

**Outsourcing Desktop Initiative for NASA
(ODIN)
Program Plan**

August 23, 1999

1. Introduction and Program Overview

In 1996, the NASA Office of the Chief Information Officer (CIO), Code AO, sponsored a study to investigate the viability and desirability of outsourcing the acquisition and support of the NASA's desktop, server, and intracenter communications assets and services to the commercial sector. That study, Business Case for Outsourcing of Desktop Computers, dated October 24, 1996, concluded that outsourcing had the potential to reap the Agency significant cost savings, as well as offer other benefits. The results were presented to the NASA Capital Investment Council (CIC) in November 1996. The CIC endorsed the Outsourcing Desktop Initiative for NASA (ODIN) as a Functional Leadership Initiative (FLI) in May 1996. The Administrator approved ODIN on December 16, 1996. A Program Commitment Agreement (PCA) was signed by the Administrator on May 24, 1999.

This Indefinite-Delivery Indefinite-Quantity (IDIQ) contract is the result of a multiple award Request for Proposal (RFP) and as such includes the Delivery Order Selection Process (DOSP) by which the orders will be placed by the ordering entities. The resultant contracts are considered Government-wide Acquisition Contracts (GWAC's) and are available for use by any Agency (or designee) authorized to utilize GWAC's. Under the DOSP, each Center/Enterprise will select a single ODIN provider from the pool of ODIN contracts following a process that uses Delivery Order Selection Criteria (DOSC). Non-NASA agencies utilizing ODIN are required to comply with the DOSP.

The purpose of this Program Plan is to establish Program objectives and performance goals; identify Program requirements; describe the management structure; and detail Program resources, schedules, and controls.

2. Program Objectives

2.1 *ODIN Program objectives* – With primary focus on desktop, server, and intracenter communications services, the objectives of the ODIN Program are to:

- Focus NASA civil service personnel on core Research and Development (R&D) activities;
- Promote Information Technology (IT) systems and product interoperability;
- Enhance and optimize service delivery; and
- Reduce cost and improve cost management and cost containment.

2.2 *ODIN Program Performance Goals and Indicators* - Technical performance will be evaluated by assessing the performance of three performance indicators for six services. The three indicators are Service Delivery; Availability; and Customer Satisfaction; each is further explained in Paragraph 5, below. As outlined in the ODIN contract, Desktop User Services includes Desktop Seats, Server Services, LAN Interface Services and Remote Communications Services. The ODIN technical performance goals of each indicator by service are:

Performance Metrics	Service Delivery (%)	Availability (%)	Customer Satisfaction (%)
Desktop User Services	98	98	DOSP agreed to %*
Phone Service	95	99.9	DOSP agreed to %*
Fax Service	95	99.5	DOSP agreed to %*
Local Video Service	95	99.5	DOSP agreed to %*
Administrative Radio Service	95	99.9	DOSP agreed to %*
Public Address Service	95	99.5	DOSP agreed to %*

(NOTE: These “%*” will be negotiated as part of each Delivery Order Selection Process (DOSP) and this Program Plan will be modified accordingly.)

2.3 *Relationship to NASA Strategic Plan* - The NASA Strategic Plan identifies the strategic and tactical role IT plays in achieving NASA's missions and performing its cross-cutting processes that Manage Strategically, Provide Products and Capabilities; Generate Knowledge; and Communicate Knowledge. The CIO is accountable to the

Administrator for assuring that IT investments provide an open and secure exchange of information, support NASA's business processes, demonstrate projected returns on investment, reduce risk, and directly contribute to mission success. ODIN is a key component in meeting these CIO responsibilities. ODIN will benefit NASA, its programs and personnel, and thereby the American people, by allowing NASA to concentrate its limited resources more effectively on core R&D missions, while still securing world-class, commodity-priced IT in order to accomplish its missions.

3. Customer Definition and Advocacy

3.1 *Customer Definition* - ODIN supports four discrete customer levels—three within NASA and a fourth outside NASA. Within NASA, ODIN customers include senior management (Agency, Enterprise, and Center), Center IT provider organizations, and end-users. At the senior management level, ODIN offers the opportunity to focus NASA civil service personnel on core R&D activities and reduce cost and improve cost management and cost containment of IT assets. For IT providers, ODIN offers the opportunity to promote IT systems and product interoperability and enable more cost-effective life cycle management of IT assets. For the end-users, ODIN offers the opportunity to enhance and optimize service delivery by delivering state-of-the-art IT capabilities and ensuring routine, continuous technology refreshment of same. Outside NASA, ODIN is available to all Federal agencies with external agency order placement and administration being handled by the General Services Administration (GSA).

3.2 *Customer Advocacy* - NASA uses IT in support of its core business, scientific, research, and computational activities. NASA continually strives to optimize the productivity of its workforce through the efficient use of desktop computers, high performance networks, and sophisticated applications. These desktop, server, and intracenter communication assets are vital to NASA's success as the world leader in aeronautics, space exploration, and scientific research. NASA spends hundreds of millions of dollars each year providing such capability and commits considerable full-time equivalents in managing those assets. It is important that the private sector deliver cost-effective ODIN services that meet NASA mission and program needs while achieving a high level of customer satisfaction, otherwise, NASA may not achieve its mission and program goals and objectives. To ensure that ODIN meets the needs of its internal customers, each customer level has been involved with and will continue to be involved in the planning, requirements definition, solicitation, and implementation, including performance assessment, of ODIN. ODIN's nine service levels were developed through an intraAgency team and approved by all Center CIO Representatives. The seven ODIN vendors were selected through a Source Evaluation Board (SEB) with representation from most Centers. The results of the SEB were reviewed by the Enterprises and the CIC before award. Each Center (or optionally, each Enterprise) conducts its own DOSP. Metrics are Center-focused. Each of these individually and collectively helps ensure that ODIN is responsive to each stakeholder. Some of the measures to be used by ODIN to ensure customer needs are met are further described below.

