SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS

1. REQUISITION NUMBER	PAGE 1 OF
	77

OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24 & 30

2. CONTRACT NO.	3. AWARD/EFFECTIVE DATE	4. ORDER NUMBER	5. SOLICITATION NUMBER	6. SOLICITATION ISSUE DATE
NAS5-98145	October 1, 2000	C-73695-K	Code R DOSP	January 25, 2000

7. FOR SOLICITATION INFORMATION CALL:	a. Name	b. TELEPHONE NUMBER (No collect calls)	8. OFFER DUE DATE/LOCAL TIME
	Thomas A. Spicer	(216) 433-2762	

9. ISSUED BY — CODE 0616/TAS
NASA GLENN RESEARCH CENTER
Attn: Thomas A. Spicer
Services and Construction Branch
21000 BROOKPARK ROAD, MS 500-312
CLEVELAND, OH 44135-3191

10. THIS ACQUISITION IS
- ☐ UNRESTRICTED
- ☐ SET ASIDE: % FOR
  - ☐ SMALL BUSINESS
  - ☐ SMALL DISADV.BUSINESS
  - ☐ 8(A)

SIC:
SIZE STANDARD:

11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED ☐ SEE SCHEDULE

12. DISCOUNT TERMS

☐ 13A. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)

13B. RATING

14. METHOD OF SOLICITATION
☐ RFQ ☐ IFB ☐ RFP ☐ RFO

15. DELIVER TO — CODE 0616/TAS
NASA GLENN RESEARCH CENTER
21000 BROOKPARK ROAD
CLEVELAND, OH 44135
RECEIVING, BLDG. 21
(ATTN: , BLDG. , RM.)

16. ADMINISTERED BY — CODE

17a. CONTRACTOR/ OFFEROR — PPC/STATE CODE (BX) (19) — FACILITY CODE
Intellisource Information Systems, Inc.
Attn: Toni J. Harmon, Enterprise Contracts Manager
4221 Forbes Boulevard
Lanham, MD 20706

TELEPHONE NO.

18a. PAYMENT WILL BE MADE BY — CODE
NASA GLENN RESEARCH CENTER
COMMERCIAL ACCOUNTS MS 500-303
21000 BROOKPARK ROAD
CLEVELAND, OH 44135-3191

☐ 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
	Outsourcing Desktop Initiative for NASA (ODIN) - Please see Section I.B.3 entitled Pricing.				

(Attach Additional Sheets as Necessary)

25. ACCOUNTING AND APPROPRIATION DATA

26. TOTAL AWARD AMOUNT *(For Govt. Use Only)*

☐ 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4, FAR 52.212-3 & 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 1 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 4/19/00, 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
Toni J. Harmon

31a. UNITED STATES OF AMERICA *(Signature of Contracting Officer)*

30b. NAME AND TITLE OF SIGNER *(Type or print)*
Toni Harmon, Contracts Manager

30c. DATE SIGNED
09-28-00

31b. NAME OF CONTRACTING OFFICER *(Type or print)*
Thomas A. Spicer

31c. DATE SIGNED
9/28/00

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

33. SHIP NUMBER ☐ PARTIAL ☐ FINAL

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

41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER

41c. DATE

42a. RECEIVED BY *(Print)*

42b. RECEIVED AT *(Location)*

42c. DATE REC'D *(YY/MM/DD)*

42d. TOT. CONTAINERS

STANDARD FORM 1449 (10-95)

AUTHORIZED FOR LOCAL REPRODUCTION

ODIN Master Contract
NAS5-98145
Delivery Order Number C-73695-K

Introduction

In accordance with the Outsourcing Desktop Initiative for NASA (ODIN) master contract paragraph A.1.2.2, NASA DOSP, the Code R Centers (ARC, DFRC, LaRC, and GRC) have selected Intellisource Information Systems Inc. to provide the delivery order services. As prescribed in paragraph A.1.3.2, NASA procedures for issuing orders, the information specific to this delivery order is as follows:

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I. General Contract

A. Enterprise

1. **Period of Performance**: The period of performance of this Delivery Order shall be thirty-six (36) months from the effective date of the Delivery Order.

2. **Delivery Order Tracking:** As set forth in DRD #6, Reports Supporting Invoice, the Contractor shall generate a Delivery Order value and tracking database which shall be maintained on a real-time basis, and which can be queried on a real-time, on-line basis by the Government. This database shall include all services, along with quantities and pricing for each, included in the current DO. A copy of the database shall be archived monthly for future reconciliation purposes and shall be retained for the life of the delivery order. The ODIN Contractor shall update the database whenever a DOCO-issued change is made to the DO.

3. **Monthly Invoicing:** Invoices shall be submitted monthly for the previous month's services. Services that are cancelled after the 15th of the month shall be invoiced for the whole month, and services cancelled on or before the 15th of the month shall not be invoiced for that month. If requested by the Contractor, the above mentioned cancellations shall be subject to approval by the DOCOTR. Additionally, services that are installed or in effect after the 15th of the month shall not be invoiced for that month, and services installed or in effect on or before the 15th of the month shall be invoiced for the whole month. Temporary seats are excluded from these invoicing definitions.

4. **Seat Changes:** If the Government changes a seat type or service level during the Delivery Order (e.g., from a GP1 to a GP3 for a person moving from a traditional desktop system to a portable system with a docking station), the monthly seat price shall change to the existing cost of the new seat type, but no one-time cost shall be levied. Upon request, the DOCOTR will have the responsibility to ensure that seat change requests of this type are needed to meet mission requirements.

5. **Performance Profile:** The Code R Enterprise/Center does not intend to modify the Platform Minimum Performance Profiles as defined in Contract Attachment N.

6. **Certified Platform Offerings**: At (or prior to) delivery order award, the contractor shall obtain NSTL certification of its Attachment R, updated as appropriate, and the DOSP proposal along with NSTL-certified platform offerings will become the new baseline for Contractor's performance during the delivery order period of performance. The selected Contractor(s) shall update and submit its revised Attachment R each time NSTL issues new benchmarks, i.e., quarterly. Each submission of the revised Attachment R shall include certification by the NSTL.

7. **Liability:** Liability for the loss of Contractor-provided workstations shall be in accordance with the terms and conditions outlined in clause A.1.20 of the master contract. In the event of asset losses, the Contractor shall conduct the investigations and, if theft is suspected, shall request the assistance of Center security to ascertain pertinent facts and recover lost equipment. Lost value shall be determined by using lease cost and depreciation. The Contractor shall keep accurate records of losses that are not recovered and shall provide quarterly updates of deductions against the annual $100k

asset liability clause for lost and missing equipment. Reports shall include, at a minimum, the following information:

a. The user of the missing equipment
b. Appropriate identification number (seat ID)
c. The value of the equipment
d. The nature of the disappearance (lost, stolen, etc.)

8. **Metric Performance Retainage Pool, and Performance Retainage Pool:** For this Delivery Order, the Metric Performance Retainage Pool (MPRP) referenced in Master Contract Section A.1.8(b) is increased from [redacted] The Performance Retainage Pool (PRP) is [redacted] as stated in the Master Contract paragraph A.1.8(a). Both the PRP and the MPRP will be awarded on an all-or-none basis.

9. **Availability of Asset Management Tool:** [redacted] b(4)

10. **Asset Tracking and Management:** [redacted]

11. **Asset Transition:** [redacted]

a.

b.

c.

d.

12. **Asset Disposal:** [redacted]

13. **Government Property Clauses:** The following property clause is incorporated by Reference: FAR 52.245-2 Government Property (Fixed Price Contracts). Additionally,

NASA FAR Supplement (NFS) 1852.245-71, Installation-Accountable Government Property, and NFS 1852.245-77, List of Installation-Accountable Property and Services, (NFS) 1852.245-73 Financial Reporting of NASA Property in the Custody of Contractors, and (NFS) 1852.245-76 list of government-furnished property are hereby included in full text below:

NFS 1852.245-71, Installation-Accountable Government Property (June 1998), Alternate 1 (March 1989)

(a) The Government property described in the clause at 1852.245-77, List of Installation-Accountable Property and Services, shall be made available to the Contractor on a no-charge, non-interference 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. Under this clause, the Contractor assumes the following user responsibilities:

Per specific Delivery Order requirements, provide maintenance, repair, upgrade, enhancement, refresh, and coordination with Government personnel of physical location, status, and condition of Government property for which the contractor provides purchased support, pursuant to the terms of this Delivery Order. Use of Government property listed as available for use at clause 1852.245-77 is permitted in the performance of this Delivery Order on an as-available and as-is basis. Should any item listed as available therein either not be available for use or else no longer be fit for use to meet the needs of the contractor in the performance of this Delivery Order, the contractor shall promptly notify the COTR, and, as required for its performance, the contractor shall provide the replacement item for their own use. Any such replacement item shall be the property of and the full responsibility of the contractor.

The contractor shall establish and adhere to a system of written procedures for 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 record-keeping, physical inventory, financial control, and reporting of the property subject to this clause shall be retained by the Government and accomplished 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 (NOT APPLICABLE):

(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 45.5 and 1845.5 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.

(iii) 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 SEMO. The contractor shall assume accountability and financial reporting responsibility for such property. The contractor shall establish records and property control procedures and maintain the property in accordance with the requirements of FAR Part 45.5 until its return to the installation.

(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) 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 (NOT APPLICABLE).

(3) The contractor shall not utilize the installation's central receiving facility for receipt of Contractor-acquired property. However, the Contractor shall provide listings suitable for establishing accountable records of all such property received, on a quarterly basis, to the Contracting Officer and the Supply and Equipment Management Officer.

(End of clause)

NASA FAR Supplement (NFS) 1852.245-77, in full text below, lists available installation-accountable property and services. All property and services listed therein as being available for contractor-use are provided on an as-available, as-is basis. Should any property listed below as being available for contractor-use either not be available, or not be in serviceable condition for its intended purpose, the contractor shall provide their own replacement property for their use.

NFS 1852.245-77, List of Installation-Accountable Property and Services (July 1997)

In accordance with the clause at 1852.245-71, Installation-Accountable Government Property, the Contractor is authorized use of the types of property and services listed below, to the extent they are available, in the performance of this contract within the physical borders of the installation which may include buildings and space owned or directly leased by NASA in close proximity to the installation, if so designated by the Contracting Officer.

(a) Office space and work area space as described in the Delivery Order, and utilities. Government telephone lines for both local and long distance purposes are available for official purposes only; pay telephones are available for contractor employees for unofficial calls.

(b) General- and special-purpose equipment, including office furniture as set forth in the Delivery Order.

(1) Equipment/items to be made available for use as set forth in the DOSP. The Government retains accountability for this property under the clause at 1852.245-71, Installation-Accountable Government Property, regardless of its authorized location. Additionally, Government-owned items requiring contractor maintenance coverage are defined in the Master Contract, DOSP, and herein.

(2) 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 as required by the clause at 1852.245-71, Installation-Accountable Government Property.

(3) 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. However, advance approval is not required for items listed in the contractor's asset management database and provided for the Government's use under this contract.

(c) Diesel fuel for ODIN-supported Government-owned generators.

(d) Spares as set forth in the Delivery Order,

(e) Use of existing Mass Storage Systems for computer back-up purposes.

(f) Janitorial services for provided office space.

(g) On-Center mail services for official ODIN use.

(h) Use of the Center's existing Internet service for official ODIN use.

(i) Existing infrastructure hardware items necessary for performing assigned tasks.

(k) Software licenses as available and needed for support of ODIN, including Remedy Software.

(l) Safety and fire protection for Contractor personnel and facilities

(m) Installation service facilities: Conference and training facilities as required for customer interface activities or training, as available and as scheduled and coordinated with Points of Contact and/or facility coordinators.

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

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

(p) Building maintenance for facilities occupied by Contractor personnel.

(q) The user responsibilities of the Contractor are defined in paragraph (a) of the clause at 1852.245-71, Installation-Accountable Government Property.

NFS 1852.245-73 (NOVEMBER 1999), FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS

(a) The Contractor shall submit annually a NASA Form (NF) 1018, NASA Property in the Custody of Contractors, in accordance with the provisions of 1845.505-14, the instructions on the form, subpart 1845.71, and any supplemental instructions for the current reporting period issued by NASA. Subcontractor use of NF 1018 is not required by this clause; however, the Contractor shall include data on property in the possession of subcontractors in the annual NF 1018.

(b)(1) The Contractor shall mail the original signed NF 1018 directly to the Center Deputy Chief Financial Officer, Finance.

(2) Three copies shall be submitted (through the Department of Defense (DOD) Property Administrator if contract administration has been delegated to DOD) to the following address:

DCMC Cleveland
Admiral Kidd Bldg.
555 East 88th st.
Bratenahl, Ohio 44108-1068

(c) The annual reporting period shall be from October 1 of each year through September 30 of the following year. The report shall be submitted in time to be received by October 31. The information contained in these reports is entered into the NASA accounting system to reflect current asset values for agency financial statement purposes. Therefore, it is essential that required reports be received no later than October 31. The Contracting Officer may, in the Government's interest, withhold payment until a reserve not exceeding $25,000 or 5 percent of the amount of the contract, whichever is less, has been set aside, if the Contractor fails to submit annual NF 1018 reports when due. Such reserve shall be withheld until the Contracting Officer has determined that the required reports have been received by the Government. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government right.

(d) A final report shall be submitted within 30 days after disposition of all property subject to reporting when the contract performance period is complete in accordance with (b)(1) and (2) of this clause.

(End of Clause)

NFS 1852.245-76) (OCT 1988) LIST OF GOVERNMENT-FURNISHED PROPERTY

For performance of work under this contract, the Government will make available Government property in Appendix G of this contract on a no-charge-for-use basis. The Contractor shall use this property in the performance of this contract at NASA Glenn Research Center and at other location(s) as may be approved by the Contracting Officer.

Under the FAR 52.245 Government Property clause of this contract, the Contractor is accountable for the identified property.

(End of clause)

14. **Due Diligence Price Adjustment:** There is no one-time Due Diligence Price Adjustment for this Order.

15. **Memorandums of Understanding (MOUs):** The Contractor shall establish MOUs with the appropriate NASA and contractor organizations by the end of the Transition Period.

16. **Agency Forum Participation:** The Contractor shall participate in agency IT forums such as the NASA PKI Working Group, the Postmasters Working Group, the Unix Working Group, and all other NASA CIO sanctioned entities.

17. **ISO9000 Certification:** The Contractor shall obtain ISO9000 registration of all their ODIN Delivery Order processes and procedures by April 2001.

18. **Lead Center Reporting:** Up to a level consistent with DRD GRC-3 REPORTS, AD HOC INFORMATION REQUEST, the Contractor shall provide the necessary information to the Lead Center for the purposes of reporting to the ODIN Program Board, the NASA CIO, and other Agency level entities. For reports that exceed the limitations in DRD GRC-3 the required reporting shall be executed through a bi-lateral agreement between the ODIN Contractor Project Manager and the DOCOTR.

B. GRC Specific Items

1. **Services to Be Furnished:** The Glenn Research Center intends to subscribe to the following ODIN services; Desktop (including network), Server, Phone, Fax, Administrative Radios (AR), Local Access Network (LAN), Remote Connection (RC), local video (LVID) and public address (PA) services. The scope of these services shall be to the full extent described under the ODIN Master Contract as clarified in the Code R DOSP and described herein. The ODIN contractor shall assume full responsibility for all facets of the delivery of these services at the Glenn Research Center (including the Plum Brook Station).

2. **Ordering:**

   a. The ordering center for this delivery order is NASA GLENN RESEARCH CENTER.
   b. Authorizing Officials: In accordance with A.1.4 of the Master Contract, Modification 3:
      (1) Delivery Order Contracting Officer (DOCO): Thomas Spicer
      (2) Delivery Order Contracting Officer's Technical Representative (DOCOTR): Don Sosoka
      (3) Alternate Delivery Order Contracting Officer's Technical Representative: Les Farkas
   c. In accordance with paragraph A.1.3.2, NASA Procedures for issuing orders, any services to be furnished under this contract shall be ordered by the issuance of delivery orders (optional form 347) by the individual DOCO designated above. The 347 shall also be the instrument that provides funding for the respective order placed.

3. **Pricing**:
   - The vendor shall provide all services as identified on Appendix F, NASA GLENN RESEARCH CENTER ODIN Price List and Ordering Quantities, dated September 2000.
   - The ordering of additional seats and services and cancellations of seats and services, including increases or decreases of quantities contained in the price model catalog, may be made by the DOCO provided the changes are within the bounds specified in the GRC Min/Max tables quantities shown in Appendix E.
   - The total estimated value of this delivery order is $43,382,695.

4. **LIMITATION OF FUNDS, (FIXED-PRICE CONTRACT) (MARCH 1989), NASA FAR Supplement Clause 1852.232-77**

(a) Of the total price of items being procured under this Delivery Order, the sum of $00 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:

During the period of performance a 347 will be issued at the beginning of each month indicating the funding available and the respective items and quantities to be ordered.

(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 (see forthcoming 347).

(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 85 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, 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)

5. **Center Policies: The** ODIN Contractor shall comply with all applicable GRC policies and procedures including safety, security, and employee conduct at the Center. The ODIN Contractor shall be escorted by a GRC individual possessing the required clearance when access to secure or limited access areas is necessary, or the Contractor shall be required to obtain all necessary clearance as prescribed by the GRC Security Office, up to a limit of 5% of the contractor staff.

6. **Contractor Access to GRC** - Access to GRC is controlled and requires proper badging of personnel and vehicles.

7. **Sensitive and Proprietary Information Non-disclosure:** The ODIN Contractor Project Manager shall engage in a non-disclosure agreement on behalf of all ODIN Contractor employees, of all government related sensitive and proprietary information, with the government. In addition, individual ODIN Contractor employees shall engage in a non-disclosure agreements, with specific organizations, when requested. Additional credit and felony checks (criminal history), required by the government in accordance with NPG 2810.1(i.e., for systems administrators), shall be provided by the ODIN vendor, as part of the seat cost.

8. **Data Requirements Documents (DRD's):** In addition to the DRD's required by the Master Contract, GRC DRD's numbered 1 through 4 are hereby included in this Delivery Order.

9. **SB/SDB Goals-Contract Section A.1.2.2. (d) (4):** The subcontracting goal for this Delivery Order for Small Businesses (SB) is [redacted], which is stated as a percentage of total Delivery Order dollars. As a subset of that amount, the Small Disadvantaged Business (SDB) goal is [redacted] of total Delivery Order dollars. Additionally, the Small Woman-Owned Business goal is [redacted], and the Hub Zone goal is [redacted] of total Delivery Order dollars. b(4)

10. **Transition Period:** The Contractor shall complete implementation of the ODIN model at GRC in 90 days, instead of using the full six month transition period.

11. **Transition Bonus** - In accordance with Master Contract Section A.1.7, a transition bonus in the amount of up to $100,000 is available for the ODIN Contractor for completing a smooth transition at the Glenn Research Center.

II. Desktop

A. Enterprise items

1. **Enterprise Value Adds:** The Contractor shall provide the following services:
   a. Enhanced Laptop Loaner Pool to provide additional equipment in the pools available to of any CONTRACTOR supported ODIN center travelers. The systems shall be configured to meet the default standards of the local center. Alternate configurations shall be accommodated on request of the user. At least five laptops shall be provided to each CONTRACTOR ODIN supported centers to support this function.
   b. Enhanced Laptop maintenance to provide CONTRACTOR supported ODIN Center travelers. The Contractor shall provide maintenance and repair services at the travel location and repaired equipment can be returned to the user either at the travel location or at the user's home center.
   c. Portable printer loans to provide checkout for small personal ink jet printers. At least five printers shall be available at each Center. This service shall be provided to all CONTRACTOR ODIN supported Centers.

2. **Return to Service:** The Contractor shall implement "return to service" such that a user has access to the same software and hardware as he/she did prior to the failure, including Triage level 1 and 2 software and Category 1 and 2 catalog items. The services for LAN Services, Shared Peripheral Service, File Service, and Desktop Conferencing on all seats shall adhere to the return to service metric subscribed in the seat's Hardware Maintenance service. Any of the above-mentioned bundled services not functioning within the seat shall define the seat in a down condition.

