA Decatur, AL Merritt Island, FL GRC, OH Sterling, VA Chandler, AZ LA AFB, CA Huntington Beach, CA Littleton, CO Titusville, FL	As close as 8 miles and as far as 3,500	Some facilities have restricted access due to operational, safety or security considerations.

** NOTE Off-site requirements for Constellation are unknown.

*Per facilities, the per sq. ft charge is $14.15, escalated yearly, at KSC. This is a monthly charge and developed through cost accounting. KSC is having space utilization issues, so being off-site may be an option for the Contractor to consider.

LARC

Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
294 total buildings/ structures including:	800 total acres	3,542	1,700	None	3,500	*None*	*N/A*	*N/A*	*NA*	Some facilities have restricted access due to safety or security considerations
- 204 buildings/extensions	780 West Area	1,895 FTE								
- 68 structures (wind tunnels, etc.)	+ 20 East Area	+ 1,647 WYE	In addition to the above facility space, office space will be provided by LaRC organizations that subscribe to Enhanced Support Services (SA WYE)							
- 16 substations										
- 4 trailers										
- 2 Air Force buildings										

RELEASED - Printed documents may be obsolete; validate prior to use.

	Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
MSFC	# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
	240	1,840	7,143	6,212	1,290	-	644	Intergraph & NSSTC	Intergraph - Madison, AL NSSTC - Sparkman Drive	<10	Several Facilities will have restricted access because they are Mission Essential Infrastructure (MEI) and will require NACI background check in order to have unescorted access.
MAF	40 buildings, 142 structures	832	3,951	100	300	-					

	Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
NSSC	# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
	1	3	500	420	700	300	10	Bldg 1100	SSC, MS	0.1	Some facilities have restricted access due to safety or security considerations

	Main Campus			Square Footage (On-site & Off-site) that the Center will provide Government Furnished to the ACES Contractor in the Categories Below			Remote Locations of Center Personnel				Specialized Support Considerations
SSC	# of Bldgs.	~ Acreage	~ Total Employee Population (civil service & contractor)	General Office	Warehouse	Operations (including potential local ACES testing facility) (See ACES PWS Sections 3.8 and 5 for more info)	~ Number of Personnel	Site Name	Site Location	~ Miles From Associated Facility	Describe any specialized factors that the ACES Contractor would need to consider in providing ACES services
	120	401	2,242	-	-	-	*None*	*N/A*	*N/A*	*NA*	
	165	20,642	3,960	1,124	1,096	514	*None*	*N/A*	*N/A*	*NA*	MAF technicians (2) Government Printing Office (GPO) technicians (2) Computer systems for MAF: Desktop-PC = 72 Laptop-PC = 151 Workstation-PC = 89

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-5
SUMMARY OF BASE SERVICES

Contract Year	Service Band	Description	Value
Year 1	25,000-39,999	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 1	40,000-47,499	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 1	47,500-52,500	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 1	52,501-60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 1	Over 60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 1	25,000-39,999	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 1	40,000-47,499	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 1	47,500-52,500	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 1	52,501-60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 1	Over 60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 2	25,000-39,999	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 2	40,000-47,499	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 2	47,500-52,500	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 2	52,501-60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 2	Over 60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 2	25,000-39,999	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 2	40,000-47,499	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 2	47,500-52,500	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 2	52,501-60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 2	Over 60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 3	25,000-39,999	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

		PWS Sections 1-3)	
Year 3	40,000-47,499	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 3	47,500-52,500	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 3	52,501-60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 3	Over 60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 3	25,000-39,999	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 3	40,000-47,499	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 3	47,500-52,500	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 3	52,501-60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution)** (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 3	Over 60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 4	25,000-39,999	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 4	40,000-47,499	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 4	47,500-52,500	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 4	52.501-60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 4	Over 60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 4	25,000-39,999	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 4	40,000-47,499	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 4	47,500-52,500	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 4	52.501-60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 4	Over 60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 5	25,000-39,999	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 5	40,000-47,499	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 5	47,500-52,500	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 5	52.501-60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 5	Over 60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

Year 5	25,000-39,999	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 5	40,000-47,499	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 5	47,500-52,500	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 5	52.501-60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 5	Over 60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 6	25,000-39,999	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 6	40,000-47,499	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 6	47,500-52,500	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 6	52.501-60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 6	Over 60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 6	25,000-39,999	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 6	40,000-47,499	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 6	47,500-52,500	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 6	52.501-60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 6	Over 60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 7	25,000-39,999	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 7	40,000-47,499	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 7	47,500-52,500	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 7	52.501-60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 7	Over 60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 7	25,000-39,999	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 7	40,000-47,499	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 7	47,500-52,500	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

		Sections 1-3)	
Year 7	52.501-60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 7	Over 60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 8	25,000-39,999	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 8	40,000-47,499	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 8	47,500-52,500	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 8	52.501-60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 8	Over 60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 8	25,000-39,999	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 8	40,000-47,499	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 8	47,500-52,500	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 8	52.501-60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 8	Over 60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 9	25,000-39,999	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 9	40,000-47,499	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 9	47,500-52,500	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 9	52.501-60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 9	Over 60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 9	25,000-39,999	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 9	40,000-47,499	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 9	47,500-52,500	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 9	52.501-60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 9	Over 60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 10	25,000-39,999	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

		PWS Sections 1-3)	
Year 10	40,000-47,499	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 10	47,500-52,500	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 10	52.501-60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 10	Over 60,000	Base Services Bundle (**NOMAD**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 10	25,000-39,999	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 10	40,000-47,499	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 10	47,500-52,500	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 10	52.501-60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**
Year 10	Over 60,000	Base Services Bundle (**with innovation approach for e-mail/calendaring solution**) (PWS Sections 4.1-4.8 and PWS Sections 1-3)	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

Base Services CLIN Pricing on a Monthly Basis Template

Table 1 – BASE SERVICES														
CLIN	Description	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	TOTAL
End-user Base Services Band (47,500-52,500)														
A-1	Base Services Bundle (with NOMAD e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-2	Base Services Bundle (with innovation approach for e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
Individual Components														
A-3	PWS Section 4.1 E-mail/Calendaring (NOMAD)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-4	PWS Section 4.1 E-mail/Calendaring (with innovation approach)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-5	PWS Section 4.2 Active Directory Services	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-6	PWS Section 4.3 Loaner Pool Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-7	PWS Section 4.4 Print Queue Infrastructure Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-8	PWS Section 4.5 Security Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-9	PWS Section 4.6 Software License Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1 – BASE SERVICES														
CLIN	Description	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	TOTAL
A-10	PWS Section 4.7 Instant Messaging	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-11	PWS Section 4.8 Two-Factor User Authentication Service Distribution	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-12	PWS Sections 1-3 Program, Contract, and General Requirements	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
End-user Base Services Band (40,000 - 47,499)														
A-14	Base Services Bundle (with NOMAD e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-15	Base Services Bundle (with innovation approach for e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
Individual Components (40,000 - 47,499)														
A-16	PWS Section 4.1 E-mail/Calendaring (NOMAD)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-17	PWS Section 4.1 E-mail/Calendaring (with innovation approach)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-18	PWS Section 4.2 Active Directory	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-19	PWS Section 4.3 Loaner Pool Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1 – BASE SERVICES														
CLIN	Description	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	TOTAL
A-20	PWS Section 4.4 Print Queue Infrastructure Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-21	PWS Section 4.5 Security Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-22	PWS Section 4.6 Software License Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-23	PWS Section 4.7 Instant Messaging	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-24	PWS Section 4.8 Two-Factor User Authentication Service Distribution	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-25	PWS Sections 1-3 Program, Contract and General Requirements	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
End-user Base Services Band (25,000 - 39,999)														
A-27	Base Services Bundle (with NOMAD e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-28	Base Services Bundle (with innovation approach for e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
Individual Components (25,000 - 39,999)														
A-29	PWS Section 4.1 E-mail/Calendaring (NOMAD)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1 – BASE SERVICES														
CLIN	Description	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	TOTAL
A-30	PWS Section 4.1 E-mail/Calendaring (with innovation approach)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-31	PWS Section 4.2 Active Directory	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-32	PWS Section 4.3 Loaner Pool Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-33	PWS Section 4.4 Print Queue Infrastructure Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-34	PWS Section 4.5 Security Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-35	PWS Section 4.6 Software License Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-36	PWS Section 4.7 Instant Messaging	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-37	PWS Section 4.8 Two-Factor User Authentication Service Distribution	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-38	PWS Sections 1-3 Program, Contract and General Requirements	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
End-user Base Services Band (52,501 - 60,000)														
A-40	Base Services Bundle (with NOMAD e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1 – BASE SERVICES														
CLIN	Description	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	TOTAL
A-41	Base Services Bundle (with innovation approach for e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
Individual Components (52,501 - 60,000)														
A-42	PWS Section 4.1 E-mail/Calendaring (NOMAD)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-43	PWS Section 4.1 E-mail/Calendaring (with innovation approach)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-44	PWS Section 4.2 Active Directory	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-45	PWS Section 4.3 Loaner Pool Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-46	PWS Section 4.4 Print Queue Infrastructure Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-47	PWS Section 4.5 Security Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-48	PWS Section 4.6 Software License Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-49	PWS Section 4.7 Instant Messaging	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-50	PWS Section 4.8 Two-Factor User Authentication Service Distribution	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-51	PWS Sections 1-3 Program, Contract and General Requirements	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1 – BASE SERVICES														
CLIN	Description	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	TOTAL
End-user Base Services Band (greater than 60,000)														
A-53	Base Services Bundle (with NOMAD e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-54	Base Services Bundle (with innovation approach for e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
Individual Components (greater than 60,000)														
A-55	PWS Section 4.1 E-mail/Calendaring (NOMAD)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-56	PWS Section 4.1 E-mail/Calendaring (with innovation approach)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-57	PWS Section 4.2 Active Directory	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-58	PWS Section 4.3 Loaner Pool Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-59	PWS Section 4.4 Print Queue Infrastructure Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-60	PWS Section 4.5 Security Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-61	PWS Section 4.6 Software License Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-62	PWS Section 4.7 Instant Messaging	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1 – BASE SERVICES														
CLIN	Description	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	TOTAL
A-63	PWS Section 4.8 Two-Factor User Authentication Service Distribution	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-64	PWS Sections 1-3 Program, Contract and General Requirements	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-6
SUMMARY OF ACES PRODUCT CATALOG (APC) PURCHASES*

Center	Month/Year	Number of Purchases	Value
ARC			$0.00
DFRC			$0.00
GRC			$0.00
GSFC			$0.00
HQ			$0.00
JSC			$0.00
KSC			$0.00
LaRC			$0.00
MSFC			$0.00
NSSC			$0.00
SSC			$0.00

*Note: Detailed information regarding individual purchases, to include Catalog Item number, Description, Quantity, and Unit price available is available in ESRS.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-7
SUMMARY OF INFRASTRUCTURE UPGRADE PROPOSALS (IUP)

Proposal No.	Proposal Title	Date Approved	Negotiated Value	Incorporated by Modification No.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-8
SUMMARY OF SEAT PURCHASES AND ALL OTHER SERVICES

Summary of Seat Purchases and All Other Services will be generated monthly by the Enterprise Service Request System (ESRS) and incorporated into the contract as Attachment I-8. A description of the format and content will be added as development of the ESRS evolves.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-9
CLIN PRICING

Table 1 – BASE SERVICES											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
End-user Base Services Band (47,500-52,500)											
A-1	Base Services Bundle (with NOMAD e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-2	Base Services Bundle (with innovation approach for e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
Individual Components											
A-3	PWS Section 4.1 E-mail/Calendaring (NOMAD)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-4	PWS Section 4.1 E-mail/Calendaring (with innovation approach)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-5	PWS Section 4.2 Active Directory Services	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-6	PWS Section 4.3 Loaner Pool Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-7	PWS Section 4.4 Print Queue Infrastructure Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-8	PWS Section 4.5 Security Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-9	PWS Section 4.6 Software License Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-10	PWS Section 4.7 Instant Messaging	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1 – BASE SERVICES											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
A-11	PWS Section 4.8 Two-Factor User Authentication Service Distribution	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-12	PWS Sections 1-3 Program, Contract, and General Requirements	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-13	E-mail/Calendaring Transition		Redacted								
End-user Base Services Band (40,000 - 47,499)											
A-14	Base Services Bundle (with NOMAD e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-15	Base Services Bundle (with innovation approach for e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
Individual Components (40,000 - 47,499)											
A-16	PWS Section 4.1 E-mail/Calendaring (NOMAD)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-17	PWS Section 4.1 E-mail/Calendaring (with innovation approach)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-18	PWS Section 4.2 Active Directory	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-19	PWS Section 4.3 Loaner Pool Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-20	PWS Section 4.4 Print Queue Infrastructure Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-21	PWS Section 4.5 Security Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-22	PWS Section 4.6 Software License Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1 – BASE SERVICES											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
A-23	PWS Section 4.7 Instant Messaging	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-24	PWS Section 4.8 Two-Factor User Authentication Service Distribution	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-25	PWS Sections 1-3 Program, Contract and General Requirements	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-26	E-mail/Calendaring Transition		Redacted								
End-user Base Services Band (25,000 - 39,999)											
A-27	Base Services Bundle (with NOMAD e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-28	Base Services Bundle (with innovation approach for e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
Individual Components (25,000 - 39,999)											
A-29	PWS Section 4.1 E-mail/Calendaring (NOMAD)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-30	PWS Section 4.1 E-mail/Calendaring (with innovation approach)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-31	PWS Section 4.2 Active Directory	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-32	PWS Section 4.3 Loaner Pool Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-33	PWS Section 4.4 Print Queue Infrastructure Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-34	PWS Section 4.5 Security Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1 – BASE SERVICES											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
A-35	PWS Section 4.6 Software License Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-36	PWS Section 4.7 Instant Messaging	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-37	PWS Section 4.8 Two-Factor User Authentication Service Distribution	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-38	PWS Sections 1-3 Program, Contract and General Requirements	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-39	E-mail/Calendaring Transition		Redacted								
End-user Base Services Band (52,501 - 60,000)											
A-40	Base Services Bundle (with NOMAD e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-41	Base Services Bundle (with innovation approach for e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
Individual Components (52,501 - 60,000)											
A-42	PWS Section 4.1 E-mail/Calendaring (NOMAD)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-43	PWS Section 4.1 E-mail/Calendaring (with innovation approach)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-44	PWS Section 4.2 Active Directory	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-45	PWS Section 4.3 Loaner Pool Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-46	PWS Section 4.4 Print Queue Infrastructure Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1 – BASE SERVICES											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
A-47	PWS Section 4.5 Security Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-48	PWS Section 4.6 Software License Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-49	PWS Section 4.7 Instant Messaging	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-50	PWS Section 4.8 Two-Factor User Authentication Service Distribution	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-51	PWS Sections 1-3 Program, Contract and General Requirements	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-52	E-mail/Calendaring Transition		Redacted								
End-user Base Services Band (greater than 60,000)											
A-53	Base Services Bundle (with NOMAD e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-54	Base Services Bundle (with innovation approach for e-mail/calendaring solution) (PWS Sections 4.1-4.8, + PWS Sections 1 - 3)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
Individual Components (greater than 60,000)											
A-55	PWS Section 4.1 E-mail/Calendaring (NOMAD)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-56	PWS Section 4.1 E-mail/Calendaring (with innovation approach)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-57	PWS Section 4.2 Active Directory	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-58	PWS Section 4.3 Loaner Pool Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 1 – BASE SERVICES											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
A-59	PWS Section 4.4 Print Queue Infrastructure Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-60	PWS Section 4.5 Security Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-61	PWS Section 4.6 Software License Management	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-62	PWS Section 4.7 Instant Messaging	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-63	PWS Section 4.8 Two-Factor User Authentication Service Distribution	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-64	PWS Sections 1-3 Program, Contract and General Requirements	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
A-65	E-mail/Calendaring Transition		Redacted								

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 2 – "S" COMPUTING SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
B-1	Platform (Microsoft) (Desktop)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
B-2	Platform (Microsoft) (Laptop)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
B-3	Platform (Apple) (Desktop)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
B-4	Platform (Apple) (Laptop)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
B-5	Monitor (NASA-STD-2805*x* Standard)										
B-6	Monitor (None)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

Volume Discounts		
CLIN	**Seat Increase**	**% Reduction**
T-1	500	Redacted
T-2	500	Redacted
T-3	100	Redacted
T-4	100	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 3 – "M" COMPUTING SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
C-1	Platform (Microsoft Compatible) (Desktop)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-2	Platform (Microsoft Compatible) (Laptop)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-3	Platform (Microsoft Compatible) (Lightweight)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-4	Platform (Microsoft Compatible) (Tablet)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-5	Platform (Microsoft Compatible) (Workstation)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-6	Platform (Apple) (Desktop)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-7	Platform (Apple) (Laptop)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-8	Platform (Apple) (Lightweight)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-9	Platform (Apple) (Workstation)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-10	Platform (Linux) (Desktop)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-11	Platform (Linux) (Laptop)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-12	Platform (UNIX) (Workstation)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-13	Monitor (Microsoft/Apple/Linux/UNIX) (None)										
C14	Monitor (Microsoft/Apple/Linux/UNIX) (NASA-STD-2805*x* Standard)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-15	Monitor (Microsoft/Apple/Linux/UNIX) (NASA-STD-2805*x* + 10% Min.)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-16	Monitor (Microsoft/Apple/Linux/UNIX) (NASA-STD-2805*x* + 20% Min.)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-17	Return to Service (2 business hours)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-18	Return to Service (8 business hours)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-19	Return to Service (None)										
C-20	Standard Load (Microsoft)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-21	Standard Load (Apple)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 3 – "M" COMPUTING SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
C-22	Standard Load (Linux)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-23	Standard Load (UNIX)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-24	Standard Load (None)										
C-25	Docking Station Solution (Microsoft Compatible) (Included)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-26	Docking Station Solution (Microsoft Compatible) (None)										
C-27	Docking Station Solution (Apple) (Included)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-28	Docking Station Solution (Apple) (None)										
C-29	Local Virtual Machine	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-30	Remote Virtual Machine	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-31	Virtual Machine (None)										
C-32	System Administration (Microsoft)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-33	System Administration (Apple)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-34	System Administration (Linux)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-35	System Administration (UNIX)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
C-36	Backup Services (None)										
C-37	Backup Services (Included)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

Volume Discounts		
CLIN	**Seat Increase**	**% Reduction**
U-1	100	Redacted
U -2	100	Redacted
U-3	100	Redacted
U-4	100	Redacted
U-5	100	Redacted
U -6	100	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 3 – "M" COMPUTING SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
U -7	100	**Redacted**									
U-8	100	**Redacted**									
U -9	100	**Redacted**									
U-10	100	**Redacted**									
U-11	100	**Redacted**									
U -12	100	**Redacted**									

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 4 – "B" COMPUTING SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
D-1	Platform (Lump Sum) (Microsoft Compatible Product Line)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-2	Platform (Lump Sum) (Apple Compatible Product Line)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-3	Platform (Lump Sum) (UNIX Hardware Systems)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-4	Platform (Amortized) (Microsoft Compatible Product Line)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-5	Platform (Amortized) (Apple Compatible Product Line)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-6	Platform (Amortized) (UNIX Hardware Systems)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-7	Operating System (None)										
D-8	Operating System (Microsoft)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-9	Operating System (Apple)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-10	Operating System (Linux)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-11	Operating System (UNIX)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-12	Monitor (None)										
D-13	Monitor (NASA-STD-2805*x* Standard)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-14	Monitor (NASA-STD-2805*x* + 10% Min.)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-15	Monitor (NASA-STD-2805*x* + 20% Min.)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-16	Return to Service (2 business hours)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-17	Return to Service (8 business hours)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-18	Return to Service (None)										
D-19	System Administration (None)										
D-20	System Administration (Microsoft)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-21	System Administration (Apple)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-22	System Administration (Linux)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-23	System Administration (UNIX)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
D-24	Standard Load (Microsoft)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 4 – "B" COMPUTING SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
D-25	Standard Load (Apple)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
D-26	Standard Load (Linux)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
D-27	Standard Load (UNIX)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
D-28	Standard Load (None)										
D-29	Docking Station Solution (Microsoft Compatible) (Included)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
D-30	Docking Station Solution (Microsoft Compatible) (None)										
D-31	Docking Station Solution (Apple) (Included)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
D-32	Docking Station Solution (Apple) (None)										
D-33	Local Virtual Machine	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
D-34	Remote Virtual Machine	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
D-35	Virtual Machine (None)										
D-36	Backup Services (None)										
D-37	Backup Services (Included)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

*Percentage discount off Manufacturer's Suggested Retail Price
**Percentage Basis to determine maintenance cost

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 2 – "T" COMPUTING SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
P-1	Platform (Desktop)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
P-2	Platform (Laptop)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
P-3	Operating System (Microsoft)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
P-4	Operating System (Apple)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
P-5	Monitor (NASA-STD-2805*x* Standard)										
P-6	Monitor (None)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

Volume Discounts		
CLIN	**Seat Increase**	**% Reduction**
V-1	300	**Redacted**
V-2	300	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 5 – "S" CELL PHONE SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
E-1	Carrier 1	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
E-2	Carrier 2	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 6 – "B" CELL PHONE SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
F-1	**Carrier 1**-Instrument (Product Line)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-2	**Carrier 1**-Hardware Refresh (None)										
F-3	**Carrier 1**-Domestic Calling Plan (500 Anytime Voice Minutes)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-4	**Carrier 1**-Domestic Calling Plan (1200 Anytime Voice Minutes)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-5	**Carrier 1**-Domestic Calling Plan (Unlimited Anytime Voice Minutes)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-6	**Carrier 1**-Voice Mail (Included)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-7	**Carrier 1**-Voice Mail (None)										
F-8	**Carrier 1**-Return to Service (2 business hours)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-9	**Carrier 1**-Return to Service (8 business hours)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-10	**Carrier 1**-International Calling Plan (Included)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-11	**Carrier 1**-International Calling Plan (None)										
F-12	**Carrier 1**-Camera (Included)										
F-13	**Carrier 1**-Camera (None)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-14	**Carrier 2**-Instrument (Product Line)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-15	**Carrier 2**-Hardware Refresh (None)										
F-16	**Carrier 2**-Domestic Calling Plan (500 Anytime Voice Minutes)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-17	**Carrier 2**-Domestic Calling Plan (1200 Anytime Voice Minutes)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 6 – "B" CELL PHONE SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
F-18	**Carrier 2**-Domestic Calling Plan (Unlimited Anytime Voice Minutes)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-19	**Carrier 2**-Voice Mail (Included)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-20	**Carrier 2**-Voice Mail (None)										
F-21	**Carrier 2**-Return to Service (2 business hours)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-22	**Carrier 2**-Return to Service (8 business hours)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-23	**Carrier 2**-International Calling Plan (Included)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
F-24	**Carrier 2**-International Calling Plan (None)										
F-25	**Carrier 2**-Camera (Included)										
F-26	**Carrier 2**-Camera (None)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

*Percentage discount off Manufacturer's Suggested Retail Price

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 7 – "S" SMARTPHONE SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
G-1	Carrier 1-Instrument (RIM-based)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
G-2	Carrier 1-Instrument (Apple-based)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
G-3	Carrier 2-Instrument (RIM-based)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
G-4	Carrier 2-Instrument (Apple-based)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 8 – "B" SMARTPHONE SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
H-1	**Carrier 1**-Instrument (None)										
H-2	**Carrier 1**-Instrument (RIM-based)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-3	**Carrier 1**-Instrument (Apple-based)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-4	**Carrier 1**-Instrument (Other Architecture)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-5	**Carrier 1**-Hardware Refresh (None)										
H-6	**Carrier 1**-Domestic Calling Plan (Data Only)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-7	**Carrier 1**-Domestic Calling Plan (500 Voice Minutes)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-8	**Carrier 1**-Domestic Calling Plan (1200 Voice Minutes)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-9	**Carrier 1**-Domestic Calling Plan (Unlimited Voice Minutes)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-10	**Carrier 1**-Voice Mail (Included)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-11	**Carrier 1**-Voice Mail (None)										
H-12	**Carrier 1**-Return to Service (None)										
H-13	**Carrier 1**-Return to Service (2 business hours)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-14	**Carrier 1**-Return to Service (8 business hours)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-15	**Carrier 1**-International Calling Plan (Included)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-16	**Carrier 1**-International Calling Plan (None)										
H-17	**Carrier 1**-Camera (Included)										
H-18	**Carrier 1**-Camera (None)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 8 – "B" SMARTPHONE SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
H-19	**Carrier 1**-Tethering (None)										
H-20	**Carrier 1**-Tethering (Included)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-21	**Carrier 2**-Instrument (None)										
H-22	**Carrier 2**-Instrument (RIM-based)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-23	**Carrier 2**-Instrument (Apple-based)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-24	**Carrier 2**-Instrument (Other Architecture)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-25	**Carrier 2**-Hardware Refresh (None)										
H-26	**Carrier 2**-Domestic Calling Plan (Data Only)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-27	**Carrier 2**-Domestic Calling Plan (500 Voice Minutes)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-28	**Carrier 2**-Domestic Calling Plan (1200 Voice Minutes)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-29	**Carrier 2**-Domestic Calling Plan (Unlimited Voice Minutes)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-30	**Carrier 2**-Voice Mail (Included)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-31	**Carrier 2**-Voice Mail (None)										
H-32	**Carrier 2**-Return to Service (None)										
H-33	**Carrier 2**-Return to Service (2 business hours)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-34	**Carrier 2**-Return to Service (8 business hours)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-35	**Carrier 2**-International Calling Plan (Included)	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted	Redacted
H-36	**Carrier 2**-International Calling Plan (None)										

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 8 – "B" SMARTPHONE SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
H-37	**Carrier 2**-Camera (Included)										
H-38	**Carrier 2**-Camera (None)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
H-39	**Carrier 2**-Tethering (None)										
H-40	**Carrier 2**-Tethering (Included)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

*Percentage discount off Manufacturer's Suggested Retail Price

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 9 – PAGER SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
I-1	Instrument (Numeric)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
I-2	Instrument (Alphanumeric One-Way/Alias)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
I-3	Instrument (Alphanumeric Two-Way/Alias)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
I-4	Service Plan (Local Only)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
I-5	Service Plan (Statewide)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
I-6	Service Plan (Nationwide)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
I-7	Service Plan (800 Number)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
I-8	Voicemail Notification (None)										
I-9	Voice Mail Notification (Sent to Pager)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
I-10	Octel Message Notification (None)										
I-11	Octel Message Notification (Enabled)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
I-12	Return to Service (2 business hours)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
I-13	Return to Service (8 business hours)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 10 – NETWORK PRINTER (PRN) SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
J-1	Instrument (Black and White 5,000 B&W Impressions per machine/month)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
J-2	Instrument (Color 2,000 color/5,000 B&W Impressions per machine/month)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
J-3	Return to Service (2 business hours)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
J-4	Return to Service (4 business hours)										

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 11 – MFD B&W DESKTOP SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
K-1	Monthly Volume Band (5,000 B&W Impressions per machine/month)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
K-2	Return to Service (2 business hours)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
K-3	Return to Service (4 business hours)										

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 12 – MFD B&W FLOOR SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
L-1	Monthly Volume Bands (Vol Band 1 7,500 Impressions per machine/month)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
L-2	Monthly Volume Bands (Vol Band 2 15,000 Impressions per machine/month)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
L-3	Monthly Volume Bands (Vol Band 3 30,000 Impressions per machine/month)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
L-4	Return to Service (2 business hours)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
L-5	Return to Service (4 business hours)										
L-6	Capacity Tray (Capacity Tray)										
L-7	Capacity Tray (Optional Large Capacity Tray)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
L-8	2-Hole/3-Hole Punch (None)										
L-9	2-Hole/3-Hole Punch (Optional 2-Hole/3-Hole Punch)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 13 – MFD COLOR DESKTOP SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
M-1	Monthly Volume Bands (2,000 color/5,000 B&W Impressions per machine/month)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
M-2	Return to Service (2 business hours)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
M-3	Return to Service (4 business hours)										

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 14 – MFD COLOR FLOOR SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
N-1	Monthly Volume Bands (Vol Band 1 2,000 color/7,500 B&W Impressions per machine/month)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
N-2	Monthly Volume Bands (Vol Band 2 4,000 Color/15,000 B&W Impressions per machine/month)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
N-3	Monthly Volume Bands (Vol Band 3 High-End Fiery Graphics 4,000 Color/15,000 B&W Impressions per machine/month)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
N-4	Return to Service (2 business hours)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
N-5	Return to Service (4 business hours)										
N-6	Capacity Tray (Capacity Tray)										
N-7	Capacity Tray (Optional Large Capacity Tray)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
N-8	2-Hole/3-Hole Punch (None)										
N-9	2-Hole/3-Hole Punch (Optional 2-Hole/3-Hole Punch)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 15 – VIRTUAL TEAM SERVICE (VTS) SEAT											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
O-1	Account Services for Virtual Team Service	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 16 – ACES PRODUCT CATALOG											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
Q-1	APC Purchases	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

*Percentage discount off Manufacturer's Suggested Retail Price

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 17 – ENHANCED SUPPORT SERVICES											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
R-1	Basic Microsoft Operating Systems Analysis Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
R-2	Advanced Microsoft Operating Systems Analysis Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
R-3	Basic Apple Operating Systems Analysis Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
R-4	Advanced Apple Operating Systems Analysis Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
R-5	Basic Linux Operating Systems Analysis Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
R-6	Advanced Linux Operating Systems Analysis Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
R-7	Basic UNIX Operating Systems Analysis Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
R-8	Advanced UNIX Operating Systems Analysis Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
R-9	Basic Database Administration Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
R-10	Advanced Database Administration Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
R-11	Basic Network Peripheral Technician Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
R-12	Advanced Network Peripheral Technician Services	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

Table 18 – OTHER GENERAL SERVICES											
CLIN	**Description**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
S-1	Computing Seat RTSS	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
S-2	Cellular Seat RTSS	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
S-3	Software RTSS	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
S-4	Non-ACES device sanitization	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
S-5	Non-ACES peripheral installation	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
S-6	Data Transfer	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
S-7	Wireless Aircard Service (monthly recurring cost)	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
S-8	Non-Prime Time Service Request	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
S-9	Additional VTS Participants Over 200	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
S-10	B&W Cost per Copy over Monthly Volume Band	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
S-11	Color Cost per Copy over Monthly Volume Band	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**
S-12	Excess Cellular Services Usage	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-10
SCHEDULE OF FULLY BURDENED LABOR RATES*

BASE PERIOD FULLY BURDENED LABOR RATES				
Labor Category	**CY 1 07/01/11- 06/30/12**	**CY 2 07/01/12 - 06/30/13**	**CY 3 07/01/13 - 06/30/14**	**CY 4 07/01/14- 06/30/15**
Master IT Analyst	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Senior IT Analyst	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Journeyman IT Analyst	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Apprentice IT Analyst	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Junior IT Analyst	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Entry Level IT Trainee	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Senior Subject Matter Expert	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Subject Matter Expert	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Senior Technician	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Journeyman Technician	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Technician	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Junior Technician	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Project Control Officer	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Emerging Technology Expert	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Clerical	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Technical Writer	**Redacted**	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

OPTION PERIOD No. 1 FULLY BURDENED LABOR RATES			
Labor Category	**CY 5** **07/01/15 - 06/30/16**	**CY 6** **07/01/16 - 06/30/17**	**CY 7** **07/01/17 - 06/30/18**
Master IT Analyst	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Senior IT Analyst	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Journeyman IT Analyst	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Apprentice IT Analyst	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Junior IT Analyst	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Entry Level IT Trainee	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Senior Subject Matter Expert	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Subject Matter Expert	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Senior Technician	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Journeyman Technician	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Technician	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Junior Technician	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Project Control Officer	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Emerging Technology Expert	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Clerical	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Technical Writer	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**

RELEASED - Printed documents may be obsolete; validate prior to use.