3.2.1 GSFC, the Center delegated responsibility to manage the ODIN Program, will employ an intraAgency team consisting of a Program Manager (PM) and staff, a Contracting Officer (CO) for the master contracts, Delivery Order Contracting Officers (DOCO's), Delivery Order Contracting Officer's Technical Representatives (DOCOTR's), and Technical Management Representatives (TMR's). The ODIN PM is responsible for ODIN Program operations. The ODIN PM is accountable to the NASA CIO, the NASA IT Investment Council, and the Agency PMC for meeting ODIN program and performance objectives. Included in this responsibility are ensuring vendor compliance with the terms and conditions of their contracts; implementing and ensuring compliance with Agency architectures and standards; assuring maintenance of interoperability and compatibility across the Agency; validating that vendor offered systems and products are within the system and product performance specifications; and ensuring that ODIN performance measures are within, or exceed, guidelines.

3.2.2 To ensure that ODIN meets NASA's needs on a continuing basis over its 10-year term, NASA and ODIN vendors are encouraged to recommend additions, modifications, and deletions to Agency and Center IT policies, architectures, standards, and procedures. Stakeholder involvement is maintained by reviewing proposed changes before implementation at the appropriate level (Agency, Enterprise, and/or Center). Vendors are responsible for raising adverse impacts to stability, cost, architecture, interoperability, compatibility, or service. Vendors also review with NASA any planned system implementations, including hardware/software refreshment and application roll-out, which could be reasonably expected to have an adverse impact on the stability of the existing IT environment.

3.2.3 To assure maintenance of the NASA IT architectural configuration, the process set forth in paragraph 2.2.1 of NASA Procedures and Guidelines (NPG) 2800 will be followed. Vendors will bring recommendations for changes to the NASA IT architecture and standards to the attention of the ODIN PM, who is responsible for ensuring the review and approval process is conducted in compliance with NPG 2800 and communicating the results of that process to the vendors. When reviewing and approving recommendations for changes affecting ODIN, the CIO Representatives Board (comprised of all CIO Representatives—Agency, Enterprise, and Center) will be augmented by the ODIN Program Manager and the vendor program managers. To facilitate management of the ODIN Program and resolution of program issues that cannot be resolved at a lower level, the IT Investment Council, chaired by the NASA CIO, will be augmented as appropriate with senior vendor representatives. Also, given that ODIN vendors are required to comply with Center standards where applicable, each Center will establish a Center-level Configuration Control Board (CCCB), chaired by the Center CIO Representative with membership made up of at least the DOCOTR/TMR and vendor representative. Functions of the CCCB include approving proposed changes to local architectures and standards, which assure changes in local architectures and standards are consistent with Agency interoperability and compatibility standards. The Centers may use an existing or alternative mechanism that accomplishes the same results.

3.2.4 Each Center/Enterprise will have a DOCOTR/TMR. The DOCOTR/TMR is responsible for ODIN Center Operations, adherence to Center standards; is accountable to the ODIN PM for meeting ODIN program and performance objectives; ensuring the Vendors' compliance with the terms and conditions of their delivery orders; implementing and ensuring compliance with Agency architectures and standards; assuring maintenance of interoperability, compatibility across the Agency; managing the local configuration; and ensuring that ODIN performance measures at their Center are within or exceed guidelines. Vendors will coordinate system, product, and service roll-outs with the DOCOTR/TMR and facilitate implementation to minimize impact to end-users.

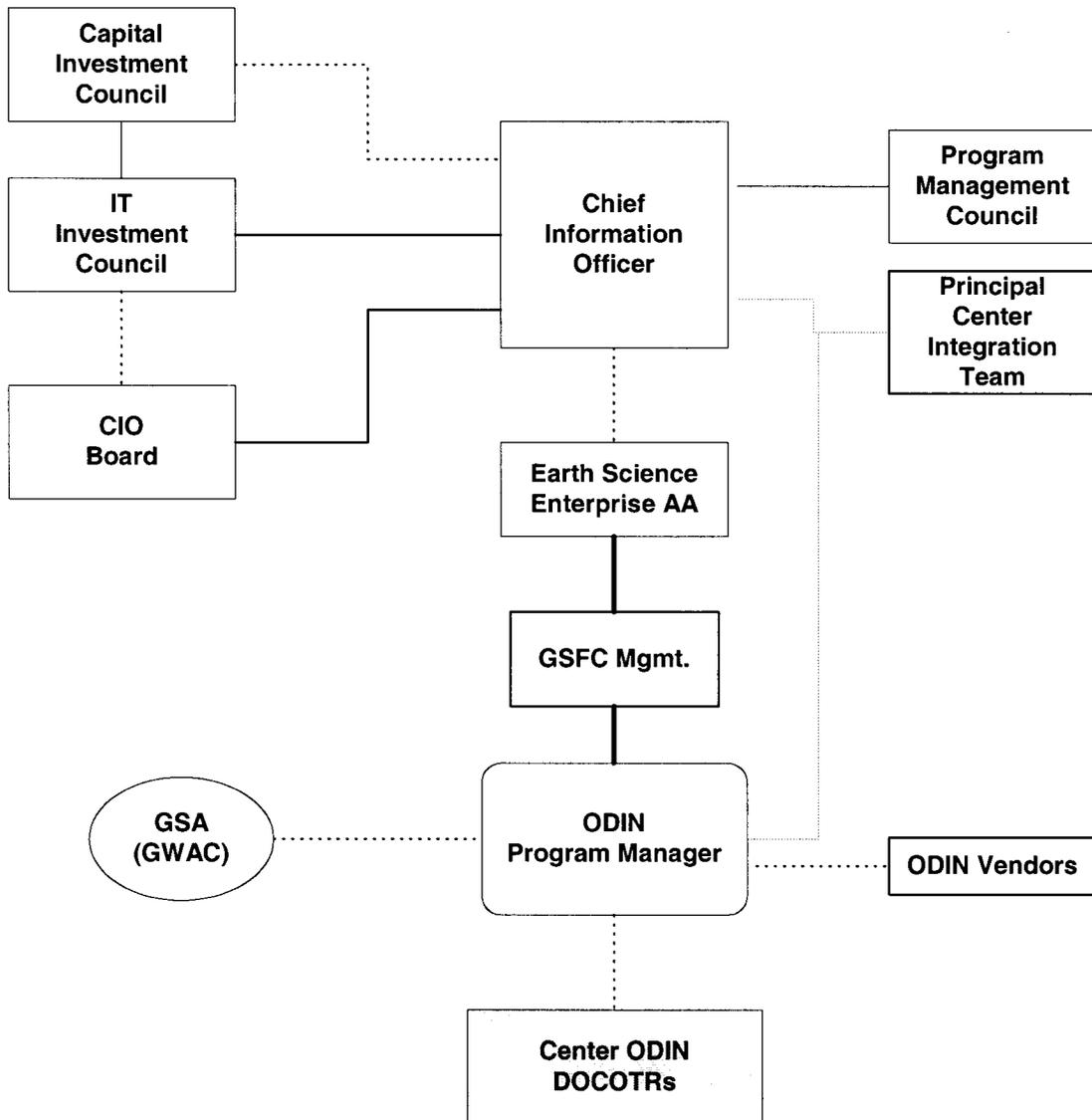
3.2.5 Finally, vendors are responsible for selecting systems, products, and services which meet the terms of their contracts and the needs of the users. Vendors are required to meet the requirements for interoperability and functionality and maintain configuration control of their specific Center environment. The configuration shall be current and available for NASA review and use, upon request. Each vendor will coordinate their system, product and service roll-outs with the other vendors to assure Agency or Center level interoperability or functionality requirement are not compromised. Where vendors are unable to agree among themselves on matters affecting the interoperability or functionality of ODIN systems, vendors will establish and employ binding conflict resolution techniques at their expense. This process will not impact schedules, and the Government will not be a party to such conflict resolution. The Vendor shall inform the ODIN PM as soon as practicable of any issue requiring binding conflict resolution.