3. **Principle Period of Maintenance:** The Principle Period of Maintenance is 6:00 a.m. to 6:00 p.m. Monday through Friday, local time. The Principle Period of Maintenance for a seat signed up for critical hardware, software and (if appropriate) application software maintenance, shall be 24 hours a day, 7 days a week

4. **Technology Implementation Plans**: The Contractor shall provide an annual technology implementation plan, updated quarterly, detailing schedules of technology refresh activities and approved infusion projects, and identifying technology evaluation activities.

5. **Workstation Quality Assurance:** Whenever a seat is repaired, replaced, or refreshed, the Contractor shall assume the responsibility of ensuring that all functionality of the seat, including all hardware, all software, and all externally attached devices, is operating properly in cases where such hardware, software, and externally attached devices are fully compatible with the repaired, replaced, or refreshed seat. The Contractor shall include the cost of this responsibility in the seat cost. The following are clarifications of this requirement:
   a. Specifically, if requested by the user or DOCOTR, during hardware refresh, the Contractor shall, in cases where the internal/external component is fully compatible with the new seat, reinstall the existing Government-owned external and internal devices, including monitors, to the user's seat in order to maintain existing functionality. This reinstallation shall not be counted in the Center's allocation of move/add/changes. If the Contractor cannot reasonably reinstall the component, due to incompatibilities, and the user still requires the service, the user may purchase this required item/functionality from the catalog. If additional hardware (e.g., video cards) or software is required to make the system operable, the user may order the required hardware and/or software from the catalog.
   b. The Contractor shall be responsible for ODIN outages (i.e. non-triage 3 situations) and ensure that seats are restored to the same working functionality that existed before the repair, replacement, or refreshment was executed. The execution of a return to service condition or technology refreshment, initiated by the Contractor, shall result in the same functionality of the seat.
   c. User data, preferences, and settings shall be restored and transferred by the Contractor, to the best extent possible, to the repaired, replaced, or refreshed seat.
   d. The installation of patches and upgrades shall insure the interoperability of the established environment. Security patches will receive priority treatment.

6. **Moves, Adds, Changes Definition:** In addition to the requirements in Contract Section E.3.1.8, Moves, Adds, Changes (MAC), the following definitions apply: (a) A move is defined as de-installation, move and re-installation of system hardware, including telephones requiring a physical dispatch of a technician or analyst. (b) Virtual moves do not count in computing the total number of moves included in the service levels. A virtual move is one that does NOT require a physical dispatch of a technician or analyst. (c) Moves are aggregated by service, for example, average of one move per year for each "seat" type in each of these categories: desktop, server, and communications services. (d) Wiring needed to provide connectivity to a seat is included in the seat price provided the basic infrastructure is in place to support it. If the basic infrastructure is not in place, then the service level goes down to the level the infrastructure can support. MAC's shall be tracked, by the Contractor, on both a center-by-center and an enterprise basis. The cost for MAC's beyond 110% of the enterprise total will be distributed across only those centers that exceeded 100% of their total MAC's. The distribution shall be calculated to be proportional to the number of excess MAC's each of the centers use.

7. **Guidelines for Laptop Loaner Pool Services:** The Contractor shall provide, at a minimum, the following services for ODIN seats that include the Laptop Loaner Pool option:
   a. Maintain Center standard load

b. Maintain any organization-specific software configurations (including software in addition to the standard load that the organization has ordered through the catalog for the specific seat)
c. Battery recharge and/or exchange
d. Remote access setup and guidance including required remote access scripts for individual users at a given Center.
e. Data transfer support (moving data from a server to the laptop or vice versa)
f. Remove user data from laptop
g. Provide any rudimentary user training as needed when the laptop is picked up by the user
h. Ensure proper government approvals have been obtained

i. Maintaining loan records

The Laptop Loaner Pool services shall be provided at a Government provided on-site location.

8. **Retention of Replaced Hard Drives:** When an internal or external hard drive is not repairable, and cannot be verified as properly wiped clean, whether the associated CPU is owned by the Government or by ODIN, if requested by the customer and approved by the DOCOTR, the unrepairable hard drive shall become the property of the Government and shall be physically turned over to the customer. Any costs incurred by the Contractor because unrepairable drives need to go to the Government rather than to the manufacturer/supplier shall be included in seat prices.

9. **ODIN Application Software and Triage Software:** For any product on the ODIN Application S/W Suite list, the Contractor shall include the cost for providing the following services within the basic seat cost (i.e. does not require any additional purchases off the CSCC or elsewhere):
   a. Product purchase
   b. Installation and integration
   c. Full help desk support including expert user consultation support
   d. Accessible by all "full support" (GP1/2/3, SE1/2/3) seats
   e. Maintenance and refreshment according to the subscribed service levels
   f. Within-version upgrades

   For any product on the Triage level 1 list, the Contractor shall include the cost for providing the following services within the basic seat cost (i.e. does not require any additional purchases off the CSCC or elsewhere):
   a. Installation and integration
   b. Full help desk support including expert user consultation support
   c. Accessible by all "full support" (GP1/2/3, SE1/2/3) seats for any seat that a license is provided

   For any product on the Triage level 2 list, the Contractor shall include the cost for providing the following services within the basic seat cost (i.e. Does not require any additional purchases off the CSCC or elsewhere):
   a. Installation and integration
   b. Trouble ticket management and redirection to non-ODIN service provider for problem resolution

c. Accessible by all "full support" (GP1/2/3, SE1/2/3) seats for any seat that a license is provided

For any product on the Triage level 3 list the cost for providing support, as required in Workstation Quality Assurance is bundled within the basic seat cost (i.e. Does not require any additional purchases off the CSCC or elsewhere)

10. **Definition of ODIN Application Software and Triage Software:** The ODIN Standard Application Software Suite to be delivered with all full seats (GP1/2/3, SE1/2/3) is detailed in Appendix B of this document. Contractors should note the "Coverage" column. Applications with a "Coverage" of **All** are to be resident on (or directly accessible by) all desktops signed up as a full seat. Applications designated as **Full** are to be resident on (or directly accessible by) any desktop that it is requested for and is signed up as a full seat. Applications on the Triage Lists that have a **percentage** associated with them are capped at that percentage of the total number of full seats which the contractor may be required to have that package be resident on (or directly accessible by). Some of the applications on the triage level 1 or 2 software lists are currently available to some or the entire Center via concurrent or floating licensing. It is the Government's intent that these applications continue to be provided in this fashion. Examples of concurrently served software are included in the GRC Application KeyServer and provided under GRC's UNIX setup environment. The Contractor is advised that all such software at GRC is not currently centrally managed, and individual organizations may concurrently serve/manage other software applications within their organizations.

To support concurrent-use, licensing practices the catalog shall offer category 1 and 2 software packages in stand-alone and concurrent-use arrangements if the software vendor supports such licensing. At a minimum, software that is currently served via concurrent licenses, floating licenses or temporary licenses shall continue to be available. When percentages are indicated in the Triage software lists and concurrency is available, the percentage is the number of concurrent (simultaneous) usage allowed at any one time. In cases where the above-mentioned software is required to run in a non-networked environment, the Contractor shall provide the software in a stand-alone fashion.

The cost of the required infrastructure for support of concurrent-use, floating, or temporary licenses shall be bundled into and spread across all desktop seats. The cost of the application software licenses shall be covered by the catalog prices of the various applications.

The ODIN Contractor shall be responsible for all ODIN Standard Software Suite, Triage 1, and Triage 2 software deliveries to the ODIN desktops and servers. The ODIN Contractor shall be responsible for maintaining a database that specifies what software resides on every desktop to facilitate both COTS, as well as non-COTS, software deployments.

The contractor shall provide, for all full seats, within version software upgrades for the ODIN standard software suite and operating systems. The contractor shall include these in the fixed seat price and they shall be governed by the software technology refreshment service level metric subscribed to the seat.

11. **Back Office Support:** The following components shall be included as part of what is defined as "back office" products and services; e-mail service, network time service, directory service, network name/address resolution, common LERC Domain unique username, central NFS namespace username, central LERC MS Windows domain browsing and Mass Storage data archival functionality. The contractor shall include back office support as part of the NAD service.

12. **Support For Linux:** The Contractor shall provide full support for Linux on full PC Platform seats and shall allow substitution for Microsoft Windows operating systems.

13. **GP3 Interoperability:** The contractor shall insure full interoperability, within 6 months of delivery order start, of GP3's including the following services:
    a. Ability to utilize all services not requiring network connectivity when in the standalone mode.
    b. Ability to synchronize file service-based files with locally stored-based files when connected to the network.
    c. When attached to the center network, all full seat functionality shall be available, at the subscribed network speed.
    d. If multiple LAN services are associated with the seat (e.g. remote and regular), the seat shall function with the current connection with at most a reboot of the system.

14. **The Seat and Service Model Variations:** The Contractor shall support the seat service variations in Appendix A of this document.

15. **Color Network Print Services:** The defined color printer services shall be priced per desktop seat in the CSCC.

    Basic Color Printer Services
    The standard color printer shall support at a minimum, print page size of at least 8.5" X 14", print speed of 4 pages per minute, Postscript Level II, capability of printing transparencies, and resolution of 600 X 600 dpi. No printer shall be shared with an organization outside of the serviced seat's supported organization without DOCOTR approval. Pricing shall be for the following maximum distances from the serviced seat to the color printer, and shall be in the same building and, except for d., shall be on the same floor as the serviced seat:
    a. Within the same office/cubicle
    b. 30 (walking) feet
    c. 60 (walking) feet
    d. 150 (walking) feet

    Enhanced Color Printer Services
    Provision of enhanced color printer services shall be priced per desktop seat in the CSCC. Enhanced printer capabilities include increased print page size, print and color quality, and, to include a minimum print page size of at least 11"X17", print speed of at least 6 pages per minute, and resolution of at least 1200 X 1200 dots per inch.
    a. Within the same office/cubicle
    b. 30 (walking) feet
    c. 60 (walking) feet
    d. 150 (walking) feet

16. **Existing Components That Exceed Refresh:** When the Contractor encounters desktop hardware components that exceed those comparable components during desktop technology refreshment, the Contractor shall use the higher level component in the refresh box, if the hardware component is compatible with the new system, and provide an appropriate credit.

17. **ODIN Standard Software Suite:** The contractor shall have the standard load accessible and fully functional on all full seats by the end of the agreed upon transition period.

18. **ODIN Software Available on Catalog:** The contractor shall have ODIN Standard Software Suite, Triage1, and Triage2 software available on the catalog on the first day of the delivery order.

19. **Central X.500 Directory Service:** The Contractor shall provide support, operations, and maintenance for the current Central X.500 Directory Service infrastructure in accordance with NASA Standard 2807A: The NASA Directory Service: Architecture, Standards and Protocols and emerging NASA standards related to the implementation of PKI across the Agency.

20. **Printer Infrastructure:** The Government has made a best effort to subscribe to the appropriate shared peripheral service levels relative to its current requirements. During the execution of the Delivery Order the Contractor is encouraged to discuss any plans to move any existing networked printers with the DOCOTR in order to provide an opportunity for the Government to appropriately adjust subscription service levels. Government requests to move ODIN networked printers will be accomplished by utilizing a desktop MAC.

B. Glenn specific items

1. **GRC Monitor Standard:** The contractor shall provide 17" (minimum) monitors for all PC (Windows and LINUX) and Mac configurations and 19" monitors (minimum) on all Unix workstations (excludes LINUX PC's). The Contractor shall offer a discounted seat price if the user requests reutilization of the existing monitor during technology refreshment.

2. **Shared Peripheral Support for Institutional Mainframe environment:** The Contractor shall support the GRC Mainframe Business Application environment's integration with the GRC Shared Peripheral network-printing environment in its current functionality. The cost of this service shall be included in the Shared Peripheral Service element, which is bundled into a desktop seat. The ODIN Contractor shall provide support for MVS printing after the job leaves the MVS system. The Contractor shall provide print integration and troubleshooting support for the version level upgrades of Business Applications utilized by GRC. The Contractor shall work cooperatively with the MSFC NACC, relevant GRC contractors, and relevant GRC Business Application organizational entities to fulfill this requirement.
3. **Licensing of Upgraded OS:** The contractor shall provide for all GRC licensing including migration to Windows 2000, Mac OS X, and all currently supported UNIX Operating Systems.

4. **Shared System Administration:** The Contractor shall allow shared system administration as needed, upon approval of the DOCOTR. The Contractor shall take any necessary steps to protect proprietary/sensitive data.

5. **Test Facility Support:** The Contractor shall provide critical service levels on failed systems involved in test runs, in addition to the normal critical service uplift requirement, at no additional cost.

6. **Backup and Recovery:** The Mass Storage System (DSS/HSM) supports four discrete functions:

   a. On-line virtual disk file storage

   b. Local backup/restore services

   c. Infrastructure servers backup/restore services

   d. Long term data archival services to magnetic tape

   The Contractor may use the CMASS system to provide backup and recovery of NASA data for all servers and those desktops signed up for local backup. In the event of a disaster within the server farm facility, the Contractor shall restore over 80 percent of the server farm capability within 48 hours. 100 percent of the server farm capability will be fully operational within 5 working days. Processes for contingency and disaster recovery shall include:

   a. Daily/weekly incremental and full server backups
   b. Off-site storage facility at Plum Brook Station
   c. Automated backups during non-business hours
   d. Local backup and recovery using CMASS and Netbackup when ordered
   e. Coordination with the PACES contractor for Plum Brook storage site delivery (MOU)
   f. Full redundancy of the Brook Park IntelliCenter with our Philadelphia, PA, IntelliCenter.

7. **Mass Storage Archival System:** The Contractor shall fully administer and support an on-going archival *functionality* of the Mass Storage environment and system. Government record retention guidelines and regulations require GRC to maintain archived data even though there is no longer a need to actively use or access the information. This kind of inactive information has been archived onto the HSM tape archival system, and the vendor shall maintain this environment as part of the back-office infrastructure. The vendor may propose alternative architectures to address GRC's inactive data archival issues as long as related legacy issues are addressed. These proposals are subject to review and approval by the DOCOTR. For more information on the Mass Storage Environment, refer to the Mass Storage Environment Description document.

   On-line, virtual disk drive, active data that currently exists on the Mass Storage System will be subscribed as FILE1 Server Services seats.

   The contractor shall provide the necessary infrastructure, client applications, and server support necessary to provide center-wide subscription of local backup/restore at the Code R standard service level ("regular"). Equipment provided, as GFE shall be augmented by the vendor as required to support regular file storage requirements.

8. **Environment Description Documents:** The Contractor shall maintain documentation for systems under their support and shall maintain the Environment Description Documents for GRC for ODIN supported systems as part of the fixed seat price. The Environment Description documents shall be updated on a semi-annual basis from the start of the Delivery Order.

9. **Technology Infusion:** The Contractor shall provide and support the following technologies, as described in the table:

Technology Changes	Expected to be Implemented	Included?
Wireless local area networking	Expected	Fully included
Voice over IP	Expected	Partially included, client portion is included. Network bandwidth issues will be addressed via IUP.
Collaborative conferencing at the desktop (e.g. "whiteboarding", document management, desktop VITS, etc.)	Expected	Fully included at the Triage 1 level
Public Key Infrastructure (PKI) including:	Basic Element of the Model	
Directory service integration		Fully included
Certificate services		Fully included
Client integration		Fully included
Window 2000 (native mode) client server infrastructure		Fully included
MAC OS X deployment		Fully included
Integrated messaging (e-mail, voice, fax)	Expected	Partially included, client portion is included. Network bandwidth issues will be addressed via IUP.
UNIX interoperability (i.e. citrix upgrade or other solution)		Fully included
UNIX operating system upgrades (full seats)		Fully included
UNIX operating system upgrades (NAD/MA seats)		Partially included, for bug fixes and patches only.
Implementation of LINUX as a fully supported operating system for a full seat	Expected	Fully included as an alternative primary operating system (i.e. not dual boot)
Implementation of Palm/PDA as a fully supported system	Expected	Fully included as an MA peripheral seat or Category 1 catalog item
Assist in the development of IT Security Plans as defined by NPG 2810.1, OMB A-130 Appendix III, PDD 63 (1998), Computer Security Act of 1987 (40 V.S.C. 1114).		Fully included

10. **Bundled Services:** The following items and services shall be included in the fixed priced of the seats:
    a. COA and comprehensive outreach program, including instructor-led ODIN model training
    b. Desktop Video capability for 10% refreshed seats each year
    c. 128MB RAM minimum standard on PC/Mac Platforms
    d. Upgrade the IDE server farm and1 Gbps IDE server farm interface to the center network
    e. Standardize the Mac environment
    f. Complete the desktop inventory and auto discovery implemented
    g. Improved tool set to include Self Healing
    h. De-fragmented Reporting
    i. ODIN Integration Lab/Walk-in lab available for use by Glenn customers
    j. De-fragmented file storage

11. **Priority Service:** In lieu of the 1% fixed priority service problem calls for all seats as specified in C.5.9.4.1, the contractor shall provide for an additional 2% (or 3% total) "dynamic" uplift priority service of all current problems as specified in C.5.9.4.2. Consistent with C.5.9.4.2, this 3% shall be included in the desktop services seat price. The need for this level of priority service will be based on the urgency expressed by the customer when they call the help desk. DOCOTR approval to grant the request for priority service is not required. However, approval to deny the request is required from the DOCOTR.

12. **CSCC Shared Peripheral Support and NAD Printers:** Support for Shared Peripheral services shall be offered on the Catalog, for both new and existing Color printers and Black & White printers not offered as standard equipment in the Shared Peripheral Service level under a seat.

    a. The Catalog shall provide Category 1 Color Shared Peripheral services, which includes the printer and administration services commensurate with the Shared Peripheral services provided on full seats.
    b. For existing Color printers, the Catalog shall provide Color Shared Peripheral services, which provides printer administration services commensurate with the Shared Peripheral services provided on full seats. Maintenance shall not be included in the cost of this Catalog item. If maintenance is required on the peripheral, the government will subscribe the item as a MAP seat.
    c. The Contractor shall accommodate printers purchased for specialized requirements, which require incorporation into the Shared Peripheral infrastructure. The Contractor shall allow these printers to be subscribed as NAD seats for this purpose. The Systems Administration service under these seats shall entitle the printer to full integration into the Shared Peripheral infrastructure and environment.

13. **Maintenance Peripheral Seat (MAP):** In the event the government subscribes a MAP seat which becomes non-reparable, and it is not over 7 years old, the Contractor shall assume full responsibility for returning the item to like-functionality service, including purchasing a new replacement item if necessary. If the item is replaced, the GAV of the original item that was replaced shall be used in calculating the seat cost. The government shall subsequently be obligated to subscribe the item as a MAP seat for the duration of the Delivery Order, unless the government has no further use for the seat, at

which time control of the item shall be returned to the Contractor, and further obligation of government subscription shall cease.

14. **Premium PC Augmentation:** The CSCC shall allow augmentation, on the Catalog, for PC seats requiring more than the Premium PC performance level. This includes, but is not limited to, CPU, Memory, and Storage. The seat must be subscribed at the highest platform level of the PC seat type, as a prerequisite to entitlement to this service.

15. **PKI Support:** PKI support shall be considered as a Triage 1 service, in which the government provides the licensed software, and the Contractor shall assume responsibility for management and support for the environment. The exception to this is Entrust Entelligence, which is part of the ODIN Standard Software Suite. For Entrust Entelligence, the Contractor shall provide full support as part of the ODIN Standard Software Suite. Support for the environment shall include back-office support, certificate management, and shall be contingent upon Entrust developing solutions acceptable to the government. The Contractor shall participate in the Trust Model Working Group. The Contractor shall assume full responsibility for the PKI environment no later than January 1, 2001. The Government shall provide on-site private space to accomplish the operational aspects.

III. TELECOMMUNICATIONS AND NETWORKING

A. Enterprise items

1. **Cellular Phone Usage:** The Contractor shall include in the PCELL seat price: up to 300 minutes of usage per month, long distance, roaming, and the PCELL instrument The Contractor shall charge for cellular use in excess of 300 minutes pursuant to the pricing established in the CSCC.

2. **Fax Technology Refresh:** Fax seats shall be refreshed with fax systems that meet or exceed the capabilities of the seat's service characteristics as defined in the Master Contract. Refreshment of a fax seat shall occur when a given fax machine cannot be repaired to and/or maintained to be compliant with the applicable service characteristics of the fax service level definitions. Refresh costs shall be bundled into fax seat costs.

