

MANAGEMENT OF IRAQ RELIEF
AND RECONSTRUCTION FUND
PROGRAM

THE EVOLUTION OF THE IRAQ
RECONSTRUCTION MANAGEMENT
SYSTEM

SIGIR-06-001
APRIL 24, 2006

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 24 APR 2006		2. REPORT TYPE		3. DATES COVERED 24-04-2006 to 24-04-2006	
4. TITLE AND SUBTITLE The Evolution of the Iraq Reconstruction Management System				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Offices of Inspector General,Special Inspector General for Iraq Reconstruction,400 Army Navy Drive,Arlington,VA,22202				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES The original document contains color images.					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES 36	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			



SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

April 24, 2006

MEMORANDUM FOR U.S. AMBASSADOR TO IRAQ
DIRECTOR, IRAQ RECONSTRUCTION MANAGEMENT
OFFICE
COMMANDING GENERAL, GULF REGION DIVISION,
U.S. ARMY CORPS OF ENGINEERS

SUBJECT: Audit report on Management of the Iraq Relief and Reconstruction Fund
Program: The Evolution of the Iraq Reconstruction Management System
(SIGIR-06-001)

We are providing this audit report for your information and use. We performed the audit in accordance with our statutory duties contained in Public Law 108-106, as amended, which requires that we provide for the independent and objective conduct of audits, as well as leadership and coordination of and recommendations on policies designed to promote economy, efficiency, and effectiveness in the administration of Iraq relief and reconstruction programs and operations and to prevent and detect waste, fraud, and abuse.

We appreciate the courtesies extended to the staff. For additional information on this report, please contact in Baghdad, Iraq, Mr. Joseph T. McDermott at (703) 343-9440, or by email at joseph.mcdermott@sigir.mil; or Mr. Clifton Spruill by email at clifton.spruill@iraq.centcom.mil or at (703) 343-9275. For the report distribution, see Appendix G.

A handwritten signature in black ink, reading "Stuart W. Bowen, Jr." with a stylized flourish at the end.

Stuart W. Bowen, Jr.
Inspector General

Special Inspector General for Iraq Reconstruction

SIGIR-06-001

April 24, 2006

Management of the Iraq Relief and Reconstruction Fund Program: The Evolution of the Iraq Reconstruction Management System

Executive Summary

Introduction. In June 2005, we initiated this audit to determine whether the information systems used by U.S. government organizations resulted in the effective management of Iraq Relief and Reconstruction Fund (IRRF) programs. Issuance of this audit report was delayed to take into consideration significant management improvement actions that took place in September 2005. At that time, the Director, Iraq Reconstruction Management Office (IRMO), required a unified IRRF reporting system be developed and directed all agencies spending IRRF dollars to load and update project data in the system. Preliminary findings from this audit were used as input for the development of the requirements contained in the September 20, 2005, Action Memorandum issued by the IRMO Director (see Appendix B).

This audit report is one of a series of reports addressing the information technology (IT) and management information systems being used to support IRRF programs and their ability to produce reliable and accurate information. This report discusses the development, management and evolution of the Iraq Reconstruction Management System (IRMS).

Objective. The objective of this audit was to determine whether information systems used by U.S. government organizations support the effective management of IRRF programs. Specifically, this audit focused on the development and evolution of the information management system intended to support all organizations for the reporting of IRRF project and funding information.

Results. Although progress is being made, there were many delays during the twenty month period ending September 2005 in the efforts to develop and make fully operational a management information system to report on IRRF projects and funds. In developing the initial IRRF management information system (known as the “PCO Solution”), the Project and Contracting Office (PCO) did not follow some parts of the established leading practices or approved guidance used in the federal government for managing the design and development of an IT system. Because PCO did not assert sound management controls over this project, it did not provide adequate assurance that the PCO Solution would operate effectively and efficiently and comply with applicable laws and regulations. Further, neither PCO nor IRMO senior management took a pro-active role in ensuring that all government entities that receive IRRF monies utilized the PCO Solution for input of their project and fund information. As a result, this system took longer than necessary to develop, did not meet the full intent of the congressional mandate and hampered the work of others who relied upon the PCO data set for the management and reporting of IRRF activities as required by Section 2207 of P.L. 108-106¹.

¹ Section 2207 of Public Law 108-106 requires a report from the Office of Management and Budget to the Congress every three months that updates the proposed uses of all IRRF funds on a project by project basis, including estimates of the cost required to complete each project.

One of the most important factors in the design and software application selection of the PCO Solution was the requirement that there be a joint-use U.S. and Iraqi government component that could be transferred to the Iraqi government (e.g. Ministry of Planning) as a fully operational life-cycle project management solution. This component was referred to as the Iraq Infrastructure Management System (IIMS). However, the following problems existed:

- A detailed joint-use training and transition plan for the IIMS requirements existed in fragmented form and was not formalized.
- There are multiple software applications which will require licensing transfers from the U.S. government to the recipient Iraqi ministry.
- There are also a number of export controlled software components as a part of IIMS that will require special handling or removal prior to transfer to the Iraqi government.

Preliminary findings from this audit were used by IRMO in developing actions to correct problems with the PCO Solution (see Appendix D for details). For example, in September 2005, the IRMO Director requested several actions to be taken, which included but were not limited to:

- directing the development of a unified IRRF management information system (Iraq Reconstruction Management System - IRMS)
- requiring all agencies currently spending IRRF dollars to load and keep current data in the system
- development of a common data dictionary
- development of timeline for transition strategy plan for IRMS turnover to the Iraqi government
- utilize IRMS information to build the basis for the creation of the congressionally mandated *Section 2207 Report*
- discontinue the manual process in IRMO's information management system

Although some progress has been made, there continues to be delays in achieving the goals of the system and providing accurate data for reporting. As of December 30, 2005, data had not been fully loaded into IRMS in order to report on the IRRF dollars and reconstruction projects, for all organizations. Data refinement was still underway by several organizations where the data were being reviewed and verified.

Conclusion. Investments in IT can have a dramatic impact on an organization's performance. A well-managed IT investment that is carefully selected and focused on meeting mission needs can move an organization forward, dramatically improving operations while reducing costs. Likewise, poor investments—those that are inadequately justified or whose costs, risks, and benefits are poorly managed—can hinder and even restrict an organization's performance.

Progress had been made toward meeting the automated support requirements, as outlined by the IRMO Director, and complying with the original congressional mandate. Specifically, the U.S. government organizations are working together to develop the IRMS; a data dictionary has been developed; and each organization has signed a

Memorandum of Understanding in which they each agree to discuss common issues such as data usage and security in the IRMS.

While time consuming, the meticulous verification of the data is critical to ensure the completeness and accuracy of IRMS. IRMO and the Gulf Region Division-Project and Contracting Office (GRD-PCO)², in conjunction with the Information Technology Working Group, are working to resolve these problems, but as reported in the status update regarding IRMS initiatives (see Appendix C), many of the IRMO Director's due dates were missed. Most significant, the original December 2005 date for using the unified system as the basis for the *Section 2207 Report* has now been revised to March 2006.