3.2.6 With respect to ODIN's external stakeholders, GSA and other agencies who may use ODIN, GSA is responsible for managing these interfaces in accordance with a memorandum of agreement between NASA and GSA. See paragraph 8.2.

4. PROGRAM AUTHORITY AND MANAGEMENT

4.1 *Program Authority* - The ODIN Program was advocated by the CIO as a FLI, endorsed by the CIC, and approved by the Administrator. The PCA was signed by the Administrator on May 24, 1999. The NASA CIO delegated responsibility and authority for program execution, with the concurrence of the Associate Administrator for Earth Science, to the Director, GSFC. The ODIN Program will be implemented using NASA's program/project management process spelled out in NASA Policy Directive (NPD) 7120.4A and NPG 7120.5A; and the CIO Operating Model, explained in NPG 2800, will be used to communicate, coordinate, seek consensus, and solve problems.

4.2 *Program Management* - The following exhibit is an organizational chart that reflects the current ODIN Program management structure.



Significant ODIN Program authorities and roles and responsibilities are discussed below.

4.2.1 *The Capital Investment Council (CIC)* - Responsible for monitoring the effectiveness of ODIN as an Agency investment and approving ODIN Program budget guidelines and significant changes to the ODIN Program and its objectives.

4.2.2 *The Agency Program Management Council (PMC)* - Responsible for routinely reviewing ODIN Program implementation in meeting technical performance, schedule, and cost commitments, and sponsoring and reviewing the results of Independent Annual Reviews (IAR's).

4.2.3 *The CIO* - Accountable and responsible for ODIN success and achievement of its objectives. The CIO will monitor the overall Agency implementation of the ODIN Program and, in coordination with the Enterprise Associate Administrators (EAA's), issue Agency-level policy and other direction that helps the ODIN Program meet its objectives. The CIO, in coordination with the EAA's, will approve the ODIN Program Plan.

4.2.4 *The IT Investment Council* - Responsible for reviewing and recommending the disposition of Agency and/or Enterprise-level policy, programmatic (technical, schedule, and cost), and budgetary/funding issues that cannot be resolved at a lower level.

4.2.5 *The CIO Representatives Board* - Responsible for monitoring ODIN compliance with IT policies, architectures, and standards, for recommending changes to the ODIN Program and its objectives, identifying issues with ODIN implementation which affect intraAgency operations, and for addressing policy, programmatic, and funding/budgetary issues that cannot be resolved at a lower level. The CIO Board will engage the ODIN vendors these activities as appropriate.

4.2.6 *The Enterprise Associate Administrators (EAA's)* – Each EAA is responsible for allocating the resources through the Center Directors to fund ODIN requirements. EAA's with institutional responsibilities are responsible for deciding whether to select a single ODIN vendor, or not, for the Enterprise and, where an Enterprise-wide solution is decided, for selecting the winning vendor.

4.2.7 *The Associate Administrator for Earth Science* - Responsible for ensuring that GSFC adequately staffs and funds the ODIN Program Office at GSFC.

4.2.8 *The Director, GSFC* - Responsible for maintaining an effective ODIN Program organization and staff, developing and maintaining an ODIN Program Plan consistent with NPG 7120.5A, implementing that Program Plan in accordance with the agreed-upon technical requirements, performance levels, schedules, and cost, coordinating all intraAgency ODIN activities, administrating the ODIN contracts, ensuring that intraAgency configuration management measures are established and used which fully support evolving NASA IT policies, architectures, and standards, as well as ODIN configurations, reporting ODIN Program metrics, and establishing and maintaining a Memorandum of Understanding (MOU) with the General Services Administration (GSA) on the roles and responsibilities of GSA and NASA with respect to joint cooperation on seat management and GSA's administration of the ODIN contracts for Federal use.