OPTION PERIOD No. 2 FULLY BURDENED LABOR RATES			
Labor Category	**CY 8** **07/01/18- 06/30/19**	**CY 9** **07/01/19- 06/30/20**	**CY 10** **07/01/20- 06/30/21**
Master IT Analyst	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Senior IT Analyst	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Journeyman IT Analyst	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Apprentice IT Analyst	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Junior IT Analyst	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Entry Level IT Trainee	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Senior Subject Matter Expert	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Subject Matter Expert	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Senior Technician	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Journeyman Technician	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Technician	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Junior Technician	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Project Control Officer	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Emerging Technology Expert	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Clerical	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**
Technical Writer	**Redacted**	**Redacted**	**Redacted**
Overtime Rate	**Redacted**	**Redacted**	**Redacted**

*Note: The labor categories listed in this Attachment shall be used for Infrastructure Upgrade Proposals.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-11
LIST OF GOVERNMENT FURNISHED PROPERTY

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
000000537102	Production Server	PE2950	DELL	ARC	NCAD Domain Controller
000000537114	Production Server	PE2950	DELL	ARC	NCAD Domain Controller
000000537116	Production Server	PE2950	DELL	ARC	NCAD Domain Controller
000000537129	Production Server	PE2950	DELL	ARC	NCAD Domain Controller
000000537140	Production Server	PE2950	DELL	ARC	NCAD Domain Controller
000000537144	Production Server	PE2950	DELL	ARC	NCAD Domain Controller
4400011676	Production Server	POWEREDGE 1950	DELL	ARC	Tivoli Back up
1667145	Production Server	POWEREDGE 2850	DELL	ARC	NCAD Domain Controller
1610373	Infrastructure Printer	4500DN	HP	DFRC	
1968583	Infrastructure Printer	GFE	GFE	DFRC	
1366471	Infrastructure Printer	GFE	GFE	DFRC	
1976998	Infrastructure Printer	GMP	HP	DFRC	
2076337	Infrastructure Printer	HP INKJET 2500CM	HP	DFRC	
1610368	Infrastructure Printer	HP LASERJET 2100TN	HP	DFRC	
1610340	Infrastructure Printer	HP LASERJET 2100TN	HP	DFRC	
2004479	Infrastructure Printer	HP LASERJET 4050TN	HP	DFRC	
2004620	Infrastructure Printer	HP LASERJET 4050TN	HP	DFRC	
1976415	Infrastructure Printer	HP LASERJET 5000	HP	DFRC	
2004745	Infrastructure Printer	HP LASERJET 8550DN	HP	DFRC	
2077058	Infrastructure Printer	Z740	TEKTRONIX	DFRC	
1976211	PC Projector	AF	KODAK	DFRC	
0437509	PC Projector	AF	KODAK	DFRC	
1932343	PC Projector	LDX500U	JVC	DFRC	
2003885	Printer	HP LASERJET 2100M	HP	DFRC	
2076261	Printer	HP LASERJET 2100M	HP	DFRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2076262	Printer	HP LASERJET 2100TN	HP	DFRC	
2096833	Printer	HP LASERJET 2100TN	HP	DFRC	
2076122	Printer	HP LASERJET 2100TN	HP	DFRC	
2004392	Printer	HP LASERJET 2100XI	HP	DFRC	
1968547	Printer	HP LASERJET 4000N	HP	DFRC	
2003393	Printer	HP LASERJET 4000N	HP	DFRC	
1932890	Printer	HP LASERJET 4000T	HP	DFRC	
1969154	Printer	HP LASERJET 4000TN	HP	DFRC	
1976754	Printer	HP LASERJET 4000TN	HP	DFRC	
2003793	Printer	HP LASERJET 4000TN	HP	DFRC	
2005135	Printer	HP LASERJET 4050	HP	DFRC	
2004244	Printer	HP LASERJET 4050	HP	DFRC	
2076444	Printer	HP LASERJET 4050	HP	DFRC	
2004867	Printer	HP LASERJET 4050N	HP	DFRC	
1610376	Printer	HP LASERJET 4050N	HP	DFRC	
2096827	Printer	HP LASERJET 4050TN	HP	DFRC	
2004619	Printer	HP LASERJET 4050TN	HP	DFRC	
2076541	Printer	HP LASERJET 4050TN	HP	DFRC	
USBB 265927	Printer	HP LASERJET 4050TN	HP	DFRC	
2075703	Printer	HP LASERJET 4500	HP	DFRC	
1610375	Printer	HP LASERJET 4500N	HP	DFRC	
1558702	Printer	HP LASERJET 4M PLUS	HP	DFRC	
1810501	Printer	HP LASERJET 5	HP	DFRC	
1976369	Printer	HP LASERJET 5000	HP	DFRC	
2003609	Printer	HP LASERJET 5000N	HP	DFRC	
1810705	Printer	HP LASERJET 5SI	HP	DFRC	
1810648	Printer	HP LASERJET 6L	HP	DFRC	
1810910	Printer	HP LASERJET 6L	HP	DFRC	
1810785	Printer	HP LASERJET 6MP	HP	DFRC	
2076016	Printer	HP LASERJET 6P	HP	DFRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2004617	Printer	HP LASERJET 8000DN	HP	DFRC	
2076045	Printer	HP LASERJET 8100DN	HP	DFRC	
2076662	Printer	HP LASERJET 8550GN	HP	DFRC	
2076310	Printer	HP LASERJET 8550N	HP	DFRC	
2076076	Printer	HP PLOTTER 430	HP	DFRC	
000000537302	Production Server	1950	DELL	DFRC	SMTP GATEWAY - NOMAD
000000537308	Production Server	1950	DELL	DFRC	SMTP GATEWAY - NOMAD
000000170738	Production Server	DL360	COMPAQ	DFRC	domain controller
000000170739	Production Server	DL360	COMPAQ	DFRC	domain controller
000000170740	Production Server	DL360	COMPAQ	DFRC	domain controller
1635930	Production Server	GFE	COMPAQ	DFRC	Support Equipment
1655394	Production Server	NTEIR 700 BLADE SERVER	SPECTRIC LOGIC	DFRC	media server for veritas backup
000000537108	Production Server	PE2950	DELL	DFRC	NCAD Domain Controller
000000537121	Production Server	PE2950	DELL	DFRC	NCAD Domain Controller
000000537125	Production Server	PE2950	DELL	DFRC	NCAD Domain Controller
1667126	Production Server	POWEREDGE 2850	DELL	DFRC	NCAD Domain Controller
3033501	Production Server	T-950 ROBOT LIBRARY	SPECTRA LOGIC	DFRC	Library backup
000000170737	Production Server	V65X	SUNFIRE V65X	DFRC	SYNCSORT BACKUP SERVER
000000170734	Production Server	X-RAID	APPLE	DFRC	Veritas storage
DFRCAS04	Seat Server	DL380	HP	DFRC	Serv Seat
1648384	Seat Server	DL380	HP	DFRC	Serv Seat
DFRCPSQL2	Seat Server	VIRTUAL SEAT PER DON HATLAND		DFRC	Sql Server
7790003529	Backup Unit	130925	APC	GRC	
7790003494	Backup Unit	1PAP7752	APC	GRC	
7790003344	Backup Unit	2200RM2U	APC	GRC	
7790003495	Backup Unit	AP7752	APC	GRC	
7790003496	Backup Unit	AP7752	APC	GRC	
7790003497	Backup Unit	AP7752	APC	GRC	
2134122	Backup Unit	EZ17-LVD	EXABYTE	GRC	
7790003242	Backup Unit	POWERSTACK 450	APC	GRC	
7790003470	Backup Unit	SC450RM1U	APC	GRC	
7790003229	Backup Unit	SMART UPS1500	APC	GRC	
7790003233	Backup Unit	SMART UPS700	APC	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
7790003038	Backup Unit	SMART-UPS 1400	APC	GRC	
7790003040	Backup Unit	SMART-UPS 1400	APC	GRC	
7790003043	Backup Unit	SMART-UPS 1400	APC	GRC	
7790003028	Backup Unit	SMART-UPS 2200	APC	GRC	
7790003044	Backup Unit	SMART-UPS 2200	APC	GRC	
7790003086	Backup Unit	SMART-UPS 2200	APC	GRC	
7790003094	Backup Unit	SMARTUPS1000	APC	GRC	
7790003471	Backup Unit	SMARTUPS1000	APC	GRC	
7790003472	Backup Unit	SMARTUPS1000	APC	GRC	
7790003473	Backup Unit	SMARTUPS1000	APC	GRC	
7790003474	Backup Unit	SMARTUPS1000	APC	GRC	
7790003475	Backup Unit	SMARTUPS1000	APC	GRC	
7790003476	Backup Unit	SMARTUPS1000	APC	GRC	
7790003204	Backup Unit	SMARTUPS1400	APC	GRC	
7790003206	Backup Unit	SMARTUPS1400	APC	GRC	
7790003213	Backup Unit	SMARTUPS1400	APC	GRC	
7790003222	Backup Unit	SMARTUPS1400	APC	GRC	
7790003198	Backup Unit	SMART-UPS1400	APC	GRC	
7790003096	Backup Unit	SMARTUPS1400XL	APC	GRC	
7790003101	Backup Unit	SMARTUPS1500	APC	GRC	
7790003103	Backup Unit	SMARTUPS1500	APC	GRC	
7790003217	Backup Unit	SMARTUPS2200	APC	GRC	
7790003218	Backup Unit	SMARTUPS2200	APC	GRC	
7790003245	Backup Unit	SMARTUPS2200	APC	GRC	
7790003182	Backup Unit	SMART-UPS2200	APC	GRC	
7790005373	Backup Unit	SU700RM	APC	GRC	
7790005374	Backup Unit	SU700RM	APC	GRC	
7790003524	Backup Unit	SUA1000	APC	GRC	
7790003525	Backup Unit	SUA1000	APC	GRC	
7790003526	Backup Unit	SUA1000	APC	GRC	
7790003514	Backup Unit	SUA1000	APC	GRC	
7790003515	Backup Unit	SUA1000	APC	GRC	
7790003516	Backup Unit	SUA1000	APC	GRC	
7790003517	Backup Unit	SUA1000	APC	GRC	
7790003518	Backup Unit	SUA1000	APC	GRC	
7790003519	Backup Unit	SUA1000	APC	GRC	
7790003520	Backup Unit	SUA1000	APC	GRC	
7790003521	Backup Unit	SUA1000	APC	GRC	
7790003522	Backup Unit	SUA1000	APC	GRC	
7790003523	Backup Unit	SUA1000	APC	GRC	
7790003527	Backup Unit	SUA1000	APC	GRC	
7790003528	Backup Unit	SUA1000	APC	GRC	
7790003530	Backup Unit	SUA1000	APC	GRC	
7790003531	Backup Unit	SUA1000	APC	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
7790003532	Backup Unit	SUA1000	APC	GRC	
7790003533	Backup Unit	SUA1000	APC	GRC	
7790003534	Backup Unit	SUA1000	APC	GRC	
7790003535	Backup Unit	SUA1000	APC	GRC	
7790003536	Backup Unit	SUA1000	APC	GRC	
7790003537	Backup Unit	SUA1000	APC	GRC	
7790003538	Backup Unit	SUA1000	APC	GRC	
7790003539	Backup Unit	SUA1000	APC	GRC	
7790003540	Backup Unit	SUA1000	APC	GRC	
7790003541	Backup Unit	SUA1000	APC	GRC	
7790003542	Backup Unit	SUA1000	APC	GRC	
7790003543	Backup Unit	SUA1000	APC	GRC	
7790003544	Backup Unit	SUA1000	APC	GRC	
7790003545	Backup Unit	SUA1000	APC	GRC	
7790003546	Backup Unit	SUA1000	APC	GRC	
7790003547	Backup Unit	SUA1000	APC	GRC	
7790003548	Backup Unit	SUA1000	APC	GRC	
7790003549	Backup Unit	SUA1000	APC	GRC	
7790003550	Backup Unit	SUA1000	APC	GRC	
7790003452	Backup Unit	SUA1000RM2U	APC	GRC	
7790003453	Backup Unit	SUA1000RM2U	APC	GRC	
7790003551	Backup Unit	SUA2200	APC	GRC	
7790003552	Backup Unit	SUA2200	APC	GRC	
7790003553	Backup Unit	SUA2200	APC	GRC	
7790003554	Backup Unit	SUA2200	APC	GRC	
7790003555	Backup Unit	SUA2200	APC	GRC	
7790003556	Backup Unit	SUA2200	APC	GRC	
7790003557	Backup Unit	SUA2200	APC	GRC	
7790003558	Backup Unit	SUA2200	APC	GRC	
7790003559	Backup Unit	SUA2200	APC	GRC	
7790003560	Backup Unit	SUA2200	APC	GRC	
7790003561	Backup Unit	SUA2200	APC	GRC	
7790003564	Backup Unit	SUA2200	APC	GRC	
7790003563	Backup Unit	SUA2200	APC	GRC	
7790003562	Backup Unit	SUA2200	APC	GRC	
7790003565	Backup Unit	SUA2200	APC	GRC	
7790003566	Backup Unit	SUA2200	APC	GRC	
7790003567	Backup Unit	SUA2200	APC	GRC	
7790003568	Backup Unit	SUA2200	APC	GRC	
7790003569	Backup Unit	SUA2200	APC	GRC	
7790003570	Backup Unit	SUA2200	APC	GRC	
7790003571	Backup Unit	SUA2200	APC	GRC	
7790003572	Backup Unit	SUA2200	APC	GRC	
7790003573	Backup Unit	SUA2200	APC	GRC	

RELEASED - Printed documents may be obsolete; validate prior to use.

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
7790003337	Backup Unit	SUA2200RMXL3U	CISCO	GRC	
7790003490	Backup Unit	SUA2200XL	APC	GRC	
7790003491	Backup Unit	SUA2200XL	APC	GRC	
7790003492	Backup Unit	SUA2200XL	APC	GRC	
7790003493	Backup Unit	SUA2200XL	APC	GRC	
7790003498	Backup Unit	SUA2200XL	APC	GRC	
7790003499	Backup Unit	SUA2200XL	APC	GRC	
7790003500	Backup Unit	SUA2200XL	APC	GRC	
7790003501	Backup Unit	SUA2200XL	APC	GRC	
7790003574	Backup Unit	SUA750RM2U	APC	GRC	
7790003575	Backup Unit	SUA750RM2U	APC	GRC	
7790003576	Backup Unit	SUA750RM2U	APC	GRC	
7790003578	Backup Unit	SUA750RM2U	APC	GRC	
7790003577	Backup Unit	SUA750RM2U	APC	GRC	
7790003579	Backup Unit	SUA750RM2U	APC	GRC	
7790003580	Backup Unit	SUA750RM2U	APC	GRC	
7790003581	Backup Unit	SUA750RM2U	APC	GRC	
7790003582	Backup Unit	SUA750RM2U	APC	GRC	
7790003583	Backup Unit	SUA750RM2U	APC	GRC	
7790003584	Backup Unit	SUA750RM2U	APC	GRC	
7790003585	Backup Unit	SUA750RM2U	APC	GRC	
7790003586	Backup Unit	SUA750RM2U	APC	GRC	
7790003587	Backup Unit	SUA750RM2U	APC	GRC	
7790003588	Backup Unit	SUA750RM2U	APC	GRC	
7790003589	Backup Unit	SUA750RM2U	APC	GRC	
7790003590	Backup Unit	SUA750RM2U	APC	GRC	
7790003591	Backup Unit	SUA750RM2U	APC	GRC	
7790003592	Backup Unit	SUA750RM2U	APC	GRC	
7790005367	Label Writer	SLP240	SEIKO	GRC	
7790005368	Label Writer	SLP240	SEIKO	GRC	
7790005785L	Network Printer	5030	XEROX	GRC	
7790005701	Network Printer	3010CN	DELL	GRC	
3008160	Network Printer	6350DP	XEROX	GRC	
3008886	Network Printer	6350DT	XEROX	GRC	
3008395	Network Printer	7400DN	XEROX	GRC	
3008938	Network Printer	7760DX	XEROX	GRC	
2136978	Network Printer	8200DX	TEKTRONIX	GRC	
2136409	Network Printer	8200YDP	XEROX	GRC	
2137828	Network Printer	8400N	XEROX	GRC	
3009543	Network Printer	9040DN	HP	GRC	
L24005	Network Printer	BIZHUB C350	KONICA	GRC	
3009158	Network Printer	C530DN	LEXMARK	GRC	
2186408	Network Printer	D701-1	NORITSU	GRC	
2138421	Network Printer	DIMENSIONSST	DIMENSION	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
L24034	Network Printer	DOCUCOLOR 240	XEROX	GRC	
2136910	Network Printer	DP400	EPSON	GRC	
2135792	Network Printer	HP DESIGNJET 500 PS	HP	GRC	
2134192	Network Printer	HP DESIGNJET 5000	HP	GRC	
2136779	Network Printer	HP DESIGNJET 5500	HP	GRC	
2137136	Network Printer	HP DESIGNJET 5500	HP	GRC	
2138461	Network Printer	HP DESIGNJET 5500	HP	GRC	
3009415	Network Printer	HP DESIGNJET 5500PS	HP	GRC	
2050614	Network Printer	HP DESIGNJET 800PS	HP	GRC	
2136660	Network Printer	HP LASERJET 2300	HP	GRC	
3008213	Network Printer	HP LASERJET 2600N	HP	GRC	
3008163	Network Printer	HP LASERJET 2605DN	HP	GRC	
3009138	Network Printer	HP LASERJET 3505N	HP	GRC	
3009211	Network Printer	HP LASERJET 3505N	HP	GRC	
3008143	Network Printer	HP LASERJET 3600N	HP	GRC	
3007183	Network Printer	HP LASERJET 3700DN	HP	GRC	
3007997	Network Printer	HP LASERJET 3800DTN	HP	GRC	
1887373	Network Printer	HP LASERJET 4000	HP	GRC	
2005487	Network Printer	HP LASERJET 4000	HP	GRC	
1886277	Network Printer	HP LASERJET 4000	HP	GRC	
2046055	Network Printer	HP LASERJET 4050	HP	GRC	
2047066	Network Printer	HP LASERJET 4050N	HP	GRC	
2048664	Network Printer	HP LASERJET 4050TN	HP	GRC	
2048663	Network Printer	HP LASERJET 4050TN	HP	GRC	
2048658	Network Printer	HP LASERJET 4050TN	HP	GRC	
2048656	Network Printer	HP LASERJET 4050TN	HP	GRC	
2049118	Network Printer	HP LASERJET 4050TN	HP	GRC	
2135255	Network Printer	HP LASERJET 4100DTN	HP	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2135552	Network Printer	HP LASERJET 4100DTN	HP	GRC	
3008493	Network Printer	HP LASERJET 4250N	HP	GRC	
2137599	Network Printer	HP LASERJET 4300DTN	HP	GRC	
2136796	Network Printer	HP LASERJET 4300DTN	HP	GRC	
2007489	Network Printer	HP LASERJET 4550	HP	GRC	
2134739	Network Printer	HP LASERJET 4550N	HP	GRC	
2135824	Network Printer	HP LASERJET 4600DN	HP	GRC	
2135742	Network Printer	HP LASERJET 4600DN	HP	GRC	
2136842	Network Printer	HP LASERJET 4600DN	HP	GRC	
2135705	Network Printer	HP LASERJET 4600DN	HP	GRC	
2137797	Network Printer	HP LASERJET 4600DN	HP	GRC	
2136671	Network Printer	HP LASERJET 4600DN	HP	GRC	
2136063	Network Printer	HP LASERJET 4600DN	HP	GRC	
2136719	Network Printer	HP LASERJET 4600N	HP	GRC	
3007546	Network Printer	HP LASERJET 4700DN	HP	GRC	
2050280	Network Printer	HP LASERJET 5000N	HP	GRC	
2136125	Network Printer	HP LASERJET 5100	HP	GRC	
2136489	Network Printer	HP LASERJET 5500DN	HP	GRC	
2136277	Network Printer	HP LASERJET 5500DN	HP	GRC	
3008894	Network Printer	HP LASERJET 5550DTN	HP	GRC	
3009213	Network Printer	HP LASERJET 5550HDN	HP	GRC	
1888821	Network Printer	HP LASERJET 5M	HP	GRC	
1887009	Network Printer	HP LASERJET 6MP	HP	GRC	
2049699	Network Printer	HP LASERJET 8100N	HP	GRC	
2136337	Network Printer	HP LASERJET 8150DN	HP	GRC	
2050251	Network Printer	HP LASERJET 8550DN	HP	GRC	
2007398	Network Printer	HP LASERJET 8550DN	HP	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
3008512	Network Printer	HP LASERJET 9500N	HP	GRC	
3008802	Network Printer	HP LASERJET 9550DN	HP	GRC	
3009157	Network Printer	HP LASERJET P3005DN	HP	GRC	
3007921	Network Printer	HP LASERJET2420N	HP	GRC	
2138107	Network Printer	HP PHOTOSMART 1218XI	HP	GRC	
3007996	Network Printer	LASERJET 3800DTN	HP	GRC	
2135823	Network Printer	LASERJET 4600DTN	HP	GRC	
2137042	Network Printer	LASERJET 4600DTN	HP	GRC	
2136904	Network Printer	N4525	XEROX	GRC	
7790005846	Network Printer	OFFICE JET 8500P WLS 4-1	HP	GRC	
2136414	Network Printer	PHASER 8200	XEROX	GRC	
7790005553	Network Printer	PHASER 8400	XEROX	GRC	
3009650	Network Printer	PHASER 8560	XEROX	GRC	
2184852	Network Printer	PHASER 8560N	XEROX	GRC	
2135968	Network Printer	PHASER7700GX	XEROX	GRC	
3009293	Network Printer	PRO XL	BROTHER	GRC	
2186052	Network Printer	Q7493A	HP	GRC	
2136230	Network Printer	SHDM1000	SHARP	GRC	
7790005778L	Network Printer	W5030PG	XEROX	GRC	
7790005781L	Network Printer	W5030PG	XEROX	GRC	
7790005779L	Network Printer	W5030PG	XEROX	GRC	
7790005780L	Network Printer	W5030PHG	XEROX	GRC	
7790005782L	Network Printer	W5030PHG	XEROX	GRC	
7790005796L	Network Printer	W5030PHG	XEROX	GRC	
7790005777L	Network Printer	W5050PHG	XEROX	GRC	
7790005776L	Network Printer	W5050PHG	XEROX	GRC	
7790005783L	Network Printer	W5050PHG	XEROX	GRC	
7790005827L	Network Printer	WC2030	XEROX	GRC	
7790005791L	Network Printer	WC2128	XEROX	GRC	
7790005790L	Network Printer	WC5030	XEROX	GRC	
7790005792L	Network Printer	WC5030	XEROX	GRC	
7790005798L	Network Printer	WC5030	XEROX	GRC	
7790005803L	Network Printer	WC5030	XEROX	GRC	
7790005807L	Network Printer	WC5030	XEROX	GRC	
7790005817L	Network Printer	WC5030	XEROX	GRC	
7790005823L	Network Printer	WC5030	XEROX	GRC	
7790005794L	Network Printer	WC5050	XEROX	GRC	
7790005801L	Network Printer	WCC2636	XEROX	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
7790005775L	Network Printer	WCP3545G	XEROX	GRC	
7790005787L	Network Printer	WCP3545G	XEROX	GRC	
7790005784L	Network Printer	WCP3545G	XEROX	GRC	
7790005830L	Network Printer	WORKCENTRE 5030	XEROX	GRC	
7790005832L	Network Printer	WORKCENTRE 5030	XEROX	GRC	
7790005833L	Network Printer	WORKCENTRE 5030	XEROX	GRC	
7790005842L	Network Printer	WORKCENTRE 5030	XEROX	GRC	
7790005852L	Network Printer	WORKCENTRE 5030	XEROX	GRC	
7790005829L	Network Printer	WORKCENTRE 7328	XEROX	GRC	
7790005834L	Network Printer	WORKCENTRE 7345	XEROX	GRC	
7790005855L	Network Printer	WORKCENTRE 7428	XEROX	GRC	
7790005853L	Network Printer	WORKCENTRE 7428	XEROX	GRC	
7790005854L	Network Printer	WORKCENTRE 7428	XEROX	GRC	
7790005849L	Network Printer	WORKCENTRE M20I	XEROX	GRC	
2138508	Network Printer	XIMG	DELL	GRC	
1887632	Network Printer	Z740	TEKTRONIX	GRC	
2135914	PC Projector	DP8000	PROXIMA	GRC	
7790005388	Plotter	C1316A	HP	GRC	
3008469	Plotter	Q1272A	HP	GRC	
3009251	Plotter	Q1274A	HP	GRC	
3009132	Plotter	STYLUS PRO9800	EPSON	GRC	
2185128	Plotter	TCS300	OCE	GRC	
2185130	Plotter	TDS450	OCE	GRC	
3008636	Plotter	TDS600	OCE	GRC	
2046272	Printer	HP LASERJET 2100	HP	GRC	
2005645	Printer	HP LASERJET 2100M	HP	GRC	
2007729	Printer	HP LASERJET 2100M	HP	GRC	
2048077	Printer	HP LASERJET 2100TN	HP	GRC	
2047589	Printer	HP LASERJET 2100TN	HP	GRC	
2007412	Printer	HP LASERJET 2100XI	HP	GRC	
2135694	Printer	HP LASERJET 2200D	HP	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2136073	Printer	HP LASERJET 2200D	HP	GRC	
2135780	Printer	HP LASERJET 2200D	HP	GRC	
2136279	Printer	HP LASERJET 2200DT	HP	GRC	
2050496	Printer	HP LASERJET 2250	HP	GRC	
7790005396	Printer	HP LASERJET 2300	HP	GRC	
2138363	Printer	HP LASERJET 2300	HP	GRC	
2136488	Printer	HP LASERJET 2300	HP	GRC	
2048399	Printer	HP LASERJET 2300CM	HP	GRC	
2137634	Printer	HP LASERJET 2300D	HP	GRC	
2137635	Printer	HP LASERJET 2300D	HP	GRC	
2137631	Printer	HP LASERJET 2300D	HP	GRC	
2137629	Printer	HP LASERJET 2300D	HP	GRC	
2137633	Printer	HP LASERJET 2300D	HP	GRC	
2137630	Printer	HP LASERJET 2300D	HP	GRC	
2137632	Printer	HP LASERJET 2300D	HP	GRC	
7790005513	Printer	HP LASERJET 2300D	HP	GRC	
3007913	Printer	HP LASERJET 2420D	HP	GRC	
2138549	Printer	HP LASERJET 3700DN	HP	GRC	
1328920	Printer	HP LASERJET 4	HP	GRC	
1887525	Printer	HP LASERJET 4000	HP	GRC	
1887198	Printer	HP LASERJET 4000	HP	GRC	
1620400	Printer	HP LASERJET 4000	HP	GRC	
1889153	Printer	HP LASERJET 4000N	HP	GRC	
2045943	Printer	HP LASERJET 4050	HP	GRC	
2007731	Printer	HP LASERJET 4050	HP	GRC	
2045833	Printer	HP LASERJET 4050	HP	GRC	
2047316	Printer	HP LASERJET 4050N	HP	GRC	
2049155	Printer	HP LASERJET 4050N	HP	GRC	
2005670	Printer	HP LASERJET 4050TN	HP	GRC	
2135365	Printer	HP LASERJET 4100	HP	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2007741	Printer	HP LASERJET 4500DN	HP	GRC	
2134664	Printer	HP LASERJET 4550N	HP	GRC	
2135757	Printer	HP LASERJET 4600DN	HP	GRC	
2136610	Printer	HP LASERJET 4600DN	HP	GRC	
2136895	Printer	HP LASERJET 4600DN	HP	GRC	
1277388	Printer	HP LASERJET 4M	HP	GRC	
1436976	Printer	HP LASERJET 4M	HP	GRC	
1434650	Printer	HP LASERJET 4M PLUS	HP	GRC	
1500229	Printer	HP LASERJET 4M PLUS	HP	GRC	
1746334	Printer	HP LASERJET 5	HP	GRC	
1891090	Printer	HP LASERJET 6MP	HP	GRC	
1889557	Printer	HP LASERJET 6MP	HP	GRC	
1887217	Printer	HP LASERJET 6MP	HP	GRC	
1747971	Printer	HP LASERJET 6MP	HP	GRC	
1886537	Printer	HP LASERJET 6MP	HP	GRC	
1887235	Printer	HP LASERJET 6MP	HP	GRC	
1746279	Printer	HP LASERJET 6MP	HP	GRC	
1747344	Printer	HP LASERJET 6MP	HP	GRC	
1887444	Printer	HP LASERJET 6P	HP	GRC	
1887445	Printer	HP LASERJET 6P	HP	GRC	
7790005341	Printer	HP PSC 750	HP	GRC	
1887503	Printer	LASERJET 6MP	HP	GRC	
1667152	Production Server	2850	DELL	GRC	NCAD Domain Controller
2185676	Production Server	ECM01	DELL	GRC	NASA customer server (Rick Cowin)
7790003252	Production Server	MCS-7835-H2-RC1	CISCO	GRC	UNIFIED MEETING PLACE SERVER/NETWORK
000000537119	Production Server	PE2950	DELL	GRC	NCAD Domain Controller
2185062	Production Server	POWEREDGE 2400	DELL	GRC	ASRC customer server (GESS contract /Leonard Stys)
7790003447	Production Server	POWEREDGE 2970	DELL	GRC	NDG2CTX CITRIX and VM Ware server
7790003448	Production Server	POWEREDGE 2970	DELL	GRC	SMS/SCCM server
7790003449	Production Server	POWEREDGE 2970	DELL	GRC	MOM server
7790003450	Production Server	POWEREDGE 2970	DELL	GRC	NDGRMOMO1 SCOM (Monitors Servers)
7790003253	Production Server	QUAD CORE XEON	DELL	GRC	NCAD Domain Controller