Recommendations. It is important for IRMO, in coordination with the GRD-PCO and the agencies utilizing IRRF, to continue to provide active leadership in assuring all organizations work together in correcting the problems identified with the IT system. A complete and accurate IRRF database that is accessible by the U.S. government activities and their respective management via an automated solution is the key to the success of the IRRF program. This effort must be maintained in order that a viable and unified IT management system is developed with sustained operability in order to provide an accurate and reliable picture of IRRF programs and funds for Congress, U.S. government organizations, and transition to the Iraqi government.

As such, we recommend that the IRMO Director work in conjunction with the Commanding General, GRD-PCO, and the ITWG, to continue the development of the Iraq Reconstruction Management System by ensuring all requirements identified in the IRMO Action Memorandum dated September 20, 2005, have been addressed and actions implemented.

We further recommend that the IRMO Director develop the following:

- a detailed plan to mitigate the presence (to the extent required at time of transfer) of all export control software and substitute, where appropriate, alternative solutions to retain overall solution integrity and functionality at time of transfer
- a software maintenance and licensing transfer plan to ensure the value of the software and infrastructure investment is protected by maintaining appropriate levels of annual maintenance support, licensing agreements, and executing sound equipment maintenance practices. Further, as part of this plan, a formal turnover folder should be created containing all of the necessary documents to officially transfer this software from U.S. government to the Iraqi government.

Management Comments and Audit Response. A combined response to the draft of this report was received from the U.S. Ambassador of Iraq and IRMO. The U.S. Ambassador to Iraq concurred in general with the findings of the audit and the recommendation relative to the transfer of the IRMS system to the Iraqi government, and states that corrective actions have been taken. An IRMS Migration Working Group has been authorized to look at the policies relating to transfer of IRMS to Iraqi authorities. Preliminary discussions have been held with the acting Iraqi National Chief Information Officer and the Ministers of Communications and Planning to define Iraqi management

² Effective December 4, 2005, the PCO was merged with the U.S. Army Corps of Engineers, Gulf Region Division (GRD), to form GRD-PCO.

requirements and transfer policies. IRMO is proactively working with implementing agencies to ensure that the IRMS program provides improved data collection, consolidation, standardization and reporting. Detailed comments provided by IRMO with this response were considered in the preparation of this final report. The comments received are fully responsive.

Technical comments to the draft of this report were also provided by the Commanding General, Gulf Region Division, and have been incorporated into this final report as appropriate.

Table of Contents

Executive Summary	i
Introduction	
Background	1
Objective	2
Finding	
Evolution of the Iraq Reconstruction Management System	3
Conclusion and Recommendations	9
Appendices	
A. Scope and Methodology	11
B. IRMO Director's Action Memorandum on Requirements for an Integrated System	13
C. IRMO Status Report on Requirements for the Iraq Reconstruction Management System, as of December 30, 2005	16
D. PCO Solution	17
E. Acronyms	24
F. Report Distribution	25
G. Audit Team Members	27
Management Comments	
U.S. Ambassador to Iraq	28
Commanding General, Gulf Region Division, U.S. Army Corps of Engineers	29

Introduction

Background

This audit report is one of a series of reports addressing information technology systems reporting on Iraq Relief and Reconstruction (IRRF) projects. This audit report focused primarily on the management of the development and evolution of the IT system intended to support the management and reporting of the IRRF. We reviewed the development of the IT system to determine if it was sufficiently coordinated within the organizations receiving IRRF monies, and to report on the operational status of the system.

In November 2003, \$18.6 billion was appropriated under the Emergency Supplemental Appropriations Act for Defense and the Reconstruction of Iraq and Afghanistan (Public Law 108-106). The law created the IRRF, of which \$18.4 billion of the appropriation was designated for Iraq reconstruction. To fulfill reporting and monitoring requirements of the Act, Congress earmarked \$50 million to remain available until September 30, 2005. In addition, the money was to be used for the preparation and maintenance of public records required by the Act.

We are addressing the use of these funds, as well as the management controls to ensure accurate, complete, and timely reporting to senior government officials on the use of IRRF, in separate audits.³

Section 2207 Report. Section 2207 of Public Law 108-106 requires a report from the Office of Management and Budget to the Congress every three months that updates the proposed uses of all IRRF funds on a project by project basis, including estimates of the cost required to complete each project. The most recent report, entitled, “Section 2207 Report on Iraq Relief and Reconstruction” (*Section 2207 Report*), released in October 2005, was prepared by the Department of State. The *Section 2207 Report* is compiled by IRMO from data provided by the Department of State, the Department of Defense, the U.S. Agency for International Development (USAID), and other agencies that use IRRF.

Iraq Reconstruction Management Office (IRMO). National Security Presidential Directive 36, “United States Government Operations in Iraq,” May 11, 2004, delegated responsibility for the continuous supervision and general direction of all assistance for Iraq to the Secretary of State. The Directive also created a temporary organization within the U.S. Mission in Iraq, called the Iraq Reconstruction Management Office (IRMO), to facilitate the transition in Iraq.

Project and Contracting Office (PCO). National Security Presidential Directive 36 also established the Project and Contracting Office (PCO) and directed the PCO to provide acquisition and project management support for activities in Iraq. On June 22, 2004, the Deputy Secretary of Defense established the PCO within the Department of the Army and directed the PCO to provide support for all activities associated with financial, program, and project management for both construction and non-construction IRRF activities. The PCO

³ *Fact Sheet on the Use of \$50 Million Appropriation To Support the Management and Reporting of the Iraq Relief and Reconstruction Fund*, SIGIR-05-026, January 27, 2006; and *Review of Data Entry and General Controls in the Collecting and Reporting of the Iraq Relief and Reconstruction Fund*, SIGIR-06-003, April 2006.

was consolidated with the U.S. Army Corps of Engineers, Gulf Region Division (GRD); to form GRD-PCO on December 4, 2005.

Objective

The objective of this audit was to determine whether information systems used by U.S. government organizations support the effective management of IRRF programs. Specifically, this audit focused on the development and evolution of the information management system intended to support all organizations for the reporting of IRRF project and funding information.

For a discussion of the audit scope, methodology, and a summary of prior coverage, see Appendix A. For definitions of the acronyms used in this report, see Appendix E. For a list of the audit team members, see Appendix G.

Evolution of the Iraq Reconstruction Management System

Initial Development of the IRRF Management Information System

The mission of the Project and Contracting Office (PCO)⁴ is to contract for and deliver services, supplies, and infrastructure identified within the Iraq Relief and Reconstruction Fund (IRRF). The PCO management structure consists of U.S. government employees, along with some representation from Iraq and other countries. Contractors are hired to provide the program management, both on an overall scale, as well as in each of the construction sectors. Other contractors are assigned work within those sectors to perform the construction tasks.

