

National Aeronautics and Space Administration

Office of Inspector General
Washington, DC 20546-0001



May 15, 2014

The Honorable Barbara A. Mikulski
Chairwoman
Subcommittee on Commerce, Justice,
Science, and Related Agencies
Committee on Appropriations
United States Senate
Washington, D.C. 20510

The Honorable Richard C. Shelby
Ranking Member
Subcommittee on Commerce, Justice,
Science and Related Agencies
Committee on Appropriations
United States Senate
Washington, D.C. 20510

Subject: Status of Recommendations Made in Audit Report “NASA’s Information
Technology Governance” Report No. IG-13-015

Dear Madam Chairwoman and Senator Shelby:

In June 2013, the NASA Office of Inspector General (OIG) issued a report that found the decentralized nature of NASA’s operations and its longstanding culture of autonomy hinder its ability to implement effective information technology (IT) governance.¹ We reported that NASA’s Chief Information Officer (CIO) has limited visibility and control over a majority of the Agency’s IT investments, operates in an organizational structure that marginalizes the authority of the position, and cannot enforce security measures across NASA’s computer networks. Moreover, the Agency’s IT governance structure is overly complex and does not function effectively. As a result, Agency managers tend to rely on informal relationships rather than formalized business processes when making IT-related decisions. We made eight recommendations in our audit to improve NASA’s IT governance structure to effectively balance compliance, cost, risk, security, and mission success and meet the needs of internal and external stakeholders. As directed by House Report 113-171 - approved by the explanatory statement to Public Law 113-76, the Consolidated Appropriations for FY 2014 - we are providing this update to keep you informed of the actions taken by NASA management in response to our IT governance recommendations.

¹ NASA OIG, “NASA’s Information Technology Governance” (IG-13-015, June 5, 2013).

In summary, NASA has requested and we have granted an extension for implementation of our recommendations. Effective implementation of the recommendations will require a cultural shift and significant changes to the Agency's IT management decision-making regime, including the realignment of authority and responsibilities. NASA management has acknowledged the need for change and in our view is taking an appropriately considered approach to corrective action. NASA anticipates completing corrective action by the end of 2014. The status of each recommendation and the actions taken to date are detailed below.

Recommendation 1. Consolidate the overall governance of IT within the Office of the Chief Information Officer (OCIO) to ensure adequate visibility, accountability, and integration into all mission-related IT assets and activities.

Status of Corrective Action: The OCIO is revising its IT governance model and implementing changes in three phases. In Phase 1, NASA revised procedures to require approval from its Business Systems Management and Information Technology Management Boards for a range of Agency management and operations IT investments. In Phases 2 and 3, NASA will make further revisions to require OCIO approval of and allow OCIO visibility into Center management and operations IT spending and programmatic funding. The OCIO met with the Mission Support Council on March 24, 2014 and obtained approval of the Phase 2 implementation plan.² The OCIO plans to provide an update to the Mission Support Council in June or July 2014 on the outcome and lessons learned from the first three months of execution. NASA expects to close this recommendation by November 30, 2014.

Recommendation 2. Require the Agency CIO to approve all IT procurement expenditures over an established threshold. The threshold should capture the majority of IT expenditures regardless of procurement instrument, to give the CIO visibility and authority over all Agency IT assets.

Status of Corrective Action: The OCIO has met with IT Procurement and Office of Chief Financial Officer representatives and together they have reviewed and defined current procurement processes. NASA officials also conducted an internal assessment last fall to develop a standard process for procuring IT at the Agency and Center levels that incorporates oversight by the OCIO. This assessment involved representatives from the OCIO, the Office of Chief Financial Officer, the NASA Enterprise Applications Competency Center, and the Office of Procurement. According to OCIO representatives, a standard IT procurement process will be built into the new IT governance model. NASA expects to close this recommendation by November 30, 2014.

² The Mission Support Council is NASA's senior decision-making body for IT issues.

Recommendation 3. Reevaluate the relevancy, composition, and purpose of the existing boards in light of changes made to the Agency’s IT governance structure.