4.2.9 *The Center Directors* – Center Directors have the responsibility for identifying their requirements for ODIN, and shall issue delivery orders for no less than the minimum “seats” identified in the Cost Commitments per Schedule Commitments. Further, they are responsible for maintaining an effective ODIN Project organization and staff, implementing ODIN at their respective Centers to the fullest extent practicable and consistent with end-user needs, ensuring compliance with ODIN's configuration, including configuration management measures, providing timely ODIN performance metrics and other management reports to the ODIN Program Office at GSFC, and supporting Agency and ODIN Program-level requirements to maintain the viability of the ODIN Program, its contracts, and delivery orders.

4.2.10 *The Program Manager* – The ODIN PM is responsible for ODIN Program Operations. The ODIN PM is accountable to the NASA CIO and the IT Investment Council for meeting ODIN program and performance objectives, including scheduling and providing the information for the CIC, PMC, IT Investment Council, and CIO Representatives Board management reviews. Included in this responsibility are ensuring vendor compliance with the terms and conditions of their contracts; implementing and ensuring compliance with Agency architectures and standards; assuring maintenance of interoperability and compatibility across the Agency; validating that vendor offered systems and products are within the system and product performance specifications; ensuring that ODIN performance measures are within or exceed guidelines, and overall contract management, including incorporating modifications to the master contract as necessary, to meet the requirements of NASA and the Centers.

4.2.11 *The Delivery Order Contracting Officer's Technical Representative (DOCOTR)* – The DOCOTR/TMR is responsible for ODIN Center Operations and for assuring that the Center Delivery Order vendor complies with program and performance objectives; the terms and conditions of their delivery order; implementing and ensuring compliance with Agency architecture and standards; ensuring compliance with Center standards; assuring maintenance of interoperability and compatibility with Agency standards; managing the local configuration; and validating that ODIN performance measures at their Center are within or exceed guidelines. Vendors will coordinate system, product, and service roll-outs with the DOCOTR/TMR to facilitate implementation and minimize impact to end-users.

4.2.12 *The Technical Management Representative (TMR)* – In the case of an Enterprise approach, the TMR is responsible for ODIN Center Operations, and is accountable to the Enterprise DOCOTR, and ultimately the ODIN PM for meeting ODIN program and performance objectives.

4.2.13 *The Principal Center Integration Team (PCIT)* - The Principal Centers will interface with the NASA CIO and CIO Representatives Board through the Principal Center Integration Team (PCIT) which includes the Project Managers from the Communications Architecture, IT Security, Workgroup Hardware and Software Principal Centers, and a representative of the NASA CIO. The PCIT will recommend an integrated set of priorities and processes to the CIO Representatives Board for approval and resource commitment. Additional resource requests for baseline modifications or new starts will be presented to the IT Investment Council for decision after the Principal Centers recommendations and implementation strategies are provided to the CIO Representatives Board. The ODIN vendors will work with the PCIT, as well as all applicable IT working groups, to ensure compliance with appropriate NASA standards, and to propose new technologies/standards.

5. PROGRAM REQUIREMENTS

5.1 *Overview* - The ODIN Program will transfer to the commercial sector the responsibility and risk for providing and managing the majority of NASA's desktop, server, and intracenter communication assets and services. Each desktop in ODIN (referred to as a "seat") will be bundled with IT support services, including hardware and software acquisition, installation, maintenance, technology refreshment, administration, customer support, electronic mail (E-mail), print and file services, relocation, and training. ODIN should transform desktop computing into a commodity within NASA, enabling NASA to shift personnel and other resources currently supporting these functions to R&D functions supporting core missions. In turn, this should reduce the cost to deliver computing and communications services and facilitate the management of these distributed computing assets through the evolution of more common environments. Embracing commercial practices of using common solutions for common problems, wherever practical, will lead to improved productivity, cost management, and enhanced interoperability.

The ODIN Program will secure desktop, server and intracenter communications services from a single commercial source for each Center (or at the option of an Enterprise, for the Enterprise) and infuse optimization realized by using standard commercial practices. ODIN is expected to support the majority of such computing assets at a Center. However, Center Directors may acquire alternatives to ODIN where ODIN is an ineffective or inappropriate solution to support core Center R&D missions. Headquarters and every Center, with the exception of the Jet Propulsion Laboratory (JPL), will use ODIN. JPL may use ODIN; however, JPL has embarked on its own outsourcing vehicle. Nonetheless, JPL has agreed to periodically review (at appropriate times) their outsourcing arrangement vis-à-vis ODIN and pursue that arrangement which best meets the needs of the Federal Government.

5.2 *Requirements* - ODIN technical performance goals and indicators are described in Paragraph 2, above. Each level 1 metric (i.e., service delivery, availability, and customer satisfaction), is described in more detail below.

5.2.1 *Service Delivery Metric* - Service delivery will measure, as a percentage, the frequency of action requests being responded to, and successfully completed, within the contractually defined service requirement. An action request will be considered successfully completed when the vendor has correctly implemented the move/add/change request, or the vendor has successfully concluded a 'return to service' (where the problem is resolved by restoring the user's system to full service functionality and the user's data is accessible) within the time requirement specified in the ODIN Service Model.

$$\text{Service Delivery} = 100 * \left(\frac{N_c}{N_s + N_d} \right)$$

Where:

N_c = Total number of actions completed within the specified service level during the reporting period.

N_s = Total number of actions scheduled to be completed within the reporting period.

N_d = Total number of delinquent actions from the prior reporting periods.

5.2.2 *Availability Metric* - The vendor will record all scheduled and unscheduled outages, and the number of users affected for each ODIN service. The seat/system is considered available when the entire hardware and software configuration of the seat/system operates correctly at the subscribed service level. A seat/system is defined as unavailable when the vendor discovers a problem or is otherwise notified of a problem (for example, a trouble ticket is generated).

Availability percentage shall be calculated as the percentage of time the ODIN services are available and fully functional to the end user.

$$\text{Availability} = 100 - \frac{75 * \sum(\text{PDT} * \text{Users Affected})}{(\text{PHP} * \text{Total Users})} - \frac{25 * \sum(\text{NPDT} * \text{Users Affected})}{(\text{PHN} * \text{Total Users}) - \sum(\text{SO} * \text{Users Affected})}$$

Where:

PDT = Prime Downtime: The downtime impacting Prime Time ODIN Services (in hours).