To assist in monitoring IRRF projects and funds, the development of management reporting system was initiated by the PCO. PCO received start-up monies of \$15.5 million, from the \$50 million IRRF funds designated for this purpose, to purchase the software, configure the system, and employ technical consultants. This initiative was known as the PCO Solution.

The PCO Solution was designed and deployed employing the capabilities of two different environments. The first environment, the Iraq Infrastructure Management System (IIMS), was a collection of designing, engineering, and construction applications that were deployed to provide for joint U.S.-Iraq use in managing programs and ultimate transfer to the Iraqi government. The second environment, the U.S. Army Corps of Engineers (USACE) Information Technology suite of systems, was deployed to leverage existing legacy computing capabilities and to provide a technology platform on which to manage the inherently governmental functions of acquisition, financial, and construction management. The PCO Solution was planned to provide for data sharing between these two environments and data integration within each of these environments. For detailed information regarding the background, design, operating environment, cost, and preliminary results of this audit of the PCO Solution, see Appendix D.

One of the key factors in the design and application selection of the PCO Solution was the requirement that it be a joint-use, U.S.-Iraq, solution and that the IIMS component be transferable to the Iraqi government (e.g. Ministry of Planning) as a fully operational management information solution. However, the following problems existed:

- A detailed joint-use training and transition plan for the IIMS requirements existed in fragmented form and was not formalized.
- There are multiple software applications which will require licensing transfers from the U.S. government to the recipient Iraqi ministry.
- There are also a number of export controlled software components as a part of IIMS that will require special handling or removal prior to transfer to the Iraqi government.

⁴ The Project and Contracting Office (PCO) was consolidated with the U.S. Army Corps of Engineers, Gulf Region Division (GRD), on December 4, 2005. While currently referred to as GRD-PCO, the PCO function described here is still valid since events referred to occur prior to December 4, 2005. This report refers to PCO until events occur after the consolidation date.

PCO did not follow some parts of the established leading practices or approved guidelines used in the federal government for managing the design and development and transfer to a foreign government of an information technology system, as defined by applicable federal regulations, policies, and procedures. The initial decisions by PCO for the requirements and applications selected for the PCO Solution relied on qualitative, judgmental data and analysis rather than quantitative measures. Quantitative measures are normally used in defining and developing system architecture plans for comparing and prioritizing alternative software applications; for developing user requirements; for prototyping prior to implementation; and for conducting pre- and post-implementation cost-benefit analyses to support ongoing management oversight processes and the eventual transfer of this technology to the Iraqi government.

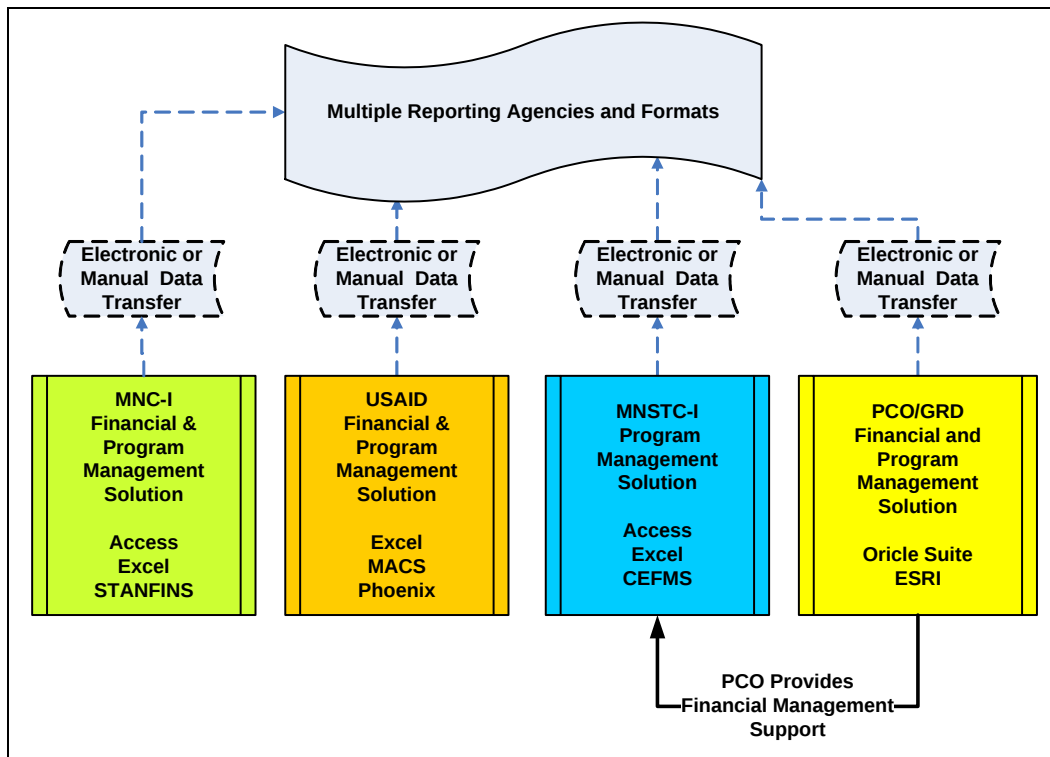
Transition to the Iraq Reconstruction Management System (IRMS)

Although progress has been made, we determined that for almost twenty months, until September 2005, there were many delays because both PCO and Iraq Reconstruction Management Office (IRMO) senior management failed to take a more pro-active role in ensuring that all government entities that receive IRRF monies utilized the PCO Solution for input of their project and fund information. This lack of management attention in defining requirements resulted in a system that did not meet the full intent of the congressional mandate and hampered the work of others who rely upon the PCO data set for reporting purposes.

In September 2005, USACE, Gulf Region Division (GRD) and PCO officials briefed the IRMO Director on the recommended solution to consolidate information from multiple data sources into a single database⁵. The proposed integrated U.S. government IT solution, the Iraq Reconstruction Management System, would leverage off the lessons learned and capabilities of the PCO Solution. The goal of this new solution was to provide a unified common operating picture of the reconstruction programs in order to synchronize and coordinate efforts across U.S. government agencies and from Iraqi national, provincial, and local government levels. The following figures illustrate the current operating practices and the intended transition of the data reporting from the original reporting practice (Figure 1); to an interim reporting practice using the IRMO Information Management Unit (IMU) Rollup Database in an extended roll (Figure 2); to the evolving U.S. government IT solution, the Iraq Reconstruction Management System (IRMS) (Figure 3).

