TO: AO/Chief Information Officer
FROM: W/Assistant Inspector General for Auditing
SUBJECT: Final Report on Delivery Order Placement Under Outsourcing Desktop Initiative Contracts
Assignment No. A-HA-98-046
Report No. IG-99-003

The subject final report is provided for your use. Please refer to the Results in Brief section for the overall audit results. Your comments on a draft of this report were responsive to our recommendations. Our evaluation of your responses has been incorporated into the body of the report. The report's three recommendations will remain open for reporting purposes pending implementation of planned and ongoing corrective actions.

If you have questions concerning the report, please contact Mr. David L. Gandrud, Program Director, Information Technology Program Audits, at (650) 604-2672, or Mr. James Hoogoian, Auditor-in-Charge, at (818) 354-9754. We appreciate the courtesies extended to the audit staff. See Appendix C for the report distribution.

[original signed by]
Russell A. Rau

Enclosure

cc: B/Chief Financial Officer
G/General Counsel
M/Associate Administrator for Space Flight
R/Associate Administrator for Aeronautics and Space Transportation Technology
Y/Associate Administrator for Earth Science
JM/Director, Management Assessment Division
REVIEW REPORT

DELIVERY ORDER PLACEMENT UNDER OUTSOURCING DESKTOP INITIATIVE CONTRACTS

NOVEMBER 10, 1998

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ACRONYMS

CIO       Chief Information Officer
NPD      NASA Policy Directive
NPG      NASA Procedures and Guidance
ODIN    Outsourcing Desktop Initiative for NASA
PCA     Program Commitment Agreement
PMC    Program Management Council
Introduction

The NASA Office of Inspector General performed a review of delivery order placement under the Outsourcing Desktop Initiative for NASA (ODIN) contracts. Our overall review objective was to assess the Agency’s readiness to place scheduled delivery orders. Specifically, we reviewed NASA’s process for identifying “lessons learned” from desktop outsourcing and the management of delivery order placement. To satisfy our review objectives, we conducted interviews from July 21, through September 11, 1998, at NASA Headquarters, Goddard Space Flight Center, John F. Kennedy Space Center, and the Jet Propulsion Laboratory. Also, we reviewed documents, dated August 1997 through September 1998, related to the ODIN contract and overall program management activities.

Results in Brief

NASA can improve its readiness to place ODIN delivery orders by implementing an effective program management process. Key documents such as the Program Commitment Agreement and program plan and an overall risk management process have not been approved and put into effect as required by NASA policy. Improved program management will help NASA identify and benefit from lessons learned from outsourcing and effectively manage ODIN delivery order placement.

Background

ODIN is a long-term, outsourcing arrangement in which NASA transfers to the commercial sector the responsibility and risk for providing and managing the majority of the Agency’s desktop, server, and intra-Center communications services. On June 18, 1998, NASA awarded 9-year contracts to seven companies for ODIN services. NASA will award delivery orders to one or more of the seven companies. The period of performance for each delivery order will not exceed 3 years. The Agency estimated the value of the delivery orders at up to $13.1 billion over the potential, 9-year life of the contracts.

As of September 8, 1998, NASA established a delivery order schedule (see Appendix A) based on the Centers’ expected readiness to receive ODIN contractor services. NASA will issue delivery

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1 A delivery order is a formal agreement made under an Outsourcing Desktop Initiative for NASA (ODIN) contract that definitizes the quantity and delivery date for ODIN services.
orders for five Centers in October and November 1998. The Agency will delay issuing delivery orders for the remaining five Centers until August 1999 through August 2000 to allow existing contracts for ODIN-type services to expire, to complete studies on alternatives to contractor selection, and to learn from other Centers’ outsourcing experiences.

On April 17, 1998, the Chief Information Officer (CIO) formalized the requirement for the Program Management Council (PMC) to provide oversight of ODIN activities. The PMC, composed of NASA senior managers, is chaired by the Deputy Administrator and is responsible for reviewing and recommending approval of proposed programs and for overseeing their implementation according to Agency commitments, priorities, and policies.

Program Management

Finding. The Agency can improve its readiness to place delivery orders by executing a Program Commitment Agreement (PCA), a program plan, and a risk management process. The Agency had not implemented those controls because of changes in key ODIN management oversight positions. The additional controls will help NASA identify lessons learned for use in establishing the delivery order schedule and in making better decisions affecting the delivery order implementation process.