Status of Corrective Action: The OCIO has reviewed the governance board charters and analyzed the Agency’s overall IT decision-making process. The OCIO is in the process of reevaluating roles and responsibilities for board and Mission Directorate CIOs. Additionally, in July 2013 the OCIO completed an IT Infrastructure Integration Program (I3P) organizational assessment to analyze the effectiveness of decision making and governance of the I3P process.³ NASA expects to close this recommendation by May 30, 2014.

Recommendation 4. Require the use of governance boards for all major IT decisions and investments, including those made by Mission Directorates.

Status of Corrective Action: OCIO officials said they are working to ensure that all major IT decisions are routed through the revised IT governance process. NASA expects to close this recommendation by November 30, 2014.

Recommendation 5. Revise the board charters to include all information critical to ensuring the effective use of the boards and develop a plan to educate IT managers and personnel regarding the charters and the requirements and interrelationship of the boards.

Status of Corrective Action: The OCIO has reviewed the charters and analyzed the overall decision-making process and is in the process of reevaluating board and Mission Directorate CIO-related roles and responsibilities. NASA expects to close this recommendation by May 30, 2014.

Recommendation 6. Make the Agency CIO a direct report and revise the job titles of the Center and Mission Directorate CIOs to delineate roles and responsibilities more clearly.

Status of Corrective Action: The OCIO stated that the Agency CIO’s position description has been revised and the position is now a direct report to the Administrator. While the title of the Mission Directorate CIOs is being changed to “IT Managers,” NASA does not plan to revise the job title of the Center CIOs. NASA expects to close this recommendation by May 30, 2014.

Recommendation 7. Make the Mission Directorate CIO position a direct report to the Agency CIO and the principal advocate for the IT needs of their respective Directorates. Define and standardize the roles and responsibilities of the Mission Directorate CIOs to ensure consistency. Mission Directorate CIOs should coordinate with the Agency CIO to ensure that both Agency and Mission needs are considered in the development of Agency-wide IT requirements.

³ I3P provides end-user services and equipment, application service technologies, networking, and web infrastructure services and equipment.

Status of Corrective Action: NASA declined to make the Mission Directorate CIOs (soon to be known as “IT Managers”) a direct report to the Agency CIO. Instead, the Agency CIO is working with Mission Directorate CIOs to more clearly define the roles and responsibilities of their position. NASA expects to close this recommendation by September 15, 2014.

Recommendation 8. In light of the changes recommended in this report, reevaluate the resources of the OCIO to ensure that the Office has the appropriate number of personnel with the appropriate capabilities and skill sets.

Status of Corrective Action: The Agency CIO has hired a contractor to perform an organizational assessment of the OCIO. The Agency CIO will review the assessment’s recommendations and make decisions relative to needed OCIO personnel and resources. NASA expects to close this recommendation by July 1, 2014.

If you or your staff would like to meet with us to discuss any of the information discussed in this letter, please contact me or Renee Juhans, OIG Executive Officer, at 202-358-1220 or renee.n.juhans@nasa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "PKMJA". The letters are stylized and connected.

Paul K. Martin
Inspector General

cc: Charles F. Bolden, Jr.
NASA Administrator

Robert Lightfoot
Associate Administrator

David Radzanowski
Chief of Staff

Larry Sweet
Chief Information Officer

Richard Keegan
Associate Administrator, Mission Support Directorate

Michael Wholley
General Counsel

Identical letter to:

The Honorable John D. Rockefeller, IV
United States Senate

The Honorable John Thune
United States Senate

The Honorable Bill Nelson
United States Senate

The Honorable Ted Cruz
United States Senate

The Honorable Thomas R. Carper
United States Senate

The Honorable Tom Coburn
United States Senate

The Honorable Frank Wolf
U.S. House of Representatives

The Honorable Chaka Fattah
U.S. House of Representatives

The Honorable Darrell Issa
U.S. House of Representatives

The Honorable Elijah Cummings
U.S. House of Representatives

The Honorable John Mica
U.S. House of Representatives

The Honorable Gerry Connolly
U.S. House of Representatives

The Honorable Lamar Smith
U.S. House of Representatives

The Honorable Eddie Bernice Johnson
U.S. House of Representatives

The Honorable Paul Broun
U.S. House of Representatives

The Honorable Dan Maffei
U.S. House of Representatives

The Honorable Steven Palazzo
U.S. House of Representatives

The Honorable Donna F. Edwards
U.S. House of Representatives