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AUDIT REPORT

OFFICE OF AUDITS

**NASA IMPLEMENTED THE PROJECT MANAGEMENT
INFORMATION IMPROVEMENT (PMI²) INITIATIVE BUT
CROSSWALK AND TRAINING NEED TO BE COMPLETED**

OFFICE OF INSPECTOR GENERAL



National Aeronautics and
Space Administration

REPORT No. IG-07-002 (ASSIGNMENT No. A-05-026-00)

Final report released by:



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Acronyms

AWCS	Agency-wide Coding Structure
BPA	Blanket Purchase Agreement
CRR	Center Readiness Review
FAR	Federal Acquisition Regulation
FY	Fiscal Year
IEM	Integrated Enterprise Management
IEMP	Integrated Enterprise Management Program
NSM	NASA Structure Management
OCFO	Office of the Chief Financial Officer
OIG	Office of Inspector General
ORR	Operational Readiness Review
PMI ²	Project Management Information Improvement

IN BRIEF

**NASA IMPLEMENTED THE PROJECT MANAGEMENT
INFORMATION IMPROVEMENT (PMI²) INITIATIVE BUT
CROSSWALK AND TRAINING NEED TO BE COMPLETED**

The Issue

In fiscal year (FY) 2005, NASA initiated the Project Management Information Improvement (PMI²) initiative to expand the functionality of the Core Financial system to better meet the needs of the Agency. PMI² was to accomplish that goal by aligning NASA's many technical work breakdown structures¹ with the financial work breakdown structures in the Core Financial system. NASA expected the alignment of the work breakdown structures to result in a more consistent historical data set on which to base future cost estimates. Through PMI², which cost \$16.5 million, NASA implemented the new financial structure, NASA Structure Management (NSM), and linked NASA's project data from the prior Agency-wide Coding Structure (AWCS) to NSM. Since NASA submitted its FY 2006 budget in the NSM format, it was critical that NASA implement PMI² by the start of FY 2006 so that the Agency could distribute funds and record financial transactions in the new structure. The Office of Inspector General (OIG) performed a review to assess Centers' readiness to implement PMI² and to ensure that all appropriate personnel received the requisite training. Details of the review's scope and methodology are in Appendix A.

Results

NASA implemented PMI² on schedule and our review disclosed no material discrepancies related to the implementation. Specifically, we found that NASA successfully implemented the new NSM work breakdown structures on October 11, 2005, and established all mission-critical project financial structures in NSM for FY 2006; the Centers communicated basic information regarding PMI² implementation to Center personnel through various media; and the implementation of PMI² provided NASA with a standardized data structure for ongoing and new projects. As of October 2006, however, NASA had not completed crosswalking projects from 2005 and prior years, for which the Agency did not plan any obligations in FY 2006, to the new NSM structure. This crosswalking project is over 10 months behind schedule, and its anticipated completion

¹ A work breakdown structure is a product-oriented hierarchical division of the hardware, software, services, and data required to produce a program or project's end product, structured according to the work that is performed.

date has slipped twice. Compounding this issue is the fact that NASA has not established a new schedule for completing the crosswalk. Also, NASA has no assurance that its project and resource managers have been adequately trained to correctly run and analyze financial reports in the new PMI² format necessary to effectively manage their projects.

In addition, in performing our work, we identified an internal control weakness. We found that NASA procedures allow some individuals to have active Core Financial system accounts for up to 180 days after separating from NASA. That weakness was previously reported by NASA's financial statement auditors who reported the condition in the last two financial statement audits and made recommendations for corrective action. We referred this issue to the OIG Information Technology and Financial Statement Directorates in the OIG's Office of Audits (see Appendix A).

Management Action

We recommended that the NASA Chief Financial Officer provide us with a schedule for completing the crosswalk of project data from AWCS to NSM and notify us when the crosswalk is complete. In addition, we recommended that the Director of the Marshall Space Flight Center (Marshall) ensure that all future contract deliverables required under the Integrated Enterprise Management Program (IEMP) contain accurate and reliable data. We also recommended that the Integrated Enterprise Management (IEM) Program Director solicit each Center Director to determine the status of the training, take appropriate action to ensure that all employees who require training are targeted, and that all targeted employees complete the necessary PMI² training courses.

In response to a draft of this report, the IEM Program Director, with input from the Headquarters and Marshall Offices of the Chief Financial Officer and the Marshall Office of the Chief Information Officer, concurred with the first and second recommendations but nonconcurred with the third (see Appendix E). The Headquarters Office of the Chief Financial Officer (OCFO) concurred with the first recommendation, stating that the remaining 1.5 percent of the crosswalk will be completed by the end of the second quarter of FY 2007. The Director of the Marshall Space Flight Center concurred with the second recommendation; the response addressed clarification of roles and responsibilities with regard to contract deliverables. The IEM Program Manager nonconcurred with the third recommendation concerning targeted employees and necessary training. He stated that the need and original goals for PMI² training have been overcome by the planned SAP Version Update² training.

We consider management's comments responsive to Recommendations 1 and 3, and both recommendations are resolved. Recommendation 1 will remain open pending our receipt

² Systems Applications and Products (SAP) R/3 is the software foundation for NASA's Core Financial system. The IEM Program Office initiated the SAP Version Update in September 2005 to update the SAP R/3 software.

of notification that the crosswalk has been completed. We will close Recommendation 3 upon issuance of this report.

We consider management's comments to be nonresponsive to Recommendation 2 because the response does not address content or accuracy of contract deliverables. We request that Marshall provide additional comments to the final report addressing how it will ensure that all future deliverables under the IEMP implementation contract contain (1) specific requirements for form and content and (2) accurate information. We request the additional comments for Recommendation 2 by December 20, 2006.

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INTRODUCTION

Background

NASA has a long, well-documented history of financial management issues. The Agency has been on the Government Accountability Office's high-risk list for ineffective contract management since 1990 due primarily to a nonintegrated financial management system that has weakened NASA's ability to oversee its procurement dollars, which make up approximately 74.9 percent of NASA's FY 2007 budget. In June 2003, NASA implemented the Core Financial system as NASA's Agency-wide, integrated financial system.

NASA Reorganization. In June 2004, NASA's Program Management Committee and Strategic Planning Council approved the reorganization of NASA to streamline the Agency and position it to implement the President's Vision for Space Exploration. The reorganization restructured NASA's Strategic Enterprises into Mission Directorates, restructured Headquarters' support functions, clarified NASA's organizational roles and responsibilities, and revised the NASA financial structure. At the time of the June 2004 reorganization, NASA used its Agency-wide Coding Structure (AWCS) to identify and classify all NASA financial activity for planning, budgeting, accounting, and reporting, captured by cost codes called unique project numbers. However, unique project numbers were not standardized throughout NASA. For instance, while several Centers may have worked on different aspects of the same project, each Center developed its own coding structure, using various Center-specific project numbers to record and report financial information. Using a variety of Center-specific numbers to identify one multi-Center project made it difficult to accumulate total project costs across Centers.

PMI² Project. In December 2004, NASA approved the initiation of PMI² to implement a standard work breakdown structure across all NASA Centers. The IEM Program Executive Officer had overall responsibility for implementation of PMI², which cost \$16.5 million, according to IEMP estimates. The PMI² Project Team, located in Huntsville, Alabama, was responsible for planning, managing, and implementing PMI². Through PMI², NASA executed a new Agency-wide budget structure—NASA Structure Management (NSM)—to align the technical and financial work breakdown structures in the Core Financial system to provide better project management information and aid in decision making. NASA had originally planned a second phase of PMI² to expand the capability of cost data to meet project management requirements and support earned

value management.³ After we started our audit, NASA incorporated the second phase of PMI² into the update of the Core Financial system scheduled for the start of FY 2007.

PMI² Contract Support. Accenture LLP of Reston, Virginia (Accenture), was NASA's primary Agency-wide support contractor for the implementation of PMI². In February 2004, Marshall awarded Blanket Purchase Agreement (BPA) NNM04AA17Z to Accenture, with a not-to-exceed value of \$200 million, for the implementation of administrative systems related to IEMP. On June 21, 2005, Marshall issued the task order for Job 12, "PMI² Phase I," a firm-fixed-price task order under BPA NNM04AA17Z that included travel costs and an incentive fee for an estimated total of \$3,438,998. This task order required Accenture to submit 22 deliverables and covered eight general activities necessary to implement PMI², including

- system integration testing,
- communicating key information to stakeholders,
- training Core Financial users on changes brought about by PMI² implementation,
- supporting PMI² technical architecture activities, and
- providing stabilization support following the commencement of "go-live" activities.

We reviewed the work that Accenture performed related to training Core Financial system users on changes brought about by PMI² implementation.

Objectives

The overall objective of our review was to evaluate NASA's readiness to implement PMI². Specifically, we determined whether the NASA PMI² staff had

- adequately trained PMI² implementers and users,
- adequately planned and performed the Center Readiness Reviews (CRRs),
- included sufficient internal controls to prevent and detect data mapping errors,
- included sufficient internal controls to prevent and detect upload errors, and

³ Earned value management is an integrated management control system for assessing, understanding, and quantifying what a project is achieving with program dollars. This system integrates technical, cost, and schedule elements with risk management; allows an objective assessment and quantification of current project performance; and helps predict future performance based on trends.

- gained NASA-wide acceptance for the new coding structure.

This report addresses the first two objectives. Because of the timing of our audit fieldwork in relation to a continuing resolution, we did not address the third and fourth objectives regarding the controls over data mapping. We addressed the last objective in September 14, 2005, memorandums to the NASA Administrator and the NASA Chief Financial Officer (see Appendix B).

See Appendix A for details of the review's scope and methodology, our review of internal controls, and a list of prior audit coverage.

NASA SUCCESSFULLY IMPLEMENTED PMI², BUT CROSSWALK AND TRAINING ARE STILL INCOMPLETE

NASA implemented PMI² on schedule and our review disclosed no material discrepancies related to the implementation. This success was due to the following:

- The Headquarters OCFO took timely action in response to a September 14, 2005, OIG memorandum on PMI², pointing out several issues that needed immediate attention to ensure the successful implementation of PMI².
- The PMI² Project Team ensured that every Center was prepared to implement PMI² through well-planned CRRs and an Agency-wide Operational Readiness Review (ORR).