On April 17, 1998, at the direction of Agency senior management, the NASA CIO required the ODIN program to comply with NASA Policy Directive (NPD) 7120.4A and NASA Procedures and Guidance (NPG) 7120.5A. NPD 7120.4A states that the NASA Administrator will approve the PCA, a document that forms the basis for the program plan. NPG 7120.5A describes the information that will be included in the PCA and program plan. Specifically, the PCA documents the Agency’s commitment to accomplish ODIN program objectives. The program plan defines the program concept and performance objectives and describes agreements, approaches, and plans for meeting the technical, budget, schedule, risk management, commercialization, acquisition, and related management system requirements. Together, the PCA and program plan provide responsible management with an understanding of ODIN program objectives, plans, and requirements and commit responsible management to providing resources to support the ODIN program.

Management should use the PCA and program plan to compare ODIN program activities to program objectives, plans, and requirements. The comparison will enable management to effectively identify variances between planned and actual activities and, in turn, lessons learned

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2 Agency policy defines risk as the combination of the probability that a program will experience an undesired event and the consequences if the undesired event were to occur.
4 The Chief Information Officer, the NASA Administrator, the Associate Administrator for Headquarters Operations, the four Enterprise Associate Administrators, and all Center Directors (with the exception of the Director, Jet Propulsion Laboratory) will sign the ODIN PCA. The ODIN program manager, the NASA Chief Information Officer, the four Enterprise Associate Administrators, and Center Directors (with the exception of the Director, Jet Propulsion Laboratory) will sign the program plan.
from the Agency’s outsourcing experiences. Management needs to consider the lessons learned when assessing NASA’s readiness to place delivery orders and when implementing delivery orders.

Due to changes in key management positions, ODIN management has not yet executed a PCA or program plan as required by NASA policy. Specifically, the CIO for the Office of Earth Science prepared a draft PCA for ODIN but left NASA before completing the draft. The NASA CIO will complete the PCA. On July 14, 1998, the NASA CIO directed the current ODIN program manager to prepare a program plan; this program manager assumed his position on July 7, 1998. At the completion of our review, the ODIN program manager was still developing the plan.

In addition to needing a PCA and program plan, the ODIN program manager needs to implement a risk management process for use in assessing the Agency’s readiness to place delivery orders and in implementing the outsourcing process. NPD 7120.4A and NPG 7120.5A require a thorough assessment of technical, cost, and schedule risks. The NPG expands on those requirements to state that the program team shall implement a continuous risk management process that will identify risk and its effects, prioritize risks for mitigation or elimination, and maintain a risk management plan. Risk management shall include a process that identifies, analyzes, tracks, controls, documents, and communicates risks. A risk management process is needed to help communicate the results of risk analyses to the program team members and to help minimize adverse effects on ODIN delivery order placement and implementation.

Program team members had addressed several risks during the period leading up to contract award on June 18, 1998. For example, at a CIO Board Meeting on June 2, 1998, a representative of the ODIN program team briefed attendees regarding high-risk areas, including information technology interoperability, cost objectives, and contract integration. While those actions are steps in the right direction, a risk management process that would be implemented throughout the delivery order implementation phase of ODIN should be established as required by NPG 7120.5A.

**Recommendations for Corrective Action**

**Recommendation 1.** The NASA Chief Information Officer should submit an ODIN PCA to the NASA Administrator for review and approval.

**Management's Response**

Concur. The draft PCA has been completed and the NASA Chief Information Officer is reviewing it. Every effort will be made to ensure compliance with NASA Procedures and Guidelines 7120.5A, as it applies to the PCA. The complete text of management's response is in Appendix B.

**Evaluation of Management's Response**

The actions are responsive to the recommendation.
**Recommendation 2.** The ODIN program manager should complete and execute a program plan for ODIN.

**Management's Response**

Concur. Development of the program plan is under way.

**Evaluation of Management's Response**

The action is responsive to the recommendation.

**Recommendation 3.** The ODIN program manager should establish a continuous risk management process that will identify risk and its effects, prioritize risks for mitigation or elimination, and maintain a risk management plan.

**Management's Response**

Concur. The ODIN program manager will establish and maintain a continuous risk management process. The process will include prioritization of risks for mitigation and elimination.

