

March 28, 2006

WALTER O'TORMEY VICE PRESIDENT ENGINEERING

SUBJECT: Technology Acquisition Management Process Manual - Phase 1, Proof of Concept (Report Product Number DA-WP-06-001)

This letter provides the results of our review of the draft *Technology Acquisition Management (TAM) Process Manual* - Phase 1, Proof of Concept, dated January 26, 2006¹ (Project Number 06XR001DA000). We performed the review in accordance with the *Value Proposition Agreement*, dated October 6, 2005.

In September 2004, the U.S. Postal Service Office of Inspector General (OIG) recommended that Engineering develop written policies and procedures to better manage acquisitions in a report entitled, *Technology Acquisition Management* (Report Number DA-AR-04-003). In response, Engineering initiated efforts to further develop, standardize, and document its internal procedures and further develop procedures to address program management activities, such as conditional acceptance criteria. Engineering sought the OIG's assistance in the development efforts, so together we formed a Value Proposition Agreement. Our objectives were to determine whether the draft manual corresponded to acquisition management procedures prescribed by the National Aeronautics and Space Administration (NASA), the Department of Defense (DOD), and the Carnegie-Mellon Institute. In addition, we determined whether the draft manual addressed internal controls prescribed by the Government Accountability Office and prior OIG report recommendations.

To accomplish the objectives, we met regularly with TAM executives and the process development team to provide feedback on draft versions of the manual. The OIG plans to continue implementing the Value Proposition Agreement and expects to issue additional letter reports as the TAM process development team completes phases 2 through 4 of the *TAM Process Manual*.

In general, the procedures documented in the draft manual were consistent with acquisition management procedures prescribed by NASA, DOD, and the Carnegie-Mellon Institute, and addressed internal controls and prior OIG report recommendations.

¹See Appendix A for the transmittal letter accompanying the draft *TAM Process Manual*.

For instance, the draft manual prescribed a disciplined approach to defining requirements and preparing program plans. However, the TAM process development team agreed that additional opportunities exist to further strengthen and improve the manual. Specific areas that could be enhanced include documenting risk management processes, program plan approvals, and user group participation in developing requirements. The results of our review are summarized below and presented in more detail in Appendix B.

• Risk Management Processes

The draft manual requires the program manager to identify major program risks. The OIG suggested providing a template for documenting and evaluating identified risks at specific intervals or milestone events. NASA and the Carnegie-Mellon Institute use continuous risk management to mitigate program risks. Requiring the program manager to document, regularly review, and assess risks in a continually evolving environment should increase the potential for successful acquisition. The TAM process development team is developing risk management templates for inclusion in the *TAM Process Manual* to better document risk management activities at specific intervals or milestone events. These templates will be further refined as TAM develops and documents procedures for follow-on acquisition management phases and included as attachments to the *TAM Process Manual*.

• Program Plan Approvals

The draft manual required the program manager to prepare an overall program plan; however, it did not require documented approval of initial program plans and significant changes. NASA maintained documentation of approvals for the initial plan and subsequent major changes. If the Postal Service has formal procedures for approving and documenting program plans and subsequent changes, this will ensure senior managers are aware of program requirements and agree with plans for completion. The TAM process development team will clarify *TAM Process Manual* procedures to ensure that program managers obtain documented approval for initial program plans and significant changes afterwards.

• User Group Participation in Developing Requirements

While the user community is involved during requirements definition, the process does not address how their input is documented. Carnegie-Mellon Institute guidance prescribes obtaining user community input during requirements definition and documenting their agreement. Including the user community and documenting their participation in the requirements definition process should help ensure acquisitions better meet future Postal Service requirements. The TAM process development team will update the process to define how the user community input is solicited, reviewed, and documented.

Engineering has made noteworthy progress in developing the *TAM Process Manual*. During the review, Engineering was highly responsive to comments and suggestions and the team effort resulted in numerous improvements. We acknowledge Engineering's commitment to enhancing its processes and agree that documented procedures should enhance their ability to deliver the right capabilities on schedule and at predictable costs. We will review the complete draft *TAM Process Manual* before its publication to ensure that agreed-upon opportunities for improvement are considered.