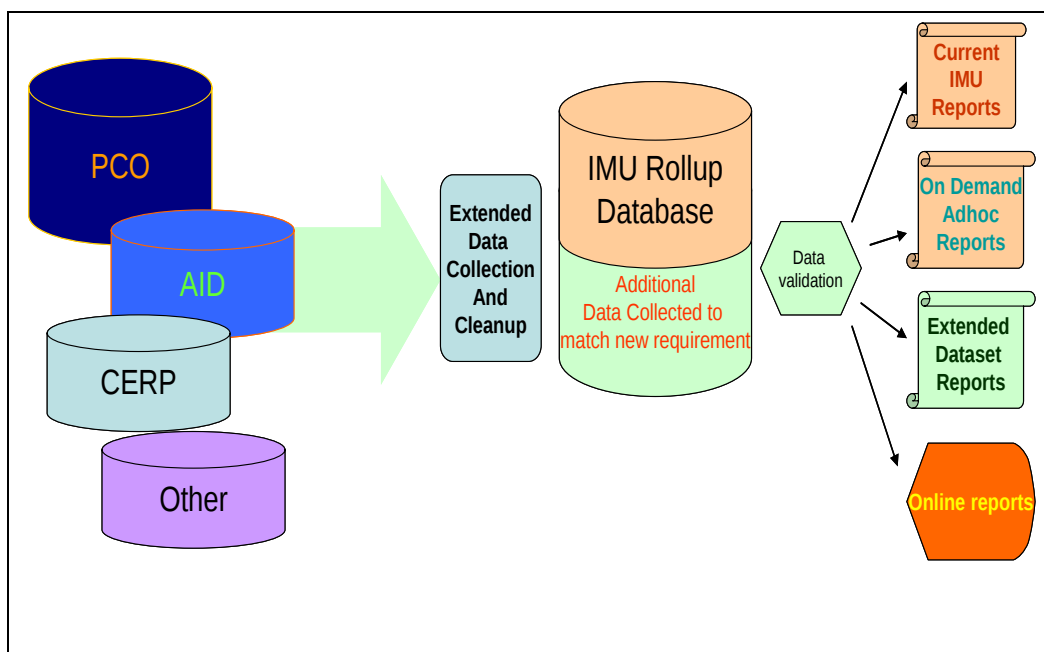
According to the senior leadership of IRMO, GRD, and PCO, implementation of the PCO's proposed U.S. government IT solution coupled with the additional requirements identified by the IRMO Director provides the best potential of a workable solution within the timeframe required.

⁵ Briefing presentation entitled, "Consolidated Reconstruction Database Update to Ambassador Speckhard," 5 September 2005.



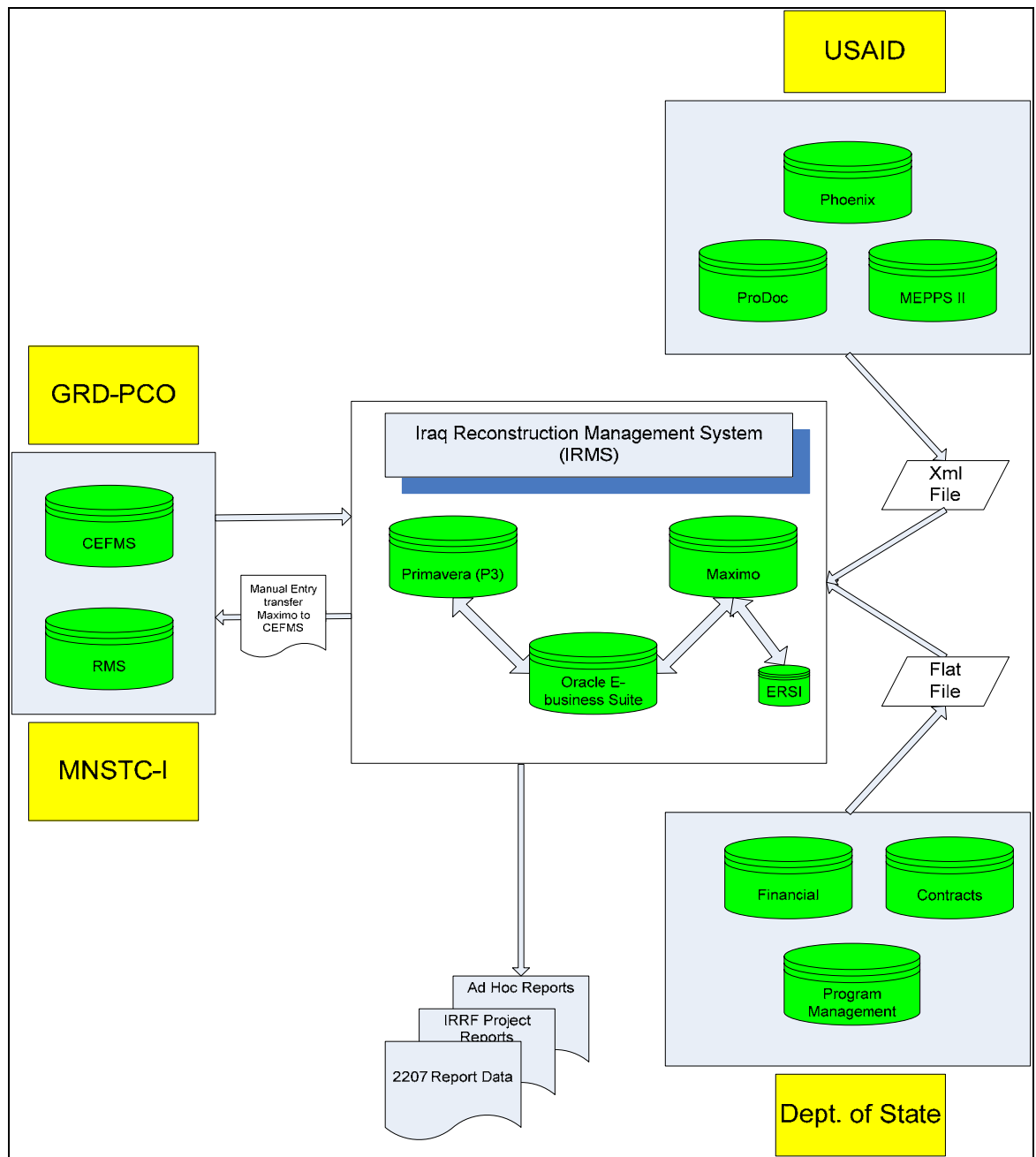
Source: PCO Brief

Figure 1. Original Reporting Practice



Source: PCO Brief

Figure 2. Interim Reporting Practice



Source: SIGIR

Figure 3. Iraq Reconstruction Management System (IRMS)

To facilitate development of the U.S government IT solution, the IRMO Director and his staff, in consultation with SIGIR, GRD-PCO, and others identified a series of critical actions that should be taken to address the desired improvements to the PCO Solution. As a result, the IRMO Director, in September 2005, issued an Action Memorandum directing all agencies receiving IRRF dollars to load and update IRRF-funded project data into the IRMS. The memorandum's intent was that GRD-PCO and the other agencies were to work with IRMO to develop the technical portions of the system to accept the additional records and to assure valid data was entered into the system. For the full text of the Action Memorandum, see Appendix B.