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
7790003254	Production Server	QUAD CORE XEON	DELL	GRC	NCAD Domain Controller
7790003255	Production Server	QUAD CORE XEON	DELL	GRC	NCAD Domain Controller
2186203	Production Server	RSA0010510	RSA SECURITY	GRC	RAS
2134256	Projector	HV5000XG	ELMO	GRC	
3008981	Projector	PT-LB50U	PANASONIC	GRC	
3008980	Projector	PT-LB50U	PANASONIC	GRC	
2555188	Seat Server	130	RSA	GRC	
2555187	Seat Server	130	RSA	GRC	
2046260	Seat Server	450	SUN	GRC	
2138019	Seat Server	840	DELL	GRC	
2500550	Seat Server	1994	APPLE	GRC	
2130505	Seat Server	2650	DELL	GRC	
1622094	Seat Server	2850	DELL	GRC	
1622095	Seat Server	2850	DELL	GRC	
2519416	Seat Server	2850	DELL	GRC	
2519477	Seat Server	2950	DELL	GRC	
2007218	Seat Server	1134946-1	SUN	GRC	
7790005204	Seat Server	600-3927-01	SUN	GRC	
2138064	Seat Server	8677-2XX	IBM	GRC	
2138693	Seat Server	8870-42X	IBM	GRC	
2500623	Seat Server	A1068 G5 XSERVE	APPLE	GRC	
2185344	Seat Server	A1246	APPLE	GRC	
2134120	Seat Server	ANTEC	NASA GLENN RESEARCH CENTER	GRC	
3007470	Seat Server	ATHLON642800+	NASA GLENN RESEARCH CENTER	GRC	
3007469	Seat Server	ATHLON642800+	NASA GLENN RESEARCH CENTER	GRC	
3007471	Seat Server	BE11	NASA GLENN RESEARCH CENTER	GRC	
2500662	Seat Server	BL30P	HP	GRC	
2555153	Seat Server	BL460C	HP	GRC	
2555154	Seat Server	BL460C	HP	GRC	
2555155	Seat Server	BL460C	HP	GRC	
2555156	Seat Server	BL460C	HP	GRC	
2581802	Seat Server	BL460C	HP	GRC	
2581801	Seat Server	BL460C	HP	GRC	
2581803	Seat Server	BL460C	HP	GRC	
2581804	Seat Server	BL460C	HP	GRC	
1328988	Seat Server	CMNA011	SGI	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1745111	Seat Server	CMN-A015	SGI	GRC	
2135570	Seat Server	CMNA018	SGI	GRC	
2135697	Seat Server	CMNA018	SGI	GRC	
3007950	Seat Server	DCCY	DELL	GRC	
3007951	Seat Server	DCCY	DELL	GRC	
3007952	Seat Server	DCCY	DELL	GRC	
3007953	Seat Server	DCCY	DELL	GRC	
3007954	Seat Server	DCCY	DELL	GRC	
3007955	Seat Server	DCCY	DELL	GRC	
3007956	Seat Server	DCCY	DELL	GRC	
3007957	Seat Server	DCCY	DELL	GRC	
3007958	Seat Server	DCCY	DELL	GRC	
3007959	Seat Server	DCCY	DELL	GRC	
3007960	Seat Server	DCCY	DELL	GRC	
3007961	Seat Server	DCCY	DELL	GRC	
3007962	Seat Server	DCCY	DELL	GRC	
3007963	Seat Server	DCCY	DELL	GRC	
3007964	Seat Server	DCCY	DELL	GRC	
3007965	Seat Server	DCCY	DELL	GRC	
3007966	Seat Server	DCCY	DELL	GRC	
3007967	Seat Server	DCCY	DELL	GRC	
3007968	Seat Server	DCCY	DELL	GRC	
3007969	Seat Server	DCCY	DELL	GRC	
3007970	Seat Server	DCCY	DELL	GRC	
3007971	Seat Server	DCCY	DELL	GRC	
3007972	Seat Server	DCCY	DELL	GRC	
3007973	Seat Server	DCCY	DELL	GRC	
3007974	Seat Server	DCCY	DELL	GRC	
3007975	Seat Server	DCCY	DELL	GRC	
3007976	Seat Server	DCCY	DELL	GRC	
3007977	Seat Server	DCCY	DELL	GRC	
3007978	Seat Server	DCCY	DELL	GRC	
3007979	Seat Server	DCCY	DELL	GRC	
2138093	Seat Server	DHM	DELL	GRC	
2185143	Seat Server	DH-PB10A-AA	COMPAQ	GRC	
2186475	Seat Server	E02S	DELL	GRC	
2186134	Seat Server	E02S	DELL	GRC	
2186476	Seat Server	E02S	DELL	GRC	
2045738	Seat Server	E450	SUN	GRC	
2137141	Seat Server	ECL	DELL	GRC	
3007184	Seat Server	ECM	DELL	GRC	
2138016	Seat Server	ECM01	DELL	GRC	
2138017	Seat Server	ECM01	DELL	GRC	
3009105	Seat Server	ECM01	DELL	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
3009652	Seat Server	ECM01	DELL	GRC	
3009653	Seat Server	ECM01	DELL	GRC	
3009654	Seat Server	ECM01	DELL	GRC	
2185738	Seat Server	ECM01	DELL	GRC	
3008899	Seat Server	ECM01	DELL	GRC	
3008996	Seat Server	EM244AV	HP	GRC	
2519544	Seat Server	EMG0	DELL	GRC	
2135625	Seat Server	EML	DELL	GRC	
2135892	Seat Server	EML	DELL	GRC	
2135966	Seat Server	EML	DELL	GRC	
2185538	Seat Server	EMM	DELL	GRC	
2500770	Seat Server	EMS	DELL	GRC	
3008477	Seat Server	EMS01	DELL	GRC	
3008476	Seat Server	EMS01	DELL	GRC	
3008999	Seat Server	EMS01	DELL	GRC	
3009123	Seat Server	EMS01	DELL	GRC	
3009124	Seat Server	EMS01	DELL	GRC	
3009125	Seat Server	EMS01	DELL	GRC	
2554873	Seat Server	EMS01	DELL	GRC	
2185267	Seat Server	EMS01	DELL	GRC	
2500788	Seat Server	EMU	DELL	GRC	
2519434	Seat Server	EMU01	DELL	GRC	
2519435	Seat Server	EMU01	DELL	GRC	
2519436	Seat Server	EMU01	DELL	GRC	
2185471	Seat Server	EMU01	DELL	GRC	
2555200	Seat Server	EMU01	DELL	GRC	
3009513	Seat Server	FAS3040	NETWORK APPLIANCE	GRC	
L24021	Seat Server	FIERY EXP50 SERVER	XEROX	GRC	
2500671	Seat Server	HPBL20P	HP	GRC	
2500669	Seat Server	HPBL30P	HP	GRC	
2500670	Seat Server	HPBL30P	HP	GRC	
2500667	Seat Server	HPBL30P	HP	GRC	
1621871	Seat Server	IMU	DELL	GRC	
1621872	Seat Server	IMU	DELL	GRC	
7790005077	Seat Server	J3265A	HP	GRC	
2185340	Seat Server	MACPRO	APPLE	GRC	
3007159	Seat Server	ML370 G4 TOWER	HP	GRC	
2137199	Seat Server	MTC2	DELL	GRC	
2135185	Seat Server	NETRA X1	SUN	GRC	
2185258	Seat Server	NETSERVER 500XR	PRIMEARRAY	GRC	
2500584	Seat Server	NONE	DELL	GRC	
3011172	Seat Server	NONE	ANTEC	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2135338	Seat Server	NONE	NASA GLENN RESEARCH CENTER	GRC	
3008584	Seat Server	NOWHOL	SYSTEMAX	GRC	
1745130	Seat Server	ORIGIN200	SGI	GRC	
1502802	Seat Server	PB73P-XA	DEC	GRC	
3008549	Seat Server	PINNACLE 30D200	ADVANCED CLUSTERING TECH	GRC	
3008554	Seat Server	PINNACLE 30D200	ADVANCED CLUSTERING TECH	GRC	
3008553	Seat Server	PINNACLE 30D200	ADVANCED CLUSTERING TECH	GRC	
3009097	Seat Server	PN1	DELL	GRC	
2554874	Seat Server	POWEREDGE 1950	DELL	GRC	
3009520	Seat Server	POWEREDGE 2900	DELL	GRC	
2519374	Seat Server	POWEREDGE 2950	DELL	GRC	
2519488	Seat Server	POWEREDGE 2950	DELL	GRC	
2554802	Seat Server	POWEREDGE 2950	DELL	GRC	
2554801	Seat Server	POWEREDGE 2950	DELL	GRC	
2555050	Seat Server	POWEREDGE 2950	DELL	GRC	
3009315	Seat Server	POWEREDGE 2970	DELL	GRC	
3009314	Seat Server	POWEREDGE 2970	DELL	GRC	
2050062	Seat Server	POWEREDGE 6400	DELL	GRC	
2186255	Seat Server	POWEREDGE R710	DELL	GRC	
2185503	Seat Server	R900	DELL	GRC	
2185337	Seat Server	SA3000	NEOTERIS	GRC	
2134670	Seat Server	SCL	DELL	GRC	
2137099	Seat Server	SCL	DELL	GRC	
2138073	Seat Server	SCL	DELL	GRC	
1886465	Seat Server	SML	DELL	GRC	
2049812	Seat Server	SML	DELL	GRC	
2049301	Seat Server	SML	DELL	GRC	
2135101	Seat Server	SML	DELL	GRC	
2135357	Seat Server	SML	DELL	GRC	
2048950	Seat Server	SMM	DELL	GRC	
2136775	Seat Server	SMM01	DELL	GRC	
2136503	Seat Server	SMM01	DELL	GRC	
3008627	Seat Server	SMM01	DELL	GRC	
1621576	Seat Server	SMP	DELL	GRC	
1621577	Seat Server	SMP	DELL	GRC	
3009330	Seat Server	SWTX51602WSS	LINUX TECHNOLOGY	GRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2519410	Seat Server	SYS-5015BMTB	SUPERMICRO COMPUTER	GRC	
2541853	Seat Server	T2000	SUN	GRC	
2185527	Seat Server	T7400	DELL	GRC	
2519542	Seat Server	V245	SUN	GRC	
2137040	Seat Server	V280	SUN	GRC	
2138176	Seat Server	V440	SUN	GRC	
2136997	Seat Server	V489	SUN	GRC	
3007402	Seat Server	WHL	DELL	GRC	
3008637	Seat Server	X5160DW	LINUX TECHNOLOGY	GRC	
2519520	Seat Server	ZODB003NM	APPLE	GRC	
F870971	Seat Server		DELL	GRC	
1328109	Server	861	SUN	GRC	Local Backup/Restore
1887251	Server	ESPR-TS1DX8	ANDATACO	GRC	Local Backup/Restore
1501399	Server	REDWOOD-SD3	STORAGE TECHNOLOGY	GRC	Storage Volume
7790003330	Switching Unit	WS-C3560-24TS-E	CISCO	GRC	
2035814	Infrastructure Printer	C4253A	HP	GSFC	
2108307	Infrastructure Printer	C4253A	HP	GSFC	
2108306	Infrastructure Printer	C4253A	HP	GSFC	
2108308	Infrastructure Printer	C4253A	HP	GSFC	
2108227	Infrastructure Printer	C4253A	HP	GSFC	
2114017	Infrastructure Printer	C7053A	HP	GSFC	
2031946	Internal Hard Drive	190100	MICRO SOLUTIONS INC	GSFC	
ECN2168473	Network Printer	HP LASERJET 1320N	HP	GSFC	
2031723	Printer	HP LASERJET 2100M	HP	GSFC	
2037511	Printer	HP LASERJET 2100TN	HP	GSFC	
2034310	Printer	HP LASERJET 2100TN	HP	GSFC	
2034308	Printer	HP LASERJET 2100TN	HP	GSFC	
2111286	Printer	HP LASERJET 2200	HP	GSFC	
1101426	Printer	HP LASERJET 3	HP	GSFC	
3079271	Printer	HP LASERJET 3600N	HP	GSFC	
3039165	Printer	HP LASERJET 3700N	HP	GSFC	
1341005	Printer	HP LASERJET 4	HP	GSFC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2033513	Printer	HP LASERJET 4	HP	GSFC	
1945804	Printer	HP LASERJET 4	HP	GSFC	
2033512	Printer	HP LASERJET 4	HP	GSFC	
1338200	Printer	HP LASERJET 4	HP	GSFC	
1945805	Printer	HP LASERJET 4	HP	GSFC	
1951339	Printer	HP LASERJET 4	HP	GSFC	
1945806	Printer	HP LASERJET 4	HP	GSFC	
1338234	Printer	HP LASERJET 4	HP	GSFC	
1344408	Printer	HP LASERJET 4	HP	GSFC	
1338135	Printer	HP LASERJET 4	HP	GSFC	
1330936	Printer	HP LASERJET 4	HP	GSFC	
1529203	Printer	HP LASERJET 4	HP	GSFC	
1529153	Printer	HP LASERJET 4 PLUS	HP	GSFC	
2031531	Printer	HP LASERJET 400	HP	GSFC	
2031534	Printer	HP LASERJET 400	HP	GSFC	
2036436	Printer	HP LASERJET 4000	HP	GSFC	
1952121	Printer	HP LASERJET 4000N	HP	GSFC	
1952122	Printer	HP LASERJET 4000N	HP	GSFC	
1947214	Printer	HP LASERJET 4000N	HP	GSFC	
2035817	Printer	HP LASERJET 4050	HP	GSFC	
20358813	Printer	HP LASERJET 4050	HP	GSFC	
2035816	Printer	HP LASERJET 4050	HP	GSFC	
2035812	Printer	HP LASERJET 4050	HP	GSFC	
2035811	Printer	HP LASERJET 4050	HP	GSFC	
2035818	Printer	HP LASERJET 4050	HP	GSFC	
2035815	Printer	HP LASERJET 4050	HP	GSFC	
2033529	Printer	HP LASERJET 4050	HP	GSFC	
2042524	Printer	HP LASERJET 4050N	HP	GSFC	
2040464	Printer	HP LASERJET 4050N	HP	GSFC	
2111238	Printer	HP LASERJET 4050N	HP	GSFC	
3015370	Printer	HP LASERJET 4200	HP	GSFC	
3014099	Printer	HP LASERJET 4200	HP	GSFC	
2168302	Printer	HP LASERJET 4350TN	HP	GSFC	
2033059	Printer	HP LASERJET 4500DN	HP	GSFC	
2036692	Printer	HP LASERJET 4500NPS	HP	GSFC	
3013491	Printer	HP LASERJET 4600	HP	GSFC	
1412501	Printer	HP LASERJET 4M	HP	GSFC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2041308	Printer	HP LASERJET 4M	HP	GSFC	
1338235	Printer	HP LASERJET 5	HP	GSFC	
1482558	Printer	HP LASERJET 5	HP	GSFC	
3036303	Printer	HP LASERJET 5100TN	HP	GSFC	
1756968	Printer	HP LASERJET 5M	HP	GSFC	
1818631	Printer	HP LASERJET 5N	HP	GSFC	
1823529	Printer	HP LASERJET 5N	HP	GSFC	
1754943	Printer	HP LASERJET 5SI	HP	GSFC	
1754944	Printer	HP LASERJET 5SI	HP	GSFC	
1947145	Printer	HP LASERJET 6MP	HP	GSFC	
1953234	Printer	HP LASERJET 6MP	HP	GSFC	
1947140	Printer	HP LASERJET 6MP	HP	GSFC	
1947138	Printer	HP LASERJET 6MP	HP	GSFC	
1947144	Printer	HP LASERJET 6MP	HP	GSFC	
1947147	Printer	HP LASERJET 6MP	HP	GSFC	
1947139	Printer	HP LASERJET 6MP	HP	GSFC	
1821607	Printer	HP LASERJET 6MP	HP	GSFC	
1955562	Printer	HP LASERJET 6MP	HP	GSFC	
1815526	Printer	HP LASERJET 6P	HP	GSFC	
2037522	Printer	HP LASERJET 7700	HP	GSFC	
2033984	Printer	HP LASERJET 8000DN	HP	GSFC	
2039914	Printer	HP LASERJET 8006	HP	GSFC	
2044866	Printer	HP LASERJET 8100DN	HP	GSFC	
2042771	Printer	HP LASERJET 8154	HP	GSFC	
000000539291	Production Server	EMS01	DELL	GSFC	NCAD Domain Controller
000000539292	Production Server	EMS01	DELL	GSFC	NCAD Domain Controller
000000539295	Production Server	EMS01	DELL	GSFC	NCAD Domain Controller
000000539296	Production Server	EMS01	DELL	GSFC	NCAD Domain Controller
000000537111	Production Server	PE2950	DELL	GSFC	NCAD Domain Controller
000000537112	Production Server	PE2950	DELL	GSFC	NCAD Domain Controller
819SF51	Production Server	POWEREDGE 1750	DELL	GSFC	HTTP/FTP Services
1667131	Production Server			GSFC	NCAD Domain Controller
1667146	Production Server			GSFC	NCAD
Delete-2234932	Infrastructure Printer	9500N	HP	HQ	
N007892	Internal Hard Drive	8000		HQ	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
HQ5500441	Internal Hard Drive	20GB	IOMEGA	HQ	
HQ5500676	Internal Hard Drive	400G	LACIE	HQ	
HQ5500433	Internal Hard Drive	80GB	IOMEGA	HQ	
N010861	Internal Hard Drive	LSG32	APPLE	HQ	
N008784	Internal Hard Drive	LSG32	APPLE	HQ	
N009234	Internal Hard Drive	LSG32	APPLE	HQ	
N009507	Internal Hard Drive	LSG32	APPLE	HQ	
N009187	Internal Hard Drive	LSG32	APPLE	HQ	
N008581	Internal Hard Drive	LSG32	APPLE	HQ	
N009229	Internal Hard Drive	LSG32	APPLE	HQ	
N008585	Internal Hard Drive	LSG32	APPLE	HQ	
N008579	Internal Hard Drive	LSG32	APPLE	HQ	
N010854	Internal Hard Drive	LSG32	APPLE	HQ	
N010497	Internal Hard Drive	LSG32	APPLE	HQ	
N013620	Internal Hard Drive		LACIE	HQ	
HQ5500451	Internal Hard Drive		MAXTOR	HQ	
HQ5500346	Internal Hard Drive		HP	HQ	
3066141	Network Printer	7300N	TEKTRONIX	HQ	
3066140	Network Printer	7300N	TEKTRONIX	HQ	
3036715	Network Printer	HP LASERJET 4600DN	HP	HQ	
2164008	Network Printer	HP LASERJET 4650	HP	HQ	
2165049	Network Printer	HP LASERJET 4650DN	HP	HQ	
3036696	Network Printer	HP LASERJET 8000	HP	HQ	
2165705	Network Printer	HP LASERJET 8000	HP	HQ	
N007920	Network Printer	HP LASERJET 8150DN	HP	HQ	
N009782	Network Printer	HP LASERJET 8150DN	HP	HQ	
N009447	Printer	2100TN	HP	HQ	
3035422	Printer	2100TN	HP	HQ	
N012149	Printer	2200DN	HP	HQ	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
N012188	Printer	2200DN	HP	HQ	
N012244	Printer	2200DN	HP	HQ	
N012192	Printer	2200DN	HP	HQ	
N011729	Printer	2200DN	HP	HQ	
N012273	Printer	2200DN	HP	HQ	
N012178	Printer	2200DN	HP	HQ	
N012305	Printer	2200DN	HP	HQ	
N012175	Printer	2200DN	HP	HQ	
N012265	Printer	2200DN	HP	HQ	
N011148	Printer	2200DN	HP	HQ	
N009431	Printer	HP LASERJET 2100	HP	HQ	
2043585	Printer	HP LASERJET 2100	HP	HQ	
N009714	Printer	HP LASERJET 2100	HP	HQ	
N009453	Printer	HP LASERJET 2100	HP	HQ	
N006878	Printer	HP LASERJET 2100	HP	HQ	
N009421	Printer	HP LASERJET 2100N	HP	HQ	
N009448	Printer	HP LASERJET 2100TN	HP	HQ	
N006596	Printer	HP LASERJET 2100TN	HP	HQ	
N006404	Printer	HP LASERJET 2100TN	HP	HQ	
N010423	Printer	HP LASERJET 2100TN	HP	HQ	
N008866	Printer	HP LASERJET 2100TN	HP	HQ	
N008871	Printer	HP LASERJET 2100TN	HP	HQ	
N008862	Printer	HP LASERJET 2100TN	HP	HQ	
N009295	Printer	HP LASERJET 2100TN	HP	HQ	
N009434	Printer	HP LASERJET 2100TN	HP	HQ	
N006879	Printer	HP LASERJET 2100TN	HP	HQ	
N009430	Printer	HP LASERJET 2100TN	HP	HQ	
N009442	Printer	HP LASERJET 2100TN	HP	HQ	
3039748	Printer	HP LASERJET 2100TN	HP	HQ	
N009449	Printer	HP LASERJET 2100TN	HP	HQ	
N006284	Printer	HP LASERJET 2100TN	HP	HQ	
N009710	Printer	HP LASERJET 2100TN	HP	HQ	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
N006283	Printer	HP LASERJET 2100TN	HP	HQ	
N009432	Printer	HP LASERJET 2100TN	HP	HQ	
N008863	Printer	HP LASERJET 2100TN	HP	HQ	
N009435	Printer	HP LASERJET 2100TN	HP	HQ	
3036583	Printer	HP LASERJET 2100TN	HP	HQ	
N009438	Printer	HP LASERJET 2100TN	HP	HQ	
N009455	Printer	HP LASERJET 2100TN	HP	HQ	
N008864	Printer	HP LASERJET 2100TN	HP	HQ	
N010924	Printer	HP LASERJET 2100TN	HP	HQ	
N008872	Printer	HP LASERJET 2100TN	HP	HQ	
N006470	Printer	HP LASERJET 2100TN	HP	HQ	
N009294	Printer	HP LASERJET 2100TN	HP	HQ	
N009446	Printer	HP LASERJET 2100TN	HP	HQ	
N009577	Printer	HP LASERJET 2100TN	HP	HQ	
N009286	Printer	HP LASERJET 2100TN	HP	HQ	
3036643	Printer	HP LASERJET 2100TN	HP	HQ	
3039900	Printer	HP LASERJET 2100TN	HP	HQ	
N009292	Printer	HP LASERJET 2100TN	HP	HQ	
3039892	Printer	HP LASERJET 2100TN	HP	HQ	
N008867	Printer	HP LASERJET 2100TN	HP	HQ	
HQ5500711	Printer	HP LASERJET 2100TN	HP	HQ	
N008861	Printer	HP LASERJET 2100TN	HP	HQ	
HQ5500744	Printer	HP LASERJET 2100TN	HP	HQ	
3036690	Printer	HP LASERJET 2100TN	HP	HQ	
N010420	Printer	HP LASERJET 2100TN	HP	HQ	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
N009424	Printer	HP LASERJET 2100TN	HP	HQ	
N009443	Printer	HP LASERJET 2100TN	HP	HQ	
N010427	Printer	HP LASERJET 2100TN	HP	HQ	
N009427	Printer	HP LASERJET 2100TN	HP	HQ	
N006594	Printer	HP LASERJET 2100TN	HP	HQ	
N007091	Printer	HP LASERJET 2100TN	HP	HQ	
N009422	Printer	HP LASERJET 2100TN	HP	HQ	
N006881	Printer	HP LASERJET 2100TN	HP	HQ	
1957331	Printer	HP LASERJET 2100TN	HP	HQ	
N010926	Printer	HP LASERJET 2100TN	HP	HQ	
N009439	Printer	HP LASERJET 2100TN	HP	HQ	
N009428	Printer	HP LASERJET 2100TN	HP	HQ	
2164980	Printer	HP LASERJET 2100TN	HP	HQ	
N010927	Printer	HP LASERJET 2100TN	HP	HQ	
N008868	Printer	HP LASERJET 2100TN	HP	HQ	
HQ5501230	Printer	HP LASERJET 2100TN	HP	HQ	
N009700	Printer	HP LASERJET 2100TN	HP	HQ	
N009441	Printer	HP LASERJET 2100TN	HP	HQ	
N006285	Printer	HP LASERJET 2100TN	HP	HQ	
2114142	Printer	HP LASERJET 2100TN	HP	HQ	
N011758	Printer	HP LASERJET 2200	HP	HQ	
N011736	Printer	HP LASERJET 2200	HP	HQ	
3012797	Printer	HP LASERJET 2200	HP	HQ	
N012179	Printer	HP LASERJET 2200	HP	HQ	
N012266	Printer	HP LASERJET 2200	HP	HQ	
N012180	Printer	HP LASERJET 2200	HP	HQ	
N012283	Printer	HP LASERJET 2200	HP	HQ	
N012157	Printer	HP LASERJET 2200	HP	HQ	
N012290	Printer	HP LASERJET 2200	HP	HQ	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
HQ5500438	Printer	HP LASERJET 2200	HP	HQ	
N011747	Printer	HP LASERJET 2200	HP	HQ	
N007897	Printer	HP LASERJET 2200	HP	HQ	
N012169	Printer	HP LASERJET 2200	HP	HQ	
N012228	Printer	HP LASERJET 2200	HP	HQ	
N012243	Printer	HP LASERJET 2200	HP	HQ	
N007896	Printer	HP LASERJET 2200	HP	HQ	
N012231	Printer	HP LASERJET 2200	HP	HQ	
N012299	Printer	HP LASERJET 2200	HP	HQ	
2017963	Printer	HP LASERJET 2200DN	HP	HQ	
N012219	Printer	HP LASERJET 2200DN	HP	HQ	
N012198	Printer	HP LASERJET 2200DN	HP	HQ	
N011732	Printer	HP LASERJET 2200DN	HP	HQ	
N011135	Printer	HP LASERJET 2200DN	HP	HQ	
N012150	Printer	HP LASERJET 2200DN	HP	HQ	
3039898	Printer	HP LASERJET 2200DN	HP	HQ	
3039888	Printer	HP LASERJET 2200DN	HP	HQ	
3037770	Printer	HP LASERJET 2200DN	HP	HQ	
N009921	Printer	HP LASERJET 2200DN	HP	HQ	
N012173	Printer	HP LASERJET 2200DN	HP	HQ	
N012275	Printer	HP LASERJET 2200DN	HP	HQ	
N012147	Printer	HP LASERJET 2200DN	HP	HQ	
N011763	Printer	HP LASERJET 2200DN	HP	HQ	
N012221	Printer	HP LASERJET 2200DN	HP	HQ	
N012278	Printer	HP LASERJET 2200DN	HP	HQ	
N012166	Printer	HP LASERJET 2200DN	HP	HQ	
N012161	Printer	HP LASERJET 2200DN	HP	HQ	
N012210	Printer	HP LASERJET 2200DN	HP	HQ	
N011733	Printer	HP LASERJET 2200DN	HP	HQ	

RELEASED - Printed documents may be obsolete; validate prior to use.