Because of management's responsiveness, and having an opportunity to comment on the *TAM Process Manual* in its entirety prior to publication, we have no recommendations at this time. Management reviewed a discussion draft and provided feedback, which we have taken into account in this final report. While no response is necessary, we appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Miguel Castillo, director, Engineering; Judy Leonhardt, director, Supply Management and Facilities; or me at (703) 248-2300.

E-Signed by Mary Demory 🕐 ERIFY authenticity with Approvel

for Colleen A. McAntee Deputy Assistant Inspector General for Core Operations

Attachments

cc: Susan M. Brownell Aron M. Sanchez Donald E. Crone J. Otis Smith John F. Keegan Steven R. Phelps

APPENDIX A. TECHNOLOGY ACQUISITION MANAGEMENT PROCESS MANUAL (TRANSMITTAL LETTER)

ENGINEERING



January 26, 2006

OFFICE OF INSPECTOR GENERAL UNITED STATES POSTAL SERVICE

SUBJECT: USPS Engineering Management Advisory Letter (MAL) for Phase I TAM Process Manual

In accordance with the agreement between the U.S. Postal Service, Director, Engineering Team, OIG and the U.S. Postal Service Vice President, Engineering, USPS Engineering hereby submits the results of the OIG and USPS Engineering Value Proposition efforts on Phase I of the Technology Acquisition Management Process Manual. Phase I is the "Establish Plan and Develop Requirements" Phase.

In its entirety, this manual will provide acquisition guidelines which will aid in determining the best return on the investment of USPS.

Formulation of the USPS Engineering TAM Process Manual will accomplish both the objective of promoting acquisition practices that maximize benefits for the Postal Service, and the goal of standardizing technology acquisition procedures that support the Postal Service transformation plan.

By implementing the recommended methodologies of documenting Best Practices, benchmarking to those Best Practices, ensuring established parameters, ensuring internal controls are adequate, and obtaining input from stakeholders, TAM Engineering has established this baseline for the TAM Process Manual.

Further submissions will be made in accordance with the Value Proposition Agreement

Don Crone Manager, Mail Processing Protection Systems

John F. Keega anager, Automation/Equipment

J. Otis Smith Manager, Manager Package Sorting & Customer Service Equipment

Attachment

cc: Tony Gaston MiguelCastillo Judy Leonhardt Mark Burrell Carolyn Youngblood Wanda Morell Fazle Rabbee Hezekiah Hayes

8403 Leg Hickway Merry MLD VA 22082-8101

APPENDIX B. OIG PHASE I ANALYSIS

	BENCHMARKING WITH DOD (Department of		Included in Draft Technology Acquisition	TAM Draft Manual	
١.	Defense)	Document Reference	Management (TAM) Manual	Reference	Followup Actions
а.	Prepare an Initial Capabilities Document (ICD).	DODI5000.2, Section 3.4.1	Yes. Program Definition	Section 2.1.1	None
b.	Prepare Analysis of Alternatives (AOA) to refine concept.	DODI5000.2, Section 3.5.1	Yes. Program Definition	Section 2.1.1	None
C.	ICD and AOA approved by MDA (Milestone Decision	DODI5000.2, Section 3.5.2	Yes. Vice-President of Engineering or other Postal	Section 2.1.1	None
	Authority)		Service senior manager		
d.	Prepare Technology Development Strategy (TDS).	DODI5000.2, Section 3.5.4	Yes. Prototype Development Process	Section 2.3	None
e.	Prepare Capability Development Document (CDD) for	DODI5000.2, Section 3.6.7	Yes, Key Performance Schedule Criteria in	Sections 2.6/2.5/2.5.7	None
	MDA approval.		Statement of Work and Decision Analysis Report		
			(DAR) approval by Vice President Engineering,		
			Capital Investment Committee (CIC), Capital Projects		
			Committee (CPC), and Board of Governors (BOG).		