3. **LAN3 Seats:** Contract Section E.2.3.7.4, LAN3A/B Descriptions are revised to be Gigabit Ethernet (1 gigabit per second). As a catalog item, the contractor shall provide an augmentation (delta) price for LAN3A/B 155 Megabits per second ATM service.

4. **Loaner Cell Phones**: Short-term cell phones loans to provide at least five cell phones at each Center for short-term cell phone loaner pool. The user shall be permitted at least 30 free airtime minutes per day. This service shall be provided to all CONTRACTOR ODIN supported Centers.

5. **Cable Plant Management Contract Section A.1.10:** The Government will retain ownership of the entire cable plant at the respective centers including any satellite facilities (e.g. Plum Brook at GRC). The cable plant includes the cabling and network infrastructure for the telephone systems, the local area networks, the video distribution system, intercom systems, and other special circuits and systems.

All conduit, cable trays, messenger cables, telephone poles, underground ducts, manholes, communications racks, mounting panels, patch panels, wall plates, and other media installed to support the plant will remain under Government ownership as well as all fiber, copper, coax and other types of cable that comprise the plant. All concentrators, routers, hubs, repeaters, converters, transceivers, bridges, splitters, taps, connectors, and other network devices that constitute the cable plant will remain the property of the Government, including the telephone switch. All documentation, including as-built drawings, pertaining to the cable plant will belong to the Government.

While the government will retain ownership of the cable plant as described above, the contractor shall have full cable plant management responsibilities. Specifically, the ODIN contractor shall operate, maintain, and provide configuration management of the cable plant to provide the desktop and telecommunications and networking services required under the contract. These services include all intra (within) building (including desktop to wallplate) and inter (building-to-building) building connectivity. The contractor shall also be responsible for the configuration management of the cable plant as requested for use by organizations outside of the scope of ODIN (e.g. alarm circuits). This includes the acquisition, installation, testing, operation, preventative and remedial maintenance, repair, capacity planning, upgrades, demolition, removal, disposal, and excessing of cable plant components.

As a part of the contractor's obligation to operate and manage the cable plant, the contractor shall be responsible for funding and furnishing any equipment needed to maintain service delivery in accordance with the requirements and metrics in the delivery order. Any new equipment added by the contractor to the plant will become the property of the Government. NASA tagged equipment removed from service shall be excessed, and new equipment tagged, per established procedures.

In performing work on the cable plant, the contractor is responsible for adherence to all applicable laws, codes, regulations, and standards. Penalties or fees assessed by external organizations (e.g. OSHA) associated with violations shall be borne by the ODIN contractor. The contractor shall coordinate cable plant work with other center organizations and contractors as directed by the DOCOTR to avoid disruptions to the center community and to minimize system(s) downtime. It is the contractor's obligation to leave all work areas in a cleaned, finished state at the conclusion of any work. All work performed on the cable plant shall be documented by the contractor consistent with the guidelines in the documentation section contained herein.

B. GRC Specific Items

1. **GRC Fax Services:** GRC-owned fax machines that require ODIN fax support at Delivery Order start but do not align to the functionality of standard FAX1, FAX2, or FAX3 seats, will be signed up as FAX3 seats. The ODIN Contractor shall provide full fax maintenance and support services for these systems, including supporting the advanced functionality. Technology refresh of these fax systems shall provide a fax system that meets the functionality of the standard ODIN FAX3 seat. The ODIN Contractor's technology refresh activities shall include providing sufficient notice to users such that if the higher functionality is still required, the user may purchase an appropriate catalog item to upgrade from the standard FAX3 seat to the advanced featured fax system.

2. **Meeting Place Conferencing:** GRC has deployed a Latitude Systems' Meeting Place conferencing system that consists of both a voice and data conferencing capability. The Contractor shall support voice conferencing service be maintained at its present level. The cost of this service shall be bundled into the phone seat cost.

3. **Wireless LAN Support:** GRC has or will deploy a Wireless Local Area Network in several of its buildings (3, 5, 86, 142, 301). This network is based on the 802.11 standard and currently uses equipment from Lucent Technologies. The Contractor shall provide support for the network to be maintained at its present level and assumed to be part of the center network infrastructure. Any further customer funded wireless infrastructure components will assume to be part of the center network infrastructure and maintained as such. Individuals who poses compatible network cards for Laptops, Palmtops, etc. will be required to subscribe to "Remote-W LAN Access" in the ODIN Model. If the seat subscription for wireless LAN warrants a technology infusion of wireless in a building, the contractor shall deploy the necessary infrastructure to provide wireless LAN services. The threshold for contractor provided technology infusion shall be negotiated with the DOCOTR.

4. **Administrative Radio (AR) Seats:** The Contractor shall include the following service elements in the AR seats.
   a. Provide full maintenance coverage.
   b. Provide battery exchange for batteries that have failed.
   c. Program radios when required.
   d. Provide traffic statistics yearly to the GRC frequency manager to comply with NTIA regulations.
   e. Provide customer support for select, appropriate hardware.
   f. Provide customer support for recommended installation solutions.
   g. Maintain repair and maintenance records in Contractor's Remedy Action Request System.
   h. Monitor system daily to ensure proper operation.
   i. Maintain the remote site manager console in a restricted area and with only authorized personnel being granted access to the area.

5. **Remote Communication (RC) Seats:** RC service shall be provided for through purchases of RC seats and seat subscriptions to Remote S LAN Service. RC1 and RC2 seats will be based on the total number of requests for RC service of this type, presently defined by the number of active Remote Access Service II accounts; the number of seats subscribed to Remote S LAN Service; and, the capacity of the RAS II system. Regardless of the number of RC1 and RC2 seats purchased, the ODIN contractor shall provide sufficient connection means for Remote S LAN services subscribed through GP3 or other seats. The Contractor shall include the following service elements in the RC seats.

   a. Maintain equipment and software, as listed in ED titled **Remote Access Service II (RASII)**.
   b. Provide security, and log monitoring.
   c. Perform backups on authentication server(s).
   d. Administer RAS II user accounts
   e. Manage the archiving of Remote Access User Declaration forms.
   f. Generate statistical information.

g. Create, distribute, and maintain RAS II user manuals and related software diskettes and CD-ROMs.
h. Maintain the content of the RAS II web site.
i. Troubleshoot, user network connection anomalies.
j. Investigate the need for software upgrades due to changes in OA or new versions of applications and their associated integration issues.
k. Actively investigate the need for system upgrades and implement government-approved changes.
l. Maintain RAS II adherence to security procedures set forth by the DPI-CSO for issuing accounts, resetting passwords, terminating inactive connects, and addressing unauthorized attempts to access the system.
m. Provide continual documentation including: maintain the RAS II user profile spreadsheet, RAS II drawings, maintenance records, equipment manuals, operational manuals.
n. Support and generation of report of usage statistics or other report required for criminal investigations.

6. **PH1 Through PH4 seats:** The Contractor shall include the following service elements in the PH1 through Ph4 seats.
   a. Circuits connecting the center PBX to the local telephone company providing dialtone for access external to the center
   b. Engineering, operation, and maintenance of the telephone switch and voice mail systems including maintenance contracts
   c. An analog or digital (as appropriate to the service level ordered) port on a line card in the telephone switch
   d. The cable pair(s) (copper circuit) extending the telephone switch port to the location of the telephone instrument, including:
   e. Furnish and install when necessary beyond the use of installed cable plant where available. Cabling is provided as a part of a new seat installation up to the capability of the current switch configuration. Building remodeling or the addition on new facilities will be handled as an IUP. Movement of existing seats that require cabling will be assessed as a MAC.
   f. Set-up, and testing
   g. Documentation
   h. Corrective and preventative maintenance on existing circuits
   i. A telephone instrument as appropriate to the service level ordered
   j. Telecommunications billing administration as specified in the DOSP letter
   k. Maintenance of the current service level of the Meeting Place Voice Conferencing system (Latitude) that consists of both a voice and data conferencing capability. The cost of this service shall be bundled into the phone seat cost.
   l. Maintenance of the current service level of the voice processing application as specified in the DOSP letter
   m. All corrective and preventive maintenance of the telephone cable plant infrastructure, including repair of cables damaged by nature.
   n. Support testing of the UPS system including batteries, the back-up generator, and transfer switch
   o. Distribution of voice broadcast messages

7. **Central Communications Center:** The Contractor shall include the following service elements in the Central Communications Center:

a. Administration, maintenance, operation of this service
b. Staffed (8am-5pm, five days week, not gov't holidays) Phone operators to direct incoming phone calls. Off hours goes to computerized system.
c. Set up of voice conferences
d. Initiation of foreign calls
e. Operation of a central facsimile service for incoming & outgoing faxes to service personal not having there own facsimile and to support foreign facsimile transmissions

8. **PA1 Seats:** The Contractor shall include the following service elements in the PA1 seats:
   a. Provide support, maintenance, and repair of all existing permanently installed intercom systems including the instruments and interconnecting cabling as described in the **O&EI System** and **10A2Intercom Systems** environment descriptions.
   b. Provide telephone functionality to intercom systems by interface with the GRC PBX.
   c. Support intercom/public address functions such as paging and station-to-station conversations without dialing a phone number.

9. **LVID Seats:** The Contractor shall maintain or improve upon the total functionality defined in the LINK and Glenn TV Control Center –video broadcasting Environment Descriptions. The contractor shall offer additional television sets/monitors on the ODIN catalog The Contractor shall include the following service elements in the LVID seats:

   a. Operation and maintenance of Glenn TV control center including:
      1. Support for all equipment having to do with manipulating audio and video signals including distribution onto LINK system (e.g. recorders, switchers, demodulators, modulators, character generators)
      2. Monitoring of all channels to ensure correct programming.
      3. Update, maintain, and backup the VBB (Video Bulletin Board).
      4. Review and schedule all requests to broadcast programming.
      5. Broadcast programming at appointed times including prerecorded video, live video, and conferencing as appropriate and/or requested.
      6. Provide services and interfaces for the uplink/downlink of video feeds, inbound and outbound live video, and conferences/seminars
      7. Coordinate Center Director Messages with Director's staff, ITC (Imaging Technology Center), and video teleconferencing coordinator.
      8. Coordinate all equipment repair and maintenance.
      9. Record programming as required which could include downlinks, center broadcasts, and utilization of video camera to record live conferences/seminars.
      10. Maintain a user-accessible web-based scheduling system
      11. Provide for operations of the GRC message board located outside of Building 500.

   b. Operation and maintenance of LINK video distribution system (i.e. Broadband CATV) including:
      1. Perform preventative and corrective maintenance on entire system.
      2. Provide for LINK system a centralized support structure coordinated with the Network control center.
      3. Provide support and system maintenance for distribution of bi-directional video, audio and necessary data services.
      4. Perform all work as per relevant safety and electrical codes.

5. Maintain documentation consistent with the guidelines specified in the DOSP letter.

c. Operation and maintenance of televisions and monitors attached to the LINK system including:
   1. Support existing television and monitors including repair and configuration.
   2. Provide support for new installations of television and monitors.
   3. Coordinate work orders for electrical power and physical mounting of televisions.

10. **Commercial Cable Services:** Prior to contract award, GRC plans to procure and install a satellite dish to provide access to commercial satellite services. GRC intends to extract selected channels (e.g. CSPAN 1, CSPAN 2, CNN, CNN Headline News, Weather Channel and other informational/news channels) for rebroadcast on the GRC CATV system. The ODIN Contractor shall continue to provide this service and include this cost in the LVID1 seat.

11. **Telecommunications Billing and Service Administration:** The contractor shall provide billing and service administration for telecommunications systems and services that are outside the standard telecommunications seats. The cost of performing these services shall be included in the telephone seat costs. The activities included in this support are:
    a. Act as the receiving office for all telecommunications related billing from contractors.
    b. Review, validate, and coordinate all bills in relationship to established and approved accounts with the NASA GRC Procurement and the Financial Management Division (FMD).
    c. Prepare all bills for signature by a responsible NASA individual for processing to FMD for payment, and within established timelines to prevent late-payment fees.
    d. Coordinate telecommunications services from contractors such as Ameritech, AT&T, MCI, ICG, GTE, Air Touch, and other sources.
    e. Coordinate Intercenter services for voice and data with the NASA Integrated Systems Network (NISN) contract administered by MSFC.
    f. Provide administrative support (e.g., distribution of pager units, batteries, etc.) to the existing pager services being provided under the current GRC contract with AirTouch.
    g. Provide administrative support (e.g., distribute cards and billing information) for Government provided telephone calling cards (domestic and international) provided by MSFC under the NISN contract.
    h. Coordinate special circuit requests, such as ISDN, business lines, high capacity circuits (T-1, DS3, etc) for GRC organizations.

12. **Local Area Network (LAN) seat** – The Contractor shall include as part of the LAN service the following:
    a. Network name/address resolution (DNS)
    b. Physical network attachment and associated supporting infrastructure

13. **Voice Mail and Voice Processing:** The contractor shall maintain the voice processing applications currently in use at GRC. Addition of applications shall be via an infrastructure upgrade makes use of the voice information processing capability of its voice mail system. Currently there are 8 specific applications using varying quantities of mailboxes each. This service shall be maintained at its present level and the cost of doing so shall be spread across all phone seats. Additional information is available within the appropriate environment descriptions. Contract section E.3.3.1 is revised to be

standard 60 minutes of storage and the enhanced service level is 90 minutes of storage. These levels are currently available at GRC.

14. **Special Purpose Networks** – The scope and technical breadth of GRC's mission is such that unpredictable requirements arise for special purpose networks to support new requirements. As with GRC's local area network, the responsibility for responding to such requirements will be divided between the Government and the ODIN Contractor, i.e., the Government will be responsible for the analysis of requirements and the architectural design of the associated special purpose network. Because of the ODIN Contractor's expertise and day-to-day GRC Network operations experience, the ODIN Contractor shall be involved with analyzing requirements and designing special networks. Once the network design is approved, the implementation, day-to-day operations, and maintenance of the new special purpose network shall become the responsibility of the ODIN Contractor unless waived by the DOCOTR. Since the number of these networks and the subsequent scope of the associated network support services are not known in advance, the provision of these services will be addressed by a Delivery Order modification if/when special purpose network requirements develop.

15. **Network Operations** – The Contractor shall provide on-site network monitoring and problem resolution 24 hours, 7 days a week.

16. **LAN Wiring Upgrade:** The contractor shall implement a fully functional (cable, connectors, faceplates, Communication racks, patch panels, 10/100MB Ethernet switches, etc.) Ethernet over twisted pair LANs in GRC buildings 21, 3, 7, 11, 15, 23, 55/56, and 106 during the period of the delivery order. All cabling shall be 100MB capable (category 5E as a minimum) with both voice and data integrated onto the same faceplate such that any cable can be used for either voice or data. The new LANs shall be connected to the new Gigabit backbone or the old FDDI backbone should a building LAN be completed prior to implementation of the Gigabit backbone. All work must be documented in compliance with section 7.B.3 of the delivery order and media shall be tested with test results documented and kept on file. The Intellisource proposal dated April 19, 2000 and revised September 26, 2000 is hereby incorporated as reference.

17. **Network Backbone Upgrade:** The contractor shall implement a switched Gigabit Ethernet network backbone at GRC. This network shall be capable of being upgraded to 10 Gigabit with the addition of some nominal hardware. The Gigabit network shall totally replace the FDDI Routed backbone in place at the onset of this delivery order. The contractor shall decommission the FDDI network when the Gigabit network is fully operational. The contractor shall prepare the FDDI routers for excess via established Government procedures and trade-in to the Gigabit switch vendor should the routers not be claimed through excess.

    The Gigabit network shall be fully implemented within the first two years of the delivery order with all current building LANs, end user devices, central services (e.g. Mass Storage, email, etc.), and external connectivity (including NISN and the Internet) moved from the FDDI network to the new Gigabit network. The network shall be fully documented in compliance with section 7.B.3 of the delivery order. The Intellisource proposal dated April 19, 2000 and revised September 26, 2000 is hereby incorporated as reference.

IV. CATALOG

A. Enterprise items

1. **Enterprise Quantity Discounts for Catalog Purchases:** At the enterprise level, the Contractor shall offer discounts to NASA based on quantities and total dollar of quarterly purchases. The table below reflects the specific discounts available.

Total Dollars Spent Within A Quarter	Total Discount
$250,000 – 500,000 $500,001 – 750,000 750,001 – 1,000,000 1,000,001 – 2,000,000 > $2,000,001	[redacted]

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Quantity Discounts	Category	Percentage of Price Reduction
100 – 500 items	1	[redacted]
501 – 1000 items	1	
1001 – 1500	1	
> 1501	1	

2. **Catalog of Services and Commercial Components (CSCC):** In accordance with Contract Section C.5.7, the full CSCC shall be in place and fully operational at each respective center and available for orders/deliveries by the Delivery Order start date. Catalog purchases shall be effective for 36 months from the date of initial service delivery, unless 36 months is not applicable/appropriate to the purchased service and other terms are specifically stated in the catalog. Prices shall be one-time charges covering the full 36-months of that item, or monthly as appropriate, and dependent upon the item. The CSCC shall be configured to allow for the use of Government Purchase Cards as appropriate and within the parameters of those Cards. Catalog items shall be priced in three categories in accordance with Master Contract Section G.1; catalog items shall be priced in three categories. The catalog shall clearly define, in precise and understandable terms, what coverage, support, etc., is included in catalog prices.

   The contractor shall include 36 months of usage in catalog prices. For items purchased from the catalog, hardware maintenance is defined to include "break-fix" and return to service. For software purchased from the catalog, maintenance is defined in accordance with the manufacturer's definition and licensing agreements. Service metrics for these maintenance items shall be the same as for the associated desktop seat.

   In accordance with Contract Section G.1, catalog items shall be priced in three categories. Category 1 pricing shall include full ODIN support, including acquisition, installation/integration, maintenance, and consultation/support; Category 2 pricing shall

include acquisition, installation/integration, and maintenance; and Category 3 pricing shall include acquisition and maintenance only.

3. **Re-Utilization of Catalog Product or Unique Services:** If a seat with any catalog-purchased item(s) is deleted or cancelled, then the catalog service associated with that seat shall remain available for use by the Government for the remainder of the service period associated with the initial purchase of the catalog item. The service may be directly transferred to another seat or held in account by the Contractor until transferred to a new or existing seat, as directed by the DOCO/DOCOTR. A single re-utilization as described here will incur one Move/Add/Change (MAC) for the total transfer.

B. GRC specific items

1. **Catalog/Ordering Tool Customization:** The contractor shall customize its catalog/ordering tool approach with the following:
   a. Accessibility by ODIN Points Of Contact (POCs)
   b. Read-only accessibility by the general user community
   c. Provide for "What if" pricing
   d. Integration with credit card
   e. Support three levels of approval (managers, supervisors, etc.)
   f. Provide cost comparison (services included)
   g. Provide for the tracking of non-ODIN equipment (not asset management, but data entry ONLY)
   h. Provide description of services included in each purchased item (i.e. description of maintenance, installation, etc.)
   i. User accessible order tracking information

   For purposes of full seat expandability and extensibility, at a minimum, the catalog shall provide for the following items to support the needs and requirements of test facility and other areas:
   a. The ability to augment or substitute a hardware refresh system with extended drive bay capacity, in the system chassis, so that existing internal components can be installed into the refreshed system.
   b. System case shall provide a minimum of three unused externally accessible 5.25 inch bays and one unused externally accessible 3.5 inch bay in addition to any bays used for the standard CD ROM and floppy drives. The system case shall also support a minimum of two internal hard drive bays exclusive of the external bays.

   The contractor shall migrate the current seat database to their ODIN Subscription Tool. The contractor shall allow for data entry of non-ODIN equipment.

III. HELP DESK AND METRICS

A. Enterprise Items

1. **ODIN Related Web Chat Room:** The Contractor shall establish and monitor an ODIN web chat room on a regular basis, and will participate and provide information where appropriate.

2. **Technology User Forum:** A Technology User Forum shall be provided at an Enterprise-wide level with the addition of a Web-based chat room for ODIN Code R customers to

share experiences and discuss technology issues. The Web-site has a bulletin board where customers can post and respond to questions.

3. **Customer Satisfaction Metrics:** In accordance with Master Contract Section F.1.1.3, the Contractor shall define the method and mechanism for measuring customer satisfaction. The primary measure of the Customer Satisfaction Metric is herein defined to be the percent of respondents who choose a score of "Very Good" or "Excellent" on the following adjectival scale: Poor, Fair, Good, Very Good, and Excellent.