**Evaluation of Management's Response**

The planned actions are responsive to the recommendation.
## Appendix A

### ODIN Delivery Order Issue Dates

<table>
<thead>
<tr>
<th>NASA Enterprise</th>
<th>NASA Center</th>
<th>Delivery Order Date</th>
</tr>
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<tbody>
<tr>
<td>Office of Space Flight</td>
<td>John F. Kennedy Space Center</td>
<td>November 1998</td>
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<td></td>
<td>Lyndon B. Johnson Space Center</td>
<td>November 1998</td>
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<td></td>
<td>John C. Stennis Space Center</td>
<td>November 1998</td>
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<td></td>
<td>George C. Marshall Space Flight Center</td>
<td>November 1998</td>
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<tr>
<td>Office of Earth Science</td>
<td>Goddard Space Flight Center</td>
<td>October 1998</td>
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<tr>
<td>Office of Aero-Space Technology *</td>
<td>Lewis Research Center</td>
<td>August 1999</td>
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<tr>
<td></td>
<td>Dryden Flight Research Center</td>
<td>May 2000</td>
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<td></td>
<td>Langley Research Center</td>
<td>June 2000</td>
</tr>
<tr>
<td></td>
<td>Ames Research Center</td>
<td>June 2000</td>
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<tr>
<td></td>
<td>NASA Headquarters</td>
<td>May 2000</td>
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</tbody>
</table>

* Previously the Office of Aeronautics and Space Transportation Technology

The Office of Space Flight will issue delivery orders to the same contractor for all Office of Space Flight Centers. John C. Stennis Space Center and George C. Marshall Space Flight Center will delay transition to the selected contractor until December 1998 and February 1999, respectively, to accommodate expiration of their existing contracts.

The Jet Propulsion Laboratory (a Government-owned, contractor-operated facility) outsourced its ODIN-related services to a single contractor in February 1998.
TO: NASA Headquarters  
Attn: W/ Assistant Inspector General for Auditing

FROM: 100/Director


On behalf of the NASA Chief Information Officer, GSFC is pleased to respond to the subject draft report.

Thank you for providing us with an assessment of our readiness and management controls associated with the placement of delivery orders under the ODIN contract. We concur with the three OIG recommendations for action to further improve program management processes that will help NASA identify and benefit from lessons learned from outsourcing and effectively manage ODIN delivery order placement. The enclosure describes actions to be taken in response to those recommendations.

Please call Ms. Barbara Sally, GSFC Audit Liaison Representative, at 301-286-8436 if you have any questions or need further assistance.

A. V. Diaz

Enclosure

cc:  
HQ/AO/Mr. L. Holcomb  
HQ/AO/Ms. C. Simonson  
HQ/JM/Ms. D. Green  
HQ/YB/Mr. Q. Williams  
HQ/YB/Ms. D. Santa
APPENDIX B

GODDARD SPACE FLIGHT CENTER

RESPONSE TO

OFFICE OF INSPECTOR GENERAL (OIG)

DRAFT REVIEW REPORT ON

DELIVERY ORDER PLACEMENT UNDER

OUTSOURCING DESKTOP INITIATIVE FOR NASA (ODIN) CONTRACTS

A-HA-98-046

DATED SEPTEMBER 24, 1998

DATE OCT 25 1998

ENCLOSURE
OIG RECOMMENDATION 1: ($0)

The NASA Chief Information Officer should submit an ODIN Program Commitment Agreement (PCA) to the NASA Administrator for review and approval.

GSFC RESPONSE TO RECOMMENDATION 1: ($0) CONCUR

The draft PCA has been completed and is in review. Every effort will be made to ensure compliance with NASA Procedures and Guidelines (NPG) 7120.5a, as it applies to the PCA.

- Action Official: GSFC/200/M. Hagerty/ODIN Program Manager
- Closure Official: GSFC/200/S. Foster/Director, Management Operations
- Concurring Official: HQ/AO/L. Holcomb/NASA Chief Information Officer
- Projected Closure Date: November 4, 1998

OIG RECOMMENDATION 2: ($0)

The ODIN program manager should complete and execute a program plan for ODIN.

GSFC RESPONSE TO RECOMMENDATION 2: ($0) CONCUR

Development of the program plan is underway.

- Action Official: GSFC/200/M. Hagerty/ODIN Program Manager
- Closure Official: GSFC/200/S. Foster/Director, Management Operations
- Concurring Official: HQ/AO/L. Holcomb/NASA Chief Information Officer
- Projected Closure Date: November 30, 1998

OIG RECOMMENDATION 3: ($0)

The ODIN program manager should establish a continuous risk management process that will identify risk and its effects, prioritize risks for mitigation or elimination, and maintain a risk management plan.

GSFC RESPONSE TO RECOMMENDATION 3: ($0) CONCUR

The ODIN program manager will establish and maintain a continuous risk management process and plan that will address all risks identified in the program plan, including prioritization of those risks for mitigation and elimination.

- Action Official: GSFC/200/M. Hagerty/ODIN Program Manager
- Closure Official: GSFC/200/S. Foster/Director, Management Operations
- Concurring Official: HQ/AO/L. Holcomb/NASA Chief Information Officer
- Projected Closure Date: December 15, 1998
Appendix C

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The Honorable Pete Sessions, U.S. House of Representatives
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