The critical initiatives identified by the IRMO Director were:

- development of a single unified IT system, with a common data dictionary, that all agencies currently spending IRRF dollars be required to load and keep current with IRRF-funded project data
- GRD-PCO demonstrate the capability of the unified system in reporting information required in the congressionally mandated *Section 2207 Report* by mid-November 2005 with the intent of the information being used in the December 2005 report
- GRD-PCO and IRMO develop a transition strategy for transferring the unified system to the Iraqi government

To assist in implementing the Action Memorandum initiatives, an interagency Information Technology Working Group (ITWG) was formed to help coordinate implementation of the unified system. The ITWG working group is comprised of representatives from IRMO, the PCO, GRD, Multi-National Corps-Iraq, Multi-National Security Transition Command-Iraq, the Department of State, and the U.S. Agency for International Development. The ITWG has been proactive in coordinating implementation of several of the initiatives and has resolved numerous issues and problems which have arisen during the course of making IRMS a unified system.

As of December 30, 2005, many of the initiatives discussed in the IRMO Director's Action Memorandum were underway. Our review determined that the IRRF organizations, in general, are working well together. Some of the issues which have been addressed are:

- A data dictionary was developed, providing common definitions of inter-agency data points, and is in place.
- Organizations have signed a Memorandum of Understanding agreeing to discuss common issues such as data usage and security in IRMS.
- Assessment and cost analysis of bandwidth requirements were completed which will facilitate interfacing to the IRRF agency unique systems.

However, there are some initiatives that have been delayed or not completed:

- The achievement of a complete IRRF database has not been realized.
- Data have not been fully loaded into the IRMS regarding IRRF dollars, for all organizations.

Data refinement is still underway in several organizations where the data are being reviewed and verified. The ITWG is working with these organizations and has established a revised

timeframe for using IRMS to prepare the March 2006, *Section 2207 Report*. For details on the progress of these initiatives, see Appendix C.

Additional Observations: IRMS Evolution and Transferability

During our review, we and IRMO identified additional areas of concern that need to be addressed before IRMS can be effectively fully operational and transferred to the Iraqi government. Specifically the areas of concern we identified are:

- In reviewing the plans to develop the transition of the IRMS component to the Iraqi government, we noted that the plan did not consider export control issues or identify alternative solutions for software that cannot be transferred because of export control regulations.
- A software maintenance and licensing transfer plan with identified warranties has not been documented.

Further, IRMO identified:

- The linkage between financial information and projects is difficult to obtain. There is currently a \$3 billion variance between construction project dollars in the database and the total IRRF apportionment of \$18.4 billion. IRMO attributes this difference to items such as contingency, overhead, administrative costs, security, studies, etc.
- Dollars were tied to “activities or initiatives” that did not result in a project. The GRD-PCO database does not report these costs in their standard reports if the “activity/initiative” never resulted in a project. GRD-PCO estimates there is less than \$200 million associated with this issue.

Conclusion and Recommendations

Conclusion

Investments in IT can have a dramatic impact on an organization's performance. A well-managed IT investment that is carefully selected and focused on meeting mission needs can move an organization forward, dramatically improving operations while reducing costs. Likewise, poor investments, those that are inadequately justified or whose costs, risks, and benefits are poorly managed can hinder and even restrict an organization's performance.

Progress had been made toward meeting the IT requirements, as outlined by the IRMO Director, and complying with the original congressional mandate. Specifically, the U.S. government organizations are working together to develop the IRMS; a data dictionary has been developed; and each organization has signed a Memorandum of Understanding in which they each agree to discuss common issues such as data usage and security in the IRMS.

While time consuming, meticulous verification of the data is critical to ensure the completeness and accuracy of the IRMS. IRMO and GRD-PCO, in conjunction with the ITWG, are working to resolve these problems, but as reported in the status update regarding IRMS initiatives (see Appendix C), many of the IRMO Director's due dates were missed, including the original December 2005 date for using the unified system as the basis for the *Section 2207 Report* which has now been revised to March 2006.

Recommendations, Management Comments, and Audit Response

It is important for IRMO, in coordination with the GRD-PCO and the other agencies of the ITWG, to continue to provide active leadership in assuring all organizations work together in correcting the problems identified with the IT system. A complete and accurate IRRF database that is accessible by the U.S. government activities and their respective management via a common automated solution is the key to the success of the IRRF program. This effort must be maintained in order that a viable and unified IT management system is developed with sustained operability in order to provide an accurate and reliable picture of IRRF programs and funds for Congress, U.S. government organizations, and transition to the Iraqi government.

As such, we recommend that the IRMO Director work in conjunction with the Commanding General, GRD-PCO, and the ITWG, to continue the development of the Iraq Reconstruction Management System by ensuring all requirements identified in the IRMO Action Memorandum dated September 20, 2005, have been addressed and actions implemented.

We further recommend that the IRMO Director develop the following:

- A detailed plan to mitigate the presence (to the extent required at time of transfer) of all export control software and substitute, where appropriate, alternative solutions to retain overall solution integrity and functionality at time of transfer.

- A software maintenance and licensing transfer plan to ensure the value of the software and infrastructure investment is protected by maintaining appropriate levels of annual maintenance support, licensing agreements, and executing sound equipment maintenance practices. Further, as part of this plan, a formal turnover folder should be created containing all of the necessary documents to officially transfer this software from U.S. government to the Iraqi government.

Management Comments and Audit Response. A combined response to the draft of this report was received for the U.S. Ambassador of Iraq and IRMO. The U.S. Ambassador to Iraq concurred in general with the findings of the audit and the recommendation relative to the transfer of the IRMS system to the Iraqi Government, and states that corrective actions have been taken. An IRMS Migration Working Group has been authorized to look at the policies relating to transfer of IRMS to Iraqi authorities. Preliminary discussions have been held with the acting Iraqi National Chief Information Officer and the Ministers of Communications and Planning to define Iraqi management requirements and transfer policies. IRMO is proactively working with implementing agencies to ensure that the IRMS program provides improved data collection, consolidation, standardization and reporting. Detailed comments provided by IRMO with this response were considered in the preparation of this final report. The comments received are fully responsive.

Technical comments to the draft report were also provided by the Commanding General, U.S. Army Corps of Engineers, Gulf Region Division, and have been incorporated into this final report as appropriate.

Appendix A. Scope and Methodology

In June 2005, we initiated this audit, Project No. D2005-DCPAAI-0004.3. We conducted our work in Baghdad, Iraq, at the: PCO Annex Building, Freedom Building, Multi-National Security Transition Command-Iraq (MNSTC-I), USAID, and the U.S. Embassy Annex.