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
N009913	Printer	HP LASERJET 2200DN	HP	HQ	
N012194	Printer	HP LASERJET 2200DN	HP	HQ	
N012271	Printer	HP LASERJET 2200DN	HP	HQ	
N012156	Printer	HP LASERJET 2200DN	HP	HQ	
N012191	Printer	HP LASERJET 2200DN	HP	HQ	
N012174	Printer	HP LASERJET 2200DN	HP	HQ	
N012181	Printer	HP LASERJET 2200DN	HP	HQ	
N012230	Printer	HP LASERJET 2200DN	HP	HQ	
N011146	Printer	HP LASERJET 2200DN	HP	HQ	
3037010	Printer	HP LASERJET 2200DN	HP	HQ	
3036874	Printer	HP LASERJET 2200DN	HP	HQ	
3034343	Printer	HP LASERJET 2200DN	HP	HQ	
N012241	Printer	HP LASERJET 2200DN	HP	HQ	
N012167	Printer	HP LASERJET 2200DN	HP	HQ	
N012211	Printer	HP LASERJET 2200DN	HP	HQ	
N012217	Printer	HP LASERJET 2200DN	HP	HQ	
3036848	Printer	HP LASERJET 2200DN	HP	HQ	
N012267	Printer	HP LASERJET 2200DN	HP	HQ	
N012245	Printer	HP LASERJET 2200DN	HP	HQ	
N011731	Printer	HP LASERJET 2200DN	HP	HQ	
N012301	Printer	HP LASERJET 2200DN	HP	HQ	
N011760	Printer	HP LASERJET 2200DN	HP	HQ	
N012251	Printer	HP LASERJET 2200DN	HP	HQ	
N011136	Printer	HP LASERJET 2200DN	HP	HQ	
N012269	Printer	HP LASERJET 2200DN	HP	HQ	

RELEASED - Printed documents may be obsolete; validate prior to use.

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
N009928	Printer	HP LASERJET 2200DN	HP	HQ	
N012170	Printer	HP LASERJET 2200DN	HP	HQ	
N012186	Printer	HP LASERJET 2200DN	HP	HQ	
HQ5500377	Printer	HP LASERJET 2200DN	HP	HQ	
N012272	Printer	HP LASERJET 2200DN	HP	HQ	
N011771	Printer	HP LASERJET 2200DN	HP	HQ	
N011741	Printer	HP LASERJET 2200DN	HP	HQ	
N012172	Printer	HP LASERJET 2200DN	HP	HQ	
N010424	Printer	HP LASERJET 2200DN	HP	HQ	
N011147	Printer	HP LASERJET 2200DN	HP	HQ	
N012302	Printer	HP LASERJET 2200DN	HP	HQ	
3036894	Printer	HP LASERJET 2200DN	HP	HQ	
3037279	Printer	HP LASERJET 2200DN	HP	HQ	
N011740	Printer	HP LASERJET 2200DN	HP	HQ	
HQ5500544	Printer	HP LASERJET 2200DN	HP	HQ	
3036703	Printer	HP LASERJET 2200DN	HP	HQ	
N012185	Printer	HP LASERJET 2200DN	HP	HQ	
N012171	Printer	HP LASERJET 2200DN	HP	HQ	
N012189	Printer	HP LASERJET 2200DN	HP	HQ	
3037750	Printer	HP LASERJET 2200DN	HP	HQ	
N012292	Printer	HP LASERJET 2200DN	HP	HQ	
N012209	Printer	HP LASERJET 2200DN	HP	HQ	
N011757	Printer	HP LASERJET 2200DN	HP	HQ	
N009919	Printer	HP LASERJET 2200DN	HP	HQ	
N012190	Printer	HP LASERJET 2200DN	HP	HQ	

RELEASED - Printed documents may be obsolete; validate prior to use.

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2164993	Printer	HP LASERJET 2200DN	HP	HQ	
N012154	Printer	HP LASERJET 2200DN	HP	HQ	
N011742	Printer	HP LASERJET 2200DN	HP	HQ	
N012282	Printer	HP LASERJET 2200DN	HP	HQ	
N011762	Printer	HP LASERJET 2200DN	HP	HQ	
N011739	Printer	HP LASERJET 2200DN	HP	HQ	
N008913	Printer	HP LASERJET 2200DN	HP	HQ	
N011728	Printer	HP LASERJET 2200DN	HP	HQ	
N006595	Printer	HP LASERJET 2200DN	HP	HQ	
N012165	Printer	HP LASERJET 2200DN	HP	HQ	
3036927	Printer	HP LASERJET 2200DN	HP	HQ	
N012259	Printer	HP LASERJET 2200DN	HP	HQ	
N012207	Printer	HP LASERJET 2200DN	HP	HQ	
N012274	Printer	HP LASERJET 2200DN	HP	HQ	
N012225	Printer	HP LASERJET 2200DN	HP	HQ	
N012284	Printer	HP LASERJET 2200DN	HP	HQ	
N012224	Printer	HP LASERJET 2200DN	HP	HQ	
N012203	Printer	HP LASERJET 2200DN	HP	HQ	
N012294	Printer	HP LASERJET 2200DN	HP	HQ	
N012291	Printer	HP LASERJET 2200DN	HP	HQ	
3036864	Printer	HP LASERJET 2200DN	HP	HQ	
N011749	Printer	HP LASERJET 2200DN	HP	HQ	
N011734	Printer	HP LASERJET 2200DN	HP	HQ	
N011152	Printer	HP LASERJET 2200DN	HP	HQ	
3039889	Printer	HP LASERJET 2200DN	HP	HQ	

RELEASED - Printed documents may be obsolete; validate prior to use.

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
N012212	Printer	HP LASERJET 2200DN	HP	HQ	
N011139	Printer	HP LASERJET 2200DN	HP	HQ	
3039890	Printer	HP LASERJET 2200DN	HP	HQ	
N011765	Printer	HP LASERJET 2200DN	HP	HQ	
N012295	Printer	HP LASERJET 2200DN	HP	HQ	
N011770	Printer	HP LASERJET 2200DN	HP	HQ	
N012242	Printer	HP LASERJET 2200DN	HP	HQ	
N012159	Printer	HP LASERJET 2200DN	HP	HQ	
N011143	Printer	HP LASERJET 2200DN	HP	HQ	
N012300	Printer	HP LASERJET 2200DN	HP	HQ	
N011138	Printer	HP LASERJET 2200DN	HP	HQ	
N012247	Printer	HP LASERJET 2200DN	HP	HQ	
N011766	Printer	HP LASERJET 2200DN	HP	HQ	
3036735	Printer	HP LASERJET 2200DN	HP	HQ	
N011748	Printer	HP LASERJET 2200DN	HP	HQ	
2165702	Printer	HP LASERJET 2200DN	HP	HQ	
N012155	Printer	HP LASERJET 2200DN	HP	HQ	
3039893	Printer	HP LASERJET 2200DN	HP	HQ	
N011769	Printer	HP LASERJET 2200DN	HP	HQ	
3039899	Printer	HP LASERJET 2200DN	HP	HQ	
N012297	Printer	HP LASERJET 2200DN	HP	HQ	
N012296	Printer	HP LASERJET 2200DN	HP	HQ	
N012148	Printer	HP LASERJET 2200DN	HP	HQ	
N009912	Printer	HP LASERJET 2200DN	HP	HQ	
N012218	Printer	HP LASERJET 2200DN	HP	HQ	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
N011753	Printer	HP LASERJET 2200DN	HP	HQ	
3035441	Printer	HP LASERJET 2200DN	HP	HQ	
N011755	Printer	HP LASERJET 2200DN	HP	HQ	
N012279	Printer	HP LASERJET 2200DN	HP	HQ	
2165752	Printer	HP LASERJET 2200DN	HP	HQ	
N012287	Printer	HP LASERJET 2200DN	HP	HQ	
N012199	Printer	HP LASERJET 2200DN	HP	HQ	
3039886	Printer	HP LASERJET 2200DN	HP	HQ	
3037005	Printer	HP LASERJET 2200DN	HP	HQ	
3039896	Printer	HP LASERJET 2200DN	HP	HQ	
N009916	Printer	HP LASERJET 2200DN	HP	HQ	
N012255	Printer	HP LASERJET 2200DN	HP	HQ	
N012239	Printer	HP LASERJET 2200DN	HP	HQ	
N009922	Printer	HP LASERJET 2200DN	HP	HQ	
N009918	Printer	HP LASERJET 2200DN	HP	HQ	
3036853	Printer	HP LASERJET 2200DN	HP	HQ	
3035418	Printer	HP LASERJET 2200DN	HP	HQ	
N011133	Printer	HP LASERJET 2200DN	HP	HQ	
3036718	Printer	HP LASERJET 2200DN	HP	HQ	
N011752	Printer	HP LASERJET 2200DN	HP	HQ	
N011142	Printer	HP LASERJET 2200DN	HP	HQ	
3037788	Printer	HP LASERJET 2200DN	HP	HQ	
3037286	Printer	HP LASERJET 2200DN	HP	HQ	
N009917	Printer	HP LASERJET 2200DN	HP	HQ	
N012193	Printer	HP LASERJET 2200DN	HP	HQ	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
N011738	Printer	HP LASERJET 2200DN	HP	HQ	
N012238	Printer	HP LASERJET 2200DN	HP	HQ	
N012226	Printer	HP LASERJET 2200DN	HP	HQ	
N009702	Printer	HP LASERJET 2200DN	HP	HQ	
N012151	Printer	HP LASERJET 2200DN	HP	HQ	
N012289	Printer	HP LASERJET 2200DN	HP	HQ	
3066362	Printer	HP LASERJET 2200TN	HP	HQ	
3039646	Printer	HP LASERJET 2300D	HP	HQ	
3036624	Printer	HP LASERJET 2300L	HP	HQ	
3039655	Printer	HP LASERJET 2550L	HP	HQ	
2165095	Printer	HP LASERJET 2820C	HP	HQ	
3066383	Printer	HP LASERJET 3500	HP	HQ	
3036388	Printer	HP LASERJET 3550	HP	HQ	
2165113	Printer	HP LASERJET 3800N	HP	HQ	
2041183	Printer	HP LASERJET 4050TN	HP	HQ	
N012562	Printer	HP LASERJET 4100N	HP	HQ	
N012563	Printer	HP LASERJET 4100N	HP	HQ	
N012556	Printer	HP LASERJET 4100N	HP	HQ	
3039891	Printer	HP LASERJET 4100N	HP	HQ	
N012554	Printer	HP LASERJET 4100N	HP	HQ	
N012555	Printer	HP LASERJET 4100N	HP	HQ	
N012558	Printer	HP LASERJET 4100N	HP	HQ	
N012561	Printer	HP LASERJET 4100N	HP	HQ	
N012557	Printer	HP LASERJET 4100N	HP	HQ	
N012568	Printer	HP LASERJET 4100N	HP	HQ	
N012566	Printer	HP LASERJET 4100N	HP	HQ	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
N012362	Printer	HP LASERJET 4100N	HP	HQ	
N007947	Printer	HP LASERJET 4200	HP	HQ	
N007970	Printer	HP LASERJET 4200	HP	HQ	
N007981	Printer	HP LASERJET 4200	HP	HQ	
N007961	Printer	HP LASERJET 4200	HP	HQ	
N007966	Printer	HP LASERJET 4200	HP	HQ	
N007956	Printer	HP LASERJET 4200	HP	HQ	
N007968	Printer	HP LASERJET 4200	HP	HQ	
N007955	Printer	HP LASERJET 4200	HP	HQ	
N007971	Printer	HP LASERJET 4200	HP	HQ	
N007972	Printer	HP LASERJET 4200	HP	HQ	
N007975	Printer	HP LASERJET 4200	HP	HQ	
N007967	Printer	HP LASERJET 4200	HP	HQ	
N007940	Printer	HP LASERJET 4200	HP	HQ	
N007942	Printer	HP LASERJET 4200	HP	HQ	
N007943	Printer	HP LASERJET 4200	HP	HQ	
N007946	Printer	HP LASERJET 4200	HP	HQ	
N007982	Printer	HP LASERJET 4200	HP	HQ	
N007949	Printer	HP LASERJET 4200	HP	HQ	
N007953	Printer	HP LASERJET 4200	HP	HQ	
N007938	Printer	HP LASERJET 4200	HP	HQ	
N007969	Printer	HP LASERJET 4200TN	HP	HQ	
N007963	Printer	HP LASERJET 4200TN	HP	HQ	
N007973	Printer	HP LASERJET 4200TN	HP	HQ	
N007958	Printer	HP LASERJET 4200TN	HP	HQ	
N007976	Printer	HP LASERJET 4200TN	HP	HQ	
3037408	Printer	HP LASERJET 4300	HP	HQ	
3035164	Printer	HP LASERJET 4300DN	HP	HQ	
3037443	Printer	HP LASERJET 4300DTN	HP	HQ	
3037383	Printer	HP LASERJET 4300DTN	HP	HQ	
3037524	Printer	HP LASERJET 4300DTN	HP	HQ	
3037436	Printer	HP LASERJET 4300DTN	HP	HQ	
3037444	Printer	HP LASERJET 4300DTN	HP	HQ	
3037435	Printer	HP LASERJET 4300DTN	HP	HQ	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
3035287	Printer	HP LASERJET 4300DTN	HP	HQ	
3036603	Printer	HP LASERJET 4550DN	HP	HQ	
3036986	Printer	HP LASERJET 4550DN	HP	HQ	
3036667	Printer	HP LASERJET 4600DN	HP	HQ	
3037832	Printer	HP LASERJET 4600DN	HP	HQ	
N012621	Printer	HP LASERJET 4600DN	HP	HQ	
3035297	Printer	HP LASERJET 4600DN	HP	HQ	
2163954	Printer	HP LASERJET 4600DN	HP	HQ	
N012623	Printer	HP LASERJET 4600DN	HP	HQ	
3035478	Printer	HP LASERJET 4600DN	HP	HQ	
3037557	Printer	HP LASERJET 4600DN	HP	HQ	
3036930	Printer	HP LASERJET 4600DN	HP	HQ	
N007902	Printer	HP LASERJET 4600DN	HP	HQ	
3037004	Printer	HP LASERJET 4600DN	HP	HQ	
N007911	Printer	HP LASERJET 4600DN	HP	HQ	
3066267	Printer	HP LASERJET 4600DN	HP	HQ	
3036630	Printer	HP LASERJET 4600DN	HP	HQ	
3036672	Printer	HP LASERJET 4600DN	HP	HQ	
3036651	Printer	HP LASERJET 4600DN	HP	HQ	
3036725	Printer	HP LASERJET 4600DN	HP	HQ	
N007904	Printer	HP LASERJET 4600DN	HP	HQ	
N007912	Printer	HP LASERJET 4600DN	HP	HQ	
N007903	Printer	HP LASERJET 4600DN	HP	HQ	
N007908	Printer	HP LASERJET 4600DN	HP	HQ	
N007910	Printer	HP LASERJET 4600DN	HP	HQ	

RELEASED - Printed documents may be obsolete; validate prior to use.

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
3035392	Printer	HP LASERJET 4600DN	HP	HQ	
3035340	Printer	HP LASERJET 4600DN	HP	HQ	
3036663	Printer	HP LASERJET 4600DN	HP	HQ	
N012622	Printer	HP LASERJET 4600DN	HP	HQ	
N007913	Printer	HP LASERJET 4600DN	HP	HQ	
3037764	Printer	HP LASERJET 4600DN	HP	HQ	
3036699	Printer	HP LASERJET 4600DN	HP	HQ	
3036660	Printer	HP LASERJET 4600DN	HP	HQ	
N007909	Printer	HP LASERJET 4600DN	HP	HQ	
2163998	Printer	HP LASERJET 4650	HP	HQ	
2163999	Printer	HP LASERJET 4650N	HP	HQ	
3066384	Printer	HP LASERJET 4650N	HP	HQ	
2165667	Printer	HP LASERJET 4700	HP	HQ	
2165117	Printer	HP LASERJET 4700DN	HP	HQ	
2165597	Printer	HP LASERJET 4700DN	HP	HQ	
2165596	Printer	HP LASERJET 4700N	HP	HQ	
N013796	Printer	HP LASERJET 5500	HP	HQ	
2165703	Printer	HP LASERJET 5520MT	HP	HQ	
HQ5500803	Printer	HP LASERJET 5550	HP	HQ	
3037270	Printer	HP LASERJET 5M	HP	HQ	
1957198	Printer	HP LASERJET 8000	HP	HQ	
1957207	Printer	HP LASERJET 8000	HP	HQ	
1481099	Printer	HP LASERJET 8000	HP	HQ	
3037744	Printer	HP LASERJET 8000	HP	HQ	
1957205	Printer	HP LASERJET 8000	HP	HQ	
N006299	Printer	HP LASERJET 8000	HP	HQ	
N006290	Printer	HP LASERJET 8000	HP	HQ	
1482280	Printer	HP LASERJET 8000	HP	HQ	
2165724	Printer	HP LASERJET 8000	HP	HQ	
2165713	Printer	HP LASERJET 8000	HP	HQ	
1957199	Printer	HP LASERJET 8000	HP	HQ	
N006292	Printer	HP LASERJET 8000	HP	HQ	
N006296	Printer	HP LASERJET 8000	HP	HQ	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2165721	Printer	HP LASERJET 8000	HP	HQ	
3036890	Printer	HP LASERJET 8000	HP	HQ	
1481565	Printer	HP LASERJET 8000DN	HP	HQ	
3036719	Printer	HP LASERJET 8100	HP	HQ	
3036739	Printer	HP LASERJET 8100	HP	HQ	
3035427	Printer	HP LASERJET 8150DN	HP	HQ	
3035466	Printer	HP LASERJET 8150DN	HP	HQ	
HQ5500457/N009777	Printer	HP LASERJET 8150DN	HP	HQ	
HQ5500481	Printer	HP LASERJET 8150DN	HP	HQ	
N009770	Printer	HP LASERJET 8150DN	HP	HQ	
3039649	Printer	HP LASERJET 8150DN	HP	HQ	
N007907	Printer	HP LASERJET 8150DN	HP	HQ	
N009787	Printer	HP LASERJET 8150DN	HP	HQ	
N009780	Printer	HP LASERJET 8150DN	HP	HQ	
N009784/CF-5002001	Printer	HP LASERJET 8150DN	HP	HQ	
N009786	Printer	HP LASERJET 8150DN	HP	HQ	
N009788	Printer	HP LASERJET 8150DN	HP	HQ	
3035481	Printer	HP LASERJET 8150DN	HP	HQ	
3036915	Printer	HP LASERJET 8150DN	HP	HQ	
N009769	Printer	HP LASERJET 8150DN	HP	HQ	
N007921	Printer	HP LASERJET 8150DN	HP	HQ	
N007923	Printer	HP LASERJET 8150DN	HP	HQ	
N007924	Printer	HP LASERJET 8150DN	HP	HQ	
N007930	Printer	HP LASERJET 8150DN	HP	HQ	
3039645	Printer	HP LASERJET 9500HDN	HP	HQ	
2172212	Printer	HP5550C	HP	HQ	
N012206	Printer	LASERJET 2200DN	HP	HQ	
3081904	Printer	LASERJET CP3525N	HP	HQ	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
000000537104	Production Server	PE2950	DELL	HQ	NCAD Domain Controller
000000537107	Production Server	PE2950	DELL	HQ	NCAD Domain Controller
000000537137	Production Server	PE2950	DELL	HQ	NCAD Domain Controller
000000537138	Production Server	PE2950	DELL	HQ	NCAD Domain Controller
DG4C5D1	Production Server	POWEREDGE 2950	DELL	HQ	NHQ WSUS Server
8B7DPB1	Production Server	POWEREDGE 6850	DELL	HQ	NHQ SMS Server
3039832	Projector	LP350V	INFOCUS	HQ	
5000242	Backup Unit	080441141035	APC	JSC	
1618051	Backup Unit	221-1585	DELL	JSC	
1453027	Backup Unit	ADV2000DATE	MICRONET	JSC	
1447455	Backup Unit	C1529A	HP	JSC	
1544822	Backup Unit	HPFH005-01	HP	JSC	
2226791	Backup Unit	LSC5H-UEXM-900N	QUANTUM	JSC	
2226792	Backup Unit	LSC5H-UEXM-900N	QUANTUM	JSC	
1553636	Backup Unit	TH3BA-YF	QUANTUM	JSC	
1744275	Backup Unit	TH3FA-YF	QUANTUM	JSC	
1855419	Backup Unit	X822A-ST	SUN	JSC	
1237196	Infrastructure Printer	33449A	HP	JSC	
1448084	Infrastructure Printer	33449A	HP	JSC	
2145361	Infrastructure Printer	5550HDN	HP	JSC	
1348069	Infrastructure Printer	C2009A	HP	JSC	
1549573	Infrastructure Printer	C2009A	HP	JSC	
1738364	Infrastructure Printer	C3197A	HP	JSC	
1921380	Infrastructure Printer	C4121A	HP	JSC	
1929592	Infrastructure Printer	HP DESIGNJET 750C	HP	JSC	
1986990	Infrastructure Printer	HP DESIGNJET 750C	HP	JSC	
1453729	Infrastructure Printer	HP DESKJET 1600C	HP	JSC	
1542404	Infrastructure Printer	HP DESKJET 1600C	HP	JSC	
1846514	Infrastructure Printer	HP DESKJET 1600C	HP	JSC	
1929530	Infrastructure Printer	HP DESKJET 1600C	HP	JSC	
1544323	Infrastructure Printer	HP DESKJET 855C	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1544324	Infrastructure Printer	HP DESKJET 855C	HP	JSC	
1930254	Infrastructure Printer	HP LASERJET 2100TN	HP	JSC	
1930724	Infrastructure Printer	HP LASERJET 2200TN	HP	JSC	
1240469	Infrastructure Printer	HP LASERJET 4	HP	JSC	
1294911	Infrastructure Printer	HP LASERJET 4	HP	JSC	
1357149	Infrastructure Printer	HP LASERJET 4	HP	JSC	
1291392	Infrastructure Printer	HP LASERJET 4	HP	JSC	
1235877	Infrastructure Printer	HP LASERJET 4	HP	JSC	
1236076	Infrastructure Printer	HP LASERJET 4	HP	JSC	
1929998	Infrastructure Printer	HP LASERJET 4000	HP	JSC	
1920130	Infrastructure Printer	HP LASERJET 4000N	HP	JSC	
1920136	Infrastructure Printer	HP LASERJET 4000N	HP	JSC	
1919438	Infrastructure Printer	HP LASERJET 4000N	HP	JSC	
1919445	Infrastructure Printer	HP LASERJET 4000N	HP	JSC	
1913411	Infrastructure Printer	HP LASERJET 4000N	HP	JSC	
1913382	Infrastructure Printer	HP LASERJET 4000T	HP	JSC	
1913386	Infrastructure Printer	HP LASERJET 4000T	HP	JSC	
1919504	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919505	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919859	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919977	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919987	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919994	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919995	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920068	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1920399	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920400	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920407	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920408	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920409	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1915217	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1915219	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919466	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919467	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919469	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919481	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920410	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920413	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920414	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920415	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920416	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920417	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920418	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920420	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1929538	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1929544	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1929545	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1929586	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1929589	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920398	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1914670	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1920346	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919819	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1919992	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1551862	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1921652	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1551754	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1552107	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1551838	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1551762	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1551869	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1551871	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1551752	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1551758	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1551755	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1551761	Infrastructure Printer	HP LASERJET 4000TN	HP	JSC	
1930292	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930420	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930421	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930641	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930640	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930393	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930430	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930646	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930367	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1930592	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930504	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930266	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930356	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930591	Infrastructure Printer	HP LASERJET 4050TN	HP	JSC	
1930847	Infrastructure Printer	HP LASERJET 4100	HP	JSC	
1930700	Infrastructure Printer	HP LASERJET 4100N	HP	JSC	
1930970	Infrastructure Printer	HP LASERJET 4100N	HP	JSC	
1930777	Infrastructure Printer	HP LASERJET 4100N	HP	JSC	
1931249	Infrastructure Printer	HP LASERJET 4600	HP	JSC	
1931291	Infrastructure Printer	HP LASERJET 4600	HP	JSC	
1931158	Infrastructure Printer	HP LASERJET 4600DN	HP	JSC	
2143328	Infrastructure Printer	HP LASERJET 4650	HP	JSC	
2154336	Infrastructure Printer	HP LASERJET 4700DN	HP	JSC	
1240951	Infrastructure Printer	HP LASERJET 4M	HP	JSC	
1352426	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1354418	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1445752	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1449177	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1450139	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1450820	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1743796	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1454908	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1743729	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1550123	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1450815	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1295647	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1295479	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1236495	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1446268	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1446309	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1295528	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1295633	Infrastructure Printer	HP LASERJET 4M PLUS	HP	JSC	
1446271	Infrastructure Printer	HP LASERJET 4SI	HP	JSC	
1544155	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1743418	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1743419	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1743424	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1743426	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1743427	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1743429	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1743431	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1743432	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1744207	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1744499	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1825956	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1849618	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1849621	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1849945	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1913390	Infrastructure Printer	HP LASERJET 5	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1913391	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1913968	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1914240	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1914245	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1734868	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1849776	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1850372	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1849773	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1550895	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1551460	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1550997	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1551026	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1930135	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1551185	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1550810	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1550998	Infrastructure Printer	HP LASERJET 5	HP	JSC	
1930576	Infrastructure Printer	HP LASERJET 5000	HP	JSC	
1931084	Infrastructure Printer	HP LASERJET 5000DN	HP	JSC	
1930377	Infrastructure Printer	HP LASERJET 5000GN	HP	JSC	
1930378	Infrastructure Printer	HP LASERJET 5000GN	HP	JSC	
1920122	Infrastructure Printer	HP LASERJET 5000N	HP	JSC	
1920125	Infrastructure Printer	HP LASERJET 5000N	HP	JSC	
1920126	Infrastructure Printer	HP LASERJET 5000N	HP	JSC	
1930425	Infrastructure Printer	HP LASERJET 5000N	HP	JSC	
1930837	Infrastructure Printer	HP LASERJET 5000N	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1930250	Infrastructure Printer	HP LASERJET 5000N	HP	JSC	
1930766	Infrastructure Printer	HP LASERJET 5000N	HP	JSC	
1930740	Infrastructure Printer	HP LASERJET 5000N	HP	JSC	
1931130	Infrastructure Printer	HP LASERJET 5100DTN	HP	JSC	
2224271	Infrastructure Printer	HP LASERJET 5200TN	HP	JSC	
1854465	Infrastructure Printer	HP LASERJET 5M	HP	JSC	
1553543	Infrastructure Printer	HP LASERJET 5M	HP	JSC	
1919450	Infrastructure Printer	HP LASERJET 5M	HP	JSC	
WB167	Infrastructure Printer	HP LASERJET 5M	HP	JSC	
1551388	Infrastructure Printer	HP LASERJET 5M	HP	JSC	
1453730	Infrastructure Printer	HP LASERJET 5P	HP	JSC	
1450947	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1450962	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1743433	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1744009	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1744214	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1744462	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1825945	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1825950	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1846513	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1849958	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1850786	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1854477	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1553653	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1854489	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1854490	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1913372	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1914635	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1915211	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1915213	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1915214	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1915215	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1914592	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1914594	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1850348	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1743961	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1744012	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1848811	Infrastructure Printer	HP LASERJET 5SI	HP	JSC	
1445982	Infrastructure Printer	HP LASERJET 6MP	HP	JSC	
1551814	Infrastructure Printer	HP LASERJET 6MP	HP	JSC	
1849674	Infrastructure Printer	HP LASERJET 6P	HP	JSC	
1921623	Infrastructure Printer	HP LASERJET 8000DN	HP	JSC	
1921626	Infrastructure Printer	HP LASERJET 8000DN	HP	JSC	
1921629	Infrastructure Printer	HP LASERJET 8000DN	HP	JSC	
1919854	Infrastructure Printer	HP LASERJET 8000N	HP	JSC	
1931160	Infrastructure Printer	HP LASERJET 8100DN	HP	JSC	
1931083	Infrastructure Printer	HP LASERJET 8150DN	HP	JSC	
1931351	Infrastructure Printer	HP LASERJET 8150DN	HP	JSC	
1930889	Infrastructure Printer	HP LASERJET 8550N	HP	JSC	
1931161	Infrastructure Printer	HP LASERJET 8550N	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1930229	Infrastructure Printer	HP LASERJET4000TN	HP	JSC	
1551759	Infrastructure Printer	HP LASERJET4000TN	HP	JSC	
1737041	Infrastructure Printer	HP PLOTTER	HP	JSC	
1238742	Infrastructure Printer	HP33491A	HP	JSC	
1294884	Infrastructure Printer	M5890	APPLE	JSC	
1002212	Infrastructure Printer	M6000	APPLE	JSC	
1168358	Infrastructure Printer	M6000	APPLE	JSC	
1168375	Infrastructure Printer	M6000	APPLE	JSC	
76198	Infrastructure Printer	M6000	APPLE	JSC	
1168391	Infrastructure Printer	M6000	APPLE	JSC	
CNBB036636	Infrastructure Printer	NOT IN NPROP	NOT IN NPROP	JSC	
65025	Infrastructure Printer	QMS-3825-1	QMS INC	JSC	
1916339	Network Printer	4000	HP	JSC	
1928443	Network Printer	C14112A	HP	JSC	
1987742	Network Printer	C4112A	HP	JSC	
1929590	Network Printer	C4121A	HP	JSC	
1919191	Network Printer	C412A	HP	JSC	
2140687	Network Printer	C9661A	HP	JSC	
2084975	Network Printer	C9692A	HP	JSC	
2148122	Network Printer	HP 2820	HP	JSC	
1986168	Network Printer	HP DESIGNJET 1055CM	HP	JSC	
2080848	Network Printer	HP DESKJET 2600	HP	JSC	
2079254	Network Printer	HP LASERJET 2200DN	HP	JSC	
2119519	Network Printer	HP LASERJET 3500N	HP	JSC	
2155611	Network Printer	HP LASERJET 3800DN	HP	JSC	
2226164	Network Printer	HP LASERJET 3800N	HP	JSC	
1929346	Network Printer	HP LASERJET 4000	HP	JSC	
1915218	Network Printer	HP LASERJET 4000TN	HP	JSC	
1919482	Network Printer	HP LASERJET 4000TN	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1919478	Network Printer	HP LASERJET 4000TN	HP	JSC	
1919993	Network Printer	HP LASERJET 4000TN	HP	JSC	
1914625	Network Printer	HP LASERJET 4000TN	HP	JSC	
1995545	Network Printer	HP LASERJET 4050	HP	JSC	
1987724	Network Printer	HP LASERJET 4050TN	HP	JSC	
2143518	Network Printer	HP LASERJET 4200DTN	HP	JSC	
2139715	Network Printer	HP LASERJET 4300DNT	HP	JSC	
2139719	Network Printer	HP LASERJET 4300DNT	HP	JSC	
2120375	Network Printer	HP LASERJET 4350N	HP	JSC	
2086103	Network Printer	HP LASERJET 4600DN	HP	JSC	
2152084	Network Printer	HP LASERJET 4600DN	HP	JSC	
1931085	Network Printer	HP LASERJET 4600DTN	HP	JSC	
2143327	Network Printer	HP LASERJET 4650DN	HP	JSC	
2079828	Network Printer	HP LASERJET 4M	HP	JSC	
1446579	Network Printer	HP LASERJET 4M PLUS	HP	JSC	
1914252	Network Printer	HP LASERJET 5	HP	JSC	
1914262	Network Printer	HP LASERJET 5	HP	JSC	
1914282	Network Printer	HP LASERJET 5	HP	JSC	
1849772	Network Printer	HP LASERJET 5	HP	JSC	
2086151	Network Printer	HP LASERJET 5100DTN	HP	JSC	
2146678	Network Printer	HP LASERJET 5550DN	HP	JSC	
2146667	Network Printer	HP LASERJET 5550DN	HP	JSC	
1734856	Network Printer	HP LASERJET 5SI	HP	JSC	
1744812	Network Printer	HP LASERJET 5SI	HP	JSC	
1849959	Network Printer	HP LASERJET 5SI	HP	JSC	
1854478	Network Printer	HP LASERJET 5SI	HP	JSC	
2224392	Network Printer	HP LASERJET 9040N	HP	JSC	
2139677	Network Printer	NOT IN NPROP	NOT IN NPROP	JSC	
1986478	Network Printer	OCE3165	OCE	JSC	
2143430	Network Printer	PHASER 6250	XEROX	JSC	
2155449	Network Printer	Q3715A	HP	JSC	
2224606	Network Printer	Q3715A	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2140643	Network Printer	WPL100S11852	TEKTRONIX	JSC	
C0086873	Network Printer			JSC	
C0086872	Network Printer			JSC	
C0086874	Network Printer			JSC	
C0086868	Network Printer			JSC	
C0086870	Network Printer			JSC	
FLB010950N	Network Printer			JSC	
NE0132085	Photocopier		XEROX	JSC	
1847648	Plotter	8830	XEROX	JSC	
839424	Plotter	7550A		JSC	
839000	Plotter	7575A		JSC	
1738737	Plotter	C3196A	HP	JSC	
1913636	Plotter	C4704A	HP	JSC	
1926704	Plotter	C4704A	HP	JSC	
1926703	Plotter	C4704A	HP	JSC	
1846398	Plotter	C4709A	HP	JSC	
2084905	Plotter	C6075B	HP	JSC	
2080887	Plotter	DESIGNJET 1055	HP	JSC	
1995600	Plotter	KIP	KIP	JSC	
SG42L620048N	Plotter			JSC	
2119928	Printer	HP LASERJET 3500	HP	JSC	
1240240	Printer	HP LASERJET 4	HP	JSC	
1294920	Printer	HP LASERJET 4	HP	JSC	
1355748	Printer	HP LASERJET 4	HP	JSC	
1355751	Printer	HP LASERJET 4	HP	JSC	
1355752	Printer	HP LASERJET 4	HP	JSC	
1292676	Printer	HP LASERJET 4	HP	JSC	
1240794	Printer	HP LASERJET 4	HP	JSC	
1240277	Printer	HP LASERJET 4	HP	JSC	
1357140	Printer	HP LASERJET 4	HP	JSC	
1292663	Printer	HP LASERJET 4	HP	JSC	
1292675	Printer	HP LASERJET 4	HP	JSC	
1919856	Printer	HP LASERJET 4000	HP	JSC	
1919858	Printer	HP LASERJET 4000	HP	JSC	
1920166	Printer	HP LASERJET 4000N	HP	JSC	
1920167	Printer	HP LASERJET 4000N	HP	JSC	
1919443	Printer	HP LASERJET 4000N	HP	JSC	
1921486	Printer	HP LASERJET 4000N	HP	JSC	
1928180	Printer	HP LASERJET 4000N	HP	JSC	
1919437	Printer	HP LASERJET 4000N	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1921485	Printer	HP LASERJET 4000N	HP	JSC	
1919626	Printer	HP LASERJET 4000N	HP	JSC	
1919446	Printer	HP LASERJET 4000N	HP	JSC	
1920127	Printer	HP LASERJET 4000N	HP	JSC	
1913381	Printer	HP LASERJET 4000T	HP	JSC	
1913403	Printer	HP LASERJET 4000T	HP	JSC	
1913387	Printer	HP LASERJET 4000T	HP	JSC	
1919493	Printer	HP LASERJET 4000TN	HP	JSC	
1919494	Printer	HP LASERJET 4000TN	HP	JSC	
1919497	Printer	HP LASERJET 4000TN	HP	JSC	
1919499	Printer	HP LASERJET 4000TN	HP	JSC	
1919501	Printer	HP LASERJET 4000TN	HP	JSC	
1914606	Printer	HP LASERJET 4000TN	HP	JSC	
1914610	Printer	HP LASERJET 4000TN	HP	JSC	
1914626	Printer	HP LASERJET 4000TN	HP	JSC	
1914632	Printer	HP LASERJET 4000TN	HP	JSC	
1915216	Printer	HP LASERJET 4000TN	HP	JSC	
1919475	Printer	HP LASERJET 4000TN	HP	JSC	
1919476	Printer	HP LASERJET 4000TN	HP	JSC	
1919477	Printer	HP LASERJET 4000TN	HP	JSC	
1919479	Printer	HP LASERJET 4000TN	HP	JSC	
1919485	Printer	HP LASERJET 4000TN	HP	JSC	
1919491	Printer	HP LASERJET 4000TN	HP	JSC	
1929580	Printer	HP LASERJET 4000TN	HP	JSC	
1914673	Printer	HP LASERJET 4000TN	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1915026	Printer	HP LASERJET 4000TN	HP	JSC	
1929543	Printer	HP LASERJET 4000TN	HP	JSC	
1919998	Printer	HP LASERJET 4000TN	HP	JSC	
1929539	Printer	HP LASERJET 4000TN	HP	JSC	
1919976	Printer	HP LASERJET 4000TN	HP	JSC	
1914668	Printer	HP LASERJET 4000TN	HP	JSC	
1919982	Printer	HP LASERJET 4000TN	HP	JSC	
1929583	Printer	HP LASERJET 4000TN	HP	JSC	
1987831	Printer	HP LASERJET 4050	HP	JSC	
1984518	Printer	HP LASERJET 4050	HP	JSC	
1984499	Printer	HP LASERJET 4050	HP	JSC	
1984505	Printer	HP LASERJET 4050TN	HP	JSC	
1984514	Printer	HP LASERJET 4050TN	HP	JSC	
1984484	Printer	HP LASERJET 4050TN	HP	JSC	
1987725	Printer	HP LASERJET 4050TN	HP	JSC	
1984524	Printer	HP LASERJET 4050TN	HP	JSC	
1987726	Printer	HP LASERJET 4050TN	HP	JSC	
1987716	Printer	HP LASERJET 4050TN	HP	JSC	
2052511	Printer	HP LASERJET 4050TN	HP	JSC	
1984509	Printer	HP LASERJET 4050TN	HP	JSC	
1984502	Printer	HP LASERJET 4050TN	HP	JSC	
1984496	Printer	HP LASERJET 4050TN	HP	JSC	
1984489	Printer	HP LASERJET 4050TN	HP	JSC	
1984515	Printer	HP LASERJET 4050TN	HP	JSC	
1987721	Printer	HP LASERJET 4050TN	HP	JSC	
1984497	Printer	HP LASERJET 4050TN	HP	JSC	
1984504	Printer	HP LASERJET 4050TN	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1984498	Printer	HP LASERJET 4050TN	HP	JSC	
1987731	Printer	HP LASERJET 4050TN	HP	JSC	
1984486	Printer	HP LASERJET 4050TN	HP	JSC	
1987715	Printer	HP LASERJET 4050TN	HP	JSC	
1984488	Printer	HP LASERJET 4050TN	HP	JSC	
1987729	Printer	HP LASERJET 4050TN	HP	JSC	
1987736	Printer	HP LASERJET 4050TN	HP	JSC	
1987733	Printer	HP LASERJET 4050TN	HP	JSC	
1984503	Printer	HP LASERJET 4050TN	HP	JSC	
1984490	Printer	HP LASERJET 4050TN	HP	JSC	
1987722	Printer	HP LASERJET 4050TN	HP	JSC	
1984508	Printer	HP LASERJET 4050TN	HP	JSC	
1987734	Printer	HP LASERJET 4050TN	HP	JSC	
1987728	Printer	HP LASERJET 4050TN	HP	JSC	
1984512	Printer	HP LASERJET 4050TN	HP	JSC	
1987714	Printer	HP LASERJET 4050TN	HP	JSC	
1987723	Printer	HP LASERJET 4050TN	HP	JSC	
1984506	Printer	HP LASERJET 4050TN	HP	JSC	
2086120	Printer	HP LASERJET 4050TN	HP	JSC	
1997746	Printer	HP LASERJET 4050TN	HP	JSC	
1986359	Printer	HP LASERJET 4050TN	HP	JSC	
1984511	Printer	HP LASERJET 4050TN	HP	JSC	
1987727	Printer	HP LASERJET 4050TN	HP	JSC	
2079836	Printer	HP LASERJET 4100DTN	HP	JSC	
2079833	Printer	HP LASERJET 4100DTN	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2079834	Printer	HP LASERJET 4100DTN	HP	JSC	
2079837	Printer	HP LASERJET 4100DTN	HP	JSC	
2079838	Printer	HP LASERJET 4100DTN	HP	JSC	
2086129	Printer	HP LASERJET 4200 DTN	HP	JSC	
2086115	Printer	HP LASERJET 4200DN	HP	JSC	
2086108	Printer	HP LASERJET 4200DN	HP	JSC	
2086125	Printer	HP LASERJET 4200DTN	HP	JSC	
2086117	Printer	HP LASERJET 4200DTN	HP	JSC	
1984520	Printer	HP LASERJET 4200TN	HP	JSC	
2079840	Printer	HP LASERJET 4250DTN	HP	JSC	
2143303	Printer	HP LASERJET 4300	HP	JSC	
2139551	Printer	HP LASERJET 4300DTN	HP	JSC	
2139532	Printer	HP LASERJET 4300DTN	HP	JSC	
1988391	Printer	HP LASERJET 4500DN	HP	JSC	
1987753	Printer	HP LASERJET 4500DN	HP	JSC	
1987752	Printer	HP LASERJET 4500N	HP	JSC	
1987745	Printer	HP LASERJET 4500N	HP	JSC	
1930255	Printer	HP LASERJET 4500N	HP	JSC	
2079193	Printer	HP LASERJET 4550	HP	JSC	
2078975	Printer	HP LASERJET 4550N	HP	JSC	
2086098	Printer	HP LASERJET 4600DN	HP	JSC	
2086100	Printer	HP LASERJET 4600DN	HP	JSC	
2140411	Printer	HP LASERJET 4600DN	HP	JSC	
2140592	Printer	HP LASERJET 4600DN	HP	JSC	
2120033	Printer	HP LASERJET 4600DTN	HP	JSC	
1346831	Printer	HP LASERJET 4L	HP	JSC	
1347687	Printer	HP LASERJET 4L	HP	JSC	

