

National Aeronautics and
Space Administration

Office of Inspector General
Washington, DC 20546-0001



January 14, 2008

TO: Program Director, Integrated Enterprise Management
NASA Headquarters

FROM: Assistant Inspector General for Auditing

SUBJECT: Addendum to Final Report on System Integration Testing of the Systems,
Applications, and Products Version Update Needed Improvement
(Report No. IG-07-031, September 28, 2007)

We requested additional management comments on the subject final report because we did not consider the comments on Recommendation 6 to be responsive. We received additional management comments on November 30, 2007 (see the Enclosure) that are responsive and, therefore, Recommendation 6 is resolved and closed. Following is a summary of management's comments on Recommendation 6 and our evaluation of the comments.

Recommendation 6

In our draft report, we recommended that the Integrated Enterprise Management (IEM) Program Director complete all testing and resolve all defects prior to holding the Operational Readiness Review (ORR).

In response to the draft report, the IEM Program Director partially concurred with the recommendation, agreeing that an ORR should not be held until testing is completed, but disagreeing with the need to resolve all defects prior to entering the ORR. The IEM Program Director noted that although NASA Procedural Requirements (NPR) 7123.1A, "NASA Systems Engineering Processes and Requirements," includes entrance criteria for the ORR stating that "[t]est failures and anomalies from validation testing have been resolved and the results incorporated into all supporting and enabling operational products," the intent of this statement—to force resolution of every individual defect related to an administrative software application prior to conducting the ORR—does not seem feasible or cost-effective, particularly with respect to space flight systems. The IEM Program Director noted that the IEM Program Competency Center "utilizes a set of rigorous entrance and exit criteria for each SIT [system integration testing] pass and will continue to use this criteria going forward."

We considered management's comments on the draft report to be nonresponsive because the IEM Program Director did not agree to comply with the current policy when conducting future IEM Program projects. NPR 7123.1A requires that test failures and anomalies be resolved prior to the ORR. We contend that, at a minimum, all high and

very high severity defects should be resolved or have documented workarounds that have been successfully tested prior to the ORR. Therefore, we requested that the IEM Program Director reconsider his position and provide additional comments in response to the final report.

The IEM Program Director provided additional comments on November 30, 2007, concurring with Recommendation 6. He stated that the latest IEM Program test plan documents have been reviewed and are consistent with the requirements of NPR 7123.1A. The test plan documents show that all very high severity defects must be resolved and all high severity defects must be resolved or have a documented workaround prior to the start of the ORR.

On the basis of these comments, the recommendation is resolved and closed.

We appreciate the courtesies extended the audit staff during the review. If you have any questions, or need additional information, please contact Ms. Wen Song, Acting Financial and Institutional Management Director, Office of Audits, at 202-358-2588.

signed

Evelyn R. Klemstine

Enclosure

cc:

Administrator

Deputy Administrator

Chief of Staff

Associate Administrator, Program Analysis and Evaluation

Chief Financial Officer

Chief Information Officer

Director, Marshall Space Flight Center

Deputy Director, Office of the Chief Information Officer, Marshall Space Flight Center

Director, Competency Center

Supervisor, IEM Program Business Process and Application Support Office

Management's Additional Comments

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



November 30, 2007

Integrated Enterprise Management Program

Reply to Atn of:

TO: Assistant Inspector General for Auditing
FROM: Director, Integrated Enterprise Management Program
SUBJECT: Revised Response to Recommendation 6. Management Response to Office of Inspector General Draft Audit Report entitled "System Integration Testing of the Systems, Applications and Products Version Update Project Needed Improvement". (Assignment No. A-06-017-00)

Per your request, our revised response to recommendation 6 of the referenced Audit report is contained below:

6. The IEM Program Director should require the project manager to not hold the ORR until testing is completed and defects are resolved.

Response: Concur. IEMP agrees that all high and very high defects should be resolved or have documented work-arounds prior to the ORR, as this coincides with IEMP established ORR entrance criteria. Our established entrance criteria are based on NPR 7123.1A, "NASA Systems Engineering Processes and Requirements" and it is IEMP policy for projects to follow this guidance.

The latest IEMP test plan documents have been reviewed and are consistent with the above requirement. The way in which IEMP test plan documents are written, all very high defects must be resolved and all high defects must be resolved or have a documented work-around prior to the start of the ORR.

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

A handwritten signature in black ink, appearing to read "Bobby German".

Bobby German

cc:
Director, Marshall Space Flight Center
Deputy Director, Integrated Enterprise Management
Program/Competency Center Manager

SVU Project Manager
ALR Representative, Marshall Space Flight Center
MSFC OIG Auditor