NPDT = Non-Prime Downtime: The downtime impacting Non-Prime Time ODIN Services (in hours).

PHP = Possible Hours during prime time: The total system availability period (in hours) during prime time.

PHN = Possible Hours during non prime time: The total system availability period (in hours) during non-prime time.

SO = Scheduled Outages: Scheduled Outage during non-prime time (in hours).

5.2.3 *Customer Satisfaction Metric* - Customer satisfaction will be measured using commercial/broad, industry-accepted practices and objective evidence, based on a statistical approach specified by the vendor and found acceptable to the Government (i.e., selected customer surveys, comment forums). The metric will measure the user's determination of the accuracy, completeness, consistency, effectiveness, timeliness, and overall quality of the service provided by the vendor. The primary measure is the percent of respondents who choose a score above the neutral level ('satisfied' or greater on an adjective scale, or above the mid point on a numeric scale).

5.2.4 *Vendor Specific Metrics (Level 2)* - Vendor specific metrics will augment or provide greater detail than Level 1 metrics (paragraph 5.2.1, 5.2.2, and 5.2.3) and identify key specific areas of interest (such as the measurement of proactive, vendor-discovered versus user- discovered, problems). These metrics will be specified by the vendor and will be used to augment, validate, and ensure the completeness of the Level 1 metrics; however, regular reporting of vendor-specific metrics to the Government is not required. These metrics will also be used to ensure the impartiality, effectiveness, and consistency of the overall metric gathering and reporting process. These metrics shall be made available to the Government or its agents.

5.2.5 *Trend Metrics (Level 3)* - The Vendor will create a set of metrics, comprised of the previously reported Level 1 and vendor-specific metrics which will allow for the evaluation of time-based trends. These metrics will illustrate ODIN service level trends over the previous 3-month or greater period. These metrics shall be made available to the Government or its agents.

5.3 *Metric Terms* -The following metric terms will be used for the ODIN Program.

5.3.1 *Availability* is the amount of time the system(s), or the total system, is working such that the customer can utilize the ordered ODIN-provided services.

5.3.2 *Customer satisfaction* is measure the user's determination of the accuracy, completeness, consistency, effectiveness, timeliness, and overall quality of the service provided by the Contractor.

5.3.3 *Downtime* is the period of time when an end user's access to ODIN services is impaired. Downtime for each incident shall be the period of time between the time of failure and the time that the system is returned to the Government fully operational. Events not within the control of the vendor will be evaluated by the COTR and may not be calculated as downtime. If the COTR defers the necessary repair of a system that has failed, downtime shall be suspended and operational use time shall accrue for the entire period that the COTR defers the repair. If the vendor repairs a failed system or component and there is a second, or subsequent, incident of the same failure within 3 business days of the previous repair, the system downtime shall accrue from the first incident until a repair finally corrects the malfunction. If a platform or server service fails to meet the performance specifications it was delivered under as defined in Attachment R, Technology Refreshment Baseline, it shall be considered down.

5.3.4 *Prime time* is defined as the ODIN standard hours of operation: 6:00 am to 6:00 pm local time on Monday through Friday, excluding Government holidays.

5.3.5 *Scheduled outage* is defined as maintenance, testing, or other vendor-initiated activity that impacts the user's ability to access ODIN services. If such outages are scheduled and the affected users are notified at least 3 business days in advance and the outage does not take place during prime business hours, then the outage is considered as a scheduled outage. If outages due to maintenance or testing take place during prime business hours, then those outages shall be counted as downtime.

5.3.6 *Total users* is defined as the total number of users that receive ODIN services.

5.3.7 *Users affected* is defined as follows:

In the calculation of the number of users and seats affected by outages, no user and/or seat shall be counted more than once per hour of downtime even if more than one of their ODIN services is not available. The total number of users and seats affected shall not exceed the number of end users or seats for whom ODIN provides services. If the number of users and seats affected cannot be measured with certainty, the Vendor shall estimate the number of users and seats affected using the rules below based upon the best information available, subject to COTR approval.

- *Connectivity Server, file, print, and related services* - When a resource is impaired or not available, those end users that have access rights to that resource shall be counted as affected. If the resource is accessible to all end users by default, or to a majority of end users by default, then the number of users in the organization to whom the resource is primarily assigned shall be counted as affected.
- *Connectivity Services (LAN Services)* - If the connectivity outage affects a user's access to ODIN services, those users shall be counted as affected.
- *Name Services* - The number of users affected shall be the number of entries in the name space who receive ODIN Communication Services (OCS).

- Desktop Seats - The number of end users who use an ODIN provided desktop seat (General Purpose, Scientific & Engineering, Maintenance, and Network Attached Device) shall be counted as affected.
- ODIN Communication Services (OCS) - If an OCS outage affects a user's access to their OCS service, the user shall be counted as affected.
- Server Services - The number of users affected shall be the average number of users accessing the services provided by the server per day.
- Remote Local Area Network (LAN) Connectivity (Including Remote Communications and LAN seats) - Each RC or LAN connection shall be counted as one user affected, however if an RC or LAN outage prevents desktop seats (GP, MA, SE, NAD) from accessing any of their ODIN provided services, those users shall be counted as affected.

6. Program Schedule

The ODIN master schedule reflects the point in time when the Center issues the due diligence letter, and culminates with ODIN implementation. Intermediate milestones include due diligence, receipt and evaluation of written proposals, oral presentation by participating vendors, vendor selection, and transition.

The schedule for the ODIN program is illustrated in the following exhibit. Each task bar represents the initiation of the Delivery Order Selection Process, culminating in the implementation of ODIN at the respective Center.