п.	Space Administration (NASA)	Document Reference	Included in Draft TAM Manual	Reference	Followup Actions
a.	Prepare a Formulization Authorization Document (FAD)	NASA Procedure Requirements (NPR) 7120.Section 2.2.1	Yes. Program Definition	Section 2.1.1	None
b.	Prepare a Program Plan; Create an Program Organizational and Financial Structure; Develop a Program Technical Approach; Develop a Continuous	NPR7120, Sections 2.2.2.a/b/c/d/e/f	Yes. Program Plan and Prototype Development Process.	Sections 2 2/2.3	Provide Continuous Risk Management Process Template and
	Risk Management Process; Develop a Tracking Process; and Approval of Program Plan by the MDAA.		No risk assessment template (risk list). No standard program plan. No senior management approves intial program plan.		Program Plan Template. Senior management should approve initial program plan (and major changes).
C.	FAD and Program Plan approved by Program Management Committee.	NPR7120.C, Section 2.3	Yes. VP Engineering approves program definition. No senior management approves initial program plan.	Sections 2.1.1/2.2.2/2.3	Senior management should approve initial program plan (and major changes)

				TAM Draft Manual	
ш.	BENCHMARKING WITH CARNEGIE MELLON	Document Reference	Included in Draft TAM Manual	Reference	Followup Actions
a.	Project Management Process Areas	Capability Maturity Model	Yes. Initial Planning and Program Plan.	Sections 2.1.1/2.2.2	Provide Continuous
		Integration (CMMI)-Acquisition		-	Risk Management
		Model (AM), V1.1, Section 3.1	No risk assessment template (risk list)		Process Template.
b.	Engineering Process Areas	CMMI-AM, V1.1, Sections	Yes. Prototype Developmental Process. User not	Sections 2 3/2 1 1/2 2 1	Include User Group in
×.	Engineering Process Areas	3.2/3.2.1	involved in requirements definition process.	3000013 2.3/2.1.1/2.2.1	the Requirements
		0.2.0.2.1	intered intequiencing definition process.		Definition Process.
-					
				TAM Draft Manual	
IV.	INTERNAL CONTROL CONSIDERATIONS	Document Reference	Included in Draft TAM Manual	Reference	Followup Actions
a.	Internal control should provide for an assessment of	General Accounting Office	Yes. Risk List	Section 2.2.2	Provide Continuous
	the risks the agency faces from both external and	(GAO)/ Accounting and			Risk Management
	internal sources	Information Management Division			Process Template.
		(AIMD)-00-21.3.1,			
		November 1999.			
b.	Internal control activities help ensure that	GA0/AIMD-00-21.3.1.	Yes. Manual provides control activities. Additionally,	Phase 1	None
υ.	management's directives are carried out. The control		Handbook F66 identifies additional controls.	Flase I	None
	activities should be effective and efficient in	November 1999	manubook roo identifies additional controls.		
	accomplishing the agency's control objectives.				

APPENDIX B. OIG PHASE 1 ANALYSIS (CONTINUED)