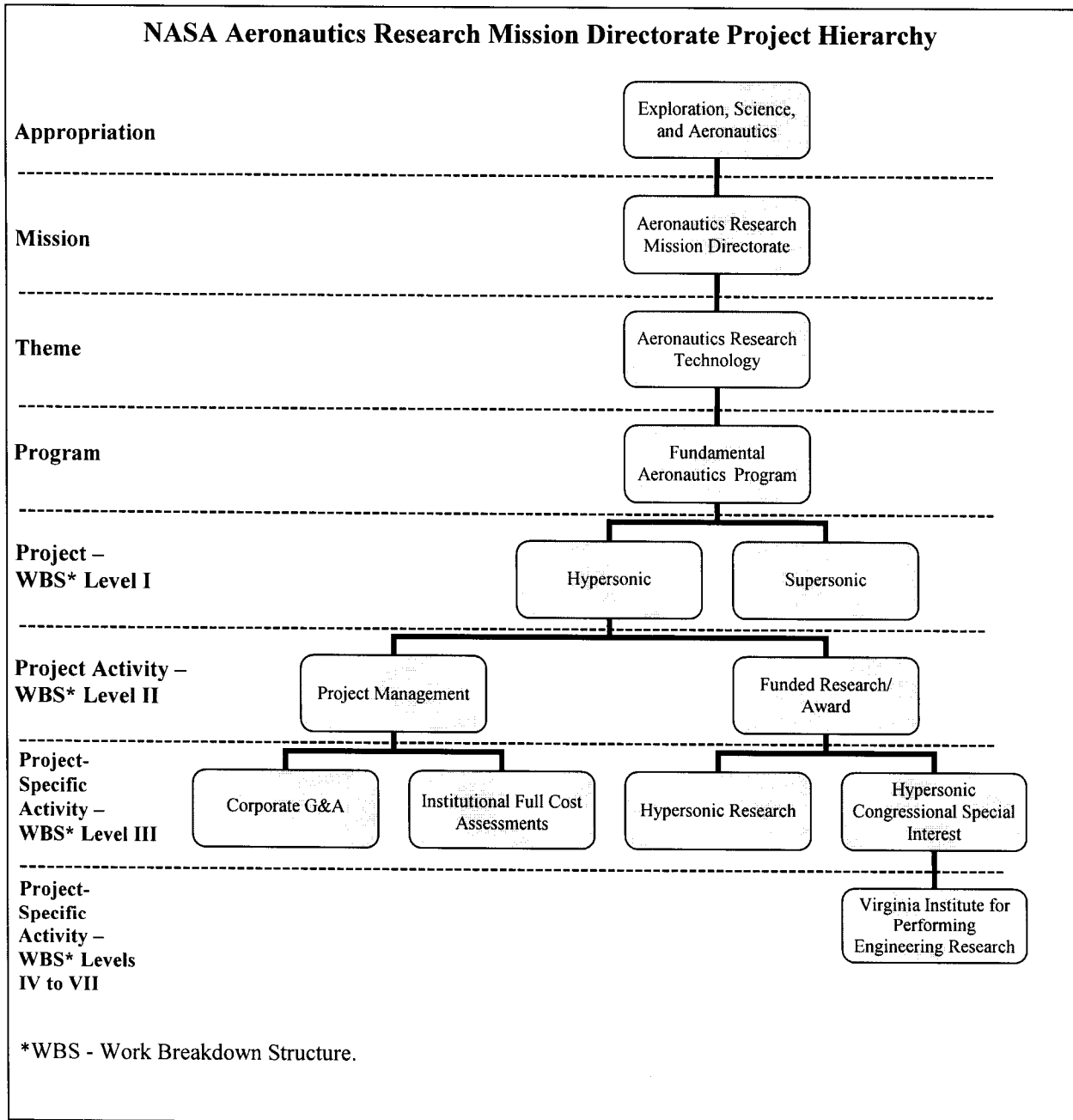
While NASA successfully implemented PMI², the Agency still needs to complete two major post-implementation activities—crosswalking data from AWCS to NSM, which had not been completed as of October 16, 2006, and training all targeted employees. Completing those tasks will improve the standardization of financial data throughout the Agency and will allow NASA staff to efficiently produce reports on both current and prior projects in a standard format.

Transition from AWCS to NSM Required Restructuring Financial Data

The implementation of PMI², and thereby NSM, necessitated that project codes be transitioned from AWCS to NSM to align the technical and financial work breakdown structures in the Core Financial system, which would result in a more consistent historical data set on which to base future cost estimates across the Agency. NSM organized NASA's financial data in a hierarchy of appropriation, mission, theme, program, and project.⁴ The following figure shows an example of a project hierarchy, based on the NSM hierarchy, for a project within NASA's Aeronautics Research Mission Directorate.

⁴ A project is a specific investment identified in a program plan having defined goals, objectives, requirements, life-cycle costs, a beginning, and an end.

Figure 1. A Project Hierarchy Based on the NSM Hierarchy



As shown in Figure 1, the NSM hierarchy divides NASA’s work into work breakdown structures. Beginning at the project level, NSM replaces the unique project numbers under AWCS with project numbers. The NASA Office of the Chief Engineer establishes work breakdown structure Levels I and II, which are used throughout NASA for projects and general project activities. Project managers establish Levels III through VII for project-specific activities that vary according to the needs of each project. In anticipation

of implementing PMI² by October 1, 2005, NASA submitted its FY 2006 budget in that format.

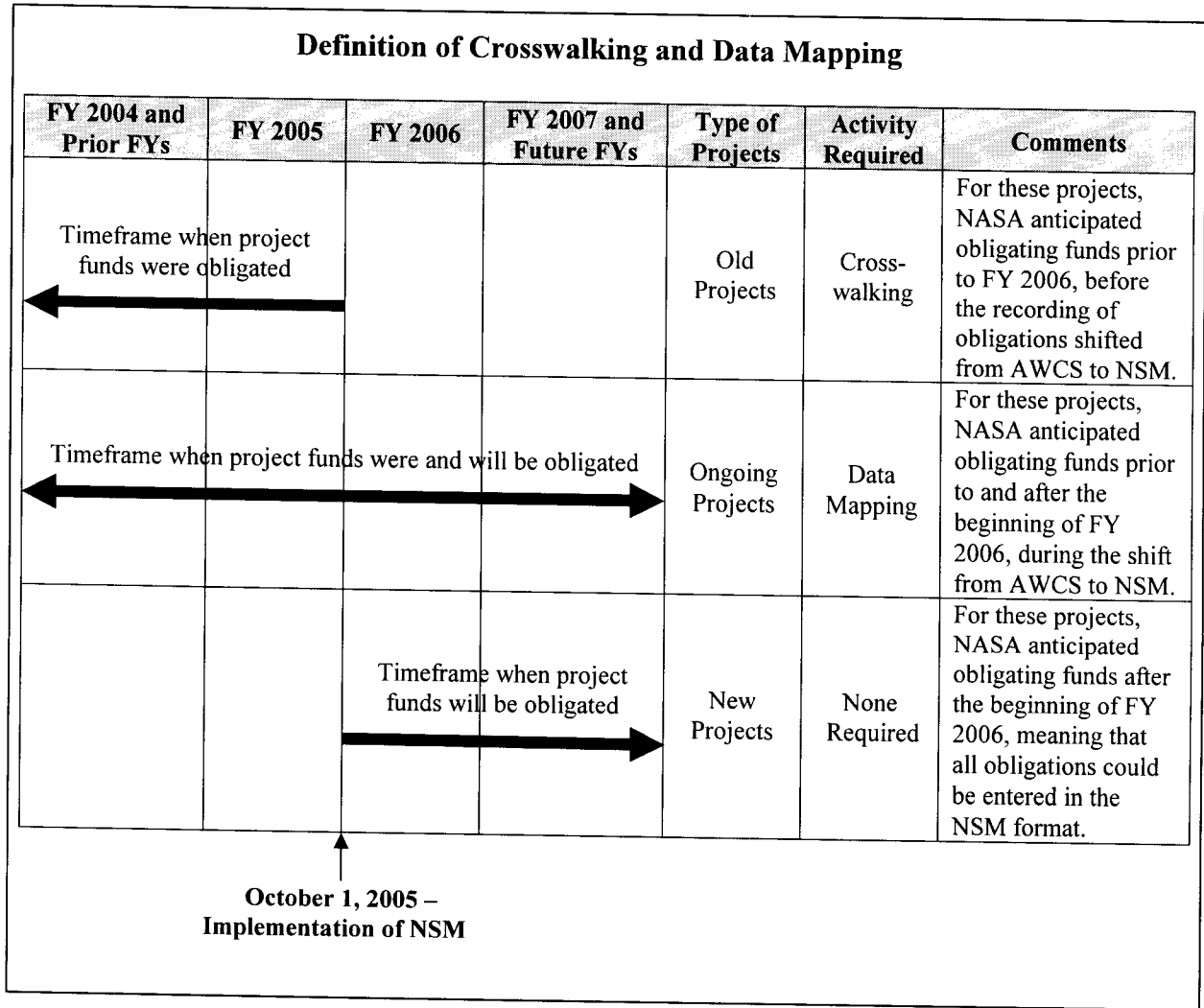
Data Mapping and Crosswalking. NASA's change from AWCS to NSM created the challenge of having to maintain two different financial structures during the transition period. To ensure a smooth transition between AWCS and NSM from FY 2005 to FY 2006 so that the Agency could distribute funds and record financial transactions in the new structure, the PMI² Project Team had to electronically link data related to ongoing projects⁵ from AWCS to NSM. The PMI² Project Team referred to that process as data mapping and needed to complete the activity before the start of FY 2006 because NASA submitted its FY 2006 budget in the NSM format. For the sake of consistency and to facilitate reporting, the PMI² Project Team also planned to link pre-FY 2006 data from old projects⁶ to the new NSM structure. The PMI² Project Team referred to that activity as crosswalking to distinguish it from data mapping. The PMI² Project Team originally planned to complete the crosswalking before the start of FY 2006, but due to their unanticipated workload, the PMI² Project Team decided that it was not necessary to finish the crosswalk before FY 2006 and planned to complete the crosswalk after FY 2006 began. For financial information related to new projects,⁷ the data was simply entered into the NSM format; no data mapping or crosswalking was required. Figure 2 further delineates the difference between data mapping and crosswalking.

⁵ Ongoing projects include projects for which NASA anticipated obligating funds before and after the onset of FY 2006.

⁶ Old projects include projects for which NASA obligated funds prior to FY 2006 but did not anticipate obligating additional funds in FY 2006 or later fiscal years.

⁷ New projects include projects for which NASA anticipated obligating funds beginning in FY 2006 or later fiscal years.

Figure 2. Timelines and Project Differentiation between Crosswalking and Data Mapping



Implementation of PMI² Was Successful

NASA implemented PMI² on schedule and our review disclosed no material discrepancies related to the implementation. We validated the status of PMI² by conducting discussions with staff from the IEMP, PMI² Project Team, Headquarters and Center OCFOs, Mission Directorate resource management offices, and Center Project resource management offices. In addition, we received several demonstrations of the PMI² functionality from Headquarters and Center personnel. We concluded the following:

- NASA successfully implemented the new NSM work breakdown structures on October 11, 2005, and established all mission-critical project financial structures.

in NSM for FY 2006. Staff we interviewed demonstrated the new structure and stated that the new structure was sufficient for them to do their jobs. No material discrepancies were brought to our attention.

- The Centers communicated the changes expected to result from implementation of PMI² and their importance to Center personnel through town hall meetings, posters, e-mails, and Web sites.
- By October 11, 2005, the PMI² Project Team had completed data mapping for 584 of 648 projects. The 64 projects that were not mapped were reimbursable projects omitted from the process because of policy disagreements and questions. In January 2006, the Headquarters OCFO established a policy for mapping these reimbursable projects. According to Center financial management personnel interviewed who work with reimbursable projects, the lack of policy and reimbursable work breakdown structures initially caused a lot of extra work; but that was resolved in January 2006 when the Headquarters OCFO provided clarification and the PMI² Project Team completed mapping the reimbursable projects.

The Headquarters OCFO Acted Quickly to Resolve Implementation Issues Reported by the OIG

Contributing to the successful implementation of PMI² was the Headquarters OCFO's timely action in response to a September 14, 2005, OIG memorandum on PMI². This memorandum pointed out several issues that needed immediate attention to ensure the successful implementation of PMI². Specifically, we noted the following:

- With less than 6 weeks before the scheduled implementation of PMI², the overall workforce from Headquarters and Goddard Space Flight Center (Goddard) had received little or no communication or training about the changes expected to take place under PMI².
- Some senior NASA managers had not received sufficient information about PMI² or about what actions their staff needed to take to prepare for PMI² implementation.
- The Science Mission Directorate was significantly behind in its data mapping.
- Under the new financial structure, NASA did not have a plan for addressing a continuing resolution.