RELEASED - Printed documents may be obsolete; validate prior to use.

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1347866	Printer	HP LASERJET 4L	HP	JSC	
1352476	Printer	HP LASERJET 4L	HP	JSC	
1352485	Printer	HP LASERJET 4L	HP	JSC	
1354334	Printer	HP LASERJET 4L	HP	JSC	
1357280	Printer	HP LASERJET 4L	HP	JSC	
1295880	Printer	HP LASERJET 4L	HP	JSC	
1292893	Printer	HP LASERJET 4M	HP	JSC	
1292907	Printer	HP LASERJET 4M	HP	JSC	
1292924	Printer	HP LASERJET 4M	HP	JSC	
1292926	Printer	HP LASERJET 4M	HP	JSC	
1292919	Printer	HP LASERJET 4M	HP	JSC	
1236127	Printer	HP LASERJET 4M	HP	JSC	
1354345	Printer	HP LASERJET 4M PLUS	HP	JSC	
1354417	Printer	HP LASERJET 4M PLUS	HP	JSC	
1446577	Printer	HP LASERJET 4M PLUS	HP	JSC	
1446589	Printer	HP LASERJET 4M PLUS	HP	JSC	
1449552	Printer	HP LASERJET 4M PLUS	HP	JSC	
1450818	Printer	HP LASERJET 4M PLUS	HP	JSC	
1352714	Printer	HP LASERJET 4P	HP	JSC	
1913431	Printer	HP LASERJET 4V	HP	JSC	
1738486	Printer	HP LASERJET 5	HP	JSC	
1738495	Printer	HP LASERJET 5	HP	JSC	
1743408	Printer	HP LASERJET 5	HP	JSC	
1744264	Printer	HP LASERJET 5	HP	JSC	
1744266	Printer	HP LASERJET 5	HP	JSC	
1744301	Printer	HP LASERJET 5	HP	JSC	
1744475	Printer	HP LASERJET 5	HP	JSC	
1744492	Printer	HP LASERJET 5	HP	JSC	
1825983	Printer	HP LASERJET 5	HP	JSC	
1849778	Printer	HP LASERJET 5	HP	JSC	
1913393	Printer	HP LASERJET 5	HP	JSC	
1913963	Printer	HP LASERJET 5	HP	JSC	
1913964	Printer	HP LASERJET 5	HP	JSC	
1913965	Printer	HP LASERJET 5	HP	JSC	
1854548	Printer	HP LASERJET 5	HP	JSC	
1854549	Printer	HP LASERJET 5	HP	JSC	
1913966	Printer	HP LASERJET 5	HP	JSC	
1913967	Printer	HP LASERJET 5	HP	JSC	
1913974	Printer	HP LASERJET 5	HP	JSC	
1913977	Printer	HP LASERJET 5	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1913984	Printer	HP LASERJET 5	HP	JSC	
1913985	Printer	HP LASERJET 5	HP	JSC	
1914236	Printer	HP LASERJET 5	HP	JSC	
2086121	Printer	HP LASERJET 5	HP	JSC	
1914266	Printer	HP LASERJET 5	HP	JSC	
1914269	Printer	HP LASERJET 5	HP	JSC	
1914271	Printer	HP LASERJET 5	HP	JSC	
1914275	Printer	HP LASERJET 5	HP	JSC	
1913962	Printer	HP LASERJET 5	HP	JSC	
1734855	Printer	HP LASERJET 5	HP	JSC	
1847437	Printer	HP LASERJET 5	HP	JSC	
1744500	Printer	HP LASERJET 5	HP	JSC	
1913969	Printer	HP LASERJET 5	HP	JSC	
1913981	Printer	HP LASERJET 5	HP	JSC	
1913972	Printer	HP LASERJET 5	HP	JSC	
1738811	Printer	HP LASERJET 5	HP	JSC	
1850794	Printer	HP LASERJET 5	HP	JSC	
1738497	Printer	HP LASERJET 5	HP	JSC	
1987739	Printer	HP LASERJET 5000DN	HP	JSC	
1987737	Printer	HP LASERJET 5000N	HP	JSC	
1991033	Printer	HP LASERJET 5000N	HP	JSC	
1987740	Printer	HP LASERJET 500GN	HP	JSC	
2086135	Printer	HP LASERJET 5100	HP	JSC	
1931288	Printer	HP LASERJET 5100	HP	JSC	
2086159	Printer	HP LASERJET 5100DTN	HP	JSC	
2086146	Printer	HP LASERJET 5100DTN	HP	JSC	
2086141	Printer	HP LASERJET 5100DTN	HP	JSC	
2086156	Printer	HP LASERJET 5100DTN	HP	JSC	
1931129	Printer	HP LASERJET 5100DTN	HP	JSC	
2086140	Printer	HP LASERJET 5100DTN	HP	JSC	
2224643	Printer	HP LASERJET 5200	HP	JSC	
2224645	Printer	HP LASERJET 5200	HP	JSC	
2086102	Printer	HP LASERJET 5460	HP	JSC	
2086107	Printer	HP LASERJET 5500DN	HP	JSC	
1914593	Printer	HP LASERJET 551MX	HP	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1738484	Printer	HP LASERJET 5M	HP	JSC	
1914231	Printer	HP LASERJET 5N	HP	JSC	
1445839	Printer	HP LASERJET 5P	HP	JSC	
1445878	Printer	HP LASERJET 5P	HP	JSC	
1744478	Printer	HP LASERJET 5P	HP	JSC	
1550298	Printer	HP LASERJET 5P	HP	JSC	
1543431	Printer	HP LASERJET 5P	HP	JSC	
1450955	Printer	HP LASERJET 5SI	HP	JSC	
1744008	Printer	HP LASERJET 5SI	HP	JSC	
1849760	Printer	HP LASERJET 5SI	HP	JSC	
1854488	Printer	HP LASERJET 5SI	HP	JSC	
1987998	Printer	HP LASERJET 5SI	HP	JSC	
1914647	Printer	HP LASERJET 5SI	HP	JSC	
1919474	Printer	HP LASERJET 5SI	HP	JSC	
1850344	Printer	HP LASERJET 5SI	HP	JSC	
M-03261	Printer	HP LASERJET 5SI	HP	JSC	
1547609	Printer	HP LASERJET 5SI	HP	JSC	
1850788	Printer	HP LASERJET 5SI MX	HP	JSC	
1919847	Printer	HP LASERJET 6MP	HP	JSC	
1445985	Printer	HP LASERJET 6MP	HP	JSC	
1445983	Printer	HP LASERJET 6MP	HP	JSC	
1914133	Printer	HP LASERJET 6P	HP	JSC	
1914134	Printer	HP LASERJET 6P	HP	JSC	
1914135	Printer	HP LASERJET 6P	HP	JSC	
1914136	Printer	HP LASERJET 6P	HP	JSC	
1914671	Printer	HP LASERJET 6P	HP	JSC	
1921624	Printer	HP LASERJET 8000DN	HP	JSC	
1987214	Printer	HP LASERJET 8100N	HP	JSC	
1995789	Printer	HP LASERJET 8100N	HP	JSC	
1995793	Printer	HP LASERJET 8100N	HP	JSC	
2079842	Printer	HP LASERJET 8150DN	HP	JSC	
1355461	Printer	HP33440A	HP	JSC	
1549674	Printer	HP33491A	HP	JSC	
1987190	Printer	HP80000C4087A	HP	JSC	
1987084	Printer	HP8000DN	HP	JSC	
1544006	Printer	LN14C2	DEC	JSC	
1241247	Printer	LPS17A2	DEC	JSC	
1240331	Printer	LPS17A2	DEC	JSC	
1240332	Printer	LPS17A2	DEC	JSC	
1240333	Printer	LPS17A2	DEC	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1240334	Printer	LPS17A2	DEC	JSC	
1855421	Production Server	544	SUN	JSC	X500
2525961	Production Server	1950	DELL	JSC	administrative duties, and to remote to other servers in NOMAD
000000537303	Production Server	1950	DELL	JSC	SMTP GATEWAY - NOMAD
2525965	Production Server	2950	DELL	JSC	NCAD-NOMAD
2525963	Production Server	2950	DELL	JSC	NCAD
2525966	Production Server	2950	DELL	JSC	NCAD-N0MAD
2525955	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2525959	Production Server	2950	DELL	JSC	Exchange 2007 Failover Mailbox - NOMAD
2525962	Production Server	2950	DELL	JSC	NCAD
2525958	Production Server	2950	DELL	JSC	Exchange 2007 Failover Mailbox - NOMAD
2525957	Production Server	2950	DELL	JSC	Exchange 2007 Failover Mailbox - NOMAD
2525964	Production Server	2950	DELL	JSC	NCAD-NOMAD
000000535891	Production Server	2950	DELL	JSC	Exchange 2007 Public Folder Server - NOMAD
000000535893	Production Server	2950	DELL	JSC	Exchange 2007 Public Folder Server - NOMAD
2525956	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2525960	Production Server	2950	DELL	JSC	Exchange 2007 Failover Mailbox - NOMAD
2525946	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2525949	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2525948	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2525947	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2525950	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2525944	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2525935	Production Server	2950	DELL	JSC	NCAD
2525934	Production Server	2950	DELL	JSC	NCAD
000000538697	Production Server	2950	DELL	JSC	DAR Safeboot Server
2525951	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2525952	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2525953	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2525954	Production Server	2950	DELL	JSC	Exchange 2007 Failover Mailbox - NOMAD
2525945	Production Server	2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2525900	Production Server	223-4487	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2525901	Production Server	223-4487	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2525902	Production Server	223-4487	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2525903	Production Server	223-4487	DELL	JSC	SCOM Server - NOMAD
2525904	Production Server	223-4487	DELL	JSC	To Be Determined - NOMAD
2525905	Production Server	223-4487	DELL	JSC	VM SERVER - NOMAD
2525906	Production Server	223-4487	DELL	JSC	Exchange 2007 Failover Mailbox - NOMAD
2525907	Production Server	223-4487	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2525908	Production Server	223-4487	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2525909	Production Server	223-4487	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
1987281	Production Server	A27ULD2-9T1024AQ	SUN ELECTRIC CORP	JSC	X500
1987282	Production Server	A27ULD2-9T1024AQ	SUN ELECTRIC CORP	JSC	X500
2513015	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513016	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513017	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513018	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513019	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513020	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513021	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513022	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513023	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513024	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513025	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513026	Production Server	CENTERA-SN3	EMC	JSC	San Storage - Nomad
2513117	Production Server	CX3-80	EMC	JSC	San Storage - Nomad
2513118	Production Server	CX3-80	EMC	JSC	San Storage - Nomad
2512992	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2512993	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2512994	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2512995	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2512996	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2512997	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2512998	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2512999	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513000	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513001	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513002	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513003	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513004	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513005	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513006	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513007	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513008	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513009	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513010	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513011	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513012	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513013	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513014	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513029	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513030	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513031	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513032	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513033	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513034	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513035	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513036	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513037	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513038	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513039	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513040	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513041	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513042	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513043	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513044	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513045	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513046	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513047	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513048	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2513049	Production Server	CX-4PDAE	EMC	JSC	SAN Storage - NOMAD
2212888	Production Server	CX500 DAE - ATA ENCL	DELL	JSC	HEMI SAN Storage - NOMAD

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2212892	Production Server	CX500 DAE - BUS 0 ENCL 1	DELL	JSC	HEMI SAN Storage - NOMAD
2524217	Production Server	CX500 DAE - BUS 0 ENCL 1	DELL	JSC	COM SAN Storage - NOMAD
2524213	Production Server	CX500 DAE - BUS 0 ENCL 1	DELL	JSC	COM SAN Storage - NOMAD
2212891	Production Server	CX500 DAE - BUS 1 ENCL 0	DELL	JSC	HEMI SAN Storage - NOMAD
2524218	Production Server	CX500 DAE - BUS 1 ENCL 0	DELL	JSC	COM SAN Storage - NOMAD
2524214	Production Server	CX500 DAE - BUS 1 ENCL 0	DELL	JSC	COM SAN Storage - NOMAD
2212894	Production Server	CX500 DAE - BUS 1 ENCL 1	DELL	JSC	HEMI SAN Storage - NOMAD
2524216	Production Server	CX500 DAE - BUS 1 ENCL 1	DELL	JSC	COM SAN Storage - NOMAD
2524212	Production Server	CX500 DAE - BUS 1 ENCL 1	DELL	JSC	COM SAN Storage - NOMAD
2524210	Production Server	CX500 DPE - BUS 0 ENCL 0	DELL	JSC	COM SAN Storage - NOMAD
2212890	Production Server	CX500 DPE - BUS 0 ENCL 0	DELL	JSC	HEMI SAN Storage - NOMAD
2524209	Production Server	CX500 DPE - BUS 0 ENCL 0	DELL	JSC	COM SAN Storage - NOMAD
2524215	Production Server	CX500 DPE - BUS 0 ENCL 2	DELL	JSC	COM SAN Storage - NOMAD
2524211	Production Server	CX500 DPE - BUS 0 ENCL 2	DELL	JSC	COM SAN Storage - NOMAD
2513053	Production Server	DL320	CISCO	JSC	Media Convergence
2521966	Production Server	EMS	DELL	JSC	NOMAD BLACKBERRY SERVER
2521967	Production Server	EMS	DELL	JSC	NOMAD BLACKBERRY SERVER
2509991	Production Server	EMS	DELL	JSC	NCAD-CBACS
2513191	Production Server	EMU01	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2513192	Production Server	EMU01	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2513193	Production Server	EMU01	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2513194	Production Server	EMU01	DELL	JSC	San Storage - Nomad
H60D0D1	Production Server	NOT IN NPROP	NOT IN NPROP	JSC	BACKUP LIBRARY
2525940	Production Server	PE2950	DELL	JSC	NCAD
2525937	Production Server	PE2950	DELL	JSC	NCAD
2525942	Production Server	PE2950	DELL	JSC	NCAD
2525943	Production Server	PE2950	DELL	JSC	NCAD
2525939	Production Server	PE2950	DELL	JSC	NCAD
2525938	Production Server	PE2950	DELL	JSC	NCAD
2525936	Production Server	PE2950	DELL	JSC	NCAD

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2525941	Production Server	PE2950	DELL	JSC	NCAD
1667156	Production Server	POWER EDGE 2850	DELL	JSC	NCAD Domain Controller
2080534	Production Server	POWER EDGE 8450	DELL	JSC	JSC DC
2080533	Production Server	POWER EDGE 8450	DELL	JSC	JSC DC / DNS
1931947	Production Server	POWEREDGE 1600SC	DELL	JSC	DC, WINS, DHCP for WSSH. File & print server, Mapc
72QQX91	Production Server	POWEREDGE 1855	DELL	JSC	PRINT
J2QQX91	Production Server	POWEREDGE 1855	DELL	JSC	PRINT
82QQX91	Production Server	POWEREDGE 1855	DELL	JSC	PRINT
F2QQX91	Production Server	POWEREDGE 1855	DELL	JSC	PRINT
G2QQX91	Production Server	POWEREDGE 1855	DELL	JSC	PRINT
B2QQX91	Production Server	POWEREDGE 1855	DELL	JSC	PRINT
H2QQX91	Production Server	POWEREDGE 1855	DELL	JSC	PRINT
92QQX91	Production Server	POWEREDGE 1855	DELL	JSC	PRINT
C2QQX91	Production Server	POWEREDGE 1855	DELL	JSC	PRINT
2513189	Production Server	POWEREDGE 1950	DELL	JSC	Anti-Spam - NOMAD
2513190	Production Server	POWEREDGE 1950	DELL	JSC	Anti-Spam - NOMAD
5QR1VC1	Production Server	POWEREDGE 1955	DELL	JSC	PRINT
4QR1VC1	Production Server	POWEREDGE 1955	DELL	JSC	PRINT
3QR1VC1	Production Server	POWEREDGE 1955	DELL	JSC	PRINT
1931152	Production Server	POWEREDGE 2600	DELL	JSC	DNS
1618036	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618037	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618038	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618039	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618040	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618041	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618042	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618043	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618044	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618045	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618046	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618047	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618048	Production Server	POWEREDGE 2650	DELL	JSC	SMS 2003
1618049	Production Server	POWEREDGE 2650	DELL	JSC	trend
1618050	Production Server	POWEREDGE 2650	DELL	JSC	SAV Server
1618058	Production Server	POWEREDGE 2650	DELL	JSC	list server
1618071	Production Server	POWEREDGE 2650	DELL	JSC	DHCP
1617231	Production Server	POWEREDGE 2650	DELL	JSC	SQL
1653831	Production Server	POWEREDGE 2650	DELL	JSC	JSC-IFS DC
1653749	Production Server	POWEREDGE 2650	DELL	JSC	DNS / WINS

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1653750	Production Server	POWEREDGE 2650	DELL	JSC	DNS
1653832	Production Server	POWEREDGE 2650	DELL	JSC	JSC-IFS DC
1653825	Production Server	POWEREDGE 2650	DELL	JSC	NOMAD
1653630	Production Server	POWEREDGE 2650	DELL	JSC	NOMAD
1651195	Production Server	POWEREDGE 2650	DELL	JSC	DC and WINS
1651259	Production Server	POWEREDGE 2650	DELL	JSC	GIS Database Server
2512864	Production Server	POWEREDGE 2820	DELL	JSC	Exchange 2007 Hub Transport Server - NOMAD
1618153	Production Server	POWEREDGE 2850	DELL	JSC	Backup Server - Nomad
2510042	Production Server	POWEREDGE 2850	DELL	JSC	NOMAD BLACKBERRY SERVER
2510043	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2510046	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2510047	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2521971	Production Server	POWEREDGE 2850	DELL	JSC	TBD - NOMAD
2521969	Production Server	POWEREDGE 2850	DELL	JSC	TBD - NOMAD
2521970	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2003 Gateway - NOMAD
2521968	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2003 Gateway - NOMAD
2512849	Production Server	POWEREDGE 2850	DELL	JSC	NOMAD BLACKBERRY SERVER
2512850	Production Server	POWEREDGE 2850	DELL	JSC	Backup Server - Nomad
2512852	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2512853	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Hub Transport Server - NOMAD
2512854	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2003 Public Folder - NOMAD
2512855	Production Server	POWEREDGE 2850	DELL	JSC	NOMAD BLACKBERRY SERVER
2512856	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2003 Public Folder - NOMAD
2512859	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2512860	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Client Access Server - NOMAD