				TAM Draft Manual	
V.	LESSONS LEARNED FROM PAST AUDIT REPORTS	Document Reference	Included in Draft TAM Manual	Reference	Followup Actions
a.	Establish controls to ensure methodologies and assumptions used in the Decision Analysis Report (DAR) are more accurately projected in the future.	Audit Report No: DA-AR-00-002; <u>Title;</u> Tray Management System; <u>Date</u> : 3/31/2000; Recommendation No. 2 Equipment Requirement and Economic Analysis (EREA)	YES; Data in DAR is validated at different control points. 1) TAM manager reviews initial cost estimate. 2) EREA validates data. 3) Finance validates data. 4) Vice President (VP) sign off on DAR. 5) Finance performs final validation. 6) Capital Investment Committee reviews DAR. 7) Postmaster General reviews DAR. 8) Capital Projects Committee review. 9) Board of Governors review.	(1) page 64; (2) page 88; (3) page 96; (4) page 99; (5) page 100; (6) page 105; (7) page 106; (8) page 109; (9) page 112	N/A, Engineering adequately adressed OIG recommendation.
b.	Ensure DARs reflect more accurate return on investment projections by validating the accuracy of baseline data.	Audit Report No: DA-AR-00-002; <u>Title:</u> Tray Management System; <u>Date</u> : 3/31/2000; Recommendation No. 3	 YES; Baseline Data in DAR is validated at different control points. 1) TAM manager reviews initial cost estimate. 2) EREA validates data. 3) Finance validates data. 4) VPs sign off on DAR. 5) Finance performs final validation. 6) Capital Investment Committee reviews DAR. 7) Postmaster General reviews DAR. 8) Capital Projects Committee review. 9) Board of Governors review. 	(1) page 64; (2) page 88; (3) page 96; (4) page 99; (5) page 100; (6) page 105; (7) page 106; (8) page 109; (9) page 112	N/A, Engineering adequately adressed OIG recommendation.
C.	Establish, implement, and document procedures to ensure DAR funding for each phase is not exceeded without additional approval.	Audit Report No: DA-AR-00-002; <u>Title:</u> Tray Management System; <u>Date</u> : 3/31/2000; Recommendation No. 12	This recommendation does not apply to TAM Phase 1 activities.	N/A	As TAM Process Manual procedures are developed for future phases, the OIG may address this at that time.
d.	Ensure Postal Service specialists from relevant disciplines concur with Decision Analysis Report (DAR) estimates.	Audit Report No: DA-AR-01-002; <u>Title:</u> Robotics Containerization System; <u>Date:</u> 2/26/2001; Recommendation No. 5	YES; DAR data is validated and reviewed at different control points. Initial estimates are obtained from applicable departments and reviewed by managers of departments. Also, applicable VPs review and approve DAR. 1) TAM manager reviews initial cost estimate. 2) EREA validates data. 3) Finance validates data. 4) VPs sign off on DAR. 5) Finance performs final validation. 6) Capital Investment Committee reviews DAR. 7) Postmaster General reviews DAR. 8) Capital Projects Committee review. 9) Board of Governors review.	(1) page 64; (2) page 88; (3) page 96; (4) page 99; (5) page 100; (6) page 105; (7) page 106; (8) page 109; (9) page 112	N/A, Engineering adequately adressed OIG recommendation.

APPENDIX B. OIG PHASE 1 ANALYSIS (CONTINUED)

		TAM Draft Manual				
V.	LESSONS LEARNED FROM PAST AUDIT REPORTS	Document Reference	Included in Draft TAM Manual	Reference	Followup Actions	
e.	Ensure that a individual Decision Analysis Report be prepared for each equipment program, or create separate finance numbers for multiple program Decision Analysis Reports.	<u>Audit Report No:</u> DA-AR-02-010; <u>Title:</u> Automated Seamless Dispatch Program; <u>Date:</u> 9/18/2002; Recommendation No. 1	This recommendation does not apply to TAM Phase 1 activities.	N/A	As TAM Process Manual procedures are developed for future phases, the OIG may address this at that time.	
f.	Ensure that Decision Analysis Reports include a single unified plan for related projects and equipment necessary to support a network.	Audit Report No: DA-AR-02-010; Title: Automated Seamless Dispatch Program; Date: 9/18/2002; Recommendation No. 2	This recommendation does not apply to TAM Phase 1 activities.	N/A	As TAM Process Manual procedures are developed for future phases, the OIG may address this at that time.	
g.	Develop and formally adopt written policies and procedures in accordance with internal controls and best business practices to manage acquisitions. Including, but not limited to: a. Incorporating Postal Service planned program management processes; b. Developing standard procedures for conditionally accepted projects.	Audit Report No: DA-AR-04-003; <u>Title:</u> Technology Acquisition Management; <u>Date:</u> 9/24/2004; Recommendation No. 1	YES; TAM Manual are policies for managing acquisitions. The first section did not deal with conditionally accepted projects. We will review for this requirement in subsequent sections of Manual.	No specific reference; all of manual are policies for managing acquisition	N/A, Engineering adequately adressed OIG recommendation.	
h.	Include sufficient detail in statement of work and modifications to measure and accept performance.	Audit Report No: DA-AR-01-003; <u>Title:</u> Delivery Operations Information System; <u>Date:</u> 3/29/2001; Recommendation No. 10	YES; Manual includes procedure on defining quality assurance and testing requirements (page 125). Manager distributes SOW for review and requests feedback from stakeholders (page 129, 130).	page 125; page 129; page 130	N/A, Engineering adequately adressed OIG recommendation	