Location	Impl. Date	1999												2000															
		J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O
Goddard	12/01/1998																												
Kennedy	12/01/1998																												
Johnson	01/01/1999																												
Stennis	02/01/1999																												
Marshall	05/01/1999																												
HCFA	07/01/1999																												
Headquarters	03/01/2000																												
Glenn	07/01/2000																												
Dryden	07/01/2000																												
Ames	10/01/2000																												
Langley	11/01/2000																												

The ODIN Program is a FLI approved by the Administrator and will terminate only upon his direction. The ODIN contracts expire June 30, 2010, and, unless the ODIN Program is terminated, another set of ODIN contracts will be acquired in time to ensure continuity of performance. This will require a recompetition, which should begin no later than December 2008. There are no ODIN design reviews or further ODIN Program approval milestones. There will be Agency Program Management Council (PMC) reviews and Independent Audit Reviews (IAR's).

Schedule performance will be evaluated by assessing the extent to which the Centers deployed ODIN (i.e., executed delivery orders) in accordance with these schedule targets.

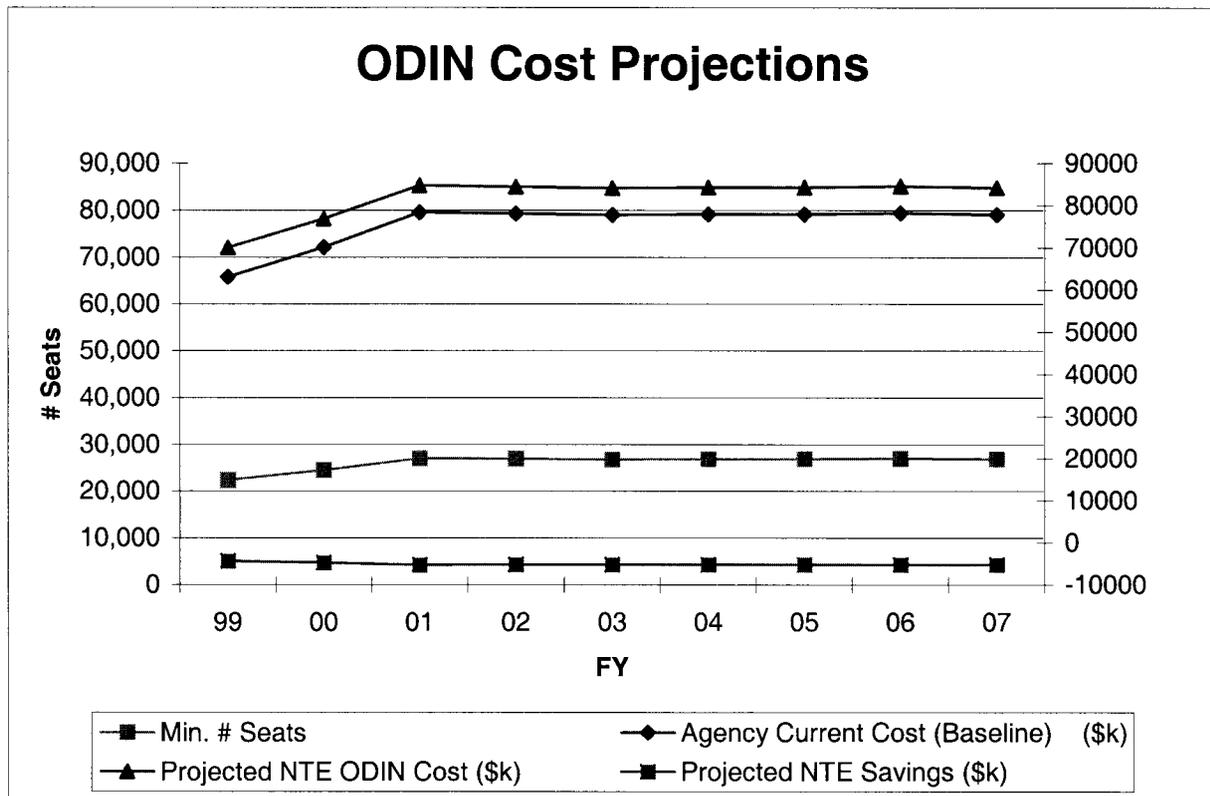
- Goddard Space Flight Center
Delivery Order NLT October 16, 1998
Implementation NLT November 2, 1998
- Kennedy Space Center
Delivery Order NLT October 30, 1998
Implementation NLT November 23, 1998
- Johnson Space Center
Delivery Order NLT October 30, 1998
Implementation NLT January 1, 1999

With respect to the reduction of civil service staff, the following are the minimum Enterprise ODIN seat and budget commitments. Enterprise civil service personnel requirements to manage and implement ODIN are included and expressed as Full Time Equivalents (FTE's).

	1999	2000	2001	2002	2003
Aero-Space Technology (Code R)					
Minimum Enterprise ODIN Seat Commitment	4,000	5,100	7,800	7,700	7,600
Minimum Enterprise ODIN Budget Commitment (\$k)	\$9,600	\$12,240	\$18,720	\$18,480	\$18,240
FTE's	8	8	8	8	8
Human Exploration and Development of Space (Code M)					
Minimum Enterprise ODIN Seat Commitment	12,700	15,000	14,800	14,800	14,800
Minimum Enterprise ODIN Budget Commitment (\$k)	\$25,298	\$29,880	\$29,482	\$29,482	\$29,482
FTE's	8	8	8	8	8
Earth Science (Code Y)					
Minimum Enterprise ODIN Seat Commitment	3,300	3,400	3,400	3,400	3,400
Minimum Enterprise ODIN Budget Commitment (\$k)	\$7,920	\$8,160	\$8,160	\$8,160	\$8,160
FTE's	2	2	2	2	2
Space Science Enterprise					
Minimum Enterprise ODIN Seat Commitment	0	0	0	0	0
Minimum Enterprise ODIN Budget Commitment (\$k)	0	0	0	0	0
FTE's	0	0	0	0	0
Headquarters (Code HQ)					
Minimum Enterprise ODIN Seat Commitment	0	1,000	1,000	1,000	1,000
Minimum Enterprise ODIN Budget Commitment (\$k)	\$0	\$2,400	\$2,400	\$2,400	\$2,400
FTE's	2	2	2	2	2

With respect to the evaluation of cost performance, the following approach will be used. First, baseline (BASELINE) costs for ODIN services will be derived. Second, projections of ODIN costs (PLAN) will be derived using normalized contract not-to-exceed costs provided by the ODIN vendors. Third, baseline savings will be derived by comparing the BASELINE costs to the PLAN costs. These will be plotted. Fourth, as Centers implement ODIN (i.e., complete their DOSP), specific ODIN costs will aggregated and normalized, and actual savings derived by comparing the DOSP costs to the PLAN costs and tracked on the plot. These will be charted and trends tracked and reported on a routine basis.