We made recommendations to the Headquarters OCFO to increase PMI² communications, provide Mission Directorate managers with a thorough briefing on PMI², ensure that the Science Mission Directorate applied the necessary resources to data

mapping to prevent any slippages in PMI² implementation, and determine how a continuing resolution would be addressed under the new structure (see Appendix B).

On September 28, 2005, the Headquarters OCFO provided the OIG with a positive and detailed response to the September 14, 2005, memorandum. Headquarters OCFO stated that the Agency had increased its PMI² communications effort by holding several PMI² town hall meetings and establishing an Agency-wide PMI² Web site that included a “frequently asked questions” page. In addition, Headquarters OCFO advised us that data mapping for the Science Mission Directorate had subsequently been completed and the Agency had obtained guidance from the Office of Management and Budget on working with its new budget structure under a continuing resolution (see Appendix B).

Subsequent to our September 14, 2005, memorandum, as we continued to conduct audit work, the IEM Program Director, PMI² Project Manager, and the Headquarters PMI² lead told us that our memorandum was widely accepted by the NASA PMI² community and resulted in increased participation in the various PMI² training and communications efforts.

CRRs and ORR Were Successfully Completed

The PMI² Project Team, by reviewing and resolving obstacles to implementation through well-planned CRRs and an Agency-wide ORR, ensured that every Center was prepared to implement PMI². These reviews improved the likelihood of successfully implementing PMI².

Readiness Review Process. NASA’s primary tools for ensuring the Centers’ readiness to implement PMI² were the CRRs and the Agency-wide ORR. Center preparation for the CRRs began in June 2005 when the PMI² Project Team provided a comprehensive schedule of steps to take to implement PMI² by October 2005 to the Centers and Mission Directorates. To prepare for the CRRs, the PMI² Project Team provided each Center with templates to be completed by the Centers to help assess their progress in the following areas:

- ensuring overall Center readiness to implement PMI²,
- data mapping,
- testing of legacy systems’ interfaces with the new structure, and
- communicating and providing training on PMI² issues (change management).

The ORR was to be performed at the conclusion of the CRRs. The purpose of the ORR was to perform a final assessment of each Center’s and the Mission Directorates’ readiness for PMI². In addition, the ORR included an assessment of each Center’s

corrective actions taken as a result of the CRRs to determine whether they were ready for PMI² go-live. The PMI² Project Team successfully conducted CRRs with Headquarters and each Center from September 20 through October 7, 2005,⁸ and conducted the Agency-wide ORR on October 6, 2005.

CRRs. All Centers successfully completed the CRRs. During the CRRs, each Center rated its readiness to implement PMI² in each of these five areas: overall Center readiness, data mapping, legacy systems interface testing, transaction testing, and change management. For each area, Centers rated their performance based on completion of steps to achieve readiness. Through PMI² Project Team instruction, the Centers assessed themselves using the following rating scale:

- Green: Ready for go-live. Activities were complete or were proceeding according to schedule.
- Yellow: Work remained to be done prior to go-live. Activities were proceeding but were behind schedule. Those areas were anticipated to be ready for go-live, and did not represent a significant risk.
- Red: Work remained to be done and there was a risk of work not being complete prior to go-live. Activities were proceeding but were behind schedule and uncertain for being ready for go-live, and represented a significant risk.

The Centers, in conjunction with the PMI² Project Team, developed specific correction or mitigation plans to correct deficiencies in each step or area rated as red or yellow prior to go-live.

We attended each CRR and observed that each review was attended by representatives from each Center's Director's office, the Center OCFO, major programs, and the PMI² team. We observed that all of those representatives were actively involved in the discussions and took actions to ensure that any yellow or red areas were timely resolved. For example, at the Goddard CRR, we observed that the Deputy Center Director directed the PMI² team to develop an action-items list as a result of the CRR.

ORR. NASA successfully completed the ORR. The PMI² Project Team and representatives from the IEMP, Center PMI² teams, Mission Directorates, the Headquarters OCFO, and the OIG attended the ORR. The staff described in great detail the corrective actions taken by all Centers and concluded that all areas that had been rated yellow or red during the CRRs were resolved. At the conclusion of the ORR, all parties agreed that PMI² go-live would proceed on schedule.

⁸ The CRR for Stennis Space Center was delayed until October 7, 2005, because of Hurricane Katrina.

Crosswalk Was Not Completed

While NASA successfully implemented PMI², NASA had not completed crosswalking data from AWCS to NSM. Completing that task should improve the standardization of financial data throughout the Agency and allow NASA to produce reports on both current and prior projects in a standard format. The PMI² Project Team decided that completion of the crosswalk was not necessary for go-live because, although the crosswalk functionality would enable better reporting, the existing Business Warehouse reporting functionality was sufficient to provide a workaround for project personnel to perform their jobs until the crosswalk was complete. Mission Directorate and project personnel we interviewed confirmed that completion of the crosswalk was not essential for them to perform their jobs effectively. However, after completing the crosswalk, NASA should be able to extract data from old, ongoing, and new projects in one place within the same structure. Thus, completion of the crosswalk would enhance the standardization of financial data throughout the Agency and allow NASA to produce reports on both current and prior projects in the same format.

Headquarters OCFO had not completed the crosswalk as of October 16, 2006. The Agency's team leader for the crosswalk estimated, at that time, that less than 1 percent of the crosswalking task still needed to be completed. The remaining effort consisted of NASA Mission Directorate staff reviewing the crosswalked data to detect errors. There was no schedule of when the remainder of the task would be completed. The OCFO initially planned to complete the crosswalk by January 19, 2006. When that date slipped, the team leader for the crosswalking effort informed us that this work would be completed by March 31, 2006. Because the planned completion date has continually slipped and the crosswalk is still not completed, the OCFO should establish a definitive milestone for the completion of that work and ensure that it dedicates appropriate resources to meet that deadline.

Training Was Not Completed

NASA does not have assurance that all targeted employees have received the requisite PMI² training. Shortly after commencing this audit, we recognized the urgent need for training throughout the NASA workforce to support the implementation of PMI². Our September 14, 2005, memorandum to the NASA Administrator emphasized the criticality of PMI² training and noted that NASA had not yet developed training milestones to ensure that all employees who needed PMI² training received it. The OIG recommended that staff from the Mission Directorates receive the proper PMI² training to prepare for PMI² implementation. In their September 28, 2005, response to the OIG memorandum to the Headquarters CFO, the OCFO agreed that training was critical to the success of PMI² (Appendix B). The Administrator issued a memorandum on September 16, 2005, directing officials in charge of Headquarters offices and Center Directors to ensure that Core Financial users were properly trained (Appendix C).

To help meet its training needs, the IEMP Competency Center⁹ issued to Accenture the task order for Job 12, which included in the statement of work a requirement that, “The Contractor shall develop a Training Metrics Report.” In November 2005, Accenture submitted the Training Metrics Report. We contacted Headquarters’ and each Center’s PMI² team, to verify the statistics from Accenture’s Training Metrics Report, and requested the names of people who were targeted for and completed PMI² training. Our review disclosed that the report was inaccurate and unsupported.

- The November 30, 2005, Training Metrics Report overstated the number of targeted Core Financial users who had completed training by 361 percent. Although Accenture reported that 4,753 targeted users had completed the training, Center records indicated that only 1,316 targeted users had been trained. An additional 1,296 individuals did complete training; however, the Centers had not targeted them as key PMI² users. We therefore did not include those individuals in the total number of targeted end users trained, as shown in Table 1.
- According to the PMI² Project Manager, the PMI²/Agency Labor Distribution System Information Delivery, Funds Distribution Processing, and Month End Cost Allocation courses provided hands-on instruction and were the courses most critical to the success of PMI². However, compared with the Center’s training records, Accenture overstated the number of targeted users who had completed those courses by 233 percent. Accenture reported that 1,548 targeted users had completed the training; however, supporting data provided by the Centers showed that 663 targeted end users had been trained.
- The lists of targeted users and/or users who completed PMI² training contained duplicates for Goddard, Glenn Research Center (Glenn), Headquarters, and Johnson Space Center (Johnson), resulting in reporting inaccuracies. Duplication was the result of users completing the same course twice, users printing multiple certificates of completion after completing on-line training, and Centers combining a variety of user lists that overlapped each other to determine users who completed training.
- Ames Research Center (Ames), Goddard, Headquarters, Johnson, and Marshall were unable to provide lists of users targeted for training for each PMI² course. Without comparing the list of users targeted for training with those who actually completed it, neither NASA nor Accenture could ensure the accuracy of the training statistics.

The Headquarters and Center PMI² leads could not provide any evidence supporting how and when the targeted employees were notified that they needed to take the necessary PMI² training courses. However, those PMI² Center leads stated that they as well as the

⁹ NASA manages all IEMP applications at a central location in Huntsville, Alabama, referred to as the Competency Center.

employees targeted for training were made aware of the need to take the necessary PMI² training courses through NASA senior management announcements, town hall meetings, posters, e-mails, and Web sites. In addition, the Center PMI² leads stated that they notified every targeted employee of the need to attend training through direct e-mail, both e-mail and telephone calls, or telephone calls. One member of the Glenn PMI² team told us that she personally contacted each targeted employee.

Table 1 shows, Agency-wide, the differences between the training metrics reported by Accenture and the training metrics supported by Headquarters and Center documentation. The “Other Individuals Trained” column refers to staff who completed PMI² training but were not targeted for training. When Centers could not provide a list of targeted users, we included all individuals trained because we could not determine whether they were targeted end users. Appendix D contains detailed training metrics by Center.

PMI ² Course	Reported by Accenture as of November 30, 2005		Supported by Headquarters and Center Training Records		
	Targeted End Users	Targeted End Users Trained	Targeted End Users	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	5,052	2,911	2,868	509	981
PMI ² /ALDS Information Delivery*	2,818	1,298	1,077	546	149
PMI ² Overview for Procurement Personnel	627	294	213	144	105
Funds Distribution Processing*	117	134	52	51	46
Month End Cost Allocation*	141	116	66	66	15
Totals	8,755	4,753	4,276	1,316	1,296
* According to the PMI ² Project Manager, these three courses provided hands-on instruction and were the most critical to the success of PMI ² .					

The IEM Program Director needs to ensure that the remaining 2,960 end users who were targeted for training complete the courses that they were targeted to take.

The Marshall contract administration team did not properly review the Training Metrics Report prior to accepting the report and paying Accenture. Federal Acquisition Regulation (FAR) 46.5, Acceptance, states that acceptance constitutes acknowledgment

that the delivered supplies or services conform to applicable contract quality and quantity requirements and that such acceptance is the responsibility of the contracting officer. Marshall did not comply with the FAR for acceptance. The contracting officer's technical representative, the Job 12 monitor, and the PMI² Change Management Lead¹⁰ stated that they did not question the accuracy of the Training Metrics Report. We obtained an e-mail from the Job 12 monitor referencing the Training Metrics Report that simply stated, "Approved as submitted," and we found no documented evidence that the report was actually reviewed.