The review focused primarily on the management of the development of the IRRF computerized information management systems and the data flow of this information in support of the production of the congressionally mandated *Section 2207 Report*. We reviewed computerized information systems used by U.S. government organizations to determine whether they were sufficiently coordinated among the organizations to ensure accurate, complete, and timely reporting to senior government officials on the use of IRRF Funds.

To determine whether federal government rules and regulations were adhered to and whether adequate management oversight was used in the development of the information management systems reporting on IRRF funds, we reviewed documentation provided by PCO and IRMO pertaining to the purchase and development of the system. Key IT and contractor support personnel staffs were interviewed who were familiar with the development and operation of the system. We also identified and analyzed pertinent policies and regulatory requirements governing the acquisition and development of federal IT systems. We used Government Accountability Office's (GAO) "Standards for Internal Control in the Federal Government" (GAO/AIMD-00-21.3.1, November 1999) as guidance.

The following criteria was used in determining if the IT system was developed in accordance with all applicable federal regulations, policies and procedures:

- Clinger-Cohen Act, formerly the Information Technology Management Reform Act of 1996, Division E of Public Law 104-106
- Paperwork Reduction Act of 1995, Public Law 104-13
- The Federal Acquisition Streamlining Act of 1994, Public Law 103-355
- Chief Financial Officers (CFO) Act (Public Law 101-576)
- Executive Order 13011, "Federal Information Technology", dated July 17, 1996
- OMB Circular A-11, Transmittal Memo # 4 "Management of Federal Information Resources" dated November 28, 2000
- OMB Circular No. A-130, "Management of Federal Information Resources", dated February 8, 1996
- The 2005 Federal Acquisition Regulation (FAR) Part 39 "Acquisition of Information Technology"
- Government Accountability Office (GAO) "Information Technology Investment Evaluation Guide", web guide, <http://www.gao.gov/policy/itguide/homepage.htm>
- Government Accountability Office (GAO) Strategic Information Planning "Framework for Designing and Developing Systems Architectures", GAO/IMTEC-92-51, dated June 1992

We conducted this performance audit from June through December 2005, in accordance with generally accepted government auditing standards.

Use of Computer-Processed Data. We did not utilize any computer-processed data during this audit.

Prior Coverage.

Special Inspector General for Iraq Reconstruction (SIGIR)

Reports issued by the Office of the Special Inspector General for Iraq Reconstruction can be accessed on its website <http://www.sigir.mil>.

SIGIR Audit Report Number SIGIR-05-027, dated January 27, 2006, “Methodologies for Reporting Cost-to-Complete Estimates”, concluded that U.S. Government agencies failed to effectively compile and report cost-to-complete information for IRRF projects – Facilities and Transportation (F&T) sector, as required by Public Law 108-106, thereby excluding important project visibility essential for project management and Congress to make informed management decisions during IRRF program execution.

SIGIR Audit Report Number SIGIR-05-026, dated January 27, 2006, “Fact Sheet on the Use of the \$50 Million Appropriation to Support the Management and Reporting of the Iraq Relief and Reconstruction Fund,” presented the facts on how the funds earmarked for the preparation, maintenance, monitoring, or reporting of the Iraq Relief and Reconstruction Fund information were used and our concerns as to the lack of information available to support the detail expenditure of this appropriation.

SIGIR Audit Report Number SIGIR-05-021, dated October 24, 2005, “Management of Iraq Relief and Reconstruction Fund Programs: Cost-to-Complete Estimate Reporting”, concluded the three organizations responsible for IRRF projects – PCO, USAID, and the MNSTC-I – have been required, since January 2004, to report cost-to-complete information for their IRRF projects in quarterly reports to the Congress. However, these organizations did not begin providing reasonably comprehensive cost-to-complete data to IRMO until the summer of 2005.

SIGIR Audit Report Number SIGIR-05-011, dated July 26, 2005, “Cost-to-Complete Estimates and Financial Reporting for the Management of the Iraq Relief and Reconstruction Fund”, included a review of PCO’s input to the April 2005 *Section 2207 Report* and found that PCO did not provide cost-to-complete information to IRMO for the *Section 2207 Report*. PCO maintained that (1) project data was not sufficiently mature to develop reasonable estimates at completion; an (2) they could not consolidate information from their management information systems because they were not integrated.

Appendix B. IRMO Director's Action Memorandum on Requirements for an Integrated System



*Embassy of the United States of America
Baghdad, Iraq*

September 20, 2005

ACTION MEMORANDUM

UNCLASSIFIED

TO: MNSTC-I Commanding General – LTG Martin Dempsey
USAID Director – Ms. Dawn Liberi
GRD Commanding General - BG Bill McCoy
PCO Director – Mr. Hugh Exton

FROM: IRMO Director – Ambassador Daniel Speckhard

CC: NEA/I – Deputy Asst. Secretary Bob Godec
Chargé – Ambassador David Satterfield
SIGIR – Mr. Stuart Bowen
NEA Special Advisor – Dr. George Folsom

SUBJECT: Requirements for Integrated IT System

I welcome the work that has been done over the last few weeks to move us forward on developing a single system, utilized by all agencies for managing the implementation of USG sponsored reconstruction projects. To meet this objective:

- 1) All agencies currently spending IRRF dollars will be required to load and update IRRF-funded project data in the current IT system developed by PCO/GRD. The IRMO IMU will use this IT system to derive IRMO, Embassy, DoS and Congressional reporting requirements. For the next reporting period, implementing agency project data currently provided to IMU that is not present in



Embassy of the United States of America
Baghdad, Iraq

the system will be entered and updated by IMU through the usual data submittal process.

- 2) The PCO system interface will be made available to implementing agencies and PCO will provide a common, non-agency specific interface that reflects the integrated effort. The IT staff of PCO, USAID and State will provide an assessment and cost analysis for increased bandwidth requirements to facilitate agency user access to the interface by October 31, 2005. USAID will designate a technical representative to provide input for the assessment by September 30, 2005.
- 3) GRD/PCO will demonstrate that the IT system is capable of providing IRMO and Congressionally mandated reporting requirements for IRRF-funded projects by mid-November to be used for the December 2207 report. All IRMO implementing agencies will be responsible for ensuring the provision of required data.
- 4) The IT Working Group comprised of representatives from IRMO, GRD, PCO, MNSTC-I, State and USAID must provide a common data dictionary that provides a reference for cross-walking the definitions of inter-agency data points. A draft must be completed by October 30, 2005.
- 5) GRD/PCO must provide funding and resources to maintain the IT system at a minimal level through the completion of the last IRRF-funded project. This also includes providing an archive for USG usage and transfer of a complete data-set to the Iraqi government.
- 6) GRD/PCO must develop, in conjunction with IRMO and implementing agencies, the scope of work and cost analysis for system requirements for various options of inter-agency usage. This would eliminate data flows through IRMO IMU and provide automatic data transfer directly from the data owners to the IT system. A draft analysis will be completed by November 30, 2005. In order for IRMO to



Embassy of the United States of America
Baghdad, Iraq

facilitate the analysis of the linkage to the USAID MEPPs system, USAID must provide to IRMO IMU the design document for the MEPPS II system by September 30, 2005.