The following graph will be updated on a regular basis:



8. Relationships to Other Programs and Agreements

8.1 Internal NASA Agreements

The ODIN vendors are required to establish interface agreements/MOU's with each other, other IT service vendors, and Government project offices that are identified by each Center during the DOSP. These agreements will be configuration-controlled in accordance with ODIN's configuration management measures.

Interface agreements have already been established with the following projects:

Space Operations Management Office (SOMO) - On September 12, 1997, the ODIN Program Manager and the Director of Space Operations jointly sent a letter to Agency Officials-in-Charge discussing the Consolidated Space Operations Contract (CSOC) and ODIN and clarifying areas of responsibility and interface requirements. Specific interface requirements were included in the ODIN contract and were subsequently added to CSOC.

Integrated Financial Management Project (IFMP) - Specific responsibilities of the ODIN and IFMP vendors are specified in the ODIN contract. The ODIN Contractor shall be responsible for maintaining an end-user desktop environment that adheres to Agency desktop standards, and ensures continued successful access to IFMP servers. Similarly, the ODIN Contractor is responsible for coordination of all schedule and standards changes with the IFMP contractor.

8.2 External Agreements

General Services Administration (GSA) - GSA will offer ODIN services to other Federal agencies on a no cost basis to NASA. GSA will maintain a record of other agency's use. NASA is responsible for supporting GSA efforts through joint briefings at trade-shows. These commitments will be documented in a Memorandum of Understanding.

National Standards Testing Laboratory (NSTL) - NSTL will establish and maintain a technology refreshment performance profile which serves as the basis for hardware refreshment under the ODIN contract. This is a Purchase Order agreement that will either be transferred to GSA or maintained by NASA, depending upon a funding decision by GSA. NASA's current preference is for GSA to include the cost of NSTL services in its charging algorithm to other agencies. Notwithstanding, cost recovery is problematic if no other agency uses ODIN, as such NASA is including the costs for NSTL services through 2000.

9. Acquisition Strategy

On June 17, 1998, GSFC awarded seven commercial item, performance-based, indefinite-delivery, indefinite-quantity contracts to form a vendor pool for ODIN, using full and open competition. The seven ODIN vendors are:

- Boeing Information Services, Inc.
- Computer Sciences Corporation
- DynCorp
- Federal Data Corporation
- Intellisource Information Systems, Inc.
- OAO Corporation
- WANG, Inc.

Each Center (or in some cases, an Enterprise) will select a single provider following a DOSP specified in the ODIN contract. The initial period of performance for Center/Enterprise delivery orders will be 3 years, with the option for sole-source logical follow-on orders. The period of performance for ordering under ODIN will be 9 years from the date of contract award, not to exceed June 30, 2010. However, a delivery order may be issued which extends beyond the 9-year term, as long as the period of performance does not extend beyond June 30, 2010. The period of performance for each delivery order placed against the contract will not exceed 3 years.

Under an arrangement with GSA, the ODIN contracts will be available for use by other Federal agencies through an ordering process administered by GSA at no cost to NASA.

10. Commercialization Opportunities

There are no commercialization opportunities associated with the ODIN program.

11. Technology Assessment

The ODIN contract has been designed to ensure that all products and services delivered under the contract keep pace with technology. Notwithstanding, there are no technologies specific to the ODIN program that are expected to mature during the life of the program.

12. Data Management

There are no science data management requirements associated with the ODIN program.

13. Risk Management Strategy and Contingency Planning

There are six major categories of risk defined within the ODIN program. Each area of risk and mitigation plans are described in the following sections.

13.1 *Interoperability Risks (Within ODIN)* - Maintaining and improving upon the existing intraAgency interoperability posture is critical to ODIN's success. The CIO publishes and will continue to publish, as well as upgrade, the Agency's IT architectures and standards. The ODIN vendors will comply with Agency, Enterprise, and Center standards. It will be a challenge and continuing obligation of each delivery order vendor to ensure that they do not compromise interoperability as they deploy products, especially as they refresh technology. The ODIN contracts require the vendors to comply with processes, including configuration management measures, to mitigate against this risk. (Note: Year 2000 risks have been specifically addressed within the ODIN contract; vendors must ensure that all hardware and software products/services provided under the ODIN contract be Year 2000 compliant by March 31, 1999.)

13.2 *Other Integration Risks (Outside ODIN)* - Closely related to the previous risk, ODIN's desktop and intracenter communication architecture is closely aligned with other major initiatives, including IFMP and CSOC, and those vendors providing non-ODIN computing and communications services; literally every Center will have some integration requirements. Managing the interfaces among these differing vendors and services will be a continuing challenge. The ODIN contracts require the vendors to establish and comply with interface agreements (e.g., Interface Control Documents—ICD's) with IFMP and CSOC vendors and with all other affected vendors and NASA project offices identified by Centers during the DOSP. In addition, the CIO Representatives Board and other affected IT-related program/project offices will work together to ensure ongoing integration. To ensure smooth operation during these tightly coupled events, the IFMP vendor will be made responsible for the IFMP servers with which ODIN will be interfacing.