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2512861	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Hub Transport Server - NOMAD
2512862	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Hub Transport Server - NOMAD
2512863	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Hub Transport Server - NOMAD
2512866	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2512867	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2512873	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Hub Transport Server - NOMAD
2512874	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2525029	Production Server	POWEREDGE 2850	DELL	JSC	Exchange 2007 Client Access Server - NOMAD
2513151	Production Server	POWEREDGE 2950	DELL	JSC	Monitor System
2525911	Production Server	POWEREDGE 2950	DELL	JSC	Anti-Spam - NOMAD
2513180	Production Server	POWEREDGE 2950	DELL	JSC	San Storage - Nomad
5001430	Production Server	POWEREDGE 2950	DELL	JSC	Cisco RADIUS/TACACS
2525988	Production Server	POWEREDGE 2950	DELL	JSC	NCAD-N0MAD
2525989	Production Server	POWEREDGE 2950	DELL	JSC	NCAD-N0MAD
2525990	Production Server	POWEREDGE 2950	DELL	JSC	NCAD-N0MAD
2523283	Production Server	POWEREDGE 2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2523366	Production Server	POWEREDGE 2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2523282	Production Server	POWEREDGE 2950	DELL	JSC	Exchange 2007 Mailbox - NOMAD
2542625	Production Server	POWEREDGE 2950	DELL	JSC	Post Forwarder - NOMAD
2542624	Production Server	POWEREDGE 2950	DELL	JSC	Post Forwarder - NOMAD
2542629	Production Server	POWEREDGE 2950	DELL	JSC	Post Forwarder - NOMAD
2569292	Production Server	POWEREDGE 2950	DELL	JSC	NCAD-N0MAD
2569291	Production Server	POWEREDGE 2950	DELL	JSC	NCAD-NOMAD
2542195	Production Server	POWEREDGE 2950	DELL	JSC	NCAD Domain Controller
2513175	Production Server	POWEREDGE 2970	DELL	JSC	JSC DC / DHCP
2212879	Production Server	POWEREDGE 6650	DELL	JSC	Exchange 2003 Mail Box - Nomad

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2146538	Production Server	POWEREDGE 6650	DELL	JSC	Exchange 2003 Mail Box - Nomad
2146540	Production Server	POWEREDGE 6650	DELL	JSC	Exchange 2003 Mail Box - Nomad
2146539	Production Server	POWEREDGE 6650	DELL	JSC	Exchange 2003 Mail Box - Nomad
2146541	Production Server	POWEREDGE 6650	DELL	JSC	Exchange 2003 Mail Box - Nomad
2146533	Production Server	POWEREDGE 6650	DELL	JSC	Exchange 2003 Mail Box - Nomad
2146534	Production Server	POWEREDGE 6650	DELL	JSC	Exchange 2003 Mail Box - Nomad
2146535	Production Server	POWEREDGE 6650	DELL	JSC	NOMAD
2212880	Production Server	POWEREDGE 6650	DELL	JSC	Exchange 2003 Mail Box - Nomad
2212878	Production Server	POWEREDGE 6650	DELL	JSC	Exchange 2003 Mail Box - Nomad
2086304	Production Server	POWEREDGE 8450	DELL	JSC	JSC DC / DNS
2086303	Production Server	POWEREDGE 8450	DELL	JSC	WS Backups
2079710	Production Server	POWEREDGE 8450	DELL	JSC	WS Backups
2079711	Production Server	POWEREDGE 8450	DELL	JSC	WS Backups
000000538709	Production Server	POWEREDGE R300	DELL	JSC	DAR Server
2080447	Production Server	POWERVAULT 128T	DELL	JSC	WS Backup Tape Library
1653824	Production Server	SMP01	DELL	JSC	San Storage - Nomad
2119702	Production Server	XTBU	DELL	JSC	External Server Tape Library
1873984	Projector	NTID	MOTOROLA	JSC	
1618054	Seat Server	221-0230	DELL	JSC	server backups
5001047	UPS	750XL-1000XL	APC	JSC	
5001319	UPS	AP7900	APC	JSC	
5001351	UPS	AP7900	APC	JSC	
5001345	UPS	AP7900	APC	JSC	
5001347	UPS	AP7900	APC	JSC	
5001350	UPS	AP7900	APC	JSC	
5001353	UPS	AP7900	APC	JSC	
2143776	UPS	AP9617	APC	JSC	
5000695	UPS	SC420	APC	JSC	
5000696	UPS	SC420	APC	JSC	
5000697	UPS	SC420	CISCO	JSC	
5000698	UPS	SC420	APC	JSC	
5000699	UPS	SC420	APC	JSC	
5000700	UPS	SC420	APC	JSC	
5000701	UPS	SC420	APC	JSC	
5000702	UPS	SC420	CISCO	JSC	
5000703	UPS	SC420	APC	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
5000704	UPS	SC420	APC	JSC	
5000705	UPS	SC420	APC	JSC	
5000706	UPS	SC420	APC	JSC	
5000707	UPS	SC420	APC	JSC	
5000708	UPS	SC420	APC	JSC	
5000709	UPS	SC420	APC	JSC	
5000710	UPS	SC420	APC	JSC	
5001326	UPS	SU100RM2U	APC	JSC	
5001317	UPS	SU2200RM3U	APC	JSC	
5001325	UPS	SU2200RM3U	APC	JSC	
5000997	UPS	SUA1000RM2U	APC	JSC	
5000612	UPS	SUA2200RMXL3U	APC	JSC	
5000613	UPS	SUA2200RMXL3U	APC	JSC	
5000614	UPS	SUA2200RMXL3U	APC	JSC	
5000646	UPS	SUA2200XL	APC	JSC	
5001020	UPS	SUA2200XL	APC	JSC	
5001021	UPS	SUA2200XL	APC	JSC	
5000799	UPS	SUA2200XL	APC	JSC	
5000800	UPS	SUA2200XL	APC	JSC	
5000998	UPS	SUA24XLBP	APC	JSC	
5000985	UPS	SUA3000XL	APC	JSC	
5000986	UPS	SUA3000XL	APC	JSC	
5000793	UPS	SUA48SLBP	APC	JSC	
5000798	UPS	SUA48SLBP	APC	JSC	
5000984	UPS	SUA48XLBP	APC	JSC	
5000987	UPS	SUA48XLBP	APC	JSC	
5000988	UPS	SUA48XLBP	APC	JSC	
5000989	UPS	SUA48XLBP	APC	JSC	
5000990	UPS	SUA48XLBP	APC	JSC	
2143758	UPS	SUA750	APC	JSC	
2143759	UPS	SUA750	APC	JSC	
2143760	UPS	SUA750	APC	JSC	
2143761	UPS	SUA750	APC	JSC	
2143767	UPS	SUA750	APC	JSC	
2143764	UPS	SUA750	APC	JSC	
2143770	UPS	SUA750	APC	JSC	
2143772	UPS	SUA750	APC	JSC	
2143771	UPS	SUA750	APC	JSC	
2143774	UPS	SUA750	APC	JSC	
2143777	UPS	SUA750	APC	JSC	
2143769	UPS	SUA750	APC	JSC	
5001352	UPS	SUA750	APC	JSC	
2143763	UPS	SUA750	APC	JSC	
5001354	UPS	SUA750	APC	JSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
5001395	UPS	SUA750	UPS	JSC	
2143762	UPS	SUA750	APC	JSC	
2143766	UPS	SUA750	APC	JSC	
2143765	UPS	SUA750	APC	JSC	
2143773	UPS	SUA750	APC	JSC	
5001331	UPS	SUA750RM2U	APC	JSC	
2143805	UPS	SUA750RM2U	APC	JSC	
2143768	UPS	SUA750RM2U	APC	JSC	
2143804	UPS	SUA750RM2U	APC	JSC	
5001320	UPS	SUA750RM2U	APC	JSC	
2143775	UPS	SUA750RM2U	APC	JSC	
5001340	UPS	SUA750RM2U	APC	JSC	
5001357	UPS	SUA750RM2U	APC	JSC	
5001321	UPS	SUA750RM2U	APC	JSC	
5001346	UPS	SUA750RM2U	APC	JSC	
5001348	UPS	SUA750RM2U	APC	JSC	
5001349	UPS	SUA750RM2U	APC	JSC	
5001327	UPS	SUA750RM2U	APC	JSC	
5001329	UPS	SUA750RM2U	APC	JSC	
5001342	UPS	SUA750RM2U	APC	JSC	
5001324	UPS	SUA750RM2U	APC	JSC	
5000711	UPS	SUA750XL	APC	JSC	
5000712	UPS	SUA750XL	APC	JSC	
5000645	UPS	SUA750XL	APC	JSC	
5000991	UPS	SURT192XLBP	APC	JSC	
5000992	UPS	SURT192XLBP	APC	JSC	
5000993	UPS	SURT192XLBP	APC	JSC	
5000994	UPS	SURT192XLBP	APC	JSC	
5000995	UPS	SURT192XLBP	APC	JSC	
5000996	UPS	SURT192XLBP	APC	JSC	
5001000	UPS	SURTD5000XLT	APC	JSC	
5001001	UPS	SURTD5000XLT	APC	JSC	
99B0341	Backup Unit	31R3335 POWER SUPPLY MODULE	IBM	KSC	
2030439	Infrastructure Printer	4200	HP	KSC	
2025909	Infrastructure Printer	C8052A	HP	KSC	
1977012	Infrastructure Printer	HP DESIGNJET 755CM PS	HP	KSC	
1866163	Infrastructure Printer	HP LASERJET 5M	HP	KSC	
2024020	Infrastructure Printer	HP LASERJET 8150DN	HP	KSC	
2027930	Infrastructure Printer	LJ5000GN	HP	KSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1979770	Network Printer	HP DESIGNJET 750 PLUS	HP	KSC	
2029980	Network Printer	HP LASERJET 4600HDN	HP	KSC	
2029946	Network Printer	HP LASERJET 4600TN	HP	KSC	
3020475	Network Printer	HP LASERJET 5500HDN	HP	KSC	
2213702	Printer	HP LASERJET 3800DNPS	HP	KSC	
1871832	Printer	HP LASERJET 4000NPS	HP	KSC	
1375508	Printer	HP LASERJET 4L	HP	KSC	
1393705	Printer	HP LASERJET 4M PLUS	HP	KSC	
1517606	Printer	HP LASERJET 6MP	HP	KSC	
1504522	Printer	HP LASERJET 6PXI	HP	KSC	
2028585	Printer	HP LASERJET 8550N	HP	KSC	
56000956	Printer	LD 225 MFD	LANIER	KSC	
51200597	Printer	LD335C	LANIER	KSC	
1662095	Production Server	1750	DELL	KSC	Domain Administration
1662096	Production Server	1750	DELL	KSC	Domain Administration
000000537313	Production Server	1950	DELL	KSC	NOMAD - SMTP GATEWAY
000000537314	Production Server	1950	DELL	KSC	NOMAD - SMTP GATEWAY
000000538835	Production Server	2950	DELL	KSC	NCAD Domain Controller
000000538836	Production Server	2950	DELL	KSC	NCAD Domain Controller
000000538839	Production Server	2950	DELL	KSC	NCAD Domain Controller
000000538840	Production Server	2950	DELL	KSC	NCAD Domain Controller
1660811	Production Server	DL320	COMPAQ	KSC	KOES Web
1660810	Production Server	DL380 GII	COMPAQ	KSC	KOES SQL
000000025499	Production Server	PE1950	DELL	KSC	KSCUSS004
2028644	Production Server	POWEREDGE 1600SC 2.4GHZ	DELL	KSC	Authentication
24RZM81	Production Server	POWEREDGE 2850	DELL	KSC	KSCADC006
000000538837	Production Server	POWEREDGE 2950	DELL	KSC	NCAD Domain Controller
000000538838	Production Server	POWEREDGE 2950	DELL	KSC	NCAD Domain Controller
3020391	Production Server	PROLIANT ML350 G3	HP	KSC	NCAD Domain Controller
1981273	Production Server	ULTRA 60	SUN	KSC	E-Mail-X500
1504599	Production Server	ULTRA1	SUN	KSC	K-Mail

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
23H7219	Production Server	XSERIES 340 W/1GB	IBM	KSC	KSCCLU003A
23H7212	Production Server	XSERIES 340 W/640MB	IBM	KSC	Cluster Server
E00313129	UPS	UPS	COMPAQ	KSC	
R000162	Digital Camera	618XI	HP	LaRC	
1740988	Infrastructure Printer	640	APPLE	LaRC	
1884773	Infrastructure Printer	4200	XEROX	LaRC	
2107523	Infrastructure Printer	4200	HP	LaRC	
1427841	Infrastructure Printer	6350	XEROX	LaRC	
1431311	Infrastructure Printer	12/640 LASER WRITER	APPLE	LaRC	
1157533	Infrastructure Printer	33491A	HP	LaRC	
1429868	Infrastructure Printer	600 LASER WRITER	APPLE	LaRC	
1875118	Infrastructure Printer	600 LASER WRITER	APPLE	LaRC	
1424162	Infrastructure Printer	600PS LASER WRITER	APPLE	LaRC	
1882263	Infrastructure Printer	ELITEXL20/600	GCC TECHNOLOGIES	LaRC	
8890003048	Infrastructure Printer	GOVT EQPT	GOVT	LaRC	
142523	Infrastructure Printer	GOVT EQPT	GOVT	LaRC	
2099315	Infrastructure Printer	HP LASERJET 1200	HP	LaRC	
1876948	Infrastructure Printer	HP LASERJET 1600	HP	LaRC	
1884709	Infrastructure Printer	HP LASERJET 2100M	HP	LaRC	
1885791	Infrastructure Printer	HP LASERJET 2100M	HP	LaRC	
1880755	Infrastructure Printer	HP LASERJET 2100M	HP	LaRC	
odin1881780	Infrastructure Printer	HP LASERJET 2100TN	HP	LaRC	
1883170	Infrastructure Printer	HP LASERJET 2100TN	HP	LaRC	
1883169	Infrastructure Printer	HP LASERJET 2100TN	HP	LaRC	
2099912	Infrastructure Printer	HP LASERJET 2200DT	HP	LaRC	
1882363	Infrastructure Printer	HP LASERJET 3500CP	HP	LaRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1878908	Infrastructure Printer	HP LASERJET 4000	HP	LaRC	
1878902	Infrastructure Printer	HP LASERJET 4000	HP	LaRC	
1879235	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
1879476	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
1879475	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
1879473	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
1879471	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
1879395	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
1879472	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
1879005	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
1878039	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
2099305	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
1883563	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
1878445	Infrastructure Printer	HP LASERJET 4000N	HP	LaRC	
1878325	Infrastructure Printer	HP LASERJET 4000TN	HP	LaRC	
odin1885122	Infrastructure Printer	HP LASERJET 4000TN	HP	LaRC	
1885119	Infrastructure Printer	HP LASERJET 4000TN	HP	LaRC	
1885556	Infrastructure Printer	HP LASERJET 4050N	HP	LaRC	
1883882	Infrastructure Printer	HP LASERJET 4050N	HP	LaRC	
1881787	Infrastructure Printer	HP LASERJET 4050N	HP	LaRC	
2008191	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1881509	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1884796	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1883404	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1885444	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1884820	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1884411	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1883982	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1885478	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1884493	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
8890003222	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1883411	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1885524	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
2009698	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
2008955	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1884658	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
2008705	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
1884661	Infrastructure Printer	HP LASERJET 4050TN	HP	LaRC	
2100204	Infrastructure Printer	HP LASERJET 4100DTN	HP	LaRC	
2101996	Infrastructure Printer	HP LASERJET 4100DTN	HP	LaRC	
R005227	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
R005087	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
R000213	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
R000220	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
R005226	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
R005048	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
R005065	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
R005066	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
R005223	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
R005158	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
R005021	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
R005020	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
R005019	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
2104454	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
2104453	Infrastructure Printer	HP LASERJET 4100N	HP	LaRC	
2099354	Infrastructure Printer	HP LASERJET 4100TN	HP	LaRC	
2098945	Infrastructure Printer	HP LASERJET 4100TN	HP	LaRC	
2099022	Infrastructure Printer	HP LASERJET 4100TN	HP	LaRC	
2107563	Infrastructure Printer	HP LASERJET 4600DN	HP	LaRC	
1160347	Infrastructure Printer	HP LASERJET 4M	HP	LaRC	
1260355	Infrastructure Printer	HP LASERJET 4M	HP	LaRC	
1425005	Infrastructure Printer	HP LASERJET 4M	HP	LaRC	
1424103	Infrastructure Printer	HP LASERJET 4M	HP	LaRC	
1431476	Infrastructure Printer	HP LASERJET 4M	HP	LaRC	
1428164	Infrastructure Printer	HP LASERJET 4M	HP	LaRC	
1741929	Infrastructure Printer	HP LASERJET 4M	HP	LaRC	
1875362	Infrastructure Printer	HP LASERJET 4MV	HP	LaRC	
1427092	Infrastructure Printer	HP LASERJET 4MV	HP	LaRC	
1260353	Infrastructure Printer	HP LASERJET 4SI	HP	LaRC	
1885156	Infrastructure Printer	HP LASERJET 5000DN	HP	LaRC	
1878980	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1878982	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1885513	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1885514	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1878892	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1878496	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1878615	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1878610	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1878603	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1885554	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1878614	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1881716	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1880566	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
2101209	Infrastructure Printer	HP LASERJET 5000N	HP	LaRC	
1742391	Infrastructure Printer	HP LASERJET 551MX	HP	LaRC	
1430420	Infrastructure Printer	HP LASERJET 5M	HP	LaRC	
1430777	Infrastructure Printer	HP LASERJET 5M	HP	LaRC	
1431589	Infrastructure Printer	HP LASERJET 5M	HP	LaRC	
1874421	Infrastructure Printer	HP LASERJET 5M	HP	LaRC	
1874834	Infrastructure Printer	HP LASERJET 5M	HP	LaRC	
1742946	Infrastructure Printer	HP LASERJET 5M	HP	LaRC	
1739327	Infrastructure Printer	HP LASERJET 5MP	HP	LaRC	
1875024	Infrastructure Printer	HP LASERJET 5SI MX	HP	LaRC	
1742040	Infrastructure Printer	HP LASERJET 5SI MX	HP	LaRC	
1880098	Infrastructure Printer	HP LASERJET 5SI MX	HP	LaRC	
1873346	Infrastructure Printer	HP LASERJET 5SI MX	HP	LaRC	
1429023	Infrastructure Printer	HP LASERJET 5SI MX	HP	LaRC	
odin1873084	Infrastructure Printer	HP LASERJET 6MP	HP	LaRC	
odin1741881	Infrastructure Printer	HP LASERJET 6P	HP	LaRC	
odin1875031	Infrastructure Printer	HP LASERJET 6P	HP	LaRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1874622	Infrastructure Printer	HP LASERJET 6P	HP	LaRC	
1879555	Infrastructure Printer	HP LASERJET 6P	HP	LaRC	
1873351	Infrastructure Printer	HP LASERJET 6P	HP	LaRC	
1875615	Infrastructure Printer	HP LASERJET 6P	HP	LaRC	
1876580	Infrastructure Printer	HP LASERJET 6P	HP	LaRC	
odin1873612	Infrastructure Printer	HP LASERJET 6PXI	HP	LaRC	
1879012	Infrastructure Printer	HP LASERJET 8000DN	HP	LaRC	
1885800	Infrastructure Printer	HP LASERJET 8000N	HP	LaRC	
1881650	Infrastructure Printer	HP LASERJET 8000N	HP	LaRC	
1883389	Infrastructure Printer	HP LASERJET 8000N	HP	LaRC	
1884209	Infrastructure Printer	HP LASERJET 8100DN	HP	LaRC	
2107469	Infrastructure Printer	HP LASERJET 8150DN	HP	LaRC	
2105651	Infrastructure Printer	HP LASERJET 8150DN	HP	LaRC	
R005188	Infrastructure Printer	HP LASERJET 8150N	HP	LaRC	
1641032	Infrastructure Printer	HP4250DTN	HP	LaRC	
1424338	Infrastructure Printer	LJ1320	HP	LaRC	
1874414	Infrastructure Printer	LJ2200	HP	LaRC	
1882446	Infrastructure Printer	LJ2550N	HP	LaRC	
1740333	Infrastructure Printer	LJ4100	HP	LaRC	
1873255	Infrastructure Printer	LJ5550	APPLE	LaRC	
1881426	Printer	HP LASERJET 2100M	HP	LaRC	
2008303	Printer	HP LASERJET 2100TN	HP	LaRC	
1885926	Printer	HP LASERJET 4050TN	HP	LaRC	
1883881	Printer	HP LASERJET 4050TN	HP	LaRC	
1885522	Printer	HP LASERJET 4050TN	HP	LaRC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2008894	Printer	HP LASERJET 4500N	HP	LaRC	
2099233	Printer	HP LASERJET 4550N	HP	LaRC	
2104831	Printer	HP LASERJET 4550N	HP	LaRC	
2107484	Printer	HP LASERJET 4600DN	HP	LaRC	
2105267	Printer	HP LASERJET 4600DTN	HP	LaRC	
1431014	Printer	HP LASERJET 5M	HP	LaRC	
3023952	Printer	HP LASERJET 8150DN	HP	LaRC	
2008884	Printer	HP LASERJET 8550	HP	LaRC	
2106923	Printer	LJ1505	HP	LaRC	
R005156	Production Server	ANACONDA	IBM	LaRC	UltraScalable Tape Library
1667130	Production Server	DELL	POWEREDGE	LaRC	NCAD Domain Controller - CBACS
R000192	Production Server	DL580	COMPAQ	LaRC	Symantec Antivirus Enterprise Primary-Master
R000193	Production Server	DL580	COMPAQ	LaRC	Symantec Antivirus Enterprise Master
R000128	Production Server	E450	SUN	LaRC	Tivoli Backup Server
000000537103	Production Server	PE2950	DELL	LaRC	NCAD Domain Controller
000000537143	Production Server	PE2950	DELL	LaRC	NCAD Domain Controller
000000537145	Production Server	PE2950	DELL	LaRC	NCAD Domain Controller
000000537147	Production Server	PE2950	DELL	LaRC	NCAD Domain Controller
220012094	Production Server	POWEREDGE 2900	DELL	LaRC	EMT Server
8800004772	Production Server	PROLIANT DL380	COMPAQ	LaRC	DC, WINS, GC, Domain Naming Master
8800004773	Production Server	PROLIANT DL380	COMPAQ	LaRC	DC, Global Catalogue (GC)
8800004774	Production Server	PROLIANT DL380	COMPAQ	LaRC	Domain Controller (DC)
8800004775	Production Server	PROLIANT DL380	COMPAQ	LaRC	WINS, MS SQL, Norton Enterprise Server, IIS
8800004778	Production Server	PROLIANT DL380 G2 CLUSTER SERVER	COMPAQ	LaRC	MS SQL, IIS, Cluster Service
8800004777	Production Server	PROLIANT DL380 G2 CLUSTER SERVER	COMPAQ	LaRC	MS SQL, IIS, Cluster Service
8800004776	Production Server	PROLIANT DL580	COMPAQ	LaRC	Domain Controller (DC), PDC Emulator, RID Master,

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
8800004779	Production Server	SMART ARRAY CLUSTER STORAGE	COMPAQ	LaRC	Attached to and Shared between CL-01 and CL-02 for
2106532	Seat Server	DL 380	COMPAQ	LaRC	
538710	DAR Server	PowerEdge 2950	Dell	MSFC	DAR Safeboot Server
538698	DAR Server	PowerEdge 2950	Dell	MSFC	DAR Safeboot LoggingServer
538713	DAR Server	POWEREDGE R300	Dell	MSFC	DAR Server
538697	DAR Server	POWEREDGE R300	Dell	MSFC	DAR
1727107	Infrastructure Printer	3167A	HP	MSFC	
1937625	Infrastructure Printer	4000N	HP	MSFC	
3025565	Infrastructure Printer	4050TN	HP	MSFC	
0033853	Infrastructure Printer	5SiMX PS	HP	MSFC	
1935580	Infrastructure Printer	C3166A	HP	MSFC	
1934084	Infrastructure Printer	C3167A	HP	MSFC	
1934096	Infrastructure Printer	C3167A	HP	MSFC	
1723753	Infrastructure Printer	C3167A	HP	MSFC	
1726367	Infrastructure Printer	C3167A	HP	MSFC	
1933642	Infrastructure Printer	C3167A	HP	MSFC	
1727110	Infrastructure Printer	C3167A	HP	MSFC	
1934083	Infrastructure Printer	C3167A	HP	MSFC	
1933261	Infrastructure Printer	C3167A	HP	MSFC	
1934085	Infrastructure Printer	C3167A	HP	MSFC	
1894955	Infrastructure Printer	C3917A	HP	MSFC	
1898692	Infrastructure Printer	C3917A	HP	MSFC	
1938058	Infrastructure Printer	C396AA	HP	MSFC	
1933880	Infrastructure Printer	C4119A	HP	MSFC	
1933808	Infrastructure Printer	C4120A	HP	MSFC	
1933809	Infrastructure Printer	C4120A	HP	MSFC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1933851	Infrastructure Printer	C4120A	HP	MSFC	
1933858	Infrastructure Printer	C4120A	HP	MSFC	
1933989	Infrastructure Printer	C4120A	HP	MSFC	
1933981	Infrastructure Printer	C4120A	HP	MSFC	
1933863	Infrastructure Printer	C4120A	HP	MSFC	
1933841	Infrastructure Printer	C4120A	HP	MSFC	
1933831	Infrastructure Printer	C4120A	HP	MSFC	
1933819	Infrastructure Printer	C4120A	HP	MSFC	
1959367	Infrastructure Printer	C4121A	HP	MSFC	
1933823	Infrastructure Printer	HP LASERJET 4000PS	HP	MSFC	
1961139	Infrastructure Printer	HP LASERJET 4000PS	HP	MSFC	
1933870	Infrastructure Printer	HP LASERJET 4000T	HP	MSFC	
3025656	Infrastructure Printer	HP LASERJET 4000TN	HP	MSFC	
3025658	Infrastructure Printer	HP LASERJET 4000TN	HP	MSFC	
1442647	Infrastructure Printer	HP LASERJET 4M PS	HP	MSFC	
3025410	Infrastructure Printer	HP LASERJET 5000DN	HP	MSFC	
3025464	Infrastructure Printer	HP LASERJET 5000DN	HP	MSFC	
2130473	Infrastructure Printer	HP LASERJET 5100TN	HP	MSFC	
2130604	Infrastructure Printer	HP LASERJET 5550N	HP	MSFC	
2130601	Infrastructure Printer	HP LASERJET 5550N	HP	MSFC	
2130602	Infrastructure Printer	HP LASERJET 5550N	HP	MSFC	
0033719	Infrastructure Printer	HP LASERJET 5M PS	HP	MSFC	
1896845	Infrastructure Printer	HP LASERJET 5M PS	HP	MSFC	
1894771	Infrastructure Printer	HP LASERJET 5M PS	HP	MSFC	
1933297	Infrastructure Printer	HP LASERJET 5M PS	HP	MSFC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1894952	Infrastructure Printer	HP LASERJET 5MP PS	HP	MSFC	
1936009	Infrastructure Printer	HP LASERJET 5PS	HP	MSFC	
3025583	Infrastructure Printer	HP LASERJET 8000DN	HP	MSFC	
2130470	Infrastructure Printer	HP LASERJET 8150N	HP	MSFC	
1900860	Infrastructure Printer	M4238	APPLE	MSFC	
1935910	Infrastructure Printer	Z560	TEKTRONIX	MSFC	
3025726	Infrastructure Printer	Z740	HP	MSFC	
1934474	Printer	HP LASERJET 4000PS	HP	MSFC	
1604607	Printer	HP LASERJET 5	HP	MSFC	
000000536690	Production Server	1950	DELL	MSFC	NOMAD MANAGEMENT SERVER
000000536691	Production Server	1950	DELL	MSFC	NOMAD
000000537296	Production Server	1950	DELL	MSFC	SMTP GATEWAY-NOMAD
000000537297	Production Server	1950	DELL	MSFC	SMTP GATEWAY - NOMAD
000000537299	Production Server	1950	DELL	MSFC	SMTP GATEWAY - NOMAD
000000537301	Production Server	1950	DELL	MSFC	SMTP GATEWAY - NOMAD
000000537305	Production Server	1950	DELL	MSFC	SMTP GATEWAY - NOMAD
000000537309	Production Server	1950	DELL	MSFC	SMTP GATEWAY - NOMAD
000000537311	Production Server	1950	DELL	MSFC	SMTP GATEWAY - NOMAD
000000537312	Production Server	1950	DELL	MSFC	SMTP GATEWAY - NOMAD
000000537315	Production Server	1950	DELL	MSFC	SMTP GATEWAY - NOMAD
000000537317	Production Server	1950	DELL	MSFC	SMTP GATEWAY - NOMAD
000000537319	Production Server	1950	DELL	MSFC	SMTP GATEWAY - NOMAD
000000537321	Production Server	1950	DELL	MSFC	SMTP GATEWAY - NOMAD
000000535904	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000535907	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000535908	Production Server	2950	DELL	MSFC	NCAD Domain Controller