B. GRC Specific Items

1. **Help Desk** – The help desk shall be staffed 24 hours, 7 days a week and accessible via a 5 digit GRC telephone extension. The contractor shall provide direct access to Remedy by non-ODIN service providers. Records shall remain open in the Intellicenter database and will be monitored until problem resolution and the service provider has closed the record (includes problems for non-ODIN service providers). The Contractor shall provide Glenn customers access to service request status through the service request form on the Intellicenter web site.

2. **Training:** The Contractor shall offer ODIN Model/Services training to those who have not been exposed to ODIN, such as temporary staff. This training shall be provided using at least two methods.

   a. Information shall be provided on a continuous basis to all GRC staff on the ODIN Web page about ODIN and the services that it provides.
   b. Instructor-led training shall be provided in a training center located at an on-site or near-site facility.

   Classes shall be available monthly at no charge for new GRC staff and temporary employees. During periods where the amount of temporary staff is large, May and June for summer students, the Contractor shall hold as many classes as required to accommodate the need. The Contractor shall work with the GRC Personnel Office to ensure training coverage shall be provided during the periods that may require extended capabilities. The Contractor shall offer ODIN Model/Services training as a part of GRC's new employee orientation process, shall offer short focus sessions for training for new applications, and shall offer training seminars and brown bag lunches for familiarizing users with replacement systems.

3. **Level One Help Desk Metrics:** The Level one Help Desk personnel shall attempt to resolve a problem at time of initial call before referring it to Second level support for at most 15 minutes, unless a solution is determined to be eminent. Calls for which it is immediately apparent that they cannot be solved at the desk shall immediately be forwarded to level two. The Level one metric for resolving calls at initial time of call shall be [redacted] for calls that can possibly be resolved without a deskside visit. The Level one metric for all calls received by the help desk, including non-ODIN and hardware calls, shall be [redacted]. b(4)

   Level 1 Metrics F.1.1: The following are the Level 1 metrics for GRC.

Table F.1.1 – Level 1 Metrics Table

	Service Delivery (%)	Availability (%)	Customer Satisfaction (%)
Desktop User Services	[redacted]		
Phone Service			
Fax Service			
Local Video Service			
Administrative Radio Service			
Public Address Service			

b(4)

Level 2 Metrics: The following are the Level 2 metrics for GRC. Performance against these metrics will be used as part of determination for award of the Performance Retainage Pool (PRP). The contractor shall report performance against these Level 2 metrics as part of a self-evaluation to be delivered at the end of each PRP evaluation period.

Level 2 Metrics Table

Level 2 Metrics		
Performance Metrics	**Goal**	**Method of measurement**
IntelliCenter wait time less then 60 seconds	[redacted]	Automated Call Distribution statistics
Intellisource understands user environment		Surveys and inquiry measurement
Intellisource ability to provide support to custom applications		Surveys and Remedy trend analysis
Catalog ease of use		Surveys and usability testing
Intellisource ODIN Website ease of use		Surveys and usability testing
Usability of Intellisource-provided tools		Usability testing
Internal Process Metrics	**Goal**	**Method of measurement**
Formal GRC training of Intellisource employees and team members	[redacted]	Training record inquiry
Processes to receive and act on customer suggestions in place		Participation
Customer Outreach effectiveness (see section 1.d)		Participation
Customer satisfaction surveys		Participation
Internal communication methods and processes in place		Test level through certification
Services Metrics	**Goal**	**Method of measurement**
Usability of office automation software	[redacted]	Surveys and inquiry measurement
Usability and reliability of email services		Surveys and inquiry measurement
Satisfaction with replacement hardware		Surveys and inquiry measurement
Satisfaction with network performance and availability		Surveys and inquiry measurement

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VI. SECURITY

A. Enterprise items

1. **Security:** The government will retain overall responsibility for IT Security at GRC, including the security of the infrastructure and all networked systems that access that infrastructure. The government will retain operational responsibility for network security, including the firewall, border routers, and various network-monitoring systems. The ODIN contractor shall have operational responsibility for host level security that includes network services, operating systems, user accounts, virus protection, and incident response capabilities.

   The GRC IT Security Program is executed in accordance with Federal Regulations and NASA Policy, specifically Office of Management and Budget Circular A-130 Appendix III, Security of Federal Automated Information Resources (OMB A-130), the Computer Security Act of 1987, the Clinton Administration's Policy on Critical Infrastructure Protection Presidential Decision Directive 63 (PDD 63), and NASA Procedures and Guidance for the Security of Information Technology (NPG 2810). The ODIN contractor shall be fully cognizant with the roles and responsibilities established by these documents and to the requirements and recommendations during the performance of their contract.

B. GRC specific items

1. **Virtual Private Network (VPN):** VPN shall be considered as a Triage 1 service, in which the Government provides the licensed software from the Catalog and the Contractor shall take over all management and support of the environment. This is based on the following conditions:
   - RC seats continue to be subscribed
   - VPN service delivery mechanism remains the same

2. **Secure ID Tokens:** Secure ID Tokens shall be considered as a Triage 1 service, in which the Government provides the licensed software from the Catalog (if non-existent), and the Contractor shall take over all management and support of the environment. Once the existing allotment has been used up, the Government (either off the catalog or in bulk) will buy additional tokens.

3. **Gateway Virus Scanning:** Gateway virus scanning shall be considered as a Triage 1 service. The Contractor shall assume all support as the part of e-mail back-office. This capability shall be in place by April 1, 2001.

4. **External Services Environment Description:** The government will document the External Services environment and the Contractor shall maintain the environment and its associated Environment Description document.

5. **Centralized External Services Architecture:** From a physical layout perspective, Contractor shall participate in the definition of an architecture that will facilitate the services environment description. The Contractor shall support the centralization architecture. The cost of this shall be included in the seat cost, unless there is a

significant infrastructure upgrade required (i.e., hardware), at which time an infrastructure upgrade will be negotiated with the ODIN Project Office.

6. **NAD System Administration:** System administration shall be the same for a NAD seats as it is for a full seat subscribed at the same level.

7. **SSH Client and Server Support:** Secure Shell (SSH) shall be considered as a Triage 1 service, in which the Government provides the licensed software, and the Contractor shall take over all management and support of the environment. The Contractor shall also be responsible for the delivery mechanism (on a day-to-day basis) for the software and maintenance of the software once it's installed, at the subscribed system administration service level.

8. **Security Plan Implementation:** The contractor shall implement all aspects of Appendix C, ODIN Security Plan and Requirements.

9. **System Level Privileges:** The Contractor will be provided system level privileges on all networked ODIN seats. In the event a subscriber requires system level privileges on an ODIN networked seat, the subscriber will enter into a System Level Privileges agreement with the Contractor. This will specify the terms of the agreement, the roles and responsibilities of the subscriber, and any applicable limitations of liability on behalf of the Contractor.

   For seats in which the subscriber requires exclusive system level privileges, the Contractor shall only use system level privileges capability in cases of a major emergency security requirement, and in which authority has been granted to the Contractor by the DOCOTR. For the cases where the subscriber has been granted exclusive system level privileges, CONTRACTOR is released from the metrics for those services related to the user exclusive system level privileges. Removal of system level privileges access for the ODIN contractor shall constitute a Triage 3 situation (return to service charge may be applied by the Contractor)

VII. GENERAL ITEMS

A. Enterprise

1. **Rechargeable Batteries** – The contractor shall provide for replacement of the original batteries for all existing GP3, AR1 and PCELL seats at such time that the batteries can no longer be recharged. Additional batteries for these seats shall be available via the catalog.

2. **Office of the Inspector General (OIG) Audits and Investigations:** The Contractor shall provide all necessary support in the event of an OIG investigation involving the Contractor's team or the Contractor's customers, and shall provide all services necessary to properly respond to NASIRC bulletins which apply to any Contractor supported systems or environments. The Contractor shall take necessary corrective actions on ODIN managed seats in response to NASIRC bulletins and notify NASIRC of suspicious activities per center security procedures.

3. **Maintenance of Institutional Components:** The ODIN Contractor shall provide all applicable hardware maintenance, system software maintenance, application software maintenance on ODIN-supported hardware and software that is part of the institutional (i.e., infrastructure and back office support) IT environment (e.g. network cable plant components, servers, etc.). The return to service shall be within 2 contiguous hours during prime hours (6:00am – 6:00pm local time on Government work days, Monday – Friday) and within 6 hours for all other times. Trouble calls may be placed on institutional components at any time (24 hours a day x 7 days a week) and all users of the component shall be considered in a "down" state from the time of the first call. In addition, all institutional servers shall have data backup/restoration and software tech refresh services at the "regular" service level. No planned infrastructure maintenance activities shall be scheduled during prime hours without prior approval by the DOCOTR, followed by notification to affected personnel. Scheduled outages during non-prime hours shall be coordinated with the specific customers, approved by the DOCOTR and followed by notification of all affected personnel.

4. **Infrastructure Upgrade Proposal Request Response Time:** Code R centers anticipate the need to request infrastructure upgrade proposals in the desktop and (in particular) network areas to accommodate the need for special or non-standard (i.e. not bundled within the seat) work to be performed. An approximate rate of two to four such requests per month is anticipated. The Contractor shall develop a proposal (cost, schedule, and technical approach) for the upgrade in accordance with the following table:

Proposal Type	Proposal Maximum Turnaround (working days)	Defining Characteristics	Examples
Rough Order of Magnitude (ROM)	3	Applies to any size project. Typically used for future planning, budgeting, and other similar exercises. Estimates (schedule/dollars) should be sufficiently accurate ("order of magnitude") to allow for "go/no-go" decisions to proceed with a request for a more formal proposal. The Contractor is not bound to any estimates provided in this category.	- Construction Advocacy - Potential leading edge technology deployment
Short Term	5	Small projects. If funded, it is anticipated that all work can be accomplished through the purchase and implementation of standard COTS technology and/or total time expected to complete is less than 1 month. Can usually be handled within the Contractor's umbrella of	- Add macro to existing s/w - Install COTS s/w - Install Extra Phones

		responsibility, but may require coordination with another contractor or organization.	
Mid-Term	15	Medium scale. If funded, it is anticipated that work to be performed will require some customization/integration of COTS technology and will require 2-3 months to complete. Can usually be handled within ODIN contractor's umbrella of responsibility, but may require coordination with another contractor or organization.	- Install/integrate COTS/GOTS technology - Rewire a hallway - Migrate pilot project to production
Long Term	25	Large scale. If funded, it is anticipated that work will require some original design and development and/or total time expected to complete is 3 to 6 months. May require coordination with another contractor or organization.	- Center wide deployment of a new agency GOTS application - Rewire entire floor of a building
Very Long Term	35	Long range. If funded, anticipated that work will require a significant amount of original design and development and/or total time expected to complete is greater than 6 months. May require materials lead-time and/or coordination with other contractor or organization.	- Rewire entire building - Center wide deployment of new capability (e.g. PKI)

B. GRC Specific

1. **On Site Office Space:** For the Delivery Order period, the ODIN contractor will be provided with 2875 sq. ft of personnel office space and 2500 sq. ft of shop (raised floor) space for ODIN related infrastructure (servers, wiring closets, etc.) and test-bed activities within Building 142 at no cost. Use of other specialized rooms across the center such as distributed communications rooms, the telephone switch room, wiring closets, server rooms, etc. will be made available at current usage levels at no charge.

2. **Logistics and Property Management Support**: The Contractor shall be accountable for ODIN-supported IT equipment, including tracking, loans, shipping, storage, inventories and surveys. The Contractor shall maintain current records and transaction documents in such a condition that, at any stage of the contract, the status of Government Property can be readily ascertained. The Contractor shall pick up all ODIN supported IT equipment identified for excess or reutilization by end-user organizations. Prior to pick-up, the contractor is required to verify that user data is appropriately dispositioned. After

excessed equipment is picked up, the hard disk must be wiped clean in accordance with existing policies and procedures. After wiping disks and prior to excess, the Contractor shall install the current baseline operating system (i.e. the operating system that was resident before the wipe operation) on the computer equipment in accordance with existing policies and procedures. At that point the items are to be turned over to the Glenn Property Disposals Officer's representative using a NASA Form C-260.

3. **Documentation:** The contractor shall completely and accurately record all work performed under the ODIN contract. At a minimum, these records shall contain detailed technical information on the design, installation, maintenance, operation, augmentation, and decommissioning of services. The contractor shall maintain physical and logical drawings of all systems under the scope of ODIN including major components (servers, storage devices, switches, hubs, concentrators, repeaters, bridges, media converters, etc.) making up the institutional ODIN infrastructure.

   Physical installations shall be recorded on as-built drawings. The as-built drawings shall identify, at a minimum, the locations of devices, inside and outside cable runs, cable terminations, pair assignments, device and cable types/manufacturers, and labeling conventions for cable media, devices, patch panels, etc. The contractor shall give particular attention to concealed work that would be difficult to record at a later date such as cable runs through the GRC manhole system. The contractor shall coordinate the creation/revision of these drawings with other GRC organizations and contractors as directed by the DOCOTR.

   For each service, the record shall have all the information required to understand and/or operate the service. All documents created and/or revised by the ODIN contractor shall be interchangeable with existing GRC documents and tools. All documentation shall be the property of the government and shall be furnished upon request by the GRC DOCOTR. For additional information regarding existing documentation and development tools in use at GRC, please refer to the environment description.

4. **Infrastructure Support:** Unless waived by the DOCOTR, The Contractor shall provide any necessary infrastructure to support increased capacity (i.e. new seats). For example, a new LAN, NAD, or full seat, a connection to the network and an IP address shall be provided. All ODIN-supported hardware and software that is part of the institutional IT environment shall have applicable software technology refreshment at the within one year after vendor release. This shall include operating systems, services software (e.g. networking services, licenses management services, and web support services), and all other associated supporting software.

5. **Center Name Change:** In support of the Lewis to Glenn name change activity, unless explicitly stated otherwise, the ODIN Contractor shall be responsible for all remaining transition elements to the grc.nasa.gov domain. For those few areas that are not the primary responsibility of ODIN, it is expected that the ODIN Contractor will maintain communications with appropriate individuals and provide ancillary support as needed. For all Center Name Change modifications, particular attention shall be paid to appropriate user notification. The ODIN Contractor shall be responsible for completing transition of any remaining activities from LeRC to GRC by January 1, 2002. Details regarding individual steps and a proposed timeline for transition to the grc.nasa.gov domain can be found in the center name change environment description.

6. **Data Facilities Support:** GRC develops and maintains steady state data acquisition systems, central data collection systems and experimental data post-processing systems. These data systems consist of computers, network components and data acquisition hardware to support the experimental test facilities at the Glenn Research Center and the Plum Brook Station Site. The support services for these mission critical systems are currently provided under the performance-based PACE contract. These services include preventative and remedial hardware maintenance, installation, removal, calibration, engineering revision maintenance, component fabrication, operation, specialized system administration, application development and configuration management. Currently, ODIN support for these systems are primarily limited to providing LAN connectivity and initial (Level 1) help desk activities. It is anticipated that an increasing amount of Data Facilities support will migrate to ODIN. The Contractor shall support the ODIN Project Office in these efforts.

7. **ADA Seats:** GRC currently provides unique systems that accommodate personnel under the Americans with Disabilities Act, e.g., special mouse, keyboard, or voice-activated software. The Contractor shall continue to support these systems and shall provide and maintain future systems per direction of the DOCOTR.

8. **Addition of New Seats:** The Contractor shall provide new seats appropriately configured for the seat type, including any catalog-ordered augmentations, within ten (10) working days of notification. For new desktop seats, the platform delivered shall meet or exceed the contractor's appropriate baseline NSTL rating using the NSTL rankings that are current at the time the new seat request notification is received.

9. **Userid Administration**: As long as number of userids does not exceed the number of seats, the contractor shall provide userid's to full seats and NAD's at no additional cost. Excesses will be handled as a non-network NAD.

10. **Temporary Seats:** In accordance with Contract Section C.5.9.3, the Contractor shall provide temporary seats appropriately configured for the requested seat type, including any catalog-ordered augmentation. Pricing for a temporary seat shall be based on the monthly price of a comparably configured full seat, pro-rated for the period of service requested. Temporary Seats shall be provided in accordance with the following table, unless the requestor agrees to longer response time or lesser functionality for the specific request.

Type of Temporary Seat Request	Maximum Response Time for Contractor to Provide Requested Service (work days)	Defining Characteristics of the Request Type	Service Characteristic
I. Short-Term	2	Connectivity and/or service to support unforeseen circumstances, meetings, conferences, authorized travel, etc., for up to 7 calendar days.	Type I (short-term) temporary seats shall provide all Standard functionality.
II. Temporary	10	Connectivity and/or service to support planned meetings, conferences, authorized travel, etc., for more than seven calendar days.	Type II temporary seats shall provide all Standard functionality.

VIII. Appendices

Appendix A, Seat and Service Model Variations
Appendix B, ODIN Application Software Lists
Appendix C, ODIN Security Plan and Requirements
Appendix D, Glenn Specific DRD Documents
Appendix E, Min/Max Quantities Table (Master Contract Attachment Q)
Appendix F, ODIN Price Model
Appendix G, Government-Furnished Property List (TBD)

Appendix A. Seat and Service Model Variations

Seat and Service Model Variations: In order to meet unique Code R requirements, variances to and clarifications of Contract Section E, the ODIN Desktop Service Model, the ODIN Server Services Model, and the Communications Seat/Services Model, are documented herein. Additional service descriptions and information that applies only to specific centers are included in Enclosures 3-6.

I. **Desktop Seat/Service Model Variations:** The following variations, revisions, and clarifications to the Desktop Service Model, master contract Section E, are applicable to Code R:

a) Platform for GP3 seats:

Entry-Level Laptop is an option.

High-End Laptop is standard.

High-End Combo Laptop (new service level) is an option. In addition to the features and functionality of the High-End Laptop platform, the High-End Combo Laptop shall include the necessary docking station and peripherals to provide full GP3 seat functionality, including, at a minimum, a port replicator/dock, microphone, stereo sound capability (basic beyond beep), external keyboard and mouse, and an additional power supply. If the docking station includes it's own power supply, this will count as one of the two power supplies requested.

High-End Lightweight Laptop (new service level) is an option. The High-End Lightweight Laptop shall not exceed 3.5 lbs in weight (base computer components i.e. processor, motherboard, ram, hard-disk, screen, keyboard and mouse, integrated card bus slots, either floppy or CD-ROM and system battery.), and shall include all features and functionality of the High-End Laptop platform and commercially-available lightweight/ultraportable laptops, including, at a minimum, processor, display, full function keyboard, modem, hard disk and connection for external peripherals. Note: If no lightweight laptop, that meets the NSTL ranking requirement for the platform "high" service level, is commercially available, the processor performance shall be the highest (in terms of MHz), which is commercially available at the time of the NSTL update.

High-End Lightweight Combo Laptop (new service level) is an option. In addition to the features and functionality of the High-End Lightweight Laptop platform, the High-End Combo Laptop shall include the necessary docking station and peripherals to provide full GP3 seat functionality, including, at a minimum, a port replicator/dock, microphone, stereo sound capability (basic beyond beep), external keyboard and mouse, and an additional power supply. . Note: If no lightweight laptop, that meets the NSTL ranking requirement for the platform "high" service level, is commercially available, the processor performance shall be the highest (in terms of MHz), which is commercially available at the time of the NSTL update.

b) Platform for SE2 seats:

- Premium (new platform service level) is an option. The Premium desktop platform is at or above the 95% percentile (per appropriate PC or MAC type) on relevant NSTL benchmark lists, making it a top performance system. The Premium platform service level also:
    - Supports desktop publishing that utilizes advanced 2D graphics acceleration, large system bandwidth, cross-platform capability and superior display technology with color calibration capabilities.
    - Support modeling that utilizes graphics horsepower, memory, ultra-fast I/O, and bandwidth to render complex 2D/3D models and images with large polygon counts in real time.
    - Supports image processing that utilizes bandwidth and memory capacities to allow visual professionals load, pan, zoom, view, and edit large images at interactive speeds.
    - Supports video editing that utilizes an integrated analog video interface and wide system bandwidth for professional video editing capabilities at interactive speeds.
    - Supports simulations that utilize extraordinary throughput for visualization of large, complex databases and models.
    - Supports software development that utilizes accelerated 2D, 3D, imaging, and I/O capabilities, and leverages the OpenGL extensions integrated into the system.
    - Is capable of accessing the minimum Agency and Center standard office automation software suite at acceptable performance levels.
    - Includes, at a minimum, 512MB RAM, 10MB RAM on video card, 10GB hard drive and 21" monitor with minimum video display resolution of 1600x1200 with 32 bit color depth.
    - Fulfills functional requirements using a single CPU on a motherboard with the capability to support multiple CPUs for maximum system and graphical capabilities.