13.3 *Managing the Customer's Expectation* - ODIN introduces a cultural shift in the way the Agency manages its desktop environment. While NASA today does employ vendors to provide the majority of support to these assets, ODIN will introduce a number of significant changes—end-users have expressed apprehension about the affect of those changes. These anxieties need to be managed. ODIN needs to be aware and attempt to mitigate the impact of these changes, and to work with the Center IT provider organizations or with end-users to the extent that Center IT provider organizations agree, to ensure that these changes are managed effectively and to ensure that there is no degradation in service and that service is enhanced. The ODIN contracts also allow for extensive tailoring of the services provided to avoid impacting the productivity of users with unique requirements.

13.4 *Smart Buyer Capability* - While NASA is reserving the authority and responsibility to establish the Agency, Enterprise, and Center IT architectures and standards, the ODIN vendors will deliver the systems and components to meet NASA needs. In the past, NASA had considerable authority over such decisions and maintained a high degree of technical expertise to ensure that vendor proposals were prudent and in the best long-term interests of NASA. Regardless of ODIN, NASA must maintain a high level of technical competence and currency that, at a minimum, ensures the strategic direction for IT continues to evolve in alignment with the strategic goals for the Agency, Enterprises, and Centers and determines that requirements are being met. This risk will be mitigated in four ways-- (1) NASA will not be converting all its services to ODIN-provided, therefore, there will continue to be a cadre of technically proficient civil service personnel at each Center; (2) NASA will retain responsibility for overall ODIN system configuration and control, which will require considerable expertise in systems engineering and integration and (at a certain level) product knowledge; (3) opportunities will be afforded NASA civil service personnel to develop and maintain the necessary levels of expertise through participation in IT-related technology development efforts within NASA control; and (4) the ODIN Program Office has acquired the services of the National Standards Testing Laboratory (NSTL), whereby NASA will retain considerable authority over, and visibility into, emerging technologies (at the component level) and can meaningfully affect the technology refresh cycle.

13.5 *Cost Objectives* - An objective of the ODIN Program is to reduce cost and improve cost management and containment. The latter is achievable since actual costs will be accumulated and permit the management of services from a cost-benefit perspective. However, it has proven difficult to establish a consensus cost baseline of NASA's current investments from which to project a ROI savings. Regardless of the reasons, the ODIN Program Office and the Centers have been forced to estimate the cost of the current baseline. Notwithstanding their best efforts, there is considerable skepticism about the baseline, i.e., there is too much Center disparity even after normalizing, and the specific Center and Agency aggregate costs are out of line with industry experience (as presented by independent observers). If the baseline is too low, there is a risk that ODIN will be unable to demonstrate an adequate ROI to

validate the investment. Agency management, including the CIC, has been continually apprised of the challenges presented by this problem and has continued to endorse the program. There is a recognition that the competitive process should achieve an optimum cost to the Agency for the services solicited. If costs are too high because of the uniqueness of Agency services, they can be adjusted. Also, vendors have incentives to recommend and implement cost saving approaches. To mitigate this risk further, the ODIN Program has developed a methodology to baseline the expected ROI and then track progress against that baseline—a declining cost trend line will help validate the cost premise. The ODIN Program Office will continually validate the accuracy of the baseline as the DOSP progresses and firmer ODIN costs are known. Finally, the Agency has both the CIC and the IAR process to validate the ROI projections on a periodic basis.

13.6 *Vendor Performance* - NASA requires IT to accomplish its missions. The ODIN contract requirements are challenging (especially those involving security and interoperability) but manageable, we, therefore, perceive contract performance risks are manageable. However, NASA could not tolerate vendor failure since comparable NASA resources are being or already have been reduced or reallocated, as such, we need to mitigate against this risk. This has been accomplished by ensuring that there is a pool of ODIN vendors from which to choose. Also, no delivery order will be written for more than 3 years. These will ensure a heightened degree of motivation for incumbent vendors to meet NASA's expectations. Other provisions in the contracts ensure sound management practices will be followed and that there are clear lines of accountability, as well as open communication channels.

14. Logistics

Plans and provision of logistics required to support ODIN work are coordinated at the Center level.

15. Test and Verification

All ODIN Vendors are jointly and mutually responsible for all system-level and product-level integration testing to ensure interoperability and functionality, as well as compliance with Agency and Center IT standards and architectures.

16. Reviews

Each NASA Enterprise Associate Administrator is responsible for all ODIN progress within their respective areas. They ensure that each Center develops a Project Plan that outlines and schedules all technical activities, allocates appropriate resources, and meets reporting and review requirements. Detailed implementation plans, schedules, and status are reviewed and approved at Center, Enterprise, and ODIN program levels, as necessary. Center PMC's conduct quarterly reviews, at a minimum, on ODIN project status. The Center CIO Representative and the Center ODIN DOCOTR/TMR support the Center Director in evaluating and verifying ODIN performance at their Center.

NASA EAA's and Enterprise CIO Representatives review and verify performance reports from their respective Centers. The Enterprise ensures that critical program or Center-level activities are not falling behind schedule by frequently collecting detailed status or performance reports. Center performance reports are verified through follow-up discussions between the Center and Enterprise management.

The NASA ODIN Program Manager is responsible for monitoring the performance of the entire NASA ODIN program and keeping the NASA CIO informed. This includes collecting, reviewing and verifying ODIN performance across all Enterprises and Centers. The NASA ODIN Program Manager completes a final validation and verification of performance reports by comparing Enterprise and Center performance reports with respective plans and schedules. The Program Manager also works to continually monitor the performance of the NASA ODIN program through 1) bi-weekly ODIN teleconferences with ODIN Center managers, 2) reviews with the Enterprise and Center CIO Representatives, and 3) by working on various ODIN issues with Enterprise and Center-level personnel on a daily basis.

Annual independent reviews of the ODIN Program will be conducted beginning no later than June 30, 2000.

17. Change Log

This section will contain a log of changes to the Program Plan.

Date	Event	Change	Addendum	Cancellation Review Req'd	Program Manager Signature	CIO Signature