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
000000535882	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000535838	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000535839	Production Server	2950	DELL	MSFC	NOMAD
000000535841	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000535842	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000535843	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000535844	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000535883	Production Server	2950	DELL	MSFC	Backup Server - Nomad
000000535884	Production Server	2950	DELL	MSFC	NOMAD GOODLINK
000000535887	Production Server	2950	DELL	MSFC	Backup Server - Nomad
000000535890	Production Server	2950	DELL	MSFC	NOMAD PUBLIC FOLDER SERVER
000000535892	Production Server	2950	DELL	MSFC	NOMAD PUBLIC FOLDER SERVER
000000535894	Production Server	2950	DELL	MSFC	NOMAD
000000535895	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000535897	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000535868	Production Server	2950	DELL	MSFC	NOMAD
000000535869	Production Server	2950	DELL	MSFC	NOMAD
000000535870	Production Server	2950	DELL	MSFC	NOMAD
000000535871	Production Server	2950	DELL	MSFC	NOMAD
000000535872	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000535873	Production Server	2950	DELL	MSFC	NOMAD
000000535874	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000535875	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000535877	Production Server	2950	DELL	MSFC	NOMAD GOODLINK
000000535878	Production Server	2950	DELL	MSFC	NOMAD
000000536695	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000536697	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000536698	Production Server	2950	DELL	MSFC	NOMAD
000000536699	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000536700	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000536701	Production Server	2950	DELL	MSFC	Exchange 2007 Mailbox - NOMAD

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
000000536702	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000536703	Production Server	2950	DELL	MSFC	Exchange 2007 Mailbox - NOMAD
000000536706	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000536707	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000536708	Production Server	2950	DELL	MSFC	NOMAD SCR SERVER
000000536709	Production Server	2950	DELL	MSFC	NOMAD SCR SERVER
000000536710	Production Server	2950	DELL	MSFC	NOMAD SCR SERVER
000000536715	Production Server	2950	DELL	MSFC	NOMAD SCR SERVER
000000536716	Production Server	2950	DELL	MSFC	NOMAD SCR SERVER
000000536719	Production Server	2950	DELL	MSFC	Exchange 2007 Failover Mailbox - NOMAD
000000536720	Production Server	2950	DELL	MSFC	NOMAD SYSLOG SERVER
000000537113	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000537136	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000537379	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000537380	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000537549	Production Server	2950	DELL	MSFC	NOMAD MONITOR SERVER
000000537553	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000537554	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000537556	Production Server	2950	DELL	MSFC	NOMAD HUB SERVER
000000537557	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000537558	Production Server	2950	DELL	MSFC	NOMAD
000000538698	Production Server	2950	DELL	MSFC	DAR Safeboot LoggingServer
000000538736	Production Server	2950	DELL	MSFC	BACKUP SERVER
000000538737	Production Server	2950	DELL	MSFC	NOMAD SCR SERVER
000000538738	Production Server	2950	DELL	MSFC	NOMAD HUB SERVER
000000538740	Production Server	2950	DELL	MSFC	NOMAD HUB SERVER
000000538626	Production Server	2950	DELL	MSFC	NCAD Security Manager Server
000000538627	Production Server	2950	DELL	MSFC	NCAD Security Manager Server
000000538628	Production Server	2950	DELL	MSFC	NCAD Security Manager Server
000000538631	Production Server	2950	DELL	MSFC	NCAD Domain Controller

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
000000538632	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000538741	Production Server	2950	DELL	MSFC	NOMAD HUB SERVER
000000538742	Production Server	2950	DELL	MSFC	NOMAD SCR SERVER
000000538743	Production Server	2950	DELL	MSFC	NOMAD SCR SERVER
000000538744	Production Server	2950	DELL	MSFC	NOMAD HUB SERVER
000000538745	Production Server	2950	DELL	MSFC	NOMAD SCR SERVER
000000538817	Production Server	2950	DELL	MSFC	NOMAD
000000538818	Production Server	2950	DELL	MSFC	NOMAD
000000538830	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000538831	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000538832	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000538833	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000538834	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000538925	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000538926	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000538927	Production Server	2950	DELL	MSFC	NCAD Domain Controller
000000565893	Production Server	2950	DELL	MSFC	NOMAD MAILBOX SERVER
000000539602	Production Server	7000G	APPLE	MSFC	NOMAD
000000539603	Production Server	7000G	APPLE	MSFC	NOMAD
000000539604	Production Server	7000G	APPLE	MSFC	NOMAD
000000539605	Production Server	7000G	APPLE	MSFC	NOMAD
000000539606	Production Server	7000G	APPLE	MSFC	NOMAD
000000539607	Production Server	7000G	APPLE	MSFC	NOMAD
000000539608	Production Server	7000G	APPLE	MSFC	NOMAD
000000539609	Production Server	7000G	APPLE	MSFC	NOMAD
000000539610	Production Server	7000G	APPLE	MSFC	NOMAD
000000539611	Production Server	7000G	APPLE	MSFC	NOMAD
000000538816	Production Server	900N	QUANTUM	MSFC	NOMAD
000000538807	Production Server	9UM	QUANTUM	MSFC	NOMAD
000000539682	Production Server	ACFIPSP	ACCELLION	MSFC	Large File Transfer
000000539623	Production Server	CX-380	EMC	MSFC	NOMAD
000000539612	Production Server	CX-380	EMC	MSFC	NOMAD
000000539613	Production Server	CX-380	EMC	MSFC	NOMAD
000000539614	Production Server	CX-380	EMC	MSFC	NOMAD
000000539615	Production Server	CX-380	EMC	MSFC	NOMAD
000000539616	Production Server	CX-380	EMC	MSFC	NOMAD
000000539617	Production Server	CX-380	EMC	MSFC	NOMAD

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
000000539618	Production Server	CX-380	EMC	MSFC	NOMAD
000000539619	Production Server	CX-380	EMC	MSFC	NOMAD
000000539620	Production Server	CX-380	EMC	MSFC	NOMAD
000000539621	Production Server	CX-380	EMC	MSFC	NOMAD
000000539622	Production Server	CX-380	EMC	MSFC	NOMAD
000000539624	Production Server	CX-380	EMC	MSFC	NOMAD
000000539625	Production Server	CX-380	EMC	MSFC	NOMAD
000000539626	Production Server	CX-380	EMC	MSFC	NOMAD
000000539627	Production Server	CX-380	EMC	MSFC	NOMAD
000000539628	Production Server	CX-380	EMC	MSFC	NOMAD
000000539629	Production Server	CX-380	EMC	MSFC	NOMAD
000000539630	Production Server	CX-380	EMC	MSFC	NOMAD
000000539631	Production Server	CX-380	EMC	MSFC	NOMAD
000000539632	Production Server	CX-380	EMC	MSFC	NOMAD
000000539633	Production Server	CX-380	EMC	MSFC	NOMAD
000000539634	Production Server	CX-380	EMC	MSFC	NOMAD
000000539635	Production Server	CX-380	EMC	MSFC	NOMAD
000000539577	Production Server	CX-380	EMC	MSFC	NOMAD
000000539578	Production Server	CX-380	EMC	MSFC	NOMAD
000000539579	Production Server	CX-380	EMC	MSFC	NOMAD
000000539580	Production Server	CX-380	EMC	MSFC	NOMAD
000000539581	Production Server	CX-380	EMC	MSFC	NOMAD
000000539582	Production Server	CX-380	EMC	MSFC	NOMAD
000000539583	Production Server	CX-380	EMC	MSFC	NOMAD
000000539584	Production Server	CX-380	EMC	MSFC	NOMAD
000000539585	Production Server	CX-380	EMC	MSFC	NOMAD
000000539587	Production Server	CX-380	EMC	MSFC	NOMAD
000000539588	Production Server	CX-380	EMC	MSFC	NOMAD
000000539589	Production Server	CX-380	EMC	MSFC	NOMAD
000000539590	Production Server	CX-380	EMC	MSFC	NOMAD
000000539591	Production Server	CX-380	EMC	MSFC	NOMAD
000000539592	Production Server	CX-380	EMC	MSFC	NOMAD
000000539593	Production Server	CX-380	EMC	MSFC	NOMAD
000000539594	Production Server	CX-380	EMC	MSFC	NOMAD
000000539595	Production Server	CX-380	EMC	MSFC	NOMAD
000000539596	Production Server	CX-380	EMC	MSFC	NOMAD
000000539597	Production Server	CX-380	EMC	MSFC	NOMAD
000000539598	Production Server	CX-380	EMC	MSFC	NOMAD
000000539748	Production Server	CX-380	EMC	MSFC	NOMAD SAN STORAGE
1284550	Production Server	DERENAA	DIGITAL EQUIPMENT CORP	MSFC	EMT Server
000000536897	Production Server	DS4100B	EMC	MSFC	NOMAD FIBER SWITCH

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
000000536898	Production Server	DS4100B	EMC	MSFC	NOMAD FIBER SWITCH
000000539298	Production Server	EMS01	DELL	MSFC	NCAD
000000539293	Production Server	EMS01	DELL	MSFC	NCAD Domain Controller
000000539294	Production Server	EMS01	DELL	MSFC	NCAD Domain Controller
000000539586	Production Server	GEN4 CENTURA	EMC	MSFC	NOMAD
000000538826	Production Server	M900	DELL	MSFC	Virtulazation - NOMAD
000000538714	Production Server	ML6020	DELL	MSFC	BACKUP LIBRARY - NOMAD
000000537115	Production Server	PE2950	DELL	MSFC	NCAD Domain Controller
000000537117	Production Server	PE2950	DELL	MSFC	NCAD Domain Controller
000000537118	Production Server	PE2950	DELL	MSFC	NCAD Domain Controller
000000537124	Production Server	PE2950	DELL	MSFC	NCAD Domain Controller
000000537126	Production Server	PE2950	DELL	MSFC	NCAD Domain Controller
000000537127	Production Server	PE2950	DELL	MSFC	NCAD PRODUCTION SERVER
000000537128	Production Server	PE2950	DELL	MSFC	NCAD Domain Controller
000000537131	Production Server	PE2950	DELL	MSFC	NCAD Domain Controller
000000537133	Production Server	PE2950	DELL	MSFC	NCAD Domain Controller
2510021	Production Server	POWEREDGE 1850	DELL	MSFC	GRC DOMAIN CONTROLLER - NOMAD
2510026	Production Server	POWEREDGE 1850	DELL	MSFC	GSFC DOMAIN CONTROLLER - NOMAD
2510028	Production Server	POWEREDGE 1850	DELL	MSFC	JSC DOMAIN CONTROLLER - NOMAD
2510027	Production Server	POWEREDGE 1850	DELL	MSFC	KSC DOMAIN CONTROLLER - NOMAD
2510025	Production Server	POWEREDGE 1850	DELL	MSFC	SSC DOMAIN CONTROLLER FOR NOMAD
2510020	Production Server	POWEREDGE 1850	DELL	MSFC	WSTF DOMAIN CONTROLLER FOR NOMAD
2512868	Production Server	POWEREDGE 2850	DELL	MSFC	NOMAD
2510607	Production Server	POWEREDGE 2850	DELL	MSFC	NOMAD LCS ACCESS PROXY

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
2510604	Production Server	POWEREDGE 2850	DELL	MSFC	NOMAD LCS ACCESS PROXY
2510595	Production Server	POWEREDGE 2850	DELL	MSFC	NOMAD LCS ACCESS PROXY
2510601	Production Server	POWEREDGE 2850	DELL	MSFC	NOMAD LCS SQL BACKEND
2510594	Production Server	POWEREDGE 2850	DELL	MSFC	NOMAD LCS SQL BACKEND
2510600	Production Server	POWEREDGE 2850	DELL	MSFC	NOMAD LCS FRONT END
2510599	Production Server	POWEREDGE 2850	DELL	MSFC	NOMAD LCS FRONT END
2510598	Production Server	POWEREDGE 2850	DELL	MSFC	NOMAD LCS FRONT END
2510606	Production Server	POWEREDGE 2850	DELL	MSFC	NOMAD LCS FRONT END
000000538710	Production Server	POWEREDGE R300	DELL	MSFC	DAR
000000537982	Production Server	PROOFPOINT	DELL	MSFC	NOMAD SPAM APPLIANCE
000000537984	Production Server	PROOFPOINT	DELL	MSFC	NOMAD SPAM APPLIANCE
000000537983	Production Server	PROOFPOINT	DELL	MSFC	NOMAD SPAM APPLIANCE
000000538633	Production Server	R900	DELL	MSFC	NCAD Security Manager Server
000000538634	Production Server	R900	DELL	MSFC	NCAD Domain Controller
000000538635	Production Server	R900	DELL	MSFC	NCAD Domain Controller
000000538636	Production Server	R900	DELL	MSFC	NCAD Security Manager Server
000000536439	Production Server	SCI500	ADIC	MSFC	BACKUP LIBRARY - NOMAD
000000538771	Production Server	X SERVE	APPLE	MSFC	IMAP Storage - NOMAD
000000538772	Production Server	X SERVE	APPLE	MSFC	IMAP Storage - NOMAD
000000538773	Production Server	X SERVE	APPLE	MSFC	IMAP Storage - NOMAD
000000538774	Production Server	X SERVE	APPLE	MSFC	NOMAD
000000538775	Production Server	X SERVE	APPLE	MSFC	NOMAD
000000538776	Production Server	X SERVE	APPLE	MSFC	NOMAD
000000538827	Production Server	XSERVE	APPLE	MSFC	Jabber Pilot - NOMAD
000000538629	Seat Server	2950	DELL	MSFC	NCAD Security Manager Server
000000535070	UPS	SUA2200	SMART UPS	MSFC	
000000537310	Production Server	1950	DELL	NSSC	SMTP GATEWAY - NOMAD
000000537316	Production Server	1950	DELL	NSSC	SMTP GATEWAY - NOMAD
000000537105	Production Server	PE2950	DELL	NSSC	NCAD Domain Controller

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
000000537139	Production Server	PE2950	DELL	NSSC	NCAD Domain Controller
1540384	Infrastructure Printer	HP LASERJET 4 PLUS	HP	SSC	
1324868	Infrastructure Printer	HP LASERJET 4M PLUS	HP	SSC	
1939931	Infrastructure Printer	HP LASERJET 5000GN	HP	SSC	
1540880	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541051	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541074	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541075	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541252	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541466	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541565	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541571	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541608	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541609	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541610	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541611	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
0034833	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
0034915	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
0034929	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1911207	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1540258	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1540261	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1540262	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1540584	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1540879	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1540882	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1542031	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1910000	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1910202	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1910852	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1910961	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1910962	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1911206	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1911209	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1911208	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1911482	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1911484	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1912799	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541867	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1541779	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1911443	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1911211	Infrastructure Printer	HP LASERJET 5SI	HP	SSC	
1540259	Infrastructure Printer	HP LASERJET 5SI/SI MX	HP	SSC	
1910197	Infrastructure Printer	LASERJET 5SI/SI MX	HP	SSC	
1910699	Infrastructure Printer	LASERJET 5SI/SI MX	HP	SSC	
1941183	Photocopier	TURNED INTO REDISTRIBUTION	XEROX	SSC	
1940348	Plotter	8830	XEROX	SSC	
1941855	Plotter	DESIGNJET 1050C	HP	SSC	
1323841	Printer	HP LASERJET 4	HP	SSC	
1324734	Printer	HP LASERJET 4	HP	SSC	
1324687	Printer	HP LASERJET 4	HP	SSC	
1539802	Printer	HP LASERJET 4 PLUS	HP	SSC	
1912324	Printer	HP LASERJET 4000	HP	SSC	

Asset Tag (ID)	Asset Function	Asset Model	Manufacturer	NASA Center	Server Function (If Server)
1912171	Printer	HP LASERJET 4000TN	HP	SSC	
1541405	Printer	HP LASERJET 4MV	HP	SSC	
1540970	Printer	HP LASERJET 5SI	HP	SSC	
2157148	Printer	HP LASERJET 5SI	HP	SSC	
1540041	Printer	HP LASERJET 5SI	HP	SSC	
1911210	Printer	HP LASERJET 5SI	HP	SSC	
1911483	Printer	HP LASERJET 5SI	HP	SSC	
1912172	Printer	LASERJET 4000TN	HP	SSC	
1912663	Printer	LASERJET 5SIMX	HEWLETT-PACKARD CO	SSC	
2155748	Production Server	DL380	COMPAQ	SSC	OUTLOOK WEB ACCESS [OWA]
000000537130	Production Server	PE2950	DELL	SSC	NCAD Domain Controller
000000537132	Production Server	PE2950	DELL	SSC	NCAD Domain Controller
000000537134	Production Server	PE2950	DELL	SSC	NCAD Domain Controller
000000537141	Production Server	PE2950	DELL	SSC	NCAD Domain Controller
1667141	Production Server	POWER EDGE 2850	DELL	SSC	NCAD - CBACS SERVER
1622837	VCR	VCR	MITSUBISHI	SSC	

ATTACHMENT I-12
LIST OF APPLICABLE DOCUMENTS

In the performance of this contract, the Contractor shall comply with the regulations, procedural requirements, policy documents, and work instructions in the list below. This is not an all-inclusive list, but serves as a representation of the types of Agency- and Center-specific applicable documents. These documents are incorporated by reference with the same force and effect as if they were in full text. The documents can be reviewed online in the NODIS Library, NASA Online Directives Information System, at URL: http://nodis3.gsfc.nasa.gov/

Center	Reference No.	Title
GSFC	GPG 2810.1	Instructions for Completion of Account Request Document
GSFC	GMI 1152.9	Facilities Coordination Committee
GSFC	GPR 1600.1	GSFC Security Manual
GSFC	GPR 1700.1	Occupational Safety Program
GSFC	GPR 1700.2	Chemical Hygiene Plan
GSFC	GPR 1800.1	GSFC Smoking Guidelines
GSFC	GPR 1800.2	Occupational Health Program
GSFC	GPR 1860.1	Ionizing Radiation Protection
GSFC	GPR 1860.2	Laser Radiation Protection
GSFC	GPR 1860.3	Radio Frequency Radiation Safety
GSFC	GPR 1860.4	Ultraviolet and High Intensity Light Radiation Protection
GSFC	GPR 2570.1	Radio Frequency Equipment Licensing
GSFC	GPD 8500.1	Environmental Program Management
GSFC	GPR 8710.2	Emergency Program Management
GSFC	GPD 8715.1	GSFC Safety Policy
GSFC	GPR 8715.1	Processing of NASA Safety Reporting System (NSRS) Incident Reports
GSFC	GSFC Form 24-27	Locator and Information Tracking System (LISTS) Form
JSC	JPR 1700.1	Safety and Health Handbook
KSC	QA-UG-0001	KSC Employee Safety & Health Pocket Guide
KSC	JHB 2000	Consolidated Comprehensive Emergency Management Plan
KSC	KNPD 1440.1	KSC Records Management and Vital Records Programs
KSC	KNPD 1800.2	KSC Hazard Communication Program
KSC	KNPD 1810.1	KSC Occupational Medicine Program
KSC	KNPD 8500.1	KSC Environmental Management
KSC	KNPR 1600.1	KSC Security Procedural Requirements
KSC	KNPR 1820.3	KSC Hearing Loss Prevention Program
KSC	KNPR 1820.4	KSC Respiratory Protection Program
KSC	KNPR 1870.1	KSC Sanitation Program
KSC	KNPR 4000.1	Supply and Equipment System Manual
KSC	KNPR 6000.1	Transportation Support System
KSC	KNPR 8500.1	KSC Environmental Regulations
KSC	KNPR 8715.3	KSC Safety Practices Procedural Requirements
KSC	KNPR 8830.1	Facilities and Real Property Procedural Requirements
KSC	KNPD 1860.1	KSC Radiation Protection Program
KSC	45SWI40-201	45th Space Wing Instruction 40-201 Radiation Protection Program
KSC	KNPR 2570.1	KSC Radio Frequency Spectrum Management Procedural Requirements
KSC	KNPD 1600.3	Use of Alcoholic Beverages on Kennedy Space Center (KSC) Property
KSC	KDP-KSC-P-1836	Removing Data and Licensed Software from Information Technology Storage Devices

RELEASED - Printed documents may be obsolete; validate prior to use.

MSFC	MWI 8621.1	Close Call and Mishap Reporting and Investigation Program
MSFC	MPD 8900.1	Medical Operations Responsibilities for Human Space Flight Programs*
MSFC	MPG 8715.1	Marshall Safety, Health and Environmental (SHE) Program
MSFC	MPG 1800.1	Bloodborne Pathogens
MSFC	MPD 1860.1	Laser Safety
MSFC	MPG 1840.2	MSFC Hazard Communication Program
MSFC	MPD 1840.1	MSFC Environmental Health Program
MSFC	MPD 1840.2	MSFC Hearing Conservation Program
MSFC	MPD 1840.3	MSFC Respiratory Protection Program
MSFC	MPD 1810.1	MSFC Occupational Medicine
MSFC	MPD 1860.2	Radiation Safety Program
MSFC	MPD 1840.1	MSFC Confined Space Entries
MSFC	MPD 1840.3	MSFC Hazardous Chemicals in Laboratories Protection Program
MSFC	MPG 1040.3	MSFC Emergency Plan
MSFC	MPG 8870.1	MSFC Environmental Management Program
MSFC	MPG 8715.1	Safety and Health Program Core Process Requirement (CPR)
SSC	SPR 8715.1	SSC Safety and Health Procedural Requirements
Agency	NAF-201 Version 1.0	Security Monitoring for Active Directory (SMAD) Training Plan*
Agency	NAF-100 Version 1.4	NASA Authentication Forest (NAF) and Active Directory Management System (ADMS) Concept of Operations*
Agency	NAF-200 Version 1.2	NASA Authentication Forest (NAF) and Active Directory Management System (ADMS) Training Plan*
Agency	NAF-400 Version 1.2	NASA Agency Forest Configuration Change Board Process*

*****Provided in the I^3P Technical Library

RELEASED - Printed documents may be obsolete; validate prior to use.

DEPARTMENT OF DEFENSE
CONTRACT SECURITY CLASSIFICATION SPECIFICATION

(The requirements of the DoD industrial Security Manual apply to all security aspects of this effort.)

1. CLEARANCE AND SAFEGUARDING

a. Facility Clearance Required: TOP SECRET/SCI

b. Level of Safeguarding Required: NONE

2. THIS SPECIFICATION IS FOR: *(X and complete as applicable)*

- [X] a. Prime Contract Number: NNX11AA01C
- [ ] b. Subcontract Number
- [ ] c. Solicitation or Other Number — Due Date *(yyyymmdd)*

3. THIS SPECIFICATION IS: *(X and complete as applicable)*

- [ ] a. Original *(Complete date in all cases)* — Date *(yyyymmdd)*: 20101227
- [ ] b. Revised *(Supersedes all previous spec)* — Revision No. — Date *(yyyymmdd)*
- [ ] c. Final *(Complete item 5 in all cases)* — Date *(yyyymmdd)*

4. IS THIS A FOLLOW-ON CONTRACT? [ ] Yes [X] No If Yes, complete the following:

Classified material received or generated under _____ *(Preceding Contract Number)* is transferred to this follow-on contract.

5. IS THIS A FINAL DD FORM 254? [ ] Yes [X] No If Yes, complete the following:

In response to the contractor's request dated _____, retention of the classified material is authorized for the period of _____

6. CONTRACTOR *(Include Commercial and Government Entry (CAGE) Code)*

a. Name, Address, and ZIP Code	b. Cage Code	c. Cognizant Security Office *(Name, Address, and ZIP Code)*
HP Enterprise Services, LLC 13600 EDS Drive Herndon, VA 20171-3225	1U305	Defense Security Service (IOFCC1) 14428 Albemarle Point Place, Suite 140 Chantilly, VA 20151

7. SUBCONTRACTOR

a. Name, Address, and ZIP Code	b. Cage Code	c. Cognizant Security Office *(Name, Address, and ZIP Code)*

8. ACTUAL PERFORMANCE

a. Location	b. Cage Code	c. Cognizant Security Office *(Name, Address, and ZIP Code)*
Various National Aeronautics and Space Administration (NASA) facilities throughout the United States		

9. GENERAL IDENTIFICATION OF THIS PROCUREMENT

Agency Consolidated End-User Services (ACES)

10. CONTRACTOR WILL REQUIRE ACCESS TO:

	Yes	No
a. COMMUNICATIONS SECURITY (COMSEC) INFORMATION	X	
b. RESTRICTED DATA		X
c. CRITICAL NUCLEAR WEAPON DESIGN INFORMATION		X
d. FORMERLY RESTRICTED DATA		X
e. INTELLIGENCE INFORMATION		
(1) Sensitive Compartmented Information (SCI)		X
(2) Non-SCI	X	
f. SPECIAL ACCESS INFORMATION		X
g. NATO INFORMATION		X
h. FOREIGN GOVERNMENT INFORMATION		X
i. LIMITED DISSEMINATION INFORMATION		X
j. FOR OFFICIAL USE ONLY INFORMATION	X	
k. OTHER (Specify)		X

11. IN PERFORMING THIS CONTRACT, THE CONTRACTOR WILL:

	Yes	No
a. HAVE ACCESS TO CLASSIFIED INFORMATION ONLY AT ANOTHER CONTRACTOR'S FACILITY OR A GOVERNMENT ACTIVITY	X	
b. RECEIVE CLASSIFIED DOCUMENTS ONLY	X	
c. RECEIVE AND GENERATE CLASSIFIED MATERIAL		X
d. FABRICATE, MODIFY, OR STORE CLASSIFIED HARDWARE		X
e. PERFORM SERVICES ONLY	X	
f. HAVE ACCESS TO U.S. CLASSIFIED INFORMATION OUTSIDE THE U.S., PUERTO RICO, U.S. POSSESSIONS AND TRUST TERRITORIES		X
g. BE AUTHORIZED TO USE THE SERVICES OF DEFENSE TECHNICAL INFORMATION CENTER (DTIC) OR OTHER SECONDARY DISTRIBUTION CENTER		X
h. REQUIRE A COMSEC ACCOUNT		X
i. HAVE TEMPEST REQUIREMENTS		X
j. HAVE OPERATIONS SECURITY (OPSEC) REQUIREMENTS		X
k. BE AUTHORIZED TO USE THE DEFENSE COURIER SERVICE		X
l. OTHER (Specify)		X

RELEASED - Printed documents may be obsolete; validate prior to use.

12. PUBLIC RELEASE. Any information (classified or unclassified) pertaining to this contract shall not be released for public dissemination except as provided by the Industrial Security Manual or unless it has been approved for public release by appropriate U.S. Government authority. Proposed public releases shall be submitted for approval prior to release ☐ Direct ☒ Through *(specify)*

Public Affairs Division, NASA Headquarters, Washington, D.C. 20546

to the Directorate for Freedom of Information and Security Review, Office of the Assistant Secretary of Defense (Public Affairs)* for review.
*In the case of non-DoD User Agencies, requests for disclosure shall be submitted to that agency.

13. SECURITY GUIDANCE. The security classifiection guidance needed for this classified effort is identified below. If any difficulty is encountered in applying this guidance or if any other contributing factor indicates a need for changes in this guidance, the contractor is authorized and encouraged to provide recommended changes; to challenge the guidance or the classification assigned to any information or material furnished or generated under this contract; and to submit any questions for interpretation of this guidance to the official identified below. Pending final decision, the information involved shall be handled and protected at the highest level of classification assigned or recommended. *(Fill in as appropriate for the classified effort. Attach, or forward under separate correspondence, any documents/guides/extracts referenced herein. Add additional pages as needed to provide complete guidance.)*

Generation or production of classified information is not required for performance of this contract. The Contractor is providing help-desk/technical systems installation, desk-side support, and maintenance for various National Aeronautics and Space Administration (NASA) facilities.

Personnel are required to be cleared because access to classified information cannot be precluded. Contractor may be required to operate and perform maintenance on a classified computer system and/or perform COMSEC accounting functions. Classified guidance will be provided by NASA.

The highest level of PCL required for contract performance is Top Secret/SCI.

Only on-site/near-site clearances will be required under the contract. Personnel that have access to classified information or systems are required to possess and maintain a Secret-level clearance. Personnel that do not require access to classified information or systems are not required to hold Secret-level clearance; however, these personnel are required to be U.S. citizens and obtain a favorable adjudication of a National Agency Check with inquiries (NACI) based on submission of an SF-85P.

Contractor personnel will follow guidance provided in the National Industrial Security Program Operating Manual (NISPOM). If additional requirements are to be imposed on the contractor, it will be the responsibility of the NASA Industrial Security Specialist to provide clarification and interpretation, and to insure compliance of additional requirements.