- 7) GRD/PCO and IRMO will develop a transition strategy that outlines how the system will be transferred to the Iraqi Government. At a minimum level, a plan for the hand-over of a complete data-set from the IT system must be defined by GRD/PCO. Specification for maximum utilization of the system by the Iraqi Government must also be articulated and priced to include an assessment of current and required capability within the Iraqi Ministries and an estimate of IT system sustainability costs. A timeline for this plan will be defined by the IT Working Group by October 30, 2005.
- 8) IRMO will not provide additional financial resources for the operations and maintenance of the system. However, IRMO is committed to the development of the common operating picture and will provide oversight and appropriate staff support.

Drafted: IRMO/IMU ASharkey (914) 360-5726
Clearance: IRMO/Deputy Director Analysis: DHarris (OK)
IRMO/Deputy Director Operations : RHeine (OK)
IRMO/Operations: RDiehl (OK)
IRMO/Budget: DHoepfer (OK)

Appendix C. IRMO Status Report on Requirements for the Iraq Reconstruction Management System, as of December 30, 2005

Requirement	Due Date	Completed Yes/No	Revised Date	Status
A complete data set to build the basic report for the “2207 report”	11/30/05	No	01/01/06	Each agency was/is still working on validating their data
Discontinue IMU project roll-up	11/30/05	No	01/30/06	Will prepare duplicate reports through 01/30/06
Common (non-agency specific) interface developed	10/31/05	Yes		Completed. All agencies have their interfaces customized to their needs. Some requested enhancements. These adjustments are being made.
Assessment and cost analysis of bandwidth requirements to facilitate agency interface	10/31/05	Yes	12/01/05	PCO-IT did an initial assessment IRMO to include this information in supplemental
USAID technical representative identified for system	9/30/05	Yes	10/31/05	Complete
ITWG to demonstrate ability of system to meet “2207 report” requirements for Dec. rpt.	11/15/05	Yes		IRMO developed the appendix to 2207 “accomplishments” Additional reports are being created
Draft of a common data dictionary	10/30/05	Yes		Complete
GRD-PCO to provide funding and resources for IRMS system (to include transfer to Iraqi government and complete archive for USG use)	ongoing			GRD-PCO is providing some funding and resources for IRMS, Each agency must provide funding and resources to assure data is validated, entered, and updated
Draft scope-of-work and cost analysis presenting options on inter-agency usage which includes direct data transfer to IRMS	11/30/05	No	TBD	IMU has hired a policy development specialist to meet this objective.
USAID to provide technical requirements for MEPPS II to IRMO/IMU	9/30/05	Yes		Complete
Timeline, developed by ITWG, for a transition strategy plan for IRMS turnover to Iraqi govt. Plan would include the following: outline for the hand over of a complete data set; specifications for maximum utilization and pricing to include and assessment of current and required capability within Iraqi ministries; system sustainability costs.	10/30/05	No	TBD	IRMO is leading a group of ITWG members in developing strategy for determining a timeline to meet all objectives related to IRMS turnover to the Iraqi government.
IRMO to provide oversight and staff support for operation and maintenance of IRMS	ongoing			IRMO, IMU, Systems Administrator, is assigned to the IRMS Project

Appendix D. PCO Solution

Background

On April 24, 2004, the Coalition Provisional Authority (CPA) Resource Requirements Board (RRB) approved \$18 million for the development of the Program Management Office (PMO) IT reporting system, of which PMO received \$15.5 million. The PMO system was to be designed to meet the mandated execution and fiduciary reporting requirements as specified by Public Law 108-106, as well as providing transparency and capacity building as part of the execution of the reconstruction program. The approval to build the PMO system was not a unanimous decision by the RRB, both the Department of State representative and the CPA Chief Financial Office voted not to fund the system. There still exist differences today on how the IT system to monitor the IRRF project should have been constructed.

On May 11, 2004, President Bush signed the National Security Presidential Directive (NSPD) Number 36 regarding USG operations in Iraq. The main emphasis of NSPD Number 36 was the termination of the CPA no later than June 30, 2004, and the re-establishment of diplomatic relations between the United States and Iraq. The U.S. Mission in Baghdad and a temporary Department of State organization called IRMO assumed from the CPA those authorities and responsibilities that continue after CPA termination. In addition, another temporary organization within the Defense Department to replace the PMO was established called the Project and Contracting Office (PCO) to provide acquisition and project management support for activities in Iraq, as requested by the Secretary of State and the heads of other agencies. PCO was to provide acquisition and project management support to the Chief of Mission.

The disestablishment of the CPA and the concurrent establishment of the US Embassy to Iraq also impacted PMO. Prior to transfer of sovereignty, PMO was responsible for total IRRF program management reporting, to include those organizations that received IRRF funding directly from the Office of Management and Budget (OMB). The creation of the Department of State's Iraq Reconstruction Management Office (IRMO) resulted in the transfer of program management responsibilities to IRMO and retention of project management responsibilities with PCO. With this transfer of program management responsibilities went the PCO reporting responsibilities for the actions of non-Defense agencies who received funds from other than PCO, principally Department of State, and U.S. Agency for International Development (USAID).

The mission of the PCO is to contract for and deliver services, supplies, and infrastructure identified within the IRRF. PCO management structure consists of U.S. government employees, along with some representation from Iraq and other countries. Contractors are hired to provide the program management, both on an overall scale, as well as in each of the construction sectors. The sectors are oil, electricity, public works and water, and facilities and transportation. Other contractors are assigned work within those sectors to perform the construction tasks.

To assist in monitoring IRRF projects and funds, the development of an IT management reporting system was initiated by the PCO. PCO received the \$15.5 million from PMO to purchase the software, configure the system, and employ technical consultants. PCO's IT management system was called the PCO Solution.

The PCO Solution was a collection of integrated commercial and government applications that, when properly configured to enable PCO approved processes, and populated with

essential data, were to provide management oversight and reporting capabilities for each milestone and functional area in the life-cycle of a project or relief action. The Iraq Infrastructure Management System (IIMS) was the commercial and transferable component of the PCO Solution. It was a three-tier architecture with the layers being database, middleware, and application riding on a Window/Linux based wide-area network. When combined with the United States Army Corps of Engineers (USACE) computing environment, the combined technologies are considered to be the PCO Solution.