C) ODIN Application Software: **For** the SE2 and SE3 seats, Standard Application Software Suite is standard; None is optional.

d) Hardware Maintenance, System Software Maintenance, and ODIN Application Software Maintenance:
   - For all GP and SE seats:
     - Hardware Maintenance, System Software Maintenance, and ODIN Application Maintenance are coupled, i.e., selected service level must be the same for all three.
     - Premium is the standard.
     - Regular is an option.
     - None and Basic are not options.
   - For MA and NAD seats, Hardware Maintenance and System Software Maintenance are coupled, i.e., selected service level must be the same for both. (ODIN Application Software Support is not applicable.)
   - For MA1 and MA2 seats:
     - Premium is the standard service level.
     - Regular is an option.
     - Basic is not an option.
   - For NAD seats, Basic is not an option.

e) Hardware Technology Refreshment: For GP1, GP2, and GP3 seats, Basic and Regular are not options.

f) Software Technology Refreshment:
   - The Regular level of software technology refreshment requires that software be refreshed within one year of the latest release by the software vendor. Releases that occur prior to the start of the Delivery Order shall be implemented relative to the vendor release date, e.g., if a vendor release occurs three months before the Deliver Order start date, the release shall be installed within nine months of Deliver Order start. Any deviation requires DOCOTR approval.
   - Enhanced is not an option.

g) Moves, Adds, and Changes: Enhanced is not an option.

h) Integrated Customer Support/Help Desk: Basic is not an option.

i) Training: For GP and SE seats, None is an option.

j) File Services: In accordance with Contract Section E.3.1.15, the Contractor shall provide the following service levels associated with server file space per user: None = 0 MB; Basic = 100 MB; Regular = 200 MB; and Enhanced = 500 MB

k) System Administration for Desktops:
   - For NAD seats, Enhanced is an option.
   - The desktop System Administration service description for all seat types is revised to be: Provides system administration services. Depending on service level, services may be basic network security compliance; basic and enhanced security management; performance monitoring and optimization; problem tracking and error detection; account management; configuration management; and user support. In addition, the following services are to be provided at each service level:
   -

Basic Service Level:

- Network protocol administration
- Email account management
- Access to and management of Center's domain-available peripherals and services (USENET, time, DNS, etc.)
- Basic security compliance management, including information about and access to system security patches., Security management of network accessible services, including patch installation and/or protocol access control list maintenance
- Maintain configuration data for the purposes of security patches
- Evaluate emerging center-wide security issues
- Security representation
- Provide consulting for center-wide security planning
- Response within 2 working days for customer requests.

Regular Service Level:

- Network protocol administration
- Email account management
- Access to and management of Center's domain-available peripherals and services (USENET, time, DNS, etc.)
- Network security management
- User account management for enterprise services (such as email, UNIX, NT, and user and group entries where appropriate for seat).
- Provision of Configuration Guidelines and/or remote or on-site system software installed according to those guidelines where applicable.
- Workstation host level security, including information about and access to system/application security patches.
- Security management of network accessible services, including patch installation and/or protocol access control list maintenance
- Maintain configuration data for the purposes of security patches
- Evaluate emerging center-wide security issues
- Security representation
- Provide consulting for center-wide security planning
- System software problem resolution
- Hardware procurement configuration consultation
- Response by next working day for customer requests.

Enhanced Service Level *

In addition to all services of the Regular service level, includes a pre-negotiated set of the following services, nominally provided by a dedicated systems administrator:

- Deskside response within 30 minutes.
- Local, customized backup, restore, and archive service
- Site specific license management for Triage 3 applications
- Direct on-site user education and assistance
- Site specific consistent system configurations
- Site specific system documentation
- Deskside system administration functions to support the installation and effective execution of organizational specific applications
- Daily system monitoring

- System-level performance monitoring, tuning and optimization
- Site-specific client-server and network configuration management
- Deskside per system account management (e.g. create, lock, remove IDs)
- Site-specific peripheral management
- Web server and installation and administration and web-site management
- Address ongoing and emerging life cycle system administration issues for the installed computing environment.
- Perform capacity planning and site architecture to optimize use of information technology resources.

* Shared Peripheral Services:

– For all seat types, color print services are not provided as part of shared peripheral service levels. (Color print services will be purchased as needed from the catalog.)

– A new service level, "Critical" is created; all service levels for shared black & white shared peripheral services are:

Basic: B&W services within 150 feet on same floor
Regular: B&W services within 60 feet on same floor
Enhanced: B&W services within 30 feet on same floor
Critical: B&W services within office/cubical on same floor

In all cases distances shall be measured in "walk-able" feet (i.e. the measured distance between the peripheral and the desktop must be along a regular walked path).

– For GP and SE seats, None is an option.

– The definition of Shared Peripheral Services is revised to be: Provides access to shared black & white printers. Networked black & white print services shall support, at a minimum, 600 dpi, Postscript Level II, 20 pages per minute plain text, and capability of printing transparencies. Refreshment of shared black & white printers shall occur at least every 5 years with no more than a 3 year average for all shared black & white printers OR when utilization of a given black & white printer reaches 80% of the Recommended Service Interval, RSI. The RSI is when the manufacturer recommends major component replacement, and is based on utilization, i.e., number of pages printed. Print jobs that become stuck in the print queue shall be cleared within 90 minutes of being reported.

l) Local Data Backup and Restore Services: For GP and SE seats, Basic are standard and None is an option.

m) Laptop Loaner Pool Management Services: Contractor will provide for laptop loaner pool for full seats (excluding GP3's) through the selection of the laptop loaner pool option. Pricing for this option shall include those functions described in the Code R DOSP and include delivery to the customer's location. This option shall provide for laptops to those who have a short term need for GP3 computing capability.

The following assumptions apply to this service:

– The subscriber site in on-site GRC

- The check-out duration shall not exceed 20 working days for a single loan instance
- The Contractor reserves the right to request DOCOTR approval in the event the Contractor identifies abuses
- Laptops shall be provided with ODIN the ODIN Standard Software Suite
- Laptops shall be provided with organizational specific software. This organizational specific software is defined as Triage 1, Triage 2, or software ordered from the Catalog
- The service shall include items in Enclosure 2, item 34 of the Code R DOSP, excluding item i.
- Laptop loaners shall be provided, when available, within one business day
- Pricing for this option shall be one-tenth the cost of a standard service GP3
- Included in the cost of this service is support to manage the loaner pool and provide for data wiping

The following guidelines apply to this service:

- Laptops shall be provided from a centralized pickup area in the RAC building
- Laptops shall be delivered to the customer's location on a request basis
- Laptops shall be provided on a 10:1 ratio. For example, for every 10 people who subscribe to this service, 1 laptop will reside in the pool
- Laptops shall be provided on an as available basis within 1 working day
- The Contractor shall distribute laptops based on organizational subscription boundaries on a best effort basis
- Customers are required to complete an on-line request form in order to obtain a loaner laptop
- Upon completion of the on-line request form, a laptop, including appropriate property documents, shall be provided to the customer, if required
- The subscription of a full ODIN seat, assigned to the customer, is a prerequisite for entitlement to this service

II. **Server Services Seat Model Variations:** The following variations, revisions, and clarifications to the Server Services Service Model, master contract Section E, are applicable to Code R:

a) System Administration for Server Services: Regular is standard; enhanced is an option.

b) **Critical System Administration Option: ODIN provides dedicated system administration that will complete the system administration, as required by the user, for the ODIN provided server service. User request for system administration shall be completed within 2 hours. Administrative functions include: access privileges, user ids, rights, permissions, file transfer, contingency planning and disaster recovery, software installation and configuration, performance monitoring and tuning, security monitoring and compliance,**

backup and restore, service reinitialization, service reconfiguration, service customization, and service isolation.

c) Maintenance: Regular is not an option.

d) Performance Delivery:

- For WEB1 and WEB2 seats:
  - Regular is an option.
  - Premium is the standard, and is defined to be Institutional Web, typically accessed by the institution (Center.)
  - Enhanced is defined to be Agency Web, typically accessed by the Agency.
  - Critical (new service level) is defined to be Public Web, typically accessed by the public over Internet connection.
- For APP1 seats:
  - Enhanced is defined to be Agency Application/Database Server, typically unitized by the Agency.
  - Critical (new service level) is defined to be Public Application/Database Server, typically utilized by the Public.
- For COMP1 seats:
  - Enhanced is defined to be Agency Computational Server, providing equivalent processing power of a 120 CFPRate SPECMark computational server to the Agency.
- For FILE1 seats:
  - Basic is defined to be Workgroup File Space, typically accessed by a small workgroup, at transfer rates consistent with the users' LAN service levels.
  - Premium is defined to be Institutional File Space, typically accessed on a centerwide basis, at transfer rates consistent with the users' LAN service levels.
  - Enhanced is defined to be Agency File Space, typically accessed by users throughout the Agency, at transfer rates consistent with intra-center connectivity.
  - Critical (new service level) is defined to be Public File Space, accessible to the Public at transfer rates consistent with intra-center connectivity.

III. **Communication Seats/Service Model Variations:** The following variations, revisions, and clarifications to the Communication Seat/Services Service Model, master contract Section E, are applicable to Code R:

a) Moves/Adds/Changes: Enhanced is not an option.

b) Restore to Service: Basic is not an option; Regular is an option; Premium is the standard.

c) For Phone Service Seats, "None" is an instrument option. No phone instrument shall be provided when the None instrument service level is selected. This service level is intended for use with special or customer-provided equipment that utilizes a phone line.

Appendix B. ODIN Application Software Lists

NASA Glenn Research Center ODIN Standard Software Suite List Date: September 13, 2000				
Package	**Vendor**	**Expected % of coverage across applicable seats**	**Software Number**	**NASA Identified POC**
Windows 95/98[1]	Microsoft Corp.	full	**1**	ODIN
Windows NT Workstation[1]	Microsoft Corp.	full	**2**	ODIN
Windows 2000[1]	Microsoft Corp.	full	**3**	ODIN
Red Hat LINUX[1]	Red Hat, Inc.	full	**4**	ODIN
Sun UNIX Operating System[1]	Sun Microsystems, Inc.	full	**5**	ODIN
Silicon Graphics (SGI) UNIX Operating System[1]	Silicon Graphics, Inc.	full	**6**	ODIN
Hewlett Packard (HP) UNIX Operating System[1]	Hewlett Packard, Inc.	full	**7**	ODIN
International Business Machines (IBM) UNIX Operating System[1]	International Business Machines, Inc.	full	**8**	ODIN
Digital Equipment Corporation (DEC) UNIX Operating System[1]	Digital Equipment Corporation, Inc.	full	**9**	ODIN
NCDware[1]	Network Computing Devices, Inc.	full	**10**	ODIN
MAC OS[1]	Apple, Inc.	full	**11**	ODIN
Windows NT Server 4.0 CAL	Microsoft	all	**12**	ODIN
Terminal Server 4.0 TS CAL	Microsoft	all	**13**	ODIN
MS Office	Microsoft Corporation	all	**14**	ODIN
MS Project	Microsoft Corporation	all	**15**	ODIN
MS Access	Microsoft Corporation	all	**16**	ODIN
Eudora Pro	Qualcomm, Inc.	all	**17**	ODIN
Norton AntiVirus	Symantec Corp.	all	**18**	ODIN
KeyServer Package	Sassafras Software, Inc.	all	**19**	ODIN
Netscape Communicator Pro	Netscape Communications Corp.	all	**20**	ODIN
3270 client	COTS	all	**21**	ODIN
Adobe Reader	Adobe Systems, Inc.	all	**22**	ODIN
WinZip	Nico Mak Computing, Inc.	all	**23**	ODIN
FTP Client	COTS	all	**24**	ODIN
Calendering/Scheduling	COTS	all	**25**	ODIN

NASA Glenn Research Center ODIN Standard Software Suite List Date: September 13, 2000				
Package	Vendor	Expected % of coverage across applicable seats	Software Number	NASA Identified POC
application				
QuickTime	Apple	all	**26**	ODIN
DiskLock	Power On Corp.	all	**27**	ODIN
stuffit	Freeware	all	**28**	ODIN
MeetingPlace	Latitude Communications, Inc.	all	**29**	ODIN
NetMeeting	Microsoft	all	**30**	ODIN
Java plug-in	Freeware	all	**31**	ODIN
Timbuktu Professional (SLP applies)	Netopia	all	**32**	ODIN
T.120 client	COTS	all	**33**	ODIN
Telnet client	COTS or Freeware	all	**34**	ODIN
VMPEG lite	Freeware	all	**35**	ODIN
Fetch	Public Domain	all	**36**	ODIN
Informed Filler	Shana, Corp.	all	**37**	ODIN
CompuTrace	Absolute Software, Corp.	full	**38**	ODIN
Entrust Entelligence	Entrust Technologies, Inc.	full	**39**	ODIN
Real Audio	Freeware	full	**40**	ODIN

[1]Individual workstations entitled to not more than one operating system.

NASA Glenn Research Center Software Triage 1 Level Software Table Date: September 13, 2000				
Package	**Vendor**	**Expected % of coverage across applicable seats[1]**	**Software Number**	**NASA Identified POC**
Adobe Acrobat 4 (full suite)	Adobe Systems, Inc.	10	**1**	ODIN
Maestro	Hummingbird Communications, LTD.	15	**2**	ODIN
Exceed	Hummingbird Communications, LTD.	15	**3**	ODIN
Exceed 3D	Hummingbird Communications, LTD.	5	**4**	ODIN
Ghostview/Ghostscript	Public Domain	full	**5**	ODIN
Independent Computing Architecture (ICA) client	Citrix Corp.	full	**6**	ODIN
Secure Independent Computing Architecture (SecureICA) client	Citrix Corp.	full	**7**	ODIN
FrameMaker	Adobe	5	**8**	ODIN
xv	Shareware	full	**9**	ODIN
Vendor C compiler	COTS	full	**10**	ODIN
Vendor C++ compiler	COTS	full	**11**	ODIN
Vendor FORTRAN 77 compiler	COTS	full	**12**	ODIN
Vendor FORTRAN 90 compiler	COTS	full	**13**	ODIN
SSH (SLP applies)	COTS	15	**14**	ODIN
sh, csh, bash, tcsh, ksh	GNU	full	**15**	ODIN
Meeting Maker	COTS	full	**16**	ODIN
PKI clients and plug-ins	COTS	full	**17**	ODIN
Secure ID tokens	COTS	full	**18**	ODIN
Setup (env tools)	GOTS	full	**19**	ODIN
OpenGL	Silicon Graphics, Inc.	full	**20**	ODIN

[1]When applications are able, currently, and requested to be served under a concurrent, floating, or temporary licensing scheme, percentages indicate a percentage of concurrent user access among all full seats.

NASA Glenn Research Center Software Triage 2 Level Software Table Date: February 15, 2000			
Package	**Vendor**	**Software Number**	**NASA Identified POC**
AutoCAD	Autodesk, Inc.	**1**	David Valco 433-3716 Autocad queue
CPET Developed Applications	GOTS	**2**	Shelby Harsany 433-8957 CEPT Queue
IFMP	GOTS	**3**	Shirley Anderson 433-5307 Org. 5150 queue
Plot3D	GOTS	**4**	TBD – may be taken off the list
Mathematica	Wolfram Research, Inc.	**5**	Jim Pennline 433-5058
PV-Wave	Visual Numerics, Inc.	**6**	June Thompson 433-5233
TK Solver	Universal Technical Systems, Inc.	**7**	Jim Pennline 433-5058
CSD Business Applications	GOTS	**8**	Bob Firestone 433-2807 APRS queue Mildred Bergman 433-9068 LOTS & TADS- Org. 7130 queue
gcc	GNU	**9**	Rafael Sanabria 433-9331
g++	GNU	**10**	Rafael Sanabria 433-9331
gzip	GNU	**11**	Rafael Sanabria 433-9331
g77	GNU	**12**	Rafael Sanabria 433-9331
Norton Utilities	Symantec Corp.	**13**	Rafael Sanabria 433-9331
Snooper	AtEase	**14**	Rafael Sanabria 433-9331
XemContractor	GNU	**15**	Rafael Sanabria 433-9331

NASA Glenn Research Center Software Triage 2 Level Software Table Date: February 15, 2000			
Package	Vendor	Software Number	NASA Identified POC
FileMaker Pro	Claris Corp.	16	Rafael Sanabria 433-9331
TeX	Freeware	17	Vendor (need phone #)
Fast	GOTS	18	Laura Monroe 433-8991
XTen	Tenon	19	Rafael Sanabria 433-9331
Shana Inform	Shana	20	Kevin Coleman 433-9331 Forms queue
Micrographx Flowcharter	Micrographx	21	TBD
Maple	Waterloo Maple, Inc.	22	Jim Pennline 433-5058
MathCAD	MathSoft	23	Jim Pennline 433-5058
MATLAB	MathWorks	24	Jim Pennline 433-5058
WorkCenter	AutoDesk, Inc.	25	David Valco 433-3716 Autocad queue
MP2	COTS	26	Mike Kaltenstein 433-3104
TecPlot	Amtec, Inc.	27	Laura Monroe 433-8991
Perl	Freeware	28	TBD
Java Developers Kit	COTS	29	Lou Handler 433-8286
Brio client	Brio Technologies, Inc.	30	Dave Cain 433-6626 DBA queue
MSC/Patran	MSC.Software, Corp.	31	Jack Oram (org. 7700) 433-2395 Matt Melis (org. 5900) 433-3322 Rick Shimko 433-2307

NASA Glenn Research Center Software Triage 2 Level Software Table Date: February 15, 2000			
Package	Vendor	Software Number	NASA Identified POC
IMSL	Visual Numerics	32	TBD
QAC	Programming Research, Ltd.	33	TBD
Purify	Rational Software Corporation	34	TBD
MContractoryma	MContractoryma, Inc.	35	Jim Pennline 433-5058
		36	
		37	
		38	
		39	

Appendix C. ODIN Security Plan and Requirements

X.0 IT Security

X.1.3 Policies and Procedures

The following policies and procedures serve as the authority for the establishment of an IT Security Program:

- Authority:
  - Office of Management and Budget (OMB) OMB A-130 w/Appendix III
  - Presidential Decision Directive (PDD) 63 (1998)
  - Computer Security Act of 1987 (40 U.S.C. 1114)
  - 18 U.S.C. 799, Violation of Regulations of the National Aeronautics and Space Administration
  - PL 93-579, The Privacy Act
- NASA Policies and Guidelines:
  - NASA Security of Information Technology, NASA Policy Directive (NPD) 2810
  - NASA Security of Information Technology, NASA Procedural Guideline (NPG) 2810
  - NASA Management Information Technology, NASA Procedural Guideline (NPG) 2800
  - NASA 48 CFR, Parts 1804 and 1852, "Security Requirements for Unclassified Information Technology"
  - NASA Security Handbook (NHB) 1620.3
  - NASA Critical Infrastructure Protection Plan
  - NASA Principal Center for Workgroup Hardware and Software Document *An Architecture for Desktop IT*
  - NASA Principal Center for Workgroup Hardware and Software Document *NASA Strategy for UNIX System Configuration.*
  - At NASA GRC, "IT Security Management Plan"

X.2 Scope

The IT security section of this delivery order addresses several facets of the IT security program:

- Operational security environment in which all ODIN requirements and tasks will be met
- Creation of an ODIN Vendor Corporate Security Plan
- Creation of individual IT Security System Security Plans as required in support of individual tasks in this delivery order
- Other IT security-specific tasks

This section is applicable to the Contractor and subcontractor personnel authorized to use, support, or manage ODIN and other NASA computer assets in support of the ODIN Delivery Order.

X.3 Requirements and Tasks

X.3.1 ODIN Corporate IT Security Plan

When directed by the contracting officer, the Contractor shall submit for NASA approval a post-award security implementation plan outlining how the Contractor intends to meet the requirements of NPG 2810. This requirement applies to all subcontractors where the requirements identified are applicable to the performance of the subcontractor.