In addition, the contracting officer's technical representative did not develop a contractor surveillance plan for BPA NNM04AA17Z, including Job 12. FAR 37.6, Performance-Based Acquisitions, and FAR 46.4, Government Contract Quality Assurance, require agencies to prepare surveillance plans for service contracts. FAR 46.401 requires that these plans specify all work requiring surveillance and the method of surveillance. A well-thought-out surveillance plan would have included specific procedures to test the accuracy of the Training Metrics Report prior to Marshall's acceptance.

Because the task order for Job 12 did not specify the form and content requirements for the Training Metrics Report, and the Marshall contract administration team accepted the report without question, the Agency has no recourse against Accenture and no basis to recoup the \$25,313 it paid for the deliverable. The contracting officer for BPA NNM04AA17Z should have taken the necessary action to ensure that all deliverables required under the BPA contained accurate and reliable data prior to their acceptance.

Without accurate training metrics, NASA has no assurance that its project and resource managers have the ability to correctly run and analyze financial reports necessary to effectively manage their projects. For example, without the appropriate training, project managers might not be able to set new bookmarks in Business Warehouse¹¹ and might not understand Business Warehouse data that they are receiving. Bookmarks save the fields used to create the most frequently needed, customized reports, eliminate the need to reselect several different fields each time users create the same report, and reduce the potential for human error. As stated in the July 7, 2005, PMI² Project Plan, the IEM Program Director is responsible for establishing the PMI² change management framework including training. Thus, to promote sound financial management and the success of PMI², the Program Director should ensure that all targeted users complete the necessary PMI² training.

¹⁰ The PMI² Change Management Lead participated in the Technical Interchange Meetings with the monitor.

¹¹ Business Warehouse is NASA's Web-based reporting tool that enables data analysis from the Core Financial system.

Management Comments on the Finding and Audit Response

Management Comments. The IEM Program Director noted that the statement that the crosswalk had not been completed as of June 2006 misrepresented the status of that activity but also noted that some prior-year codes do not have a crosswalk solution because of differences in accounting. As regards the Agency's acceptance of the contractor's Training Metrics Report, the IEM Program Director stated that the Marshall contract administration team followed the established methodology for deliverables review and that the scope of the task order did not require Accenture to validate the data in the training metrics report.

Audit Response. We do not agree that the status of the crosswalk activity was misrepresented because, in his response, the IEM Program Director confirmed that the crosswalk is not yet complete.

Concerning acceptance of contract deliverables, as of October 23, 2006, the Marshall contract administration team has been unable to provide any documentation showing that they followed the established methodology for review of deliverables or that they actually reviewed the training metrics report before accepting it. The IEM Program Director is correct in his assertion that the scope of the task order did not require the contractor to ensure that the training metrics report was accurate before submitting it for approval. However, we question the rationale in procuring a training metrics report, or any type of report, if its usefulness is suspect because the task order did not require that the information provided must be accurate.

Recommendations, Management's Response, and Evaluation of Management's Response

Recommendation 1. The NASA Chief Financial Officer should establish milestones for completing the crosswalk of project data from AWCS to NSM.

Management's Response. Headquarters OCFO concurred, stating that the Agency has completed the crosswalk to the greatest extent possible. There are approximately 200 (1.5 percent) out of approximately 13,000 prior-year project codes that do not currently have a crosswalk solution due to various difficulties. The Headquarters OCFO will work with the IEMP Competency Center and the affected mission offices to complete the crosswalk by the end of the second quarter of FY 2007.

Evaluation of Management's Response. Headquarters OCFO's comments are responsive to the recommendation. We consider the recommendation to be resolved, but it will remain open until management completes crosswalking the remaining 200 project codes and notifies us of that completion.

Recommendation 2. The Director, Marshall Space Flight Center, should direct the contracting officer for Accenture BPA NNM04AA17Z to ensure that (1) all contract deliverables contain specific and accurate requirements for form and content, and (2) all report deliverables required under the BPA contain accurate and reliable data before accepting them and approving payment.

Management's Response. Marshall Space Flight Center concurred. The response noted that the roles and responsibilities of the contracting officer's technical representative concerning contract deliverables and invoice review have been clarified. The clarification is to ensure that, when invoices are submitted for approval and payment, the contracting officer's technical representative verifies and approves the items on the invoice and the contracting officer verifies that the amount on the invoice is in agreement with the contract Milestone Payment Schedule.

Evaluation of Management's Response. Management's comments are not responsive. Marshall does not address the issue of ensuring that, before acceptance, all contract deliverables under BPA NNM04AA17Z contain (1) specific and accurate requirements for form and content and (2) accurate and reliable data. We request that Marshall provide comments to the final report addressing content and accuracy of BPA NNM04AA17Z deliverables.

Recommendation 3. The IEM Program Director should solicit each Center Director to reassess the targeted end users who truly require PMI² training to take appropriate action to ensure that those employees complete the necessary PMI² training courses.

Management's Response. The IEM Program Director nonconcurred, stating that the need and original goals for PMI² training have been overcome by implementation of the SAP Version Update training courses and events, and the Agency's time and resources are being focused on delivering the SAP Version Update.

Evaluation of Management's Response. We accept the IEM Program Director's response that the need and original goals for PMI² training have been overcome by the SAP Version Update Project training courses and events. This recommendation will be closed for reporting purposes.

The fact that PMI² training has been overcome by the events of the SAP Version Update does not resolve the fact that the IEM Program Office, PMI² Project Office, and the support contractor did an inadequate job of tracking and reporting PMI² training. NASA specifically tasked and paid Accenture to

provide guidance and oversight for Center training logistics including planning for rooms; scheduling training; registering end-users for training courses; conducting courses; tracking and reporting end-user course completions; and conducting end-user course evaluations. The Contractor shall develop a Training Metrics Report.

NASA was responsible for determining which Core Financial users needed PMI² training. Accenture was required to register individuals for training and track and report the number of users who had completed training. However, we found that Accenture did not provide the required oversight to support PMI² training throughout NASA and submitted a Training Metrics Report that overstated the number of targeted Core Financial users who had completed training by 361 percent.

APPENDIX A

Scope and Methodology

We performed fieldwork at NASA Headquarters, the IEMP Competency Center, and all Centers. Our fieldwork consisted of the following phases: obtaining an understanding of the PMI² process, evaluating Center readiness to implement PMI², evaluating and monitoring the data mapping process, evaluating and testing PMI² training statistics, evaluating Accenture's performance in support of PMI², and monitoring the PMI² crosswalk.

Understanding the PMI² Process. To understand PMI² and the PMI² implementation process, we reviewed PMI²-related documents including

- “Core Financial Implementation Assessment Executive Presentation,” June 5, 2005;
- “PMI² Framework Agreement,” February 10, 2004;
- “PMI² Critical Design Review,” June 28, 2005;
- “PMI² Project Plan,” July 7, 2005; and
- NASA Procedural Requirement 7120.5C, “NASA Program and Project Management Processes and Requirements,” March 22, 2005.

In addition, we interviewed NASA officials associated with PMI² including the IEM Project Manger; the IEMP Business Manager; the PMI² Project Manager; Center PMI² points of contact, PMI² implementers, trainers, and budget maintainers; Mission Directorate resource managers; and Headquarters and Center OCFO officials.

Center Readiness. To evaluate Center readiness to implement PMI², we attended all CRRs and the ORR either in person or via teleconference. Also, to clarify information (e.g., training metrics, data mapping, crosswalking, system security) and to respond to issues raised during the CRRs, the audit team conducted follow-up meetings as necessary with the IEM Program Director; the IEMP Business Manager; the PMI² Project Manager; Center PMI² points of contact; PMI² implementers, trainers, and budget maintainers; Mission Directorate resource managers; and Headquarters and Center OCFO officials.

Data Mapping. To evaluate and monitor the data mapping process, we participated in the weekly data mapping teleconferences and reviewed associated data mapping documents and presentations.

Training Documentation. To evaluate the extent of PMI² training and to test the accuracy of Accenture's Training Metrics Report, we interviewed PMI² training leads at Headquarters and all Centers, obtained lists maintained by the Centers of users who were targeted for and had completed PMI² training, and compared those lists with Accenture's Training Metrics Report.

Crosswalk. To monitor the status of the crosswalk, we conducted several discussions with the Headquarters OCFO officials who were the leads for the crosswalk, the Competency Center crosswalk lead, Mission Directorate resource management staff, and Center Project resources management staff.

Scope Limitations. Because of the timing of our audit fieldwork in relation to a continuing resolution, we did not address the controls over data mapping. Also, we did not address NASA-wide acceptance of the new coding structure because we addressed that issue in September 14, 2005, memorandums to the NASA Administrator and the NASA Chief Financial Officer (see Appendix B).

We performed this project from August 2005 through September 2006 in accordance with generally accepted government auditing standards.

Use of Computer-Processed Data. We analyzed training metrics, or statistics, we obtained from Accenture, the contractor that gathered and summarized the training results from NASA Headquarters and the Centers. That information was contained in Microsoft Excel spreadsheets and Power Point charts. To test the validity of that data, we contacted Headquarters and each Center and obtained lists of Core Financial users who had been targeted for and had completed the five PMI² training courses that Accenture developed for NASA. That information consisted of hard-copy documentation such as course registration sheets, course sign-in sheets, and Center-prepared Excel spreadsheets based on course sign-in sheets. After comparing that information with Accenture's Training Metrics Report, we determined that the Training Metrics Report was unreliable and largely inaccurate. See Appendix D.

Review of Internal Controls

We reviewed internal controls related to contract oversight, PMI² training, and user access to the Core Financial system.

Contract Oversight. We reviewed Marshall's procedures for contract oversight related to BPA NNM04AA17Z in accordance with FAR. We found that the Marshall contract administration team, which consisted of the contracting officer's technical representative, the Contracting Officer, and the task monitor did not thoroughly review the Training Metrics Report prior to accepting the report and paying Accenture. FAR 46.5 states that acceptance constitutes acknowledgment that the delivered supplies or services conform to applicable contract quality and quantity requirements and that such acceptance is the responsibility of

the contracting officer. Marshall's standard procedure for reviewing Accenture's contract deliverables was to review and comment on the deliverable draft, provide coordinated feedback on the deliverable during Technical Interchange Meetings, and approve the deliverable by way of a sign-off memorandum. However, the contracting officer's technical representative, the monitor, and the PMI² Change Management Lead¹² did not question the accuracy of the Training Metrics Report. We obtained an e-mail from the monitor referencing the Training Metrics Report that simply stated, "Approved as submitted."

The OIG recently issued report, "Integrated Enterprise Management Program Contract Oversight Needs Improvement" (IG-06-003, February 6, 2006). Implementation of the recommendations made in that report, to which the Marshall Director concurred, will improve IEMP contract oversight and correct the weakness noted above.

PMI² Training. We reviewed NASA's controls over targeting NASA employees for PMI² training courses, verifying that they completed appropriate training and ensuring that training statistics were accurately reported. Although we did not identify any explicit guidance requiring training on PMI², through our review of the PMI² Project Plan and interviews with PMI² implementation officials, we determined that Agency-wide training was necessary to support PMI² implementation and maintain the integrity of the Core Financial system. We found a weakness in reporting training statistics, as detailed in Appendix D. Management's implementation of Recommendations 2 and 3 will correct that weakness.

User Access to the Core Financial System. As part of our evaluation of internal controls over training, we identified a management control weakness regarding user access to the Core Financial system. We found that Headquarters did not have an effective process for terminating former employees' and contractors' access to the Core Financial system and Business Warehouse upon separation from NASA, which skewed the Headquarters PMI² training data.