14. ADDITIONAL SECURITY REQUIREMENTS. Requirements, in addition to ISM requirements, are established for this contract. *(If Yes, identify the pertinent contractual clauses in the contract document itself, or provide an appropriate statement which identifies the additional requirements. Provide a copy of the requirements to the cognizant security office. Use Item 13 if additional space is needed.)* ☐ Yes ☒ No

15. INSPECTIONS. Elements of this contract are outside the inspection responsibility of the cognizant security office. *(If Yes, explain and identify specific areas or elements carved out and the activity responsible for inspections. Use Item 13 if additional space is needed.)* ☐ Yes ☒ No

16. CERTIFICATION AND SIGNATURE. Security requirements stated herein are complete and adequate for safeguarding the classified information to be released or generated under this classified effort. All questions shall be referred to the official named below.

a.Typed Name of Certifying Official	b. Title	c. Telephone *(Include Area Code)*
Darryl A. Smith	ACES Project Manager	(228) 813-6638

d. Address *(Include Zip Code)*
NASA Shared Services Center
Bldg. 1111, C Road
Stennis Space Center, MS 39529

e. Signature

17. REQUIRED DISTRIBUTION
- ☒ a. CONTRACTOR
- ☐ b. SUBCONTRACTOR
- ☒ c. COGNIZANT SECURITY OFFICE FOR PRIME AND SUBCONTRACTOR
- ☐ d. U.S. ACTIVITY RESPONSIBLE FOR OVERSEAS SECURITY ADMINISTRATION
- ☒ e. ADMINISTRATIVE CONTRACTING OFFICER
- ☒ f. OTHERS AS NECESSARY

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-14
PHASE-IN SCHEDULE*

CENTER	PHASE-IN START DATE	IMPLEMENTATION DATE
WAVE 1		
Dryden Flight Research Center (DFRC)	1/3/11	7/1/11
Goddard Space Flight Center (GSFC)	1/3/11	7/1/11
Kennedy Space Center (KSC)	1/3/11	7/1/11
NASA Headquarters (HQ)	1/3/11	7/1/11
WAVE 2		
NASA Shared Services Center (NSSC) / Stennis Space Center (SSC)	3/1/11	9/1/11
Glenn Research Center (GRC)	3/1/11	9/1/11
Marshall Space Flight Center (MSFC)	3/1/11	9/1/11
Jet Propulsion Laboratory (JPL)**	3/1/11	9/1/11
WAVE 3		
Johnson Space Center (JSC)	5/1/11	11/1/11
Langley Research Center (LaRC)	5/1/11	11/1/11
Ames Research Center (ARC)	5/1/11	11/1/11

*Note: The ACES Contractor will have access to the Centers starting on the Phase-In start date at each Center. The ACES Contractor shall complete all necessary preparation work so that they may assume full responsibility, including providing the Base Services at each Center, on the Implementation date at each Center.

**Note: Multi-Functional Devices (MFD) seats and Virtual Team Service (VTS) seat only.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-15
PHASE-IN PLAN

The Offeror's *Phase-In Plan* dated October 25, 2010, submitted as part of the Offeror's response to RFP NNX10272008R, *Agency Consolidated End-user Services (ACES)*, on October 25, 2010, is attached herewith and includes 32 pages.

Note: The HPES Phase-In Plan for ACES contains HPES proprietary information and has been redacted in its entirety.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-16
SMALL BUSINESS SUBCONTRACTING PLAN

The Offeror's *Small Business Subcontracting Plan* dated October 25, 2010, submitted as part of the Offeror's response to RFP NNX10272008R, *Agency End-user Services (ACES)*, on October 25, 2010, is attached herewith and includes 15 pages.

Note: The HPES Small Business Subcontracting Plan for ACES contains HPES proprietary information and has been redacted in its entirety.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-17
GOVERNMENT PROPERTY PLAN

The Offeror's *Government Property Plan* shall be submitted within sixty (60) days of contract award and will be incorporated by reference with the same force and effect as if it was in full text by subsequent modification.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-18
SAFETY AND HEALTH PLAN

The Offeror's *Safety and Health Plan*, dated October 25, 2010, submitted as part of the Offeror's response to RFP NNX10272008R, *Agency Consolidated End-user Services (ACES)*, on October 25, 2010, is attached herewith and includes 12 pages.

Note: The HPES Safety and Health Plan for ACES contains HPES proprietary information and has been redacted in its entirety.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-19
MANAGEMENT PLAN

The Offeror's *Management Plan*, dated October 25, 2010, submitted as part of the Offeror's response to RFP NNX10272008R, *Agency Consolidated End-user Services (ACES)*, on October 25, 2010, is attached herewith and includes 46 pages.

Note: The HPES Management Plan for ACES contains HPES proprietary information and has been redacted in its entirety.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-20
SURVEILLANCE PLAN

The Contractor shall deliver comprehensive services in accordance with the requirements contained within the PWS throughout the term of the contract. Additionally, the Contractor is responsible for management and quality control actions that meet or exceed the terms and conditions of the Contract. The Contractor, and not the Government, is responsible for management and quality control actions necessary to meet the quality standards set forth in this Contract.

Government Surveillance will be conducted throughout the period of performance of this Contract. Additionally, the Government will utilize a combination of strategies that will include In-Depth Observation, Sampling, and Customer Feedback. Even though the Contractor is responsible for ensuring performance compliance under their Quality Control requirements, the Government will notify the Contractor once defects have been discovered in the course of documenting the Contractor's performance. This does not imply that the Government is obligated to carry out quality control inspections for the Contractor, but that upon discovering defects, the Government will inform the Contractor of the location of each defect.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-21
TECHNOLOGY REFRESH PLAN

The Offeror's *Technology Refresh Implementation Plan* shall be submitted on the ACES contract implementation date for each wave and will be incorporated by reference with the same force and effect as if it was in full text by subsequent modification.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-22
ACRONYMS LISTING

ACA	Associate Contractor Agreement
ACAP	ACES Corrective Action Plan
ACES	Agency Consolidated End-user Services
AD	Active Directory
ADMS	Active Directory Management System
AI	Application Inventory
AM	Availability Management
APC	ACES Product Catalog
ARC	Ames Research Center
ARM	Availability, Reliability, and Maintainability
ARMD	Aeronautics Research Mission Directorate
ATV	Asset Transition Value
AUID	Agency User ID
B&W	Black and White
BES	BlackBerry Enterprise Server
C&A	Certification and Accreditation
CAL	Client Access License
CAP	Computer/Electronic Accommodations Program
CCB	Configuration Control Board
CCR	Central Contractor Registration
CCS	Center Chief of Security
CDR	Critical Design Review
CF	Cross Functional
CFR	Code of Federal Regulations
CI	Configuration item
CIO	Chief Information Officer
CLIN	Contract Line Item Number
CMDB	Configuration management database
CO	Contracting Officer
COB	Close of Business
CONUS	Continental United States
COOP	Continuity of Operations Planning
COTR	Contracting Officer's Technical Representative
COTS	Commercial off-the-shelf
CPU	Central Processing Unit
CRADA	Cooperative Research and Development Agreement
CRM	Customer Relationship Management
CRP	Cost Reduction Proposal
CTM	Center Technical Monitor
DAOF	Dryden Aircraft Operations Facility
DAR	Data At Rest
DDL	Dynamic Distribution List
DFRC	Dryden Flight Research Center

RELEASED - Printed documents may be obsolete; validate prior to use.

DHS	Department of Homeland Security
DIT	Directory Information Tree
DL	Distribution List
DNS	Domain Name System
DOT	Department of Transportation
DPD	Data Procurement Document
DR	Disaster Recovery
DRD	Data Requirements Description
DTMF	Dual-tone multi-frequency
EAR	Export Administration Regulations
EAST	Enterprise Applications Services Technologies
ECN	Equipment Control Number
EFT	Electronic funds transfer
EO	Executive Order
EPA	Environmental Protection Agency
ESD	Enterprise Service Desk
ESMD	Exploration Systems Mission Directorate
ESRS	Enterprise Service Request System
ETC	Estimate to complete
FAR	Federal Acquisition Regulations
FDCC	Federal Desktop Core Configuration
FIPS	Federal Information Processing Standards
FISMA	Federal Information Security Management Act
FOIA	Freedom of Information Act
GAL	Global Address Book
GAPM	Government ACES Project Manager
GFE	Government Furnished Equipment
GFP	Government Furnished Property
GISS	Goddard Institute for Space Studies
GPO	Group Policy Objects
GRC	Glenn Research Center
GSA	General Services Administration
GSFC	Goddard Space Flight Center
HQ	Headquarters
HSPD	Homeland Security Presidential Directive
I&AM	Identity and Access Management
IDA	Interface Definition Agreement
I^3P	IT Infrastructure Integration Program
IAM PP&E	Integrated Asset Management Property, Plant, and Equipment
ICAM	Identity, Credential, and Access Management
IEMP	Integrated Enterprise Management Program
IFMS	Interagency Fleet Management System
IM	Instant Messaging
IMAC	Install, Move, Add, and Change
IMAP	Internet Message Access Protocol
I/O	Input/output

RELEASED - Printed documents may be obsolete; validate prior to use.

IP	Internet Protocol
IPAM	Internet Protocol Address Management
IPO	Industrial Property Officer
IRIS	Incident Reporting Information System
ITSCM	IT Service Continuity Management
ISO	Information System Owner
IT	Information Technology
ITAR	International Traffic in Arms Regulations
ITIL®	Information Technology Infrastructure Library
ITMB	IT Management Board
ITS	IT Security
ITS-SOP	IT Security Standard Operating Procedure
IUP	Infrastructure Upgrade Proposal
IV&V	Independent Verification and Validation Facility
JPL	Jet Propulsion Laboratory
JSC	Johnson Space Center
KSC	Kennedy Space Center
LAN	Local Area Network
LaRC	Langley Research Center
LCS	Live Communication Server
LDAP	Lightweight Directory Access Protocol
LFT	Large File Transfer
MAC	Media Access Control
MAF	Michoud Assembly Facility
MEE	McAfee Endpoint Encryption
MFD	Multi-functional device
MMS	Multimedia Messaging Service
MRP	Metrics Retainage Pool
MSFC	Marshall Space Flight Center
MSRP	Manufacturer's suggested retail price
MX	Mail eXchanger
NACI	National Agency Check with Inquiries
NAF	NASA Agency Forest
NAMS	NASA Account Management System
NARA	National Archives and Records Administration
NASA	National Aeronautics and Space Administration
NASIRC	NASA Incident Response Center
NCAD	NASA Consolidated Active Directory
NEAR	NASA Enterprise Architecture Repository
NED	NASA Enterprise Directory
NEDC	NASA Enterprise Data Center
NFS	NASA FAR Supplement
NIC	Network Interface Card
NICS	NASA Integrated Communications Services
NISC	NASA Information Support Center
NISE	NASA Integrated Service Environment

RELEASED - Printed documents may be obsolete; validate prior to use.

NISN	NASA Integrated Services Network
NIST	National Institute of Standards and Technology
NITR	NASA Information Technology Requirement
NODIS	NASA Online Directives Information System
NOMAD	NASA Operational Messaging and Directory
NPD	NASA Policy Directive
NPF	NASA Post Forwarder
NPR	NASA Procedural Requirements
NSSC	NASA Shared Services Center
NSSTC	National Space Science & Technology Center
OMB	Office of Management and Budget
OCIO	Office of the Chief Information Officer
ODIN	Outsourcing Desktop Initiative for NASA
OEM	Original Equipment Manufacturer
OIG	Office of Inspector General
OLA	Operational Level Agreement
OMB	Office of Management and Budget
ORR	Operational Readiness Review
OS	Operating System
OSHA	Occupational Safety and Health Administration
OTA	Over-The-Air
PDA	Personal Digital Assistant
PDF	Portable Document Format
PDR	Preliminary Design Review
PII	Personally Identifiable Information
PIN	Personal Identification Number
PIV	Personal Identity Verification
PKI	Public Key Infrastructure
POA&M	Plan of Action and Milestones
POC	Point of Contact
PP&E	Plant, Property, and Equipment
PPM	Pages per minute
PRP	Performance Retainage Pool
PST	Personal STore
PWS	Performance Work Statement
RAM	Random access memory
RDM	Release and Deployment Management
RFP	Request for Proposal
RIM	Research In Motion
RMP	Records Management Plan
RTS	Return To Service
RTSS	Return To Service Surcharge
RTU	Right to Use
SACM	Service Asset and Configuration Management
SAN	Storage Area Network
SBUP	Small Business Utilization Pool

RELEASED - Printed documents may be obsolete; validate prior to use.

SBU	Sensitive But Unclassified
SCI	Sensitive Compartmented Information
SEMO	Supply and Equipment Management Officer
SEWP	Solutions for Enterprise-Wide Procurement
SLA	Service Level Agreement
SLO	Service Level Objective
SMA	Security Management Application
SMD	Science Mission Directorate
SMAD	Security Monitoring for Active Directory
SMS	Short Message Service
SMTP	Simple Mail Transfer Protocol
SOC	Security Operations Center
SOMD	Space Operations Mission Directorate
SP	Special Publication
SRP	Software Refresh Portal
SSA	Social Security Administration
SSL	Secure Sockets Layer
SSP	System Security Plan
SSC	Stennis Space Center
TAL	Transoceanic Abort Landing
TBD	To Be Determined
TIN	Taxpayer Identification Number
TLS	Transport Layer Security
TRT	Target Resolution Time
U.S.C.	United States Code
UNITeS	Unified NASA Information Technology Services
US-CERT	United States Computer Emergency Readiness Team
VAFB	Vandenberg Air Force Base
VDI	Virtual Desktop Infrastructure
VPN	Virtual Private Network
VTS	Virtual Team Service
WAN	Wide Area Network
WBS	Work Breakdown Structure
WEST	Web Enterprise Service Technologies
WFF	Wallops Flight Facility
WSC	White Sands Complex
XML	Extensible Markup Language

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-23
GLOSSARY OF TERMS

_____*x* – The "*x*", as used in the RFP after the designator for a policy, procedural requirement, or standard, refers to the fact that the latest signed version of the policy, procedural requirement, or standard approved for use by NASA is the Contract requirement at any given point in time. The relevant Contract requirements will change accordingly. The latest signed version of these documents should be used by the offerors for proposal preparation, and pricing should account for these changing requirements.

Asset Management—An accounting process for monitoring hardware and software purchased under the Contract. Records include the purchase price, depreciation, business unit, and location.

Authentication—A security process designed to establish the validity of a transmission, message, or originator or to verify an individual's eligibility to receive specific categories of information.

Authorization—The process of granting or denying access to system objects based on an individual or entity's identities, roles, or other qualifying characteristics (e.g., clearance level).

Availability period—The amount of time the system(s), or the total system, is functioning so that the end-user can access the resources provided by that system.

Availability—Ability of a component or service to perform its required function at a stated instant or over a period of time. It is usually expressed as the availability ratio, i.e., the proportion of time that the service is actually available for use by the end-users within the agreed upon service hours.

Base Service Component—A component that has other services dependent upon it (e.g., a BlackBerry enterprise server).

Cellular Device—A pocket-sized computing device, having a display screen with touch or push-button input and miniature keyboard with voice and data capabilities.

Close of Business (COB)—6:00 p.m. local time at the installation where the service is to be provided.

Cloud computing—Internet- ("cloud-") based development and use of computer technology ("computing"). It is a paradigm shift whereby details are abstracted from the users who no longer need knowledge of, expertise in, or control over the technology infrastructure "in the cloud" that supports them. Cloud computing describes a new supplement, consumption and delivery model for IT services based on Internet, and it typically involves the provision of dynamically scalable and often virtualized resources as a service over the Internet.

Computing Device Configuration—The hardware and software characteristics associated with a computing device. Hardware characteristics include: CPU, RAM, disk storage, size of monitor, specialty cards (e.g., wireless network card and video card) installed in the system unit, and devices attached directly to the system unit. Software characteristics include: identification of commercial-off-the-shelf (COTS) software in use on the workstation, the operating system, and a description of any commonly distributed custom applications.

RELEASED - Printed documents may be obsolete; validate prior to use.

Computing Device—Distributed computing resource, either networked or standalone, consisting of a CPU, keyboard, monitor, and a screen manipulation device, such as a mouse. This typically includes Windows-, Apple-, Linux-, and UNIX-based workstations. This definition excludes mainframes and supercomputers.

Confidentiality—Assurance that information is not disclosed to unauthorized entities or processes.

Configuration Item (CI)—Any computing device or computing device component (e.g., computer, peripheral, and software) that is under the control of configuration management.

Configuration Management Database (CMDB)—A database that contains all relevant details of configuration items (CIs) and details of the relationships between CIs.

Consumables—Product parts or supplies (except paper) that are consumed during the operation of the product, require replacement from time to time, and are necessary to provide the functionality of the device.

Consumer product line—The product line that is identified by the hardware vendor as intended for business use and not intended for home use.

Critical Uplift—The escalation of an ACES Service Option for a set of seat services to its highest (most stringent) value in terms of performance and service characteristics. The set of services affected in this manner includes Hardware Maintenance, System and Applications Software maintenance, Service Desk, and System Administration.

Customer Relationship Management (CRM)—A strategy or philosophy designed to optimize end-user and customer benefits, value, and satisfaction. It is a widely adopted system that helps organizations implement end-user-centric actions, respond better to complaints or feedback, develop end-to-end processes, and optimize end-user support. CRM involves applying policies, processes, and technologies to ensure that current end-users and customers are retained and satisfied and new end-users and customers are gained.

Customer Satisfaction—The measure of how products and services supplied by the Contractor meet or surpass customer expectation. It is seen as a key performance indicator within business.

Data At Rest (DAR)—All data in computer storage (excluding data traversing a network or temporarily residing in computer memory). DAR can be archival or reference files that are changed rarely or never. DAR can also be data that is subject to regular but not constant change.

Discretionary—The power or right to make official decisions using reason and judgment to choose from among acceptable alternatives.

Docking Station Solution—A base station for a Laptop, Lightweight Laptop, or Tablet that provides the equivalent of a desktop system. It includes a docking station, a single monitor, keyboard, mouse, external speakers, and expansion ports.

Downtime—The amount of time when an end-user's access to the Contractor's services is impaired. Downtime for each Incident is defined as the period between the time of failure and the time that the system is returned to the end-user fully operational.

RELEASED - Printed documents may be obsolete; validate prior to use.

Early refresh—The replacement of a seat before its scheduled refresh date.

End-users affected—The calculation of the number of end-users impaired by an outage. No end-user shall be counted more than once per downtime event even if more than one of their ACES services is not available. If the number of end-users impaired cannot be measured with certainty, the Contractor shall estimate the number of end-users impaired using the following rules based on the best information available, subject to ACES COTR or ACES CTM approval:

a. When an ACES-maintained infrastructure resource (e.g., printing or e-mail) is impaired or not available, those end-users who have access rights to that resource shall be counted as affected. If the resource is accessible to a majority of end-users (possibly all end-users), then the number of end-users in the organization to whom the resource is primarily assigned shall be counted as affected.

b. ACES seats—The number of end-users who use an ACES-provided solution for their end-user services shall be counted as affected.

Enterprise Service Desk (ESD)—The initial and single point of contact for Enterprise IT Services support providing a unified interface between the customer and NASA IT service providers. The ESD is where end-users' Incidents and Problems are processed and routed to the I^3P contract vehicles. The ESD provides both Tier 1 services and a Tier 0 (Self-Service) Web site.

Enterprise Service Request System (ESRS)—A service/product online ordering tool for all the I^3P contract vehicles serving as a customer-facing interface to order all I^3P-provided services. The ESRS also provides interface to the NASA Enterprise Service Catalog and the Enterprise Service Desk.

Greening—The process of transforming IT products and services to be more environmentally friendly. The act of greening involves incorporating "green" products and processes into one's work place. "Green" qualities include, but are not limited to reduced toxicity, re-usability, energy efficiency, responsible packaging and labeling, recycled content, intelligent design, responsible manufacturing techniques, and reduction of personal environmental hazards.

Incident (ITIL® v3)—An unplanned interruption to an IT Service or a reduction in the quality or IT security (e.g., notification or detection of a security violation or intrusion) of an IT Service. Failure of a Configuration Item that has not yet impacted Service is also an Incident.

Infection—A software program capable of replicating itself and causing harm to either a computer system's hosted data, functional performance, or networking throughput. Often referred to as a virus, infections include all types of malware such as a worm, trojan horse, spyware, dishonest adware, crimeware, and other malicious and unwanted software viruses that intentionally enter an end-user's computer system to damage, destroy, or modify files and programs. Unaware of the Problem, the end-user might spread the virus to other computers by infecting files on a network file system or a file system that is accessed by others.

Information Technology (IT)—The hardware and software used to store, retrieve, and manipulate electronic information.

RELEASED - Printed documents may be obsolete; validate prior to use.

Information Technology Infrastructure Integration Program (I^3P)—The five integrated NASA contracts—NICS, ACES, EAST, WEST, and NEDC—that comprise IT infrastructure services at NASA and are collectively known as the I^3P acquisition.

Information Technology Infrastructure Library (ITIL®)—A framework of good and best practices designed to promote quality computing services in the IT sector.

Interoperability—Ability of a computer system to run application programs from different vendors and to interact with other computers across local or wide-area networks regardless of their physical architecture and operating systems. Interoperability is feasible through hardware and software components that conform to open standards such as those used for the Internet.

IT Infrastructure—The sum of an organization's IT related hardware, software, data, telecommunications, facilities, procedures, and documentation.

Mission Directorate—One of NASA's four primary business areas for implementing NASA's mission and serving its customers. The four NASA Mission Directorates are: the Aeronautics Research Mission Directorate (ARMD), Exploration Systems Mission Directorate (ESMD), Science Mission Directorate (SMD), and Space Operations Mission Directorate (SOMD).

Near-site—A business or other government agency affiliated with NASA that is within a five (5)-mile radius of a NASA Center or Facility. This term is usually used in the context of defining a location supported by NASA.

Network Interface Card (NIC)—An adapter card installed in a computer that enables it to connect to a network.

Network Interface—The physical, logical, and management connections where there is a distinct change in management responsibility or technical implementation. Network interfaces can occur between two distinct networks or between an end-user device and its supporting network.

Network Printer—A printer available for use by computing devices on a network. A network printer either has its own built-in network interface card or is connected to a computer on the network and shared.

Non-Base Service Component—A component that has no other services dependent upon it (e.g., a BlackBerry mobile computing device).

Off-site—A business or other government agency affiliated with NASA that is outside of a five (5)-mile radius of a NASA Center or Facility.

On-site—A business or other government agency affiliated with NASA that is located on a NASA Center or Facility.

Outreach—The act of extending training, information, services, and benefits to a wider section of the end-user population. The purpose of outreach is to promote and facilitate use of service capabilities to better support end-users' mission success. Effective outreach expands end-users' knowledge and understanding of, and generates interest in, services and service offerings.

RELEASED - Printed documents may be obsolete; validate prior to use.

Pager systems—Center-wide pager services, local or regional pager services, and national/international pager services necessary to support NASA requirements.

Peripherals—Devices (e.g., printers, scanners, plotters, modems, and external hard disks) attached to individual desktops, laptops, or workstations.

Preventable Incidents under the terms of the Contract—Incidents resulting from the Contractor's lack of patch deployment.

Prime Time hours—The hours between 6:00 a.m. and 6:00 p.m. local time, excluding Federal Holidays and weekends.

Principal period of performance—For non-priority service, the hours between 6:00 a.m. and 6:00 p.m. local time, excluding Federal Holidays and weekends. For Priority and Base Services, 24 hours per day by 365 days per year.

Problem (ITIL® v3)—A cause of one or more Incidents. The cause is not usually known at the time a Problem Record is created, and the Problem Management Process is followed to provide further investigation.

Responsiveness—The speed with which the Contractor responds to an Incident.

Return To Service (RTS)—In ITIL® v3 known as Restoration of Service, the restoration of an end-user's device to full operability when an Incident occurs that renders an ACES seat unstable or inoperable. RTS includes the tasks that are necessary to get an end-user's system back to an operational state within the scope of the Contractor's responsibility, including field services and any remote management. RTS is the primary objective of Incident Management.

Return To Service timeframe—The time from detection of an Incident until the service is fully restored to the end-user.

Scheduled Outage—Any planned activity that impacts the end-user's ability to access ACES services. A scheduled outage is considered downtime if all affected end-users were not notified at least 3 days in advance. Unless directed by the Government to conduct maintenance or testing, an outage during Prime Time hours shall be counted as downtime.

Security Management (ITIL® v3)—The structured fitting of security in the management organization with a focus on guaranteeing the safety of information and placing value on protecting the confidentiality, integrity, and availability of information. The goal of Security Management is to meet the security requirements of Service Level Agreements, contracts, legislation, and externally imposed policies.

Security Operations Center (SOC)—The NASA SOC monitors activity and events in the NASA environment to ensure that anomalous behavior is detected, identified, classified, and acted upon where appropriate. Security engagements are co-managed by the SOC and the Contractor where actionable behavior by each is recommended in the event of malicious activities.

Security Uplift—The act of raising the level of support provided to a seat to meet the requirements for classified information support. This is applicable only to seats that do not already have this support.

RELEASED - Printed documents may be obsolete; validate prior to use.

Server Administration—Services provided in the operation and maintenance of a server. This includes services such as installation of a new server and additional hardware, installation and upgrade of software applications and network operating system, and configuration of hardware and software. This also includes account management, backup and restore, performance monitoring and tuning, security monitoring, Problem tracking, and error detection.

Service Desk—The Single Point of Contact between the Service Provider and the end-users. A typical Service Desk manages Incidents and Service Requests, and also handles communication with the end-users. The primary purpose of a Service Desk is to manage, coordinate, and resolve Incidents as quickly as possible and to ensure that no request is lost, forgotten, or ignored. Under the Contract, the Contractor's Tier 2/3 service desk will respond to reported Incidents, Problems, and Service Requests originating from the Enterprise Service Desk (ESD) or the Enterprise Service Request System (ESRS).

Service Level Agreement (SLA) (ITIL® v3)—An agreement between an IT Service Provider and a Customer. The SLA describes the IT Service, documents Service Level Targets, and specifies the responsibilities of the IT Service Provider and the Customer. A single SLA may cover multiple IT Services or multiple Customers.

Service Level (ITIL® v3)—Measured and reported achievement against one or more Service Level Targets. The term Service Level is sometimes used informally to mean Service Level Target.

Service Option—The characteristics and metrics that define a particular type of support to be provided by the Contractor. Multiple Service Options, such as System Administration and Return to Service, may be needed to provide various types of support to the end-user.

Shared Peripherals—Peripheral devices available to the end-user through a local area network. This includes printers, multi-functional devices (MFDs), scanners, plotters, and modems.

Smartcard—A Smartcard is a card the size and shape of a standard credit card that is used to access IT resources. Imbedded in the plastic is a complete microprocessor, memory, and input/output (I/O) interface. To use a Smartcard to access an IT resource, you need a Smartcard reader—a small device into which you insert the Smartcard—and the Personal Identification Number (PIN) that is associated with the Smartcard. Smartcards can provide a level of security higher than software-only implementations.

Software Release—The date that a software developer makes their software product publicly available. This date is often used in determining when a software product is deployed to end-user computing devices and other IT devices.

Support Level—The level of system administration and technical support that the Contractor is expected to provide for hardware and software and used by end-users under the Contract. The support requirements under each level are divided into three categories: Support Levels 1, 2, and 3, which are defined in Attachment I-1, *Performance Work Statement*, Section 3.2, *Support Levels*.

Straight line depreciation—The simplest and most commonly used method of determining the value that an asset will lose each year over its useful life. Straight line depreciation is calculated

RELEASED - Printed documents may be obsolete; validate prior to use.

by taking the purchase or acquisition price of an asset, subtracting the expected salvage value, and dividing the result by the useful life of the asset.

System Administration—Duties performed by a system administrator (also known as "admin," "sys admin," and "site admin"), such as monitoring security, performing configuration, managing allocation of user accounts and passwords, monitoring disk space and other resource use, and setting up new user accounts, hardware, and software.

Tier 2 ACES Service Desk—An ACES-staffed second tier service desk support where calls/Incident requests from ACES end-users are routed from the Enterprise Service Desk (Tier 1 Service Desk) because no specialist with the knowledge of the solution and ability to implement the solution is available at that Tier 1 Service Desk.

Transoceanic Abort Landing (TAL) Sites—Contingency landing sites used by NASA in the United States and overseas in the event an orbiter experiences mechanical Problems resulting from failure of one or more of its three main engines or cooling or cabin pressurization systems, or experiences adverse weather conditions during ascent into orbit, and needs to make an unscheduled landing. NASA currently has three TAL sites—two in Spain at Moron and Zaragoza, and one in the South of France at Istres. The three air bases are within gliding range of a space shuttle trying to reach the International Space Station.

Update/Upgrade—The replacement of a software program or hardware device with a more recently released version that provides better performance or newer functionality.

Useful life—The time until the asset transition value of an asset has reached zero or the asset with residual value is no longer functional.

Vital Records—Records essential for maintaining the continuity of Federal Government activities during a national emergency. These records consist of two categories: (1) emergency operating records, which outline the essential functions of the Government for the duration of emergency conditions, and (2) rights and interests records, which are required for the preservation of the rights and interests of individual citizens and the Government. (See NPD 1440.6, *NASA Records Management*.)

Wipe and Load—The act of erasing all information on all of the ACES-supported hard drives associated with an ACES seat and bringing the seat back to the current, fully functional baseline configuration.

Workaround—A method of avoiding an Incident or Problem, either as a temporary fix or through access to an alternative service.

Workstation—A networked or standalone computer normally used for calculation or graphics-intensive applications. A workstation includes one or more CPUs, monitor, keyboard, and a mouse or other screen manipulation device.

RELEASED - Printed documents may be obsolete; validate prior to use.

ATTACHMENT I-24
MISSION SUITABILITY PROPOSAL

The following pages of the Offeror's *Mission Suitability Proposal* dated October 25, 2010, submitted as part of the Offeror's response to RFP NNX10272008R, Agency Consolidated End-user Services (ACES) on October 25, 2010, is incorporated by reference with the same force and effect as if it was in full text.

Volume	Pages
Mission Suitability (MS-1)	I-5
	I-12 thru I-13
	I-16
	I-18 thru I-37
	I-39
	I-45 thru I-49
	I-56
	I-66 thru I-68
	I-79 thru I-82
	I-84
	I-90
	I-92 thru I-93
Mission Suitability (MS-2)	I-103 thru I-104
	I-107 thru I-112
	I-114 thru I-114-2
	I-120 thru I-121-1
Mission Suitability (MS-6)	I-215 thru I-216

Note: The pages noted above from the HPES Mission Suitability Proposal dated October 25, 2010 for ACES contains HPES proprietary information and have been redacted in their entirety.

RELEASED - Printed documents may be obsolete; validate prior to use.