This plan shall subsequently be incorporated into the contract as a compliance document after receiving Government approval. This plan shall demonstrate a thorough understanding of the NPG 2810. The plan shall include as a minimum the security measures and program safeguards to ensure that IT resources acquired and used by the Contractor and subcontractor address the following:

X.3.1.1 Policies and guidelines

The contractor should demonstrate compliance with policies and procedures listed in section x.1.3 with special emphasis on the NPG 2810. This plan should demonstrate that the Contractor understands that all Federally owned information is considered sensitive to some degree and must be appropriately protected by the Contractor.

Conformance with NASA and Center established policies, procedures and guidelines should ensure that all systems connected to the NASA network or operated by the Contractor for NASA conform with NASA and Center security policies and procedures.

X.3.1.2 Contractor Personnel

The Contractor shall maintain a comprehensive list of all their contractor and subcontractor employees, both on- and off-site. This list includes employee names, company(ies), position titles, assigned locations, email usernames, Contractor and NASA badge numbers, and supervisors' names and locations.

The plan shall document how the Contractor shall ensure appropriate screening of contractor personnel in accordance with the NPG 2810 for personnel requiring unescorted or unsupervised physical and electronic access to NASA systems, programs, and information.

The Contractor shall ensure that all of their employees have at a minimum a National Agency Check (NAC). The plan may indicate those employees with current Federal Government investigative clearances who are not required to have an additional NAC at the beginning of this contract.

The Contractor shall grant access and privileges only to the extent necessary to perform their assignments. Individuals shall be held accountable for their actions on a computing asset or group of assets. An access request form is used to obtain concurrence from the system owner. User access privileges are terminated immediately upon notification by the user's manager that the user's authorization has ceased. Accounts with no activity for 90 days are reviewed to determine whether access is still required. The use of shared or group accounts for systems requiring special management attention shall not be permitted and shall be discouraged for other systems. The above requirements apply to all Contractor managed systems, commensurate with the access, systems administration, and system management subscription levels of the specific system involved.

The Contractor shall document and manage their employee checkout process that ensures:

- The return of badges, keys, electronic access devices, and NASA equipment
- Notification to NASA of planned employee termination at least three days in advance of the employee's departure. The Contractor shall notify NASA immediately upon termination for cause.
- All NASA accounts (including network access) granted terminated employees shall be disabled immediately upon separation from the Contractor
- Terminated employees shall have no continuing access to systems or networks under the operation of the contractor for NASA. Access must be disabled the day the employee separates from the Contractor

The Contractor shall obtain authorization from the Center Chief of IT Security prior to granting a non-permanent resident alien (foreign national) access to NASA IT systems and networks.

X.3.1.3 Training and Awareness

The Contractor shall ensure that its employees with access to NASA's information resources receive annual IT security awareness and training in NASA IT security policies, procedures, computer ethics, and best practices. The

Contractor shall employ an effective method for communicating employees and assessing that employees understand any ITS policies and guidance provided by the Government as part of a new employee briefing orientation. The Contractor shall further ensure that employees represent that they have read and understand any new IT security policies and guidance as provided by the Government over the duration of the contract.

The Contractor shall comply with the IT security awareness training requirements of NPG 2810. This may involve the use of SOLAR training modules for users and managers developed by Glenn Research Center, computer-based training (CBT) available on CD for users, on-site seminars and briefings, and any other training deemed necessary and appropriate by the Government and applicable to all employees.

Security training shall be required for newly hired contractor employees; all employees shall receive annual retraining. Employees in sensitive positions shall be provided access to training materials prior to the assumption of duties. Specialized training shall be provided to contractor employees serving in sensitive positions.

The Contractor shall provide training to those employees assigned to system or network administrator roles. This training shall provide those employees with a full level of proficiency to meet all NASA system administrator's functional requirements. The Contractor shall also develop a methodology to document that employees have mastered training materials or have the required knowledge and skills.

x.3.1.4 Incident Response

The Contractor shall promptly report to the Center IT Security Manager any suspected computer or network security incidents occurring on any system operated by the Contractor for NASA or connected to the NASA network. The Contractor shall comply with each Center's specific reporting requirements.

If a validated incident has occurred, the Contractor shall provide access to affected systems and system records to NASA and any NASA-designated third party so that a detailed investigation can be conducted.

At GRC, the Contractor shall participate in the Glenn Incident Response Steering Committee (GIRSC) which establishes priorities and tracks incidents according to the ISO Procedure "Computer Security Incident Response". The Contractor shall follow this procedure and the recommendations of the GIRSC when reporting and handling incidents.

x.3.1.5 Resource Control

The Contractor shall develop procedures and implementation plans that ensure IT resources leaving the control of an assigned user (such as being reassigned, repaired, replaced, or excessed) has all NASA data and sensitive application software permanently removed by a NASA-approved technique. The Contractor shall ensure that NASA-owned applications acquired via a "site license" or "server license" are removed prior to the resources leaving NASA's use. The Contractor shall ensure that damaged IT storage media for which data recovery is not possible is degaussed or destroyed. (Note: If an IT resource is to be assumed by another duly authorized person performing the same work, the IT resources may remain in tact for assignment and use of the new user.)

The Contractor shall control any item identified as a sensitive controlled item. Such systems or components thereof may not leave NASA without the approval of the cognizant security representative.

x.3.1.6 Inspection, Investigation, and Audit

The Contractor shall afford NASA, including the office of the Inspector General (OIG), access to Contractor and subcontractor facilities, installations, operations, documentation, databases, and personnel in order to facilitate an inspection, investigation, or audit. This access is to be provided to the extent required to carry such work and to preserve evidence of a computer crime.

x.3.1.7 Risk Assessments

The Contractor is responsible for documenting all vulnerability testing and risk assessments it conducts in accordance with the NPG 2810 and other IT security requirements specified in the contract or as directed by the Contracting officer, for its managed systems. All results shall be provided to the Center IT Security Manager. The Contractor is responsible for assisting with vulnerability assessments or penetration tests of the Contractor's systems

connected to a NASA network or operated by the contractor for NASA that may be required as part of the Center's IT security compliance assessment.

The Contractor shall notify the NASA system owner and information owner within five (5) days if new or unanticipated threats or hazards are discovered by the Contractor, made known to the Contractor, or if existing safeguards fail to function effectively.

The Contractor is responsible for making appropriate risk reduction recommendations to the NASA system owner and/or the NASA information owner and documenting risks or modifications in the IT security plan. (Note: The decision to accept residual risks is the responsibility of NASA.)

It should be emphasized that it is not the intent of the NASA IT Security Program to prohibit processing in high-risk situations. Rather, the NASA IT Security Program intends to ensure that risks are understood and appropriately dispositioned.

x.3.1.8 Tracking IT Security Plans

The Contractor shall establish a procedure to accomplish the development, reporting and tracking for all IT system security plans, including updates, under its controls or for systems outsourced to them to be managed on behalf of NASA. This procedure shall include tracking of (1) IT system security plans, (2) IT system penetration tests, and (3) system/network scans and vulnerability tests. The results of these actions must be reported to the Center IT Security Manager.

x.3.1.9 Protection of systems

The Contractor shall ensure that IT resources are protected from unauthorized access, alteration, disclosure, or misuse of information processed, stored, or transmitted.

x.3.1.10Continuity of Automated Information Support

The Contractor shall ensure continuity of automated information support for NASA missions, programs, and functions.

x.3.1.11System Integrity and Accuracy

The Contractor shall incorporate management, general, and application controls sufficient to provide cost-effective assurance of the system's integrity and accuracy. The Contractor shall have appropriate technical, personnel, administrative, environmental, and access safeguards.

x.3.1.12Virus Protection Program

The Contractor shall document and follow a virus protection program for all IT resources under its control.

x.3.1.13Network Intrusion Detection Program

The contractor shall document and follow a network intrusion prevention program for all IT resources under its control.

x.3.1.14Interoperability

The Contractor shall consult with the Center IT Security Manager prior to selecting any IT security solution to ensure interoperability and compatibility with other systems with which there is a data or system interface requirement.

x.3.1.15Encryption

For all NASA projects and programs that have Federal and NASA encryption requirements (e.g., secure flight termination systems, encryption for satellite uplinks, encryption for flight and satellite command and control for both up and down links, encryption for transmission of results from facility testing, encryption of data transmitted in support of engine research) the Contractor shall comply with these requirements. The Contractor shall involve the Center COMSEC (Communications Security) Manager when selecting encryption solutions.

X.3.2 IT System Security Plans

NPG 2810 and OMB A-130 mandate that system owners be responsible for the development and maintenance of security plans. The Contractor shall complete IT system security plans for all ODIN-managed systems, including all Special Management Attention systems, as required and prescribed in NPG 2810.

The Contractor shall ensure that the IT System Security Plan describes the process used, summary of findings, risk reduction analysis, how the baseline requirements are being met (NPG 2810, Appendix A), and results of any penetration testing or scanning.

4.3.2.7 Document personnel actions

Screening. Identify those personnel that shall require privileged and limited-privilege access (those who can bypass security processes and controls). Include the number of privileged and limited-privilege users. The Contractor shall work with the ITSM to determine the level of screening required.

Training. Describe the training provided to users covering the rules of the system and the Center's IT security policies. As a minimum indicate whether users receive training on: rules of the system, how to detect and respond to IT security incidents, how to get help in using system and security features, and responsibilities in adherence to Center policies, procedures, and guidelines.

4.3.2.8 Document the System's Incident Response Procedures.

Within the framework provided by NASIRC and each Center's incident response capability, document any system-specific incident response procedures required for this system. Describe how IT security incidents are to be reported to management and the IT Security Manager and what variance from Center procedures, if any, are required. List names and contact information of the people who should be called if a security incident is discovered.

4.3.2.9 Document all elements of the System Contingency Plan

Indicate whether an up-to-date contingency plan exists. List the date it was last tested.

The elements of the Contingency Plan should include as a minimum: overview, assumptions, recovery teams, staffing, vendors, vital record locations, restoration procedures; inventory, movement of vital records, contracts, equipment, connectivity, test procedures, modifications and distribution.

4.3.2.10 Document the system's Life Cycle process

Describe how IT security is addressed throughout all phases of the system's life cycle including: initiation, requirements, design, development, acquisition, implementation, operations, maintenance, upgrades, and disposal.

4.2.2.11 Obtain Authorization for the System to Process

Once the security plan has been written, the plan must be presented to the responsible Line Manager(s) for authorization of the system to process.

4.2.2.12 Review and Update the IT Security Plan.

Every three years, or upon significant change to the system that changes the security requirements of the system or its environment, the plan must be reviews and updated as appropriate.

X.3.3 Automated Network vulnerability monitoring

X.3.3.1 Network Scanning

The Contractor shall support the collection and management of automated network scanning data as appropriate. All network scans shall be coordinated in advance with the Center IT Security Manager. At Centers that continue to maintain a centralized network security function outside the scope of their ODIN Delivery Order, the Contractor shall coordinate any network and host level scans with this organization in advance to avoid duplication of effort and unnecessary or unauthorized scanning. At GRC, it is a violation of Center policy to conduct network scans without prior arrangements with the central network security organization or the IT Security Manager.

At Centers where vulnerability scanning is conducted outside the scope of ODIN and with the consent of the Center IT Security Manager, the Contractor shall respond to the results of these scans, pursuing the mitigation of identified risks.

X.3.3.1.1 Risk Measurement Techniques and Tools.

Measurable risks shall be quantified by two methods:.

Baseline Measurement of Vulnerability Status. Baseline measurement is intended to provide a consistent mark by which all Centers and systems may be compared and progress towards a reduced risk environment can be measured.

While a specific tool may be used to perform validation and crosschecking against the Agency baseline reporting metrics, the ODIN security program will not be completely reliant on a single product or approach.

Non-Baseline Measurement of Vulnerability Status. Non-baseline measurement is intended to compensate for the security needs not met by the baseline measurements. The ODIN IT Security Manager shall maintain a list of vulnerabilities unique and of special interest to the Center's environment. Tools for vulnerability scanning, intrusion detection, and compliance monitoring shall be developed and maintained, as necessary, to detect these vulnerabilities. Vulnerabilities that can be measured by scanning tools already in use, but that are excluded from the scan routine, shall be documented. The ODIN ITSM shall then record and resolve vulnerabilities found by other tools and methods not identified by the Agency baselined toolset.

Vulnerabilities assigned a severity of 'high' or 'medium,' which cannot be resolved or eliminated, shall be documented to include mitigation efforts or an explanation of possible false positive, and provided to the Center IT Security Manager.

x.3.4 Host-Level Security

The Agency and the Centers are working to strengthen network boundary monitoring and control mechanisms. In NASA's dynamic and mobile computing environment, reliance on network barriers alone is inadequate. Center security posture must be an expression of defense-in-depth, coordinating efforts at both the LAN and host security levels. The Contractor shall provide host-level configurations to its desktop systems that reflect this philosophy.

The Contractor shall use its knowledge and experience to develop security guidelines for desktop systems (UNIX/Linux, Windows NT, and Mac). These guidelines shall provide default configurations for security, and shall provide system configuration guidelines for users. Once implemented, these guidelines shall be the basis for measuring and verifying compliance with configuration and security standards. These security configurations shall be compliant with any NASA-established security configurations and standards.

Additionally, the ODIN Security Architect shall work cooperatively with Government personnel and contractor personnel to implement standard host-level evaluation mechanisms, such as Agency-sanctioned network and host scanning technology, to verify that its deployed configurations continue to provide the required resistance and resilience to network and direct compromise.

x.3.5 External Network and Public Services

The Contractor shall assist and promote the evolution of NASA Center networks toward the segregation of services into internal-use vs. public-access networks, with commensurate security controls particular to each environment. Machines on the Public Services Network shall provide limited services, and unused services shall be disabled.

GRC continues to make significant strides in relocating its public services (those IT resources accessed externally, such as public World Wide Web servers) from its internal LAN environment, to a Public Services Network . The Public Services Network is expected to provide sufficient offsite service access, while internal data owners can manage their information and services in a controlled and secure environment. The Public Services Network is further intended to ensure that should any server or service on the Public Service Network be compromised, no advantage would be gained regarding exploitation of other Center (especially internal LAN) services.

Current progress in the movement of Center services to the Public Services Network is impeded by:

- The lack of an abstract definition of the Public Services Network, against which potential data owners (those wishing to relocate services, and those with requirements and specifications) can evaluate the compliance of their current data and service management mechanisms.

- A lack of solutions for data management and transfer to/from internal data repositories to the hosts providing services within the Public Services Network.

The Contractor shall assist in cooperatively developing the design specifications for the Public Services Network and the necessary data management mechanisms. The Contractor shall be prepared to address configuration issues of deployed internal data repositories that they shall manage to provide minimal transition costs and maximum flexibility to data owners relocating their mission-essential services to the Public Services Network.

x.3.6 Remote Access Service (RAS) and Virtual Private Network (VPN)

Code R Centers users have benefited from the long-term availability of a RAS solution, which enables telecommuters and users on travel to access Center services with lower risk to network services than Internet Service Provider (ISP) access. The Contractor shall be committed to fostering the deployment of VPN technology to the widest possible user base and its integration with the best-of-breed authentication mechanisms available at the Center.

At GRC, Secure ID tokens are used to strongly authenticate users to the site's security perimeter. Based on two-factor authentication ("what you have" and "what you know"), Secure ID tokens have been procured and will be issued to all RAS and VPN users. The contractor shall manage the issuance, tracking, and recovery of these tokens, as well as managing the coordination of any deployment issues.

X.3.7 Incident Response Team

An ODIN Incident and Virus Response Team shall be formed to complement the existing Center Incident Response Capability. It shall maintain and exercise the ODIN incident response process, consistent with existing incident response procedures extant at a Center. If a system is compromised or no longer compliant with policy, the system or service may immediately be disconnected from the network. Further, the system shall not be returned to service until verified as "clean" and approved by the Center ITSM. The Team shall also:

- Provide direct support for and communications with the Center Incident and/or Virus Response Teams
- Immediately disconnect systems suspected of compromise from the network following NASA direction
- Respond to virus notifications and alerts on ODIN systems
- Maintain interfaces with:
  - ODIN Help Desk representatives, the primary points of contact for initiating the incident response process
  - ODIN Help Desk representatives, the primary points of contact for resolving virus detection issues and incidents
  - Appropriate representation from the Center ODIN functional departments.

x.3.8 Virus Protection

x.3.8.1 Virus Barrier

The Contractor shall deploy virus detection and eradication to desktop systems and servers. Systems that do not have virus detection and eradication capabilities shall be baselined, then identified by remote scans as free of known viruses. These systems shall then have permissions locked down to prevent modification of data outside of normal intended design and use. Data images shall be scanned before being distributed to other hosts.

Since most viruses are spread via electronic mail, all electronic mail will be scanned at the firewall. The Contractor shall implement, support, and manage the firewall electronic mail virus detection software in coordination with the network security team.

x.3.8.2 Virus Detection Reporting

The Contractor shall provide weekly and quarterly virus detection reports to the Center IT Security Manager and the Chairperson of the Center Incident Response Capability. These summary reports shall include the number and types of viruses detected, the detection method (desktop, firewall, network scan, etc) and eradication method, and any other readily available information pertinent to the Center Incident Response Capability.

x.3.8.3 Virus Product Evaluation and Testing

The Contractor shall develop a virus threat statement identifying categories of viruses that threaten the Center. Products shall be evaluated based on their ability to protect against that threat, their ability to be updated remotely without user intervention, their ability to log and remotely report virus activity, and their ability to generate statistical reports that adequately measure the product's effectiveness. Testing shall be conducted to ensure that the impact on system performance is within acceptable levels, according to the defined threat statement and the current threat status.

x.3.9 Software Engineering and Development Facilities

The Contractor shall provide the capability for the non-ODIN security vendor to install a firewall to isolate development and testing facilities from the Enterprise network. This shall allow for proper vulnerability scanning and system testing prior to bringing a new host or system on to the production LAN. Development stations, although considered non-production stations from an operational perspective, are considered to be in production from a security perspective if they are connected to the Enterprise network or made available to external sources.

New systems shall be introduced only after verification that they have the appropriate operating system (OS) configuration and patch revision.

X.3.10 Disaster Recovery Team

The ODIN Disaster Recovery Team complements the existing Center Disaster and Emergency Response capabilities. The Disaster Recovery Team shall:

- Ensure that complete and accurate inventories are maintained to support business resumption requirements
- Participate in Center disaster recovery and emergency preparedness exercises.

x.3.10.1Emergency Management and Disaster Recovery

The Contractor managers shall develop contingency plans to include backup and recovery procedures. These plans are designed to maintain the integrity and availability, and when required, confidentiality of information assets and the related processes that support them. The need for alternate site processing capabilities and/or offsite storage of backup materials/data shall be identified to the NASA Center ITSM in the Disaster Recovery Plan. Contingency plans shall be tested annually, and updated when significant changes occur.

x.3.11 Specific Baseline NPG 2810 Technical Security Requirements

The Baseline Information Technology Security (ITS) requirements listed in Appendix A of NPD 2810 are extensive, and most are implementation-dependent. They require variation to interface properly with Government organizations and other contractors at the NASA Code R Centers. While the following specifically addresses a few of those requirements, the Contractor shall meet all of the NPG2810 baseline requirements as applicable to the systems supported in this Delivery Order.

Operating System Integrity. The Contractor shall deploy asset and configuration management software to all supported desktop platforms to ensure that the required configuration control data and an accurate environment inventory are available.

The Contractor shall, during the period of contract transition, obtain positive system administration control of all ODIN desktop and server systems, according to their level of subscription. Regardless of the service level subscription for any hosts within Center environments, the Contractor shall make baseline system configuration documentation and online data resources (patch repositories, scripts) available to recognized administrators of ODIN IT systems. The Contractor shall encourage these administrators to configure their systems in a similar manner, so that security tools, scripts, and mechanisms (such as security patch distributions to UNIX hosts) can be used more extensively throughout the environment.

NASA has a mission-essential requirement to process and properly manage its own highly valuable and sensitive data, as well as that of industry and international partners. Proprietary commercial and other forms of Limited Exclusive Rights (LER) data are a serious concern for NASA data owners and other personnel wishing to make use

of the ODIN outsourcing model; however, they are unable to relinquish all access or control of their systems and data to non-government support personnel. The Contractor shall provide a mechanism, known as a System Level Privileges (SLP) agreement, which permits government and contractor personnel to retain system administration privileges on outsourced systems when required by the data or operation of the system.

User ID Management. Linking system data and activity to an individual provides accountability for the use of IT resources. IT solutions addressing user account and privilege management provide centralized management and control of user accounts on a wide variety of computer operating systems and platforms, while verifying and accounting for a dynamic personnel list. The Contractor shall use an IT security management system (ITSMS) to approach user account management to:

- Document the account creation, privilege granting, and management process
- Ensure proper revalidation of user access privileges occur according to a defined schedule, in a verifiable manner
- Ensure period review of user access privileges, including the identification of accounts that are no longer used
- Provide integration to (for all systems technically capable) a global namespace management environment to provide authoritative management and guaranteed uniqueness of user IDs.

The Contractor shall leverage existing namespace management environments (such as Microsoft NT Domain, LDAP Directory Services) to yield the greatest benefit to NASA in the shortest time. The contractor shall extend any currently available global namespaces to their technical limit to avoid wholesale disruption to an environment by the imposition of a weighty and one-size-fits-all management infrastructure. The Contractor shall ensure that the Government receives the benefits of this consolidation and the resultant increased management control of the user accounts of its outsourced Center IT systems.

Passwords. Related to User ID management is the issue of user account passwords. The Contractor shall provide technical and procedural mechanisms (such as software and periodic dictionary analysis of user account passwords) to ensure that all passwords on ODIN-supported systems conform to security best practices regarding their composition and complexity. User account creation procedures shall ensure that initial passwords are not susceptible to guessing by unauthorized personnel. Password distribution to new users, and upon password reset, shall be performed via a method requiring authentication levels commensurate with the security requirements of the system in question. The Contractor shall document all processes and procedures related to user password management.

Logical Access Control for Multi-User Systems. The Contractor shall employ the same positive system, user account, password, and data controls as single user systems with greater vigilance due to the number of users who rely on and access a single centralized multi-user computer system. Technical elements include continuous monitoring and periodic review of user accesses and access attempts to detect and address any untoward activity. The Contractor shall ensure that multi-user systems also have adequate physical access controls, since uncontrolled physical access allows potential intruders to bypass the controls available in the IT system.

The Contractor shall implement default system file permissions that will adhere to a principle of "minimal privileges" to ensure that any extension of access privileges are reviewed by the Data Owner and cognizant administrative staff.

Information Management and Protection for Multi-User Systems. The Contractor shall utilize the ITSMS to document and manage Data Owner concurrence and acceptance of risk with regard to data processed on ODIN multi-user computer systems. Due to the variety of applications and potential Data Owner concerns, a structured approach to management is essential. The Contractor's ITSMS shall provide this structured approach, documenting Data Owner responsibilities, concurrence, and the responsibilities of the Owners of Software Applications.

Commercial Off-the-Shelf (COTS) Software. Prior to deployment, the Contractor shall test commercial software for both proper operation and appropriate security controls. The Contractor shall provide aggressive maintenance of the software to ensure that emerging security and reliability issues are addressed in a timely manner. Pre-

deployment testing of new versions of software shall be documented in the applicable system's IT System Security Plan.

Public Domain Software. The Contractor shall utilize available system controls and implement management procedures to ensure that public domain software is not deployed on outsourced desktop IT systems without authorization or appropriate testing, including virus scanning.

Customer/Contractor Supplied Software. The Contractor shall employ full life cycle management for Contractor-provided software and document that process in an appropriate IT Security Plan for the intended deployment platforms or systems. The Contractor's ITSMS shall document the life cycle management process.

Encryption of Unclassified Data. While potentially representing a significant technology upgrade to some environments, the NASA Public Key Infrastructure (PKI) is a means of providing a standard Agency user level encryption, signature, and authentication technology. Upon implementation of PKI, the Contractor shall manage its outsourced systems and environments to leverage the use of PKI wherever possible. The Contractor shall maintain outsourced IT systems to ensure that appropriate processes are utilized for password encryption, encryption keys, and the handling of encrypted private data, according to Agency and NASA Center policies.

NPG 2810 Network Security Baseline Requirements. NPG 2810 includes guidelines for NASA networks and a Network Security Baseline.

While the NASA GRC DOSP does not include Network Boundary Management (e.g. firewall management), LAN management and host-level configuration are tied to network security. The appropriate defense-in-depth security posture can be realized at NASA Glenn with proper coordination with the WAN management organizations and agents.

The Contractor shall provide consistent and documented host-level configuration and LAN management (as required by the GRC DOSP). Procedures, security plans, and personnel management data shall be documented within the Contractor's ITSMS. The ITSMS shall include a fully developed and documented Network Emergency Response Plan for outsourced LAN environments, approved by the appropriate IT Security Manager. A complete specification of the interfaces of network management to the Glenn Computer Incident Response Capability shall also be provided in the Contractor's ITSMS.

Additionally, the Contractor shall implement network services and servers using industry best practices with regard to protocol selection to ensure that data transmission is manageable and secure. Insecure and problematic protocols, such as Post Office Protocol version 3 (POP3) and services utilizing UDP, should be eliminated where possible throughout all but the most controlled internal environments within NASA. Any protocol that cannot be appropriately managed, or that inherently allows internal access credentials to be readily observed, should not be permitted to cross NASA WAN boundaries or used to implement essential services. Outsourced services must address the issue of user access from personal ISPs and take into account the telecommuting user community, and long-term industry and educational partnerships essential to NASA's mission.

Other Network Security Issues. The Contractor shall work to adopt network technologies that disallow and identify the presence of unregistered or unauthorized network devices in Center network environments under Contractor management.

A potential approach to protecting centralized services would be the implementation of a Back Office Services Firewall (BOSF), which would restrict access to outsourced services available on the NASA Glenn internal WAN to those hosts registered within the outsourcing model. The Contractor may deploy a BOSF to mitigate risks to ODIN Central Services, and protect ODIN resources, presuming mechanisms exist to differentiate between GRC systems subscribed to service levels that include access to ODIN Central Services and systems without this level of service subscription.

X.3.12 Overall task environment

Maintain continuity of support for Code R Enterprise and Center missions, programs, and functions. Presidential Decision Directive (PDD) 63 provides guidance to Federal agencies to develop a plan to protect the

mission-essential infrastructures of our nation. In light of its mission and role as a symbol of national pride, NASA has interpreted and adopted this guidance to apply to the protection of its critical facilities and its cyber-infrastructure assets and interdependencies.

The Contractor shall formulate and test an IT infrastructure protection plan that identifies how each of the objectives in NASA Critical Infrastructure Protection Plan shall be met, including the fulfillment of required deliverables and milestones. The Contractor shall update and test the plan annually or upon major system changes.

Physical Controls The objective of physical security is to safeguard systems; prevent unauthorized access to equipment, facilities, material, media, and documents; safeguard against terrorism, sabotage, damage, misuse, and theft; and reduce exposure to threats that could result in denial of service or unauthorized alteration of data.

The Contractor shall establish, within each computing facility, a secured area in which physical assets shall be stored and maintained. New ODIN-managed server seats shall be housed within the computing facility. Passwords for privileged accounts shall be stored in a safe, and shall be maintained according to established regulations.

Access to restricted areas shall be monitored through electronic badging systems. "Temporary Visitor" logs shall be maintained for maintenance staff, employees, and others who do not have a permanent badge. Visitor logs may be audited at any time by the ODIN IT Security Manager, the NASA IT Security Manager (ITSM), or other NASA third party auditors without prior notice.

An individual shall be designated to manage access keys or combinations, when they are used.

Configuration Management. The Contractor shall develop and implement technical controls, in the form of Standard Build Documents for servers and workstations. The Contractor shall maintain these technical controls for each operating system and platform. The exceptions required for building specialized systems shall be documented and maintained in a Controls Review Matrix, which shall be verified annually and upon significant changes to the system or its environment.

Media Release Controls. The Contractor shall dispose of software in compliance with license agreements. Before any magnetic media is reissued, data on the media (including hard disks) shall be fully wiped in accordance with an NSA approved method or destroyed.

Sensitive Account Access. The Contractor shall identify and use a secure authentication mechanism for accessing administrative accounts on sensitive systems and for systems requiring special management attention. The Contractor shall establish a technical authentication solution for privileged accounts on systems lacking a strong authentication mechanism.

Communications Connectivity and Information Segregation. Because some networks or network segments may have higher security requirements than others, each node shall comply with all of the security for the network or the network segments to which it connects. At the direction of the Government, the Contractor shall provide a mechanism for isolating systems from other network nodes' security perimeter to ensure that the proper level of network isolation is provided.

Auditing. The Contractor shall collect, retain, and periodically review documentation of computing access and usage. Technical audit trail records shall be protected from unauthorized access, modification, or destruction. They shall be reviewed weekly to confirm that there have been no attempted violations, and shall be retained for 90 days. If an incident has been verified to be of a criminal nature, the contractor shall retain the audit records as directed by the Government.

Property Transfer. The Contractor shall be responsible for documenting and maintaining hardware and software ownership records. Physical audit trails shall be maintained for one year that shall track the identity of the person maintaining or removing the computing asset and the date and time of maintenance event or removal. The Contractor shall use a automated tool to track asset ownership and movement.

X.3.13 IT Security Management System (ITSMS)

X.3.13.1 ITSMS Features

The Contractor shall provide a comprehensive document and process management system to support the IT Security System Plans for systems delivered under the ODIN Glenn Delivery Order. This document and process management system shall be integrated with Service Delivery at all levels, to ensure consistent and verifiable implementation of the appropriate security system management on all supported systems. This IT Security Management System (ITSMS) shall provide the analogous documentation and standardization of security procedures and practices of an ISO 9002-certified support environment.

The ITSMS shall include the following technical features:

- Fine granularity of access control
- Strong authentication and secure access mechanisms
- Direct access by Government personnel with a need to review specific data or verify compliance via online mechanisms
- Strict revision control of all data
- High availability for those with a need to have access
- Security management and access control commensurate with the sensitivity of the data involved.

The ITSMS shall serve as the authoritative repository for:

- IT and all supporting documents
- Detailed process descriptions for all elements of ITS Management
- Documentation of personnel clearances (must be coordinated with the Center's Security management Office)
- Documentation of personnel security training
- Documentation of access control authorizations
- Documentation of security responsibilities and roles

The ITSMS shall maintain this data in a single, secure online location (with automated processes for periodic reevaluation, process management, version control, and accountability) for continuous Government review. Leading edge, automated IT solutions shall support accurate security management of IT systems.

X.3.13.3 ITSM Environment

The Contractor shall employ a group-ware/work-flow mechanism such as OpenText's Livelink Document Management System for the ITSMS. This capability should provide a Web-based interface definition and automatic diagramming of workflow processes moving documents through the management system.

Technology compatible with the NASA deployment of Public Key Infrastructure (PKI) certificates shall be utilized to provide digital signature capabilities, and electronic authentication to the ITSMS, for Government and contractor personnel. The Contractor shall obtain compatible PKI certificates for its key personnel, and shall provide the necessary integration to ensure that the ITSMS can properly manage digitally signed documents.

X.3.13.3 Data to be captured by the ITSMS:

Personnel data:

- National Agency Check investigations for Contractor system and network administrator personnel.
- Other levels of personnel clearances, as required, to ensure seamless participation with Agency security response, briefing, and planning activities
- Annual and ongoing IT security awareness training for all personnel, with specialized security training for systems and network administrators.

User ID and Password Management:

- Document the account creation, privilege granting, and management process

- Ensure proper revalidation of user access privileges occur according to a defined schedule, in a verifiable manner
- Ensure period review of user access privileges, including the identification of accounts that are no longer used, presuming automated mechanisms internal to the system bearing the account are not used.
- Provide integration to (for all systems technically capable) a global namespace management environment, to provide authoritative management and guaranteed uniqueness of user IDs.
- Document all processes and procedures related to user password management.

Information management and Protection for Multi-User Systems

- Document and manage Data Owner acceptance of risk and authorization to process with regard to data processed on ODIN multi-user computer systems, including Data Owner responsibilities and the responsibilities of the Owners of Software Applications.

Customer/Contractor Supplied Software

- Document the full life cycle process for software provided by the Contractor

Document more stringent security requirements for single and multi-user workstations

System Security plans

Network Management

- Document the complete specification of network management interfaces to the Center Incident Response Team
- Document the Network Emergency Response Plan for outsourced LAN environments

Note: The IT Security Manager believes that the aggregation of this magnitude of sensitive data is of critical importance to Code R. In a DoD environment a system containing this level of information would be classified at the confidential level. The Contractor shall work directly with the ITSM and other identified government security analysts before this system is designed and implemented to ensure the level of security required is identified and that sufficient controls and testing have been included in the life cycle of the system.

The Contractor shall develop and implement a mechanism that provides designated GRC IT security analysts with access to ODIN IT assets and specifics related to their associated connectivity. Specific IT security needs shall be provided to the Contractor by the Government.

X.4.0 Roles and responsibilities

x.4.1 ODIN Program Manager

The ODIN Program Manager (PM) is the senior company representative for the Delivery Order. The ODIN PM shall:

- Establish the approach and methodologies of the ODIN IT security program
- Maintain NASA interfaces as appropriate:

x.4.2 ODIN Project Manager

The Center ODIN Project Manager shall be the senior Team representative at each site, and report to the ODIN Program Manager. The Center PM shall:

- Accomplish the IT Security requirements within the scope of the DOSP
- Provide appropriate IT Security technical and analytical resources
- Maintain interfaces with:
  - ODIN DOCOTR for the Center
  - Center IT Security Manager
  - Non-ODIN vendors on the Center that provide IT security services

x.4.3 ODIN Security Manager

The ODIN Security Manager shall be a senior Contractor security professional reporting to the ODIN Project Manager. This manager has the authority to direct all Contractor personnel with respect to security issues and shall:

- Act as the SPOC for all contractor security issues
- Act as the Organizational Computer Security Official (CSO) for all contractor systems
- Develop and maintain the ODIN IT Corporate Security Plan that delineates program goals and priorities
- Periodically assess the effectiveness of the ODIN security efforts at each Center
- Maximize the collaboration and sharing of ODIN Center-specific security materials throughout the Centers
- Manage technical reviews of all proposed IT implementations prior to deployment to ensure compliance with applicable government requirements
- Ensure that ODIN Center standards, best practices, and procedures contribute to the secure operation of the Center's systems and the protection of the Center's data and information
- Develop and implement an IT Security Awareness and Training Plan for the ODIN Center employees
- Establish a process to ensure that appropriate screening has been completed for ODIN Center individuals requesting system privileges, and that these individuals are eligible to be issued accounts
- Establish ODIN Center Incident Response Teams and procedures in coordination with current Center policies and procedures
- Establish ODIN Center Virus Response Teams and procedures in coordination with current Center policies and procedures
- Establish ODIN Center Security Review procedures
- Support requirements for personnel screenings for those in public trust positions
- Ensure full compliance with applicable Federal and Agency regulations and directives
- Support audits and controls reviews to ensure that controls are in place
- Coordinate, organize, and direct the security work to be performed by the ODIN line managers
- Assist in the maintenance of a network security policy approved by the NASA Center IT Security Manager
- Develop threat statements and provide a "Summary of Risk" to NASA management
- Develop documentation for the IT Security Management System (ITSMS)
- Maintain interfaces with:
  - the Principal Center for IT Security
  - the Center IT Security Manager
  - NASIRC
  - Non-ODIN vendors on the Center that provide IT Security services
  - Non-ODIN Security Managers providing perimeter and system security protections and monitoring
  - ODIN Configuration Management
  - The ODIN Service Delivery Manager
  - The ODIN Customer Service Manager.

x.4.4 Direct Working Relationship

The Contractor shall, through its senior management personnel and the use of Memorandum(s) of Understanding (MOU), provide clear and direct delineation of required responsibilities between itself, Government personnel, and contractor personnel with security or operational interests.

x.4.5 Center Representation

The Contractor shall proactively represent the deployed IT solutions, address future direction, and provide input and feedback to both Center-level and Agency-level organizations. The Contractor Chief Architect, Security Architect,

and other senior personnel shall attend Agency-level technical meetings, as appropriate, to ensure continued coordination with Agency direction and the Center-deployed or contemplated solutions.

Appendix D. Glenn Specific DRD Documents

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION John H. Glenn Research Center at Lewis Field Cleveland, OH 44135	DATA REQUIREMENT DESCRIPTION	1. RFP #: ODIN 2. DRD #: GRC-1 Page 1 of 1
3. TITLE: REPORTS, SECURITY		
SUBMITTAL REQUIREMENTS		
4. TYPE: REPORTS	5. FREQUENCY OF SUBMISSION: At least every three years or upon significant change to the functionality of the assets, network connectivity, or mission of the system, whichever comes first. 2 days after receipt of request.	
6. DISTRIBUTION: 1 complete set to DOCO and 1 set of GRC-specific to GRC NASA IT Security Manager.	7. INITIAL SUBMISSION: 45 days after the issuance of the GRC Delivery Order.	
8. REMARKS: If the Contractor discovers new or unanticipated threats or hazards, or if existing safeguards have ceased to function effectively, the Contractor shall update the risk assessments and IT Security Plans (within 30 working days).		
DATA REQUIREMENT DESCRIPTION		
9. USE: The ODIN contractor shall provide risk assessments and IT Security Plans to the Government for review purposes only.		10. REFERENCE: C.8
The ODIN contractor shall maintain this information and make it available to applicable NASA Center IT Security Management, if requested.		11. INTERRELATIONSHIP: C.8.3, C.8.4, C.8.6
12. PREPARATION INFORMATION: 1. SCOPE: The Contractor shall conduct initial risk assessments, document the results, develop and maintain IT Security Plans in accordance with the IT security requirements in effect at the Center at which the system is operated. 2. CONTENTS: The IT Security Plans shall describe how the integrity, availability, confidentiality of the information and IT resources will be protected, including protection (disclosure) from the subject contractor.		

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION John H. Glenn Research Center at Lewis Field Cleveland, OH 44135	DATA REQUIREMENT DESCRIPTION	1. RFP #: ODIN 2. DRD #: GRC-2 Page 1 of 2
3. TITLE: REPORTS, SUPPORTING INVOICE DATA		

SUBMITTAL REQUIREMENTS	
4. TYPE: REPORTS	5. FREQUENCY OF SUBMISSION: Monthly except for item 12.2.e.
6. DISTRIBUTION: (3 sets) 1 Complete set to both the DOCO and DOCOTR (2 sets)	7. INITIAL SUBMISSION: 10 working days of the first month following the issuance of the initial Delivery Order.
8. REMARKS: Data provided by this DRD shall match the invoice for the same calendar period.	

DATA REQUIREMENT DESCRIPTION	
9. USE: Provides NASA with detailed data aggregated for use in accurately reflecting price at Program/Project level.	10. REFERENCE: Paragraph (g) of Contract clause 1. CONTRACT TERMS AND CONDITIONS – COMMERCIAL ITEMS (52.212-4) (May 1997)
	11. INTERRELATIONSHIP:

12. PREPARATION INFORMATION:

1. Scope

This DRD establishes the requirements price-related management reports to support the monthly invoiced amounts. The ODIN contractor is required to segregate and report data for the Glenn Delivery Orders (DO's).

2. Contents

a. Report data by each of the categories listed below:

- Desktop Services by Seat Type
- Telephone Services by Seat Type
- Server Services by Seat Type
- Administrative Radio (AR) Services by Seat Type
- LVID Services
- Public Address (PA) Services by Seat Type
- Fax Services by Seat Type
- LAN Services by Seat Type
- Remote Communication (RC) Services by Seat Type
- Catalog Purchases (Hardware and Software)
- Moves/Adds/Changes (MAC)
- One Time Price Adjustments/Technology Refreshments
- Credit for Outages by Seat Type

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION John H. Glenn Research Center at Lewis Field Cleveland, OH 44135	DATA REQUIREMENT DESCRIPTION	1. RFP #: ODIN 2. DRD #: GRC-2 Page 2 of 2

3. TITLE: REPORTS, SUPPORTING INVOICE DATA

DATA REQUIREMENT DESCRIPTION

12. PREPARATION INFORMATION (cont.):

b) The Contractor shall submit the reports electronically, via electronic mail or CD-ROM, in a mutually agreeable/interchangeable spreadsheet format.

c) The budgeting/accounting environment currently utilized by NASA is expected to shift to a Full-Cost Management/Budgeting/Accounting environment prior to the end of the first ODIN DO period. The Full-Cost concept is still under development, however, it is expected that once NASA transitions to Full-Cost, this ODIN DRD may require slight modification (i.e., same detail, aggregated differently).

d) On-site Contractor head-count will be required semi-annually as of the last day of February and September of each calendar year.

e) Data will be reported at the appropriate directorate, division and/or branch level as reflected in the requirement spreadsheets that will issued with the Initial Delivery Order.

f) This DRD will report the prior month's actual price for all of the service categories monthly for a mutually agreed upon beginning and ending date for each calendar month.

g) Dates which "freeze" the data will be mutually determined for the purpose of monthly and fiscal year data collection and preparation of supporting documents.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION John H. Glenn Research Center at Lewis Field Cleveland, OH 44135	DATA REQUIREMENT DESCRIPTION	1. RFP #: ODIN 2. DRD #: GRC-3 Page 1 of 2

3. TITLE: REPORTS, AD HOC INFORMATION REQUESTS

SUBMITTAL REQUIREMENTS

4. TYPE: REPORTS	**5. FREQUENCY OF SUBMISSION:** Randomly upon request (maximum number limited to an average of no more than 3 per month over the life of the Delivery Order)
7. DISTRIBUTION: (3 sets) 1 Complete set to both the DOCO and DOCOTR (2 sets)	**7. INITIAL SUBMISSION:** TBD

8. REMARKS: Unless otherwise agreed upon for the particular request, the contractor shall deliver the information/report within five (5) working days of the request being submitted by the DOCOTR

DATA REQUIREMENT DESCRIPTION

9. USE: Provides NASA with the ability to request information/limited reports on an ad hoc basis	**10. REFERENCE:** Paragraph (g) of Contract clause 1. CONTRACT TERMS AND CONDITIONS – COMMERCIAL ITEMS (52.212-4) (May 1997)
	11. INTERRELATIONSHIP:

13. PREPARATION INFORMATION:

1. Scope

This DRD establishes the ability for NASA to request ad hoc information or reporting on a limited basis when:

a) The contractor is the only or primary source for the required information
b) The total time to obtain and prepare (compile/format) the required data is less than 8 person-hours

Examples of ad hoc requests of this nature may include (but are not limited to):

- Number of hits on a contractor supported web server
- E-mail usage statistics
- Total file storage usage statistics
- Network printer usage statistics
- Hardware and software configurations at the desktop level
- Network utilization over a time period
- Network traffic statistics

2. Contents

a) The contents of the report shall completely address the ad hoc information request. The data shall be compiled and formatted in a concise and easy to understand way including full and summary/rollup formats whenever appropriate.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION John H. Glenn Research Center at Lewis Field Cleveland, OH 44135	DATA REQUIREMENT DESCRIPTION	3. RFP #: ODIN 4. DRD #: GRC-3 Page 2 of 2

3. TITLE: REPORTS, AD HOC INFORMATION REQUESTS

DATA REQUIREMENT DESCRIPTION

12. PREPARATION INFORMATION (cont.):

h) The Contractor shall submit the reports electronically, via electronic mail or CD-ROM, in a mutually agreeable/interchangeable spreadsheet format.

i) Data will be reported at a level specified in the request

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION John H. Glenn Research Center at Lewis Field Cleveland, OH 44135	DATA REQUIREMENT DESCRIPTION	1. CONTRACT #: NAS5-98145 2. DRD #: GRC-4 Page 1 of 2

3. TITLE: ON-LINE TELEPHONE DIRECTORY

SUBMITTAL REQUIREMENTS	
4. TYPE:	**5. FREQUENCY OF SUBMISSION:** Weekly updates
6. DISTRIBUTION: On-line telephone directory	**7. INITIAL SUBMISSION:** October 1, 2000

8. REMARKS:

The contractor shall provide electronic access to its telephone directory

DATA REQUIREMENT DESCRIPTION	
9. USE: Personnel locator service.	**10. REFERENCE:** C.5.2
	11. INTERRELATIONSHIP:

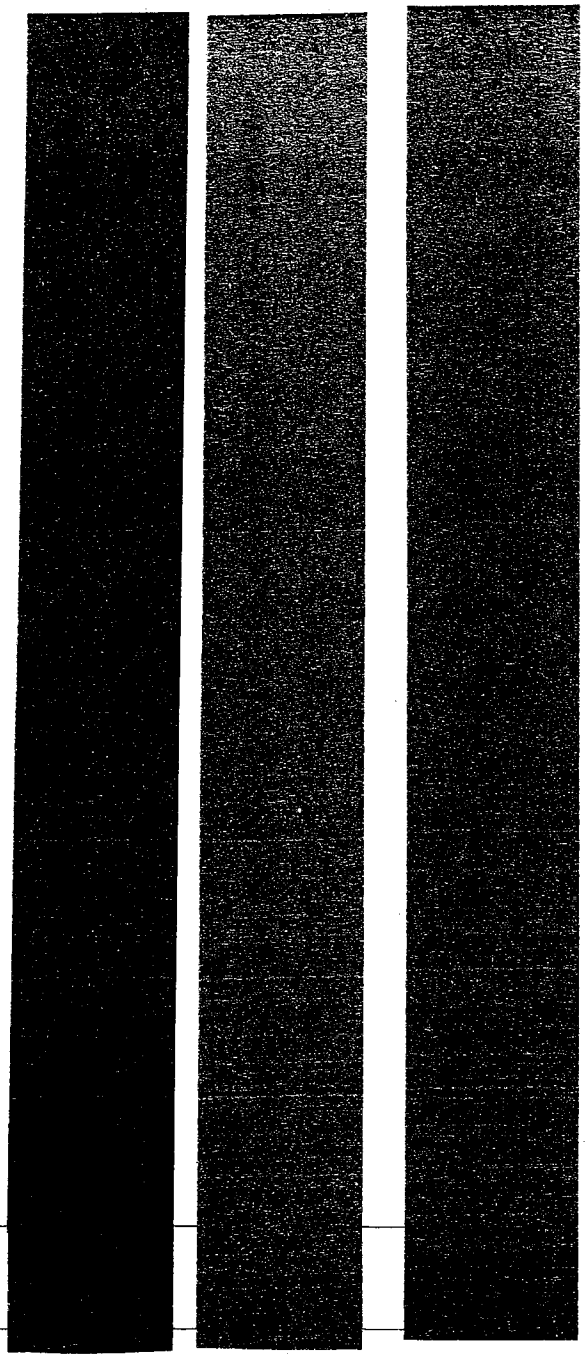
12. PREPARATION INFORMATION:

The On-line telephone directory shall include the following information:

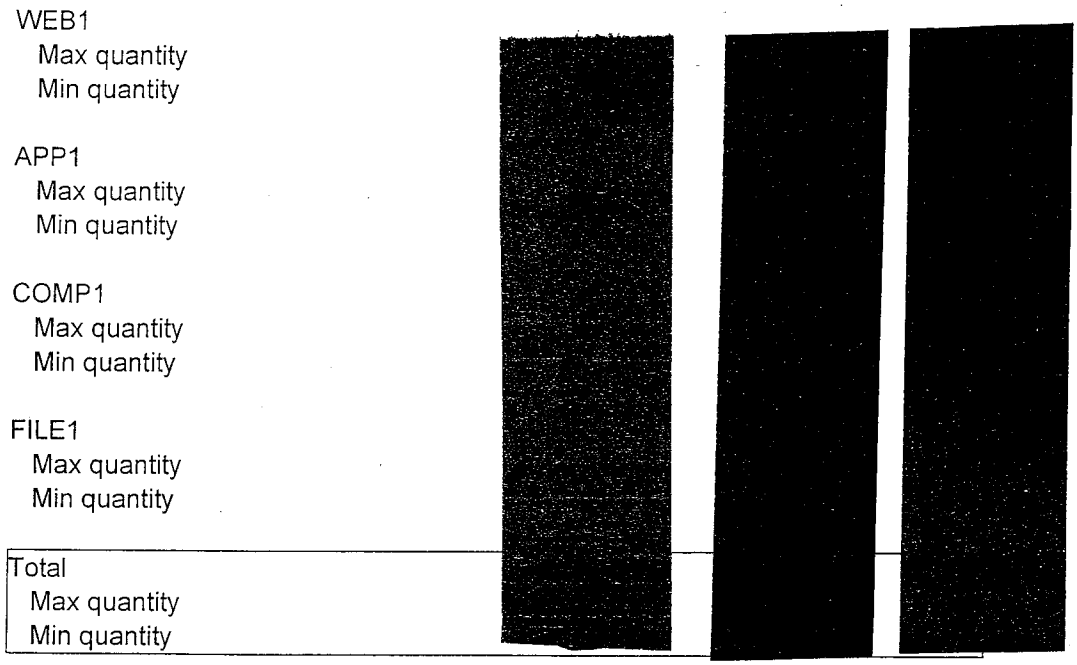
1) An alphabetical section, containing:
   a) Telephone extension
   b) Name
   c) Building
   d) Room number
   e) Company name
   f) Voice mail indicator
   g) Mail code
   h) Contractor/civil service indicator
   i) E-mail address
   j) Pager number

Appendix E. Min/Max Quantities Table (Master Contract Attachment Q)

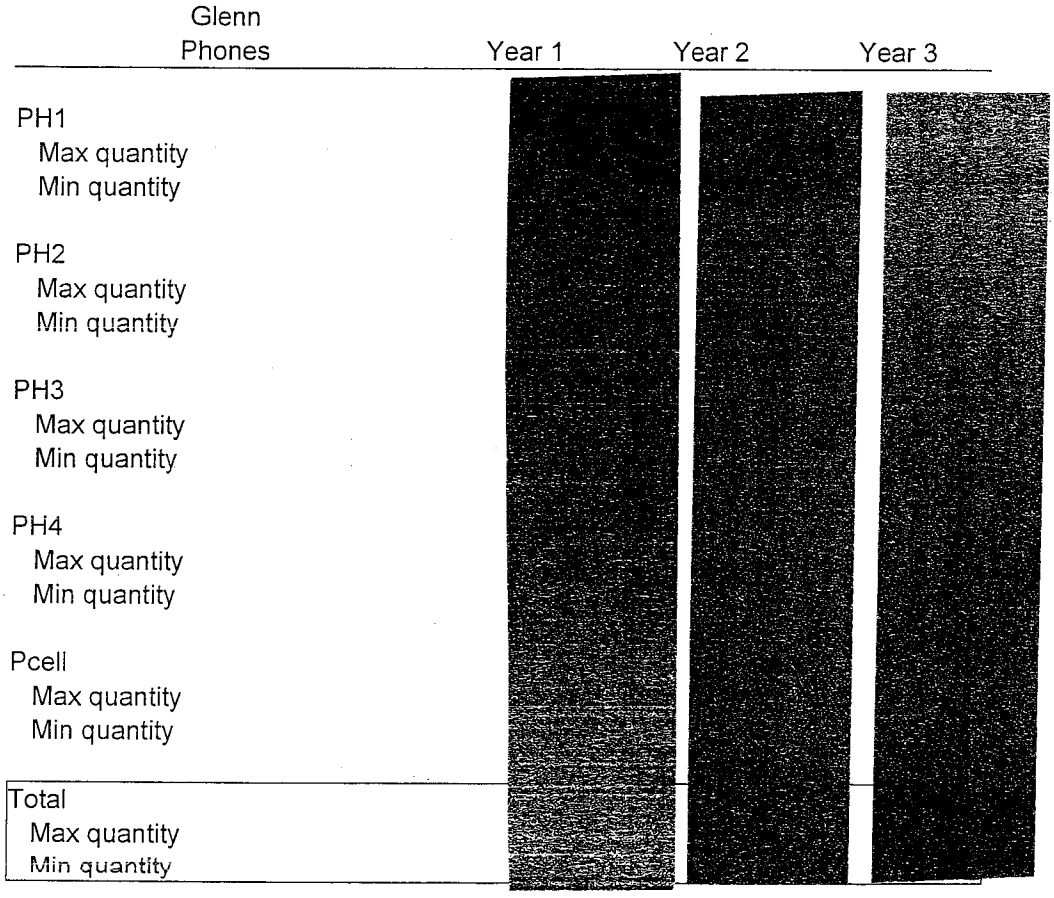
Glenn Desktops	Year 1	Year 2	Year 3
GP1			
Max quantity			
Min quantity			
GP2			
Max quantity			
Min quantity			
GP3			
Max quantity			
Min quantity			
SE1			
Max quantity			
Min quantity			
SE2			
Max quantity			
Min quantity			
SE3			
Max quantity			
Min quantity			
MA1			
Max quantity			
Min quantity			
MA2			
Max quantity			
Min quantity			
NAD			
Max quantity			
Min quantity			
Total			
Max quantity			
Min quantity			
Glenn Servers	Year 1	Year 2	Year 3



b(4)



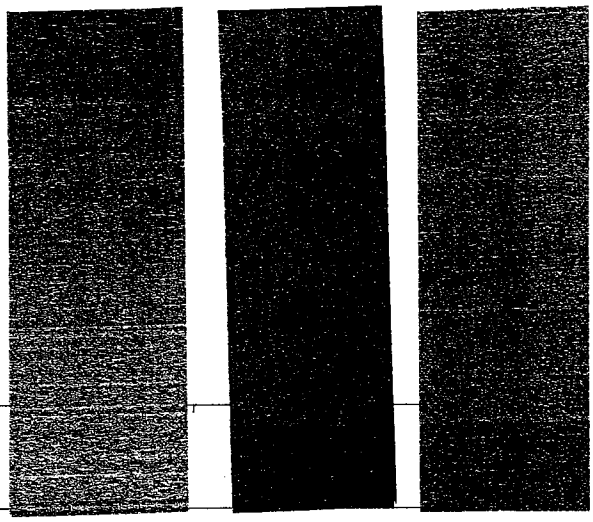
Glenn



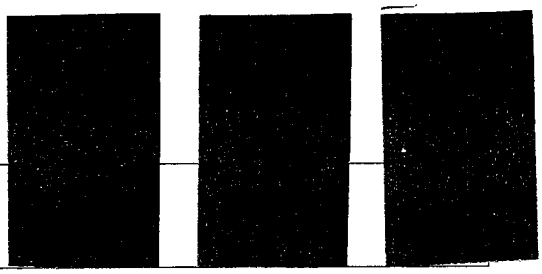
b(4)

Glenn

FAX	Year 1	Year 2	Year 3
FAX1			
Max quantity			
Min quantity			
FAX2			
Max quantity			
Min quantity			
FAX3			
Max quantity			
Min quantity			
Total			
Max quantity			
Min quantity			

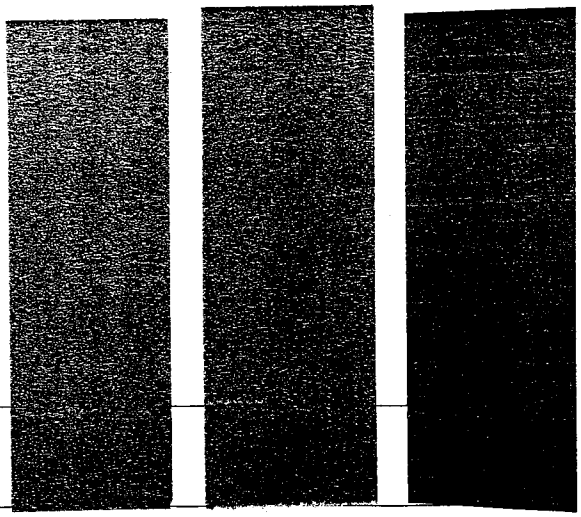


Glenn Local Video	Year 1	Year 2	Year 3
LVID1			
Max quantity			
Min quantity			
Total			
Max quantity			
Min quantity			

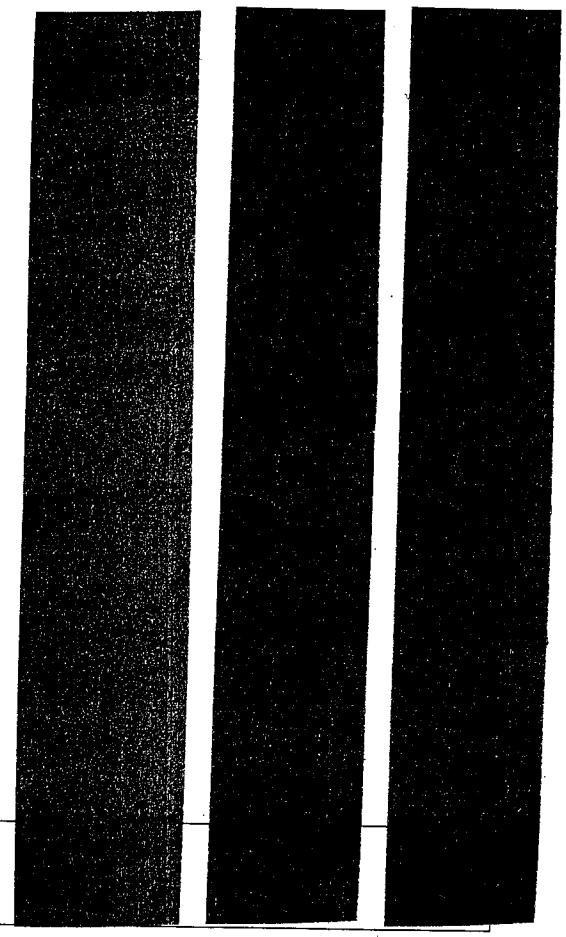


b(4)

Glenn Admin Radio	Year 1	Year 2	Year 3
AR1			
Max quantity			
Min quantity			
AR2			
Max quantity			
Min quantity			
AR3			
Max quantity			
Min quantity			
Total			
Max quantity			
Min quantity			

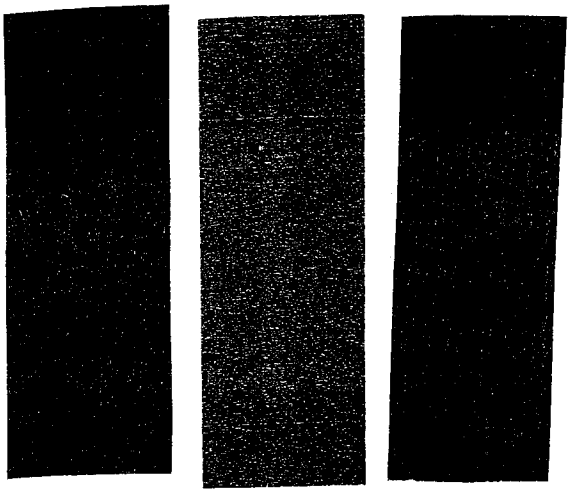


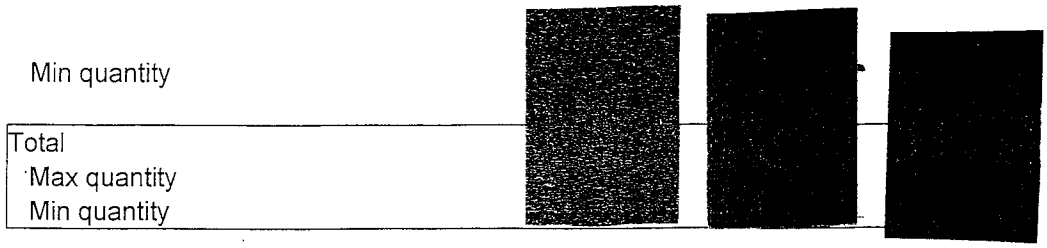
Glenn LAN	Year 1	Year 2	Year 3
LAN1A			
Max quantity			
Min quantity			
LAN1B			
Max quantity			
Min quantity			
LAN2A			
Max quantity			
Min quantity			
LAN2B			
Max quantity			
Min quantity			
LAN3A			
Max quantity			
Min quantity			
LAN3B			
Max quantity			
Min quantity			
Total			
Max quantity			
Min quantity			



b(4)

Glenn Remote Comm	Year 1	Year 2	Year 3
RC1			
Max quantity			
Min quantity			
RC2			
Max quantity			
Min quantity			
RC3			
Max quantity			
Min quantity			
RC4			
Max quantity			





Glenn Public Addr	Year 1	Year 2	Year 3
PA1			
Max quantity			
Min quantity			
PA2			
Max quantity			
Min quantity			
Total			
Max quantity			
Min quantity			

b(4)