According to NASA Procedural Requirements 2810.1, "Security of Information Technology," August 26, 1999, Appendix A, section A.6.2.6, management is responsible for the disposition of user accounts assigned to employees who no longer need system access due to resignation, change of job, or retirement. According to section A.6.2.4, if users do not change their passwords, their accounts should be suspended after 90 days and removed from the system after 180 days. However, the NASA Headquarters Business Process Lead informed us that some users who no longer worked for NASA continued to have Core Financial system and Business Warehouse accounts because 180 days had not passed since their separation from NASA. Those employees continued to be targeted for training. This problem not only skewed the PMI² training data but also creates a risk of unauthorized access to the Core Financial system for up to 180 days.

¹² The PMI² Change Management Lead participated in the Technical Interchange Meetings with the monitor.

This risk persists even though NASA's financial statement auditors reported the condition in the last two financial statement audits. In FY 2005, the auditors found that NASA did not timely terminate Core Financial system user accounts in 3 of 30 total employee separations at Kennedy. Those accounts were eventually removed from the system 1, 3, and 4 months after the employees left. Kennedy management took corrective action in response to that finding. In FY 2004, the auditors noted that Goddard did not have a process in place to track employee separations and could not determine if any open accounts belonged to employees who no longer worked for NASA.

We referred this issue to the OIG Information Technology and Financial Statement directorates in the OIG's Office of Audits.

Prior Coverage

The Government Accountability Office (GAO) and the NASA OIG have issued reports of particular relevance to the subject of this report. Reports may be accessed over the Internet at <http://www.gao.gov> (GAO) and <http://www.hq.nasa.gov/office/oig/hq/audits/reports/FY07/index.html> (NASA).

Government Accountability Office

“The National Aeronautics and Space Administration’s Fiscal Year 2004 Management Representation Letter on Its Financial Statements” (GAO-05-591R, June 23, 2005)

“National Aeronautics and Space Administration: Significant Actions Needed to Address Long-standing Financial Management Problems” (GAO-04-754T, May 19, 2004)

“Information Technology Management: Government-wide Strategic Planning, Performance Measurement, and Investment Management Can Be Further Improved” (GAO-04-49, January 12, 2004)

“Business Modernization: NASA’s Challenges in Managing Its Integrated Financial Management Program” (GAO-04-255, November 21, 2003)

“Business Modernization: NASA’s Integrated Financial Management Program Does Not Fully Address Agency’s External Reporting Issues” (GAO-04-151, November 21, 2003)

“Business Modernization: Disciplined Processes Needed to Better Manage NASA’s Integrated Financial Management Program” (GAO-04-118, November 21, 2003)

“Business Modernization: Improvements Needed in Management of NASA’s Integrated Financial Management Program” (GAO-03-507, April 30, 2003)

National Aeronautics and Space Administration

“Integrated Enterprise management Program Contract Oversight Needs Improvement” (IG-06-003, February 6, 2006)

“Synopsis of Management Issues Associated with NASA’s Integrated Financial Management Program” (IG-05-020, June 3, 2005)

“Summary Report on Audit of Integrated Financial Management Program Core Financial Module” (IG-03-028, September 29, 2003)

“Integrated Financial Management Program Core Financial Module Conversion to Full Cost Accounting” (IG-03-015, May 30, 2003)

**MEMORANDUMS ON PRELIMINARY
PMI² OBSERVATIONS**

National Aeronautics and
Space Administration

Office of Inspector General
Washington, DC 20546-0001



SEP 14 2005

TO: Administrator

FROM: Inspector General

SUBJECT: Preliminary Observations on the Review of NASA's Readiness to Implement Project Management Information Improvement, Phase I (Assignment Number A-05-026-00)

Enclosed is a memorandum summarizing our preliminary observations on NASA's readiness to implement Project Management Information Improvement (PMI²) Phase I. We began our review of progress made toward implementation of Phase I in August and believe, based on our review, that this project is suffering from the lack of a marketing strategy and warrants your attention.

Among other issues, we found that the overall workforce, and some directorate officials, had little information about what changes to expect with implementation of Phase I. They also were not fully aware of the importance of those changes to NASA's improved financial management. With regard to training, although courses had been developed for employees who will be working with the new process, no milestone dates or other details have been set to ensure that all courses would be taken before implementation of Phase I. Further, while some outreach activities were planned to inform staff about the upcoming changes, as of September 8, 2005, no activities had taken place and most had not been scheduled.

PMI² is designed to improve project information management by aligning technical and financial work breakdown structures, allowing migration to a single data management structure. PMI² will change the entire NASA budget structure, so it is critical that the implementation of Phase I should avoid the mistakes that occurred after implementation of the Core Financial Module. Implementation of PMI² Phase I is scheduled to coincide with the beginning of FY 2006 in less than 6 weeks. The Agency needs to make certain that the changes expected from PMP Phase I and the benefits resulting from those changes are adequately communicated to NASA senior management and to all personnel who will be affected by those changes.

Robert W. Cobb

Robert W. Cobb

Enclosure

National Aeronautics and
Space Administration

Office of Inspector General
Washington, DC 20546-0001



SEP 14 2005

TO: Chief Financial Officer

FROM: Assistant Inspector General for Audit

SUBJECT: Preliminary Observations on the Review of NASA's Readiness to Implement Project Management Information Improvement, Phase I (Assignment Number A-05-026-00)

The Office of Inspector General is performing a review of NASA's readiness to implement Project Management Information Improvement (PMI²) Phase I in mid-October 2005. PMI² is a data management process—the result of a study to develop an approach and strategy to expand the functionality of NASA's Core Financial Module. The purpose of PMI² is to improve project information management by aligning both technical and financial work breakdown structures,¹ thus migrating to a single data management structure. Such an alignment is needed for managers to exercise sound financial management of their programs and projects. PMI² is planned to be implemented in three phases. Because implementation of PMI² Phase I will change the entire NASA budget structure, NASA plans to implement Phase I in conjunction with the start of FY 2006. Thus it is critical that NASA implement Phase I so that it can execute the FY 2006 budget. We began our review of PMI² Phase I implementation preparations in August 2005. In conducting our review, we identified concerns that, to ensure successful implementation of PMI² Phase I, warrant your immediate attention.

The NASA manager, Integrated Enterprise Management Program's Administrative Systems Implementation Projects Office, which administers PMI², expressed concern about the implementation of PMI² Phase I. Specifically, she stated that to ensure successful implementation of PMI² Phase I and avoid the mistakes that occurred after the implementation of the Core Financial Module, the Agency needs to make certain that the changes expected from PMI² Phase I and the benefits resulting from those changes have been adequately communicated to NASA senior management and to the personnel who will be affected by those changes. In addition, the NASA manager stated that to achieve the successful implementation of PMI² Phase I in October 2005, it is critical that the PMI² Project Office provide Headquarters and the Centers with clear and definitive implementation steps and milestones that must be met. The NASA manager requested our assistance in determining whether these steps are being taken.

¹Work breakdown structure is a management tool to help NASA track project costs more accurately.

We determined that the concerns raised by the NASA manager were valid and that action needs to be taken immediately to address those concerns. Specifically, we found the following:

- With less than 6 weeks before Phase I is scheduled to be implemented, the overall workforce from Headquarters and Goddard had received little or no communication or training about the changes expected to take place under Phase I implementation or the criticality of those changes to NASA's objective of improved financial management. The PMF Project Office has provided an end-user training curriculum that must be taken by NASA employees who will be working with the new process in preparation for PMF Phase I implementation. However, the PMF Project Office did not provide milestone dates or other details to ensure that all of those courses are taken by the proper employees before Phase I implementation. In addition, while Headquarters and Goddard officials are planning outreach activities through e-mails, town hall meetings, and other activities, none of those activities had taken place, and most had not been scheduled, as of September 8, 2005.
- Neither the Director of Institutional Management (recently placed under the OCFO) nor the Director of Resources Management of the Aeronautics Research Mission Directorate had received sufficient information about PMF or what actions their staff needed to take to prepare for Phase I implementation. In addition, the Director of Resources for the Exploration Systems Mission Directorate was unsure of the status of preparation for Phase I in his directorate because he had only been in his position for 2 weeks.
- On August 19, 2005, the PMF Project Manager provided the Mission Directorates and the Center PMF implementation teams with templates containing the minimum information that each Mission Directorate and Center needed for the Center Readiness Reviews (CRR). CRRs are meetings held between the PMF Project Office and the Center PMF implementation staff shortly before implementation to ensure that the Mission Directorates and the Centers have done everything needed to implement PMF. To prepare for the CRRs, the Mission Directorates and Centers need to gather data to support their readiness for PMF go-live. That data includes data mapping progress, Center-specific SAP interfaces, Center legacy system interfaces, training metrics, communication plans, user support (help desk) readiness, and workarounds and recovery plans. However, as of September 7, 2005, the PMF Project Manager had not provided clear and definitive implementation steps or milestone dates to direct the Headquarters and Center staff to gather that information and prepare for the CRRs in late September 2005 and, thereby, implementation in October 2005.

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- From discussions held during a September 7, 2005, data mapping² approval meeting, we learned that the Science Mission Directorate, which is responsible for most NASA projects, was so far behind in its data mapping activities that management is considering having a separate data load specifically for the Science Mission Directorate.
- Under the new financial management structure, the procedures for handling a continuing resolution will change from the process that NASA used in the past. However, as of September 8, 2005, NASA did not have a plan for addressing a continuing resolution³ under the new financial structure.

We recommend that the Chief Financial Officer

1. Hold town hall meetings, send out weekly e-mail notices to all NASA employees, and provide information on their web-site explaining what PMI² is, why it is important, and summarizing the progress that has been made; and, further, establish a frequently asked questions page that is accessible to all NASA employees.
2. Provide to Headquarters Mission Directorate personnel a thorough briefing on the background and criticality of PMI² and direct the directorate officials to ensure that their respective staff receive the proper information and training needed to prepare for Phase I.
3. Direct the PMI² Project Manager to provide each Mission Directorate and Center with specific steps to take, milestones to meet, and information needed to prepare for the upcoming Center Readiness Reviews.
4. Ensure that the Science Mission Directorate has the necessary resources applied to its PMI² data mapping and other preparation activities to prevent any slippages in PMI² implementation.
5. Determine how a continuing resolution will be addressed under the new structure, and provide that information to the Mission Directorates and Centers.

Completing these actions will help ensure the successful implementation of PMI² Phase I. We will continue to monitor the NASA Centers' progress in preparing for Phase I implementation and will notify you of any additional concerns as they are identified.

²Data mapping is the crosswalk from the existing Agency Wide Coding Structure to the new NASA budget structure.

³When the new fiscal year is about to begin or has begun and regular appropriations have not been enacted, Congress enacts a joint resolution—a continuing resolution—to provide budget authority for Federal agencies and programs to continue operating until the regular appropriations acts are enacted.

If you would like to discuss this matter further please contact Catherine Schneider,
Director of Financial and Institutional Management audits, at (202) 358-3789, or
catherine.schneider@nasa.gov, or Karl Allen, Project Manager, at (202) 358-2595, or
karl.m.allen@nasa.gov.

A. Dahnelle Payson
for Evelyn R. Klemstine

cc:
NASA Executive Officer, Integrated Enterprise Management Program
Director, Management Systems Division

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National Aeronautics and
Space Administration
Headquarters
Washington, DC 20546-0001



September 28, 2005

Reply to Attn of

Office of the Chief Financial Officer

TO: Inspector General

FROM: Chief Financial Officer

SUBJECT: Response to Your Memorandum, "Preliminary Observations on the Review of NASA's Readiness to Implement Project Management Information Improvement, Phase I (Assignment Number A-05-026-00)," dated September 14, 2005

Thank you for your continued interest in NASA's Project Management Information Improvement (PMII) Project, as evidenced in your recent memorandum titled, "Preliminary Observations on the Review of NASA's Readiness to Implement Project Management Information Improvement, Phase I (Assignment Number A-05-026-00)," dated September 14, 2005. I agree with each of the five recommendations you have documented and offer the following responses.

Recommendation #1 (Hold town hall meetings ...)

You have correctly noted the importance of a broad communication strategy for the PMII implementation. Center "town hall" meetings have already occurred in multiple locations, and others are scheduled throughout September and October. Many of these gatherings have successfully updated hundreds of users on the basic overview of the PMII Project, including background and criticality of PMII. Personnel are told what they can expect during the PMII implementation process, and the training in which they must participate to make the event a success.

Center Implementation Leads are reporting healthy attendance at all their gatherings. They have worked tirelessly, along with their teams, to touch all communities affected by PMII to keep them informed. In many cases, the PMII Center Implementations teams have provided NASA employees comprehensive Project literature. The Center PMII Project teams have also taken care to punctuate their communication efforts with regular e-mails that frequently detail training dates, and provide consistent dialogue with the affected NASA communities at their Centers.

Additionally, as suggested, PMII Project information can be found by all NASA employees at: <http://pmii.jfmp.nasa.gov/index.html>. The web site was established several months ago and includes all the points recommended by the Office of the Inspector General (OIG), including why the Project is important and what the upgrade will do. A "Frequently Asked Questions" page has been posted is currently being updated.

Finally, with the support of the NASA Chief of Staff, the PMII Agency Project Manager is working with Public Affairs to plan and execute PMII communications to all levels of the NASA community. The first of these communications include letters from the Administrator to Officials-in-Charge (issued on September 22, 2005) and to all NASA employees and onsite contractors, urging awareness and readiness for PMII.

Recommendation #2 (Provide to Headquarters Mission Directorate personnel a thorough briefing ...)

As part of the Office of the Chief Financial Officer's (OCFO) overall financial management improvement efforts, I personally met with each Mission Directorate over the summer to communicate their roles in financial integrity. These discussions emphasized the importance of the PMII effort and provided the Mission Directorates with the status of their data mapping efforts. I have also discussed PMII at the weekly Administrator staff meetings to maintain awareness of the effort.

The Headquarter Business and Administrative Systems Office (BASO) leads the PMII implementation activities at NASA Headquarters. The BASO, along with PMII Project members, have been communicating to Mission Directorate personnel through a variety of mechanisms. In addition to being included in all general communications regarding training, documents, and events, the Directorates have been given general briefings by the PMII Agency Project Manager and the BASO Center Implementation Lead. Recently, at the NASA Strategic Management Council, the Mission Directorate Associate Administrators and all Center Directors were briefed on PMII (background, changes, impacts, users affected, etc.). Additional training sessions are scheduled at NASA Headquarters for the month of October for which all of the Directorates have been notified.

Recommendation #3 (...provide each Mission Directorate and Center with specific steps to take ...)

Beginning with the June data mapping kickoff, extensive calendars have been provided to the Mission Directorates containing a comprehensive schedule through the end of October. The PMII data mapping leads are providing intense regular and reliable links between the Directorates and the PMII team. The Mission Directorate staffs have been included in weekly telecons, many of which have included representatives from the Office of the Chief Engineer and the OCFO.

The data mapping teams have ensured that all members of the Mission Directorate community are kept abreast of updates through regular e-mails, the NASA web page, and the Integrated Enterprise Management Program Office's (IEMPO) i-View Portal. Moreover, it is noteworthy to recognize that all Mission Directorates have been addressed by the PMII Data Mapping Leads directly.

With respect to preparation for the upcoming Center Readiness Reviews (CRR's), the PMII Project provided each Center Implementation Lead with a template for use in the CRR's. The work for a successful CRR did not begin with the distribution of the template. The PMII Project has been building strong communication ties between the Project Team and the NASA Center Implementation Leads for several months. Consistent and targeted e-mails are disseminated directly from the Project. The Project has provided steps for the Centers to take, milestones to meet, and provided other information that has laid the ground work for successful CRR's. Last week four Centers (LaRC, JPL, KSC, and GRC) successfully completed their reviews. The remaining CRR's are scheduled for the week of September 26, 2005.

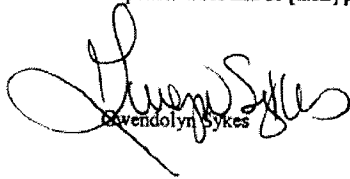
Recommendation #4 (Ensure that the Science Mission Directorate has the necessary resources applied to its PMII data mapping ...)

The Science Mission Directorate data mapping has now been completed.

Recommendation #5 (Determine how a continuing resolution will be addressed ...)

The OCFO has worked closely with Office of Management and Budget and Congress as we prepare to execute the FY 2006 budget in our new structure. Recently, we received a positive indication that NASA will receive authority to operate under the new structure even during a continuing resolution. The PMII Project team has been instructed that the FY 2006 budget structure should be included within the extracts for loading into SAP in anticipation of go-live status. NASA Headquarters OCFO and Mission Directorate personnel will be responsible for distributing the funding to the appropriate programs and projects as governed by the continuing resolution funding. This information will be incorporated into future communication materials by the PMII Project team.

In closing, I appreciate the interest you have shown in the successful implementation of the PMII Project. We are actively applying your recommendations to our existing efforts. The OCFO, IEMPO, and all of NASA must acknowledge that the success of the PMII Project hinges on the training of all NASA employees. As the Message from the Administrator, distributed on September 22, 2005, expresses, "... the successful implementation of PMII will require each [NASA employee] to understand [their] responsibilities and do [their] part to help make PMII successful."



Gayendolyn Sykes

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cc:
Administrator/Mr. Griffin
Deputy Administrator/Mr. Gregory
Chief of Staff/Mr. Morrell

Mission Directorates:

Associate Administrator for Exploration Systems Mission Directorate/Dr. Horowitz (Acting)
Associate Administrator for Space Operations Mission Directorate/Mr. Gerstenmaier
Associate Administrator for Science Mission Directorate/Dr. Cleave
Associate Administrator for Aeronautics Research Mission Directorate/Dr. Shin (Acting)

Chief Financial Officers, NASA Centers:

Ames Research Center/Mr. Moyles
Dryden Flight Research Center/Mr. Gardner
Glenn Research Center/Mr. Ward
Goddard Space Flight Center/ Ms. Abell
Johnson Space Center/Mr. Beall
Kennedy Space Center/Mr. Carroll
Langley Research Center/Mr. Winter
Marshall Space Flight Center/Ms. Foster
Stennis Space Center/Mr. Bevis
Jet Propulsion Laboratory/Mr. Johnson

Directors, NASA Centers:

Ames Research Center/Mr. Hubbard
Dryden Flight Research Center/Mr. Petersen
Glenn Research Center/Dr. Earls
Goddard Space Flight Center/Dr. Weiler
Jet Propulsion Laboratory/Dr. Elachi
Johnson Space Center/Gen. Howell
Kennedy Space Center/Mr. Kennedy
Langley Research Center/Mr. Roe
Marshall Space Flight Center/Mr. King
Stennis Space Center/Mr. Parsons

**ADMINISTRATOR'S
MEMORANDUM**

National Aeronautics and
Space Administration
Office of the Administrator
Washington, DC 20546-0001



September 16, 2005

TO: Officials-in-Charge of Headquarters Offices
Center Directors

FROM: Administrator

SUBJECT: Preparing for Project Management Information Improvement (PMI²)

NASA's implementation of PMI² in October is designed to improve project management information by establishing an Agency-standard structure to uniquely and consistently identify our programs and projects and by aligning technical and financial work breakdown structures. NASA's program year 2006 budget was submitted to Congress in the new NASA Structure Management (NSM) format and, therefore, PMI² is replacing the current financial coding structure in the Core Financial system. New codes will also be reflected in other Agency systems such as WebFads and Travel Manager.

PMI² will affect every NASA employee, from budget distribution personnel responsible for distributing funds under the new coding structure, to project engineers who will be setting up project work breakdown structures to align with the new coding structure, to all employees who will be charging their work hours to new codes on time and attendance reports. Therefore, successful implementation will require you to emphasize participation, at all levels of NASA, in programs and activities designed to familiarize employees with PMI² and to ensure proper training of Core Financial users who will be most affected by these changes.

NASA Headquarters and Centers each have a Center Implementation Manager who is preparing for the upcoming PMI² implementation. I encourage you to contact the Implementation Manager at your workplace and to involve yourself personally in efforts to prepare the NASA workforce for PMI². The Center Implementation Managers are:

ARC - Luis Mederos
DFRC - John Wonacott
GRC - Julie Scheneman
GSFC - Tamara Laster
HQ/NMO/NSSC - Nadine Tremper
JPL - Charlene Hazelton
JSC - Carol Harvey
KSC - Debbie Clarke
LaRC - Amy Radford
MSFC - Gary Gray
SSC - Gigi Hackford

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Your immediate attention and support of this initiative is expected in order to ensure successful implementation. I appreciate your help and participation.



Michael D. Griffin

CENTER TRAINING DATA

We contacted Headquarters and each Center to request lists of Core Financial users who had been targeted for and had completed the five core PMI² training courses. After comparing this information with Accenture's Training Metrics Report, we determined that the Training Metrics Report was unreliable and largely inaccurate. Table 1 (p. 13) shows, Agency-wide, the differences between the training metrics reported by Accenture and the training metrics supported by Center documentation. The "Other Individuals Trained" refers to staff who completed PMI² but were not targeted for training. When Centers could not provide a list of targeted users, we included all individuals trained because we could not determine whether they were part of the targeted end users.

Ames. Because of Ames' incomplete training records, we could not determine whether targeted end users completed training or whether Accenture's training statistics were accurate. Although the PMI² Change Management Lead at Ames provided an overall list of users targeted for PMI² training, the Center did not delineate which users it targeted for each of the PMI² training courses listed below.

PMI ² Course	Reported by Accenture		Supported by Ames Training Records		
	Targeted End Users	Targeted End Users Trained	Targeted End Users	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	230	193	Not supported*	Not supported*	42
PMI ² /ALDS Information Delivery	192	120	Not supported*	Not supported*	0
PMI ² Overview for Procurement Personnel	45	45	Not supported*	Not supported*	0
Funds Distribution Processing	6	6	Not supported*	Not supported*	27
Month End Cost Allocation	10	10	Not supported*	Not supported*	10

*The "Not supported" notations in this table are a result of Ames not delineating targeted end users by the course they needed to complete.

Dryden Flight Research Center (Dryden). Dryden’s records generally supported Accenture’s training statistics for four of the five PMI² training courses; however, due to Dryden’s incomplete training records, we could not determine whether targeted end users completed training or whether Accenture’s training statistics were accurate for the PMI² Overview course. According to the PMI² Training Coordinator at Dryden, the Center restricted user access for targeted users who did not complete the applicable PMI² training courses, likely resulting in Dryden’s high course completion rate. In spite of this policy, Dryden could not provide us with a list of targeted users who completed the PMI² Overview course.

PMI ² Course	Reported by Accenture		Supported by Dryden Training Records		
	Targeted End Users	Targeted End Users Trained	Targeted End Users	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	1,167	1,167	1,164	Not supported*	0
PMI ² /ALDS Information Delivery	67	62	67	67	6
PMI ² Overview for Procurement Personnel	21	21	21	21	0
Funds Distribution Processing	6	6	6	6	0
Month End Cost Allocation	6	6	6	6	0

*The “Not supported” notations in this table are a result of Dryden not being able to provide a list of targeted end users who completed the course.

Glenn. Glenn's training records did not support Accenture's PMI² training statistics for two of the five courses and revealed that a number of end users had not completed training. According to Glenn's records, only 72 of 222 targeted users, or 32.4 percent, completed the PMI²/Agency Labor Distribution System Information Delivery course, a mandatory, hands-on PMI² training course. Our review of Glenn's training records was complicated by the fact that Glenn customized its own PMI² courses that did not exactly align with the five courses developed by the Competency Center. While we did not compare the curriculum of the Glenn and Competency Center courses, the Glenn Mission Support and Integration Chief provided a crosswalk from the Center's courses to the corresponding PMI² courses listed below. We constructed the Glenn training statistics based on his assertion that Glenn's courses included the entire original PMI² curriculum.

PMI ² Course	Reported by Accenture		Supported by Glenn Training Records		
	Targeted End Users	Targeted End Users Trained	Targeted End Users	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	320	209	222	125	76
PMI ² /ALDS Information Delivery	165	108	222	72	10
PMI ² Overview for Procurement Personnel	0	2	2	2	1
Funds Distribution Processing	7	7	3	3	4
Month End Cost Allocation	4	4	4	4	0

Goddard. We found that Accenture overstated the number of targeted end users at Goddard who completed the PMI² Overview course, that a large number of targeted users still have not completed that course, and that Center training records were incomplete for four of the five PMI² courses. Goddard PMI² staff could not provide names of users who completed the PMI²/Agency Labor Distribution System Information Delivery course or who had been targeted for the PMI² Overview for Procurement Personnel, Funds Distribution Processing, or Month End Cost Allocation courses. During Goddard's PMI² Operational Readiness Review, the Goddard Deputy Director emphasized the importance of ensuring that all targeted end users received the proper training. Our review also revealed that some Goddard users requested multiple certificates of completion for the PMI² Overview course offered on NASA's Site for On-Line Learning and Resources and, as a result, were counted multiple times in Goddard's records. We made appropriate adjustments to the training statistics noted below.

PMI ² Course	Reported by Accenture		Supported by Goddard Training Records		
	Targeted End Users	Targeted End Users Trained	Targeted End Users	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	1,000	230	997	39	205
PMI ² /ALDS Information Delivery	528	330	151	Not supported*	0
PMI ² Overview for Procurement Personnel	230	3	Not supported*	Not supported*	3
Funds Distribution Processing	13	20	Not supported*	Not supported*	0
Month End Cost Allocation	18	22	Not supported*	Not supported*	0

*The "Not supported" notations in this table are the result of Goddard's incomplete training records.

Headquarters. We found that Accenture overstated the number of targeted end users at Headquarters who completed the PMI² Overview and PMI²/Agency Labor Distribution System Information Delivery courses, that a large number of targeted users still have not completed those courses, and that Headquarters training records were incomplete for three of the five PMI² courses. The Headquarters PMI² Point of Contact for the Business and Administrative Systems Branch provided us with a list of end users for all PMI² courses who had completed training. However, although a number of individuals completed the PMI² Overview for Procurement Personnel, Funds Distribution Processing, and Month End Cost Allocation courses, Headquarters could not provide us with a list of users targeted for those courses. Therefore, we could not determine whether the users who most needed the three courses actually completed the training.

Table 6. Number of Targeted End Users and Number of Targeted End Users and Other Individuals Trained at Headquarters					
PMI ² Course	Reported by Accenture		Supported by Headquarters Training Records		
	Targeted End Users	Targeted End Users Trained	Targeted End Users	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	500	233	226	86	84
PMI ² /ALDS Information Delivery	500	146	226	106	65
PMI ² Overview for Procurement Personnel	3	2	Not supported*	Not supported*	7
Funds Distribution Processing	34	50	Not supported*	Not supported*	36
Month End Cost Allocation	12	13	Not supported*	Not supported*	9

*The "Not supported" notations in this table are the result of Headquarters' incomplete training records.

Jet Propulsion Laboratory. Although the Jet Propulsion Laboratory's records did not support Accenture's training statistics, we found that all end users targeted by the Jet Propulsion Laboratory completed the PMI² Overview course. According to the Manager for the Jet Propulsion Laboratory's Business Management Integration Office, Ames has responsibility for many of the Jet Propulsion Laboratory's financial management functions. Therefore, no Jet Propulsion Laboratory employees have direct, hands-on access to financial management systems affected by PMI². Nevertheless, the Jet Propulsion Laboratory targeted a small group of employees for the PMI² Overview course who have responsibilities for reporting costs and for the receipt, monitoring, and control of funds. The Jet Propulsion Laboratory also encouraged business operations management and program business managers and analysts to attend the PMI² Overview course, although these employees were not formally targeted for training.

Table 7. Number of Targeted End Users and Number of Targeted End Users and Other Individuals Trained at the Jet Propulsion Laboratory					
PMI ² Course	Reported by Accenture		Supported by the Jet Propulsion Laboratory's Training Records		
	Targeted End Users	Targeted End Users Trained	Targeted End Users	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	161	111	32	32	129

Johnson. We found that Accenture overstated the number of targeted end users at Johnson who completed the PMI² Overview and PMI²/Agency Labor Distribution System Information Delivery courses, that all targeted users still have not completed those courses, and that Center training records were incomplete for two of the five PMI² courses.

Table 8. Number of Targeted End Users and Number of Targeted End Users and Other Individuals Trained at Johnson

PMI ² Course	Reported by Accenture		Supported by Johnson Training Records		
	Targeted End Users	Targeted End Users Trained	Targeted End Users	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	484	44	Not supported*	Not supported*	236
PMI ² /ALDS Information Delivery	290	75	48	38	44
PMI ² Overview for Procurement Personnel	90	95	Not supported*	Not supported*	94
Funds Distribution Processing	9	9	9	9	0
Month End Cost Allocation	7	7	7	7	0

*The "Not supported" notations in this table are the result of Johnson's records being incomplete for two of the five courses.

Kennedy. According to the Kennedy PMI² Manager, on the basis of guidance from the PMI² Project Office, the Kennedy PMI² team made an initial determination that 245 employees needed PMI² Overview training. As the project progressed and the requirements were refined, it was determined that the initial estimate was incorrect and that the target population was actually 128.

Table 9. Number of Targeted End Users and Number of Targeted End Users and Other Individuals Trained at Kennedy					
PMI ² Course	Reported by Accenture		Supported by Kennedy Training Records		
	Targeted End Users	Targeted End Users Trained	Targeted End Users	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	245	128	128	128	0
PMI ² /ALDS Information Delivery	176	93	93	93	0
PMI ² Overview for Procurement Personnel	70	1	70	1	0
Funds Distribution Processing	11	11	11	11	0
Month End Cost Allocation	31	31	31	31	0

Langley. The Langley PMI² Team made a strong effort to train Center personnel. The Langley PMI² Manager stated that Langley had listings of targeted end users based on their roles in the Core Financial system, a listing of people who accessed Business Warehouse within a 6-month period, and sign-in sheets that captured who attended the courses. However, since the PMI² Project Office never asked for any of this data, Langley only reported numbers and percentages. The Langley PMI² manager stated that the PMI² Overview course was offered to the entire Center. One hundred and fifty-four users completed the PMI²/Agency Labor Distribution System Information Delivery course at Langley. Additionally, Langley offered multiple workshops to end users as well as individual assistance sessions. Organization-specific presentations were provided upon request.

Table 10. Number of Targeted End Users and Number of Targeted End Users and Other Individuals Trained at Langley

PMI ² Course	Reported by Accenture		Supported by Langley Training Record		
	Targeted End Users	Targeted End Users Trained	Targeted End Users	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	230	213	*	*	
PMI ² /ALDS Information Delivery	230	167	230	130	24
PMI ² Overview for Procurement Personnel**	96	96	96	96	
Funds Distribution Processing	9	8	9	8	
Month End Cost Allocation	6	6	6	6	

*The PMI² Overview course was offered to the entire Center.
 **Langley provided a revised version of the PMI² Overview for Procurement Personnel in addition to the on line training provided by the Agency.

Marshall. Due to incomplete training records at Marshall, we could not determine whether targeted end users completed training or whether Accenture’s training statistics were accurate. While we did review a list of individuals who completed the PMI² Overview, Funds Distribution Processing, and Month End Cost Allocation courses, we could not determine whether those who most needed training completed it because Marshall did not have a list of users targeted for those courses.

PMI ² Course	Reported by Accenture		Supported by Marshall Training Records		
	Targeted End Users	Targeted End Users Trained	Targeted End Users	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	623	312	Not supported*	Not supported*	251
PMI ² /ALDS Information Delivery	623	176	Not supported*	Not supported*	0
PMI ² Overview for Procurement Personnel	49	6	Not supported*	Not supported*	0
Funds Distribution Processing	8	6	Not supported*	Not supported*	6
Month End Cost Allocation	29	6	Not supported*	Not supported*	6

*The “Not supported” notations in this table are the result of Marshall’s incomplete training records.

Stennis. Stennis was the only NASA Center to ensure that all of the end users targeted for PMI² training actually completed their training courses. Stennis was also the only Center to report training statistics that approximated the Accenture's training metrics.

Table 12. Number of Targeted End Users and Number of Targeted End Users and Other Individuals Trained at Stennis					
PMI ² Course	Reported by Accenture		Supported by Stennis Training Records		
	End Users Targeted	Targeted End Users Trained	End Users Targeted	Targeted End Users Trained	Other Individuals Trained
PMI ² Overview	92	71	99	99	0
PMI ² /ALDS Information Delivery	47	21	40	40	0
PMI ² Overview for Procurement Personnel	23	23	24	24	0
Funds Distribution Processing	14	11	14	14	0
Month End Cost Allocation	18	11	12	12	0

MANAGEMENT COMMENTS

National Aeronautics and
Space Administration
Headquarters
Washington, DC 20546-0001



October 16, 2006

Reply to Address

Integrated Enterprise Management Program

TO: Assistant Inspector General for Auditing

FROM: Director, Integrated Enterprise Management Program

SUBJECT: Management Response to Office of Inspector General Draft Audit Report Entitled "NASA Implemented the Project Management Information Improvement (PMI²) Initiative but Crosswalk and Training Need to be Completed." (Assignment No. A-05-026-00)

Thank you for the opportunity to respond to the Draft Audit Report, Assignment A-05-026-00, provided on September 15, 2006. Below is NASA management's response to each of the recommendations set forth in the draft report. This is a consolidated response which includes inputs compiled from various members of the Integrated Enterprise Management Program (IEMP) staff, including the Project Management Information Improvement (PMI²) Initiative Project Manager and the IEMP Program Director. In addition, inputs were provided and consolidated from the Office of the HQ Chief Financial Officer (OCFO), and the Offices of the MSFC Chief Information Officer (CIO) and Chief Financial Officer (OCFO).

Recommendations:

1. The NASA Chief Financial Officer should establish milestones for completing the crosswalk project data from AWCS to NSM.

OCFO Response: Concur. The Agency has completed the AWCS project to NSM project crosswalk to the greatest extent possible. There are approximately 200, out of approximately 13,000, prior year project codes that do not currently have a crosswalk solution due to difficulty in aligning prior year AWCS structures to a single NSM structure. A one-to-one relationship does not exist for this subset of projects. The OCFO will work with the IEMP Competency Center and the affected Mission/Mission Equivalent Offices to appropriately disposition these remaining structures by the end of the second quarter FY 2007.

2. The Director of the Marshall Space Flight Center should direct the contracting officer of Accenture BPA NNM04AA17Z to ensure that (1) all contract deliverables contain specific and accurate requirements for form and content, and (2) all report deliverables required under the BPA contain accurate and reliable data before accepting them and approving payment.

MSFC Response: Concur. The roles/responsibilities of the IEM COTR concerning contract deliverable/invoice review have been clarified to ensure that, when invoices are submitted for approval/payment, the COTR verifies and approves the items on the invoice. In addition, the CO verifies the amount on the invoice is in agreement with the contract Milestone Payment Schedule. Additionally, since the deficiencies identified in OIG Report IG-06-003 are similar to this recommendation and actions have already been taken to close recommendations from IG-06-003, NASA believes the actions already taken are sufficient to close this recommendation. Therefore, based on corrective actions taken, it's requested that this recommendation be closed upon issuance of the final report.

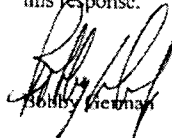
3. The IEM Program Director should solicit each Center Director to re-assess the targeted end users who truly require PMI² training to take appropriate action to ensure that those employees complete the necessary PMI² training courses.

IEMP Program Response: Non-Concur. NASA Centers identified many end users for PMI² training who most likely did not need the training. For example, some Centers targeted everyone with a BW reporting role although many of those people historically accessed BW reports very infrequently, or never. Due to the inconsistent approach used by the Centers for end user identification, it would not be practical or useful to require the full population of targeted end users to attend training. Had this draft OIG report been delivered soon after the implementation of PMI², NASA would have requested that the recommendation be revised to solicit each Center to re-examine the targeted end users still remaining untrained, confirm whether those end users should truly be targeted, and take action to train those who truly need training. However, the November 2006 implementation of the SAP Version Update (SVU) Project is one month away and is resulting in updated reporting training courses being conducted at each of the Centers as well as NASA Headquarters. The need and original goals for PMI² training have been overcome by these SVU training courses and events, and the Agency's time and resources are being focused on delivering the required SVU training.

The enclosure to this response includes additional comment and recommendations regarding the draft audit report.

3

Please contact me if you have any questions or require additional information regarding this response.



Abby Vicuna

Enclosure

cc:
Chief Engineer
Director, Management Systems Division
Director, Marshall Space Flight Center
Deputy Director, Integrated Enterprise Management
Program/Competency Center Manager
Deputy, Chief Financial Officer
PMII Project Manager
Deputy Director for Budget
Chief Financial Officer Liaison
ALR Representative, Marshall Space Flight Center

Enclosure

Additional NASA comments and recommendations on the OIG Draft Audit Report entitled "NASA Implemented the Project Management Information Improvement (PMI²) Initiative but Crosswalk and Training Need to be Completed". (Assignment No. A-05-026-00):

(1) Page i, "The Results" section, 7th sentence:

The statement that the crosswalk had not been completed as of June 2006 misrepresents the status of that activity.

The Agency has completed as of May 31, 2006, the AWCS project to NSM project crosswalk to the greatest extent possible. There are prior year project codes that do not have a crosswalk solution due to differences in accounting for items such as labor and travel prior to the Agency going to full cost and the way the Agency accounts for labor and travel under full cost. An example would be the labor project code for NASA labor prior to full cost, this labor code does not have a single equivalent in the current NSM structure since all project codes allow for labor in the new NASA full cost structure. Other project codes that have not been crosswalked are prior year reimbursable projects that do not have an equivalent current year NSM project to crosswalk to. There some 200 reimbursable project codes from 2004 and prior, which the data crosswalk exercise was not able to effectively crosswalk to a current year NSM project code. Most of these reimbursable projects were for distinct reimbursable activities, and the reimbursable project was limited to the time period of the reimbursable agreement. The crosswalk team is still assessing the need for a viable solution for creating a crosswalk of the reimbursable and other project codes that were used prior to full cost.

Centers may now run selected reports that effectively combine and report on projects crosswalked between the NSM and AWCS structure for multiple program year financial activity. If a Center requires a lower level distinct crosswalk of the WBS structure between the AWCS and NSM structure to be used for Center lower level task or organizational reporting, the Center has the option to add additional lower level WBS crosswalk tables specific to their Center to the Agency Business Warehouse reporting tool to enable additional specific crosswalk WBS detail for their Centers' lower level reporting capability.

(2) Page ii, "The Results" section, 2nd full sentence:

The draft audit report states that the schedule for completion of the crosswalking project has not been established.

See comment (1) above.

(3) Page 2, "Objectives" section, first bullet:

The draft audit report states that their staff reviewed whether the PMI² staff had "adequately trained PMI² implementers and users".

Depending on the type of training offered, delivering training to end users was a responsibility shared with the Centers. Several training approaches were utilized based on degree of process/system changes and level of expertise required to provide the training. For budget-related courses, a key member of the Core/Extended team from Headquarters was selected and trained by the PMI² team to deliver training to Headquarters personnel. The PMI² process lead delivered budget training to the Centers via Webex. In the case of the cost-related course, the "Train the Trainer" approach was utilized, with Center trainers delivering the course at their Centers. The remaining "courses" were actually communication events, in that they presented overview information and did not include any actual training exercises.

We recommend this bullet be modified to read "adequately prepared Centers to train end users".

(4) Page 6, "Data Mapping and Crosswalking" section:

Clarification of Data Mapping Activities:

The purpose of the Data Mapping phase 1 activity that occurred as part of the PMI² "go live" October 2006, was to effectively build out NSM lower level WBS 2-7 structures to be used for PY 2006 financial activity. The Data Mapping process provided the control tool to assure all ongoing active projects were effectively created in the new NSM structure and could be mapped to the project and task activity from active PY 05 projects and lower level WBS's in the AWCS structure, and also allowed project managers of new projects to create WBS 2-7 structures for all new PY 2006 proposed projects.

Clarification of Data Crosswalk Activities:

The Data Crosswalk activity that occurred after the Data Mapping phase was to provide a data crosswalk for PY 2005 and prior year AWCS project codes, cross walking these AWCS projects to the greatest extent possible to the current NSM project code structure. The outcome of the crosswalk exercise was the creation of a cross walk table which enables financial reporting for multiple program years for all AWCS and NSM projects crosswalked.

(5) Page 7, Figure 2:

In this chart, the use of "recording of obligations" does not clearly depict the differences between AWCS and NSM structures in executing transactions. Perhaps a better explanation could be built around the use of Program Year funding. All funding prior to PY06 would continue to be executed (committed, obligated, costed, disbursed) against

AWCS structures until completely consumed, but new budget (PY06 and forward) would be distributed to the NSM structures.

On the second row, the comment mentions a "shift from AWCS to NSM," but in actuality the AWCS structures remained and the new NSM structures were added, so that transactions could continue to be posted against the AWCS structures until all the old budget was consumed.

Recommend that the references to 'FY' in the Comments column be corrected to 'PY' to signify Program Year.

(6) Page 11, "Crosswalk..." section, second paragraph, first sentence:

The draft audit report states that the OCFO had not completed the crosswalking as of June 22, 2006.

Please see comment (1) above.

(7) Page 12, second paragraph, last sentence:

The draft audit report states that the training metrics report was "inaccurate and unsupported."

Clearly, the information provided to the project team was incorrect. However, in consolidating the Center inputs into a consolidated report, Accenture was performing the task as directed by the Project Manager, who relied on the Center Implementation leads to submit accurate data.

It's recommended that a statement be included in the final OIG report noting that the Project Manager did not require Accenture to validate the data submitted by the Centers, which would have required a detailed analysis and would also have been out of the scope of the contract.

(8) Page 14, last paragraph:

The draft audit report states that the Marshall Contract Administration team did not properly review the Training Metrics Report prior to accepting the report, and further states on the following page that no documented evidence exists that the report was actually reviewed.

The PMI² project was managed according to policies and procedures levied by the Administrative Systems Implementation Project Office (ASIPO), and followed the ASIPO methodology for deliverable reviews. An excerpt from the deliverable process guidelines follows below. This process was followed for all PMI² deliverables, including the training metrics report.

ASIPO DELIVERABLE PROCESS
Quick Reference Guide

See the ASIPO Quality Assurance Plan for detailed information.

1. Task Order developed and awarded.
2. NASA Project Management and Contractor Management identify deliverable team representatives.
3. NASA team and Contractor team review objectives, approach, outline the deliverable.
4. NASA team provides feedback on the objectives, approach, and outline of deliverable.
5. Ten business days before deliverable due date: Contractor representative provides completed draft of deliverable to NASA representative. NASA representative forwards completed draft to appropriate team members for comments.
6. Five business days before deliverable due date: Contractor representative conducts a Technical Interchange Meeting (TIM) with NASA team members. TIM request sent to identified representatives on Deliverable Matrix. Those not attending provide comments to Team Lead.
7. Contractor representative incorporates additional comments identified at TIM.
8. Three business days before deliverable due date: final deliverable formally submitted by Contractor to NASA.
Formal submission email should include: Job #, Deliverable #, Deliverable Title, TIM Date, TIM attendees, Path in MDM.
9. Remaining three days before deliverable due date: NASA Management Team conducts final deliverable review using Deliverable Review Form. Business Review Coordinator distributes final deliverable for review to the Technical Review Team and the Technical Review Coordinator.
Technical Review Team consists of TIM attendees and those providing comments for the TIM. Technical Review Team returns Deliverable Review Form to Technical Review Coordinator. Technical Review Coordinator summarizes team's comments and submits to Business Review Coordinator.
Remaining day of final deliverable review Business Review Coordinator and Project Manager review for approval or disapproval.
10. NASA notifies Contractor in writing of the approval/disapproval. If disapproval, NASA provides Contractor comments for incorporation. Deliverable resubmitted for another final review.

(9) Page 19, Appendix A, Review of Internal Controls, "Contract Oversight"
It should be noted that the OIG makes reference to corrective actions MSFC made from previous audit report (IG-06-003). Since the deficiencies identified in this report are similar to those in IG-06-003, NASA believes the actions already taken are sufficient to close MSFC's recommendation in this report.

(10) Page 20, Comments related to termination processes.

There is no evidence in the report that the OIG performed analysis on the terminations and linked them to the roles that required training for PMT². It's not clear that the termination issue noted by the OIG was a contributing factor in the training statistics. This issue adds little value to the report and it is recommended that it be removed from the report since termination and access processes are reviewed and included in the annual financial (FISCAM) audit report.

Revised

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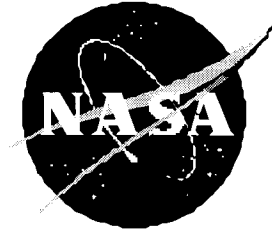
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NOVEMBER 20, 2006

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