Concept Design & System Architecture

According to the PCO Director of Information Technology, the PCO Solution was designed and deployed employing the capabilities of two different environments. The first environment, the IIMS, was a collection of market leader architecture-engineering-construction applications that were deployed to provide for joint US-Iraq use in managing this program and ultimate transfer to the Iraqi government. The second, the USACE Information Technology Architecture, was deployed to leverage existing legacy computing capabilities and to provide a technology platform on which to manage the inherently governmental functions of acquisition, Standard Procurement System (SPS), financials, Corps of Engineers' Financial Management System (CEFMS), and construction management, Resident Management System (RMS). The PCO Solution was planned to provide for data sharing between these two environments and data integration within each of these environments. This collection of integrated commercial and government application suites that, when properly configured, enable approved business processes by collecting, storing, and presenting essential data and information necessary for management of the IRRF projects; and facilitates real-time oversight and reporting capabilities for each milestone and functional area in the life-cycle of a project or relief action.

The PCO Solution was initially designed and configured based on the following:

- The PMO operational construct was to build around the concept of providing a singular focal point for the distribution of and reporting on all the IRRF monies thereby providing for consolidated program management control over the entire program. The initial agreement between PMO and OMB called for the allocation of IRRF funds to the PCO for distribution to the various U.S. government agencies conducting relief and reconstruction projects including the Departments of State, Defense, and Treasury, USAID, and the U.S. Institute for Peace. However, this agreement was abandoned early in program execution with OMB allocating IRRF funds directly to the executing agencies.
- Given the temporary nature of the organization, the more traditional IT investment board and associated processes were not instituted. Things such as:
 - Considering a broad range of alternatives (each discussing hardware, software, communications, data management, and security considerations) before selecting specific target architecture.
 - Conducting a cost-benefit analysis.
 - Prototyping prior to implementation.
 - Establishing oversight mechanisms to evaluate systematically and ensure the continuing security, interoperability, and availability of systems and their data.
 - Pre and post implementation reviews to determine project cost, benefits and returns.

- Use of commercially available off-the-shelf applications provided PCO with the planned ability to transfer a fully operational system with associated licenses to the Iraqi government at the conclusion of the program, enabling continued legal use of the software. PCO would make no changes to the applications' native coding and application selection was to consider the existence of these applications in the Middle East region as well as their ability to present information in a multi-lingual environment.
- PCO was directed by the Office of the Secretary of Defense to use CEFMS for financial management of the program and SPS as the contract authoring/management application. At the request of USACE, PCO adopted RMS as the construction management tool given pre-existing USACE user familiarity and the anticipated 120-day rotation of USACE personnel in and out of the program or Iraq. These three applications operate in the USACE.Army.mil domain, separate and disconnected from the commercial component of the solution. All data transfer between the two environments is accomplished using file transfer functionality.
- System design and application selection focused on several key factors, not the least of which was application commonality between the PCO Solution and what was already endorsed by both DoD and commercial organizations. Likewise, applications that were previously integrated into the USG legacy program and project management environment were given priority consideration. The software deployed as part of the PCO Solution was selected given its existing alignment or actual use in the USACE enterprise IT architecture. As seen in Table 1, both systems employed the majority of the same applications. In addition, all of the commercial applications used in the PCO Solution have been previously deployed in the US Navy's enterprise architecture to include Maximo, P3, Success, Oracle Projects, ESRI, and Oracle Portal systems at the Naval Facilities Engineering Command. Also, Oracle e-business (including Oracle Projects, Oracle Projects Contracts, Oracle Financial), the Primavera suite of applications, ESRI geospatial software, RS Means-based estimating applications, and Maximo are deployed extensively in the architecture, engineering and construction and infrastructure sustainability environment.

Table 1: Alignment configuration between the USACE IT system and the PCO Solution

Functional Area	USACE	PCO Solution
Program	PROMIS - P2 (not deployed)	MAXIMO
Financial	CEFMS	CEFMS
Disbursing	CEFMS	CEFMS
Acquisition	SPS	SPS
Scheduling	Primavera P3	Primavera P3
Construction	RMS	RMS
Project Controls	RMS	Primavera – Expedition
Geospatial	ESRI – Arc-Serve, Arc Info	ESRI – Arc-Serve, Arc Info
Estimating	MCACES – Success (RS Means)	Success (RS Means)
Infrastructure	(FEM) MAXIMO – Civil Works	MAXIMO – Sustainability
Information Delivery	Oracle Portal	Oracle Portal

In addition, the USACE and Naval Facilities Engineering Command conducted a joint analysis of program and project management software that could be used for the PCO Solution and for the most part, came to the same software configuration as currently exists for the PCO Solution.

- We were advised that the PCO Solution was designed to operate in both fixed priced and cost plus contracts, the type of contract dictating which environment (IIMS or USACE) would govern. It was an early program management goal of the government team that cost plus task orders would initially be negotiated with the contractors for the projects with an initial negotiated not to exceed amount (% of contract). It was envisioned that this approach would allow the contractor to do the site-survey work, mobilize, start design, and develop a sound project cost estimate. Upon completion of this work a fixed price contract would be negotiated and the contract would then be definitized providing for a more fixed accountability of funds then with a cost plus contract.

This fixed price end-state was the operating format that USACE and the USACE legacy systems were most adept at supporting. On the other hand, the PCO sector management contractors and design-build contractors, having executed a large proportion of their commercial work in a cost-plus environment, were well versed in operating in a cost plus environment. From a systems perspective, the fixed price and cost plus environments had to be supported. The IIMS architecture and application selection provided the cost plus management capabilities in the system. This shift to fixed priced contracts was never realized given the volatility of the environment and resulting inaccessibility of the site to the contractors, competition for resources that resulted in escalating costs, and the greater than anticipated deterioration of the Iraqi infrastructure.

As a result of the above, the majority of the large projects which the PCO managed were cost-plus task orders. The impact of this is three-fold:

1. "Cost loaded schedules" and inherent capabilities of the IIMS solution to project "cost to complete" based on earned value is now a critical component in managing program costs.
2. The USACE legacy architecture and workforce accustomed to supporting a fixed price contracting environment becomes less effective, forcing work-arounds and a higher reliance on project management methods and tools (earned value, cost loaded schedules [with a focus on cost to complete]) foreign to most government employees associated with infrastructure construction or repair. As a result, the importance of this key performance indicator had not been realized and was not being reported into the PCO Solution given the lack of cost loaded contractor performance schedules loaded into the solution.
3. USACE, as the construction manager, was not effectively utilizing this critical tool in monitoring costs and overseeing the construction program.

Operating Environment Constraints of the PCO Solution Development

The PCO Solution was developed under certain constraints such as:

- The funds necessary to design, procure, configure, and deploy the required management system were not authorized until May 2004, well after the management, and design and build contracts were awarded. The PCO sector personnel arrived in Baghdad to find their intended management system stalemated in the pursuit of funding, a lack of desks, desktop computing, and other normal services found in a traditional office environment.
- Existing U.S. Central Command computing, network, data cabling, and bandwidth in Baghdad, Iraq, were insufficient to support the PMO organization or mission. Shared desktop hardware and desk space was not a reality for the workforce until fall 2004. Latency (system slowness) was at unacceptable levels. This continued infrastructure shortfall ