National Aeronautics and
Space Administration

Office of Inspector General
Washington, DC 20546-0001

JAN 17 2006

TO: NASA Executive Officer, Integrated Enterprise Management Program

FROM: Assistant Inspector General for Auditing

SUBJECT: Early Planning for the Integrated Enterprise Management Program's Contract Management Module Requirements and Life-Cycle Operations (Assignment No. A-05-014-00)

The Office of Inspector General (OIG) is closing the subject assignment because our initial work revealed no significant issues or concerns. We began the audit of NASA's Integrated Enterprise Management Program's Contract Management Module (CMM) in April 2005. Our objective was to assess the adequacy of NASA's early planning for requirements and life-cycle operations for the module. The CMM is expected to enhance the efficiency of the procurement community and improve aspects of contract management by providing a template-based system to standardize contract writing, limited data reporting, procurement workload management, and procedural aspects of contract administration. The CMM is not expected to provide financial data such as total expenditures against a contract line item; that data will be in the Core Financial system. The announced objectives of our audit were to determine whether NASA

- established effective procedures for planning and monitoring the development of the CMM;
- adequately documented the processes used to identify requirements;
- adequately assessed all user requirements as part of the CMM's requirements development process;
- incorporated all applicable legal and regulatory requirements into the module; and
- identified all potential CMM users.

Given the limited scope of the CMM, we did not use the Government Accountability Office's high-risk critique of NASA contract management as criteria for examining the planning and development of the CMM.

We found that the Office of Procurement held a workshop in FY 2002 to begin developing requirements. A working group, comprised of representatives from NASA Headquarters and each Center, identified the primary CMM users—the procurement community, specifically those who either prepare or administer contracts—and participated in developing CMM's functional and technical requirements from FY 2002 through FY 2005. The working group thoroughly documented 223 functional requirements and 57 technical requirements. The Procurement Steering Committee

reviewed and approved requirements twice in FY 2004 and once in FY 2005. We reviewed the functional and technical requirements and determined that the contractor either had or would adequately incorporate 208 of the 223 functional requirements and 53 of the 57 technical requirements. We determined that the remaining 15 functional and 4 technical requirements did not present limitations for successful software implementation for the following reasons.

- Two functional requirements were for a knowledge-based system. CMM is a template-based system; therefore, these requirements were not applicable.
- Five functional and four technical requirements did not appear to be issues because we found that there were reasonable work-arounds for those requirements.
- Eight functional requirements had Systems, Applications, and Products (SAP) constraints. That is, CMM has the functionality specified by NASA; however, the Core Financial system cannot perform the required functions. Adequate work-arounds had been developed.

In addition, we found that applicable legal and regulatory requirements would be incorporated into CMM because the contractor, as part of the contract with NASA, would be updating CMM to incorporate changes to Federal and NASA procurement regulations.

We also found, however, that NASA had not planned to conduct independent verification and validation (IV&V) testing of CMM. In May 2005, the CMM integration manager stated that funding constraints and other priorities precluded conducting IV&V testing. NASA Procedural Requirements 7120.5C, "NASA Program and Project Management Processes and Requirements," March 22, 2005, nonetheless requires IV&V testing. Because the CMM project was still in its formulation phase, it was subject to those requirements. We discussed with CMM project personnel potential problems in CMM software that might go undetected without IV&V testing. Management took action and tasked a contractor to conduct IV&V testing on CMM. The contractor completed the testing in July 2005 and found no problems.

We appreciate the courtesies and cooperation provided to the staff during this audit. If you have questions or would like to discuss this matter further, please contact Ms. Catherine Schneiter, Financial and Institutional Management Director, at (202) 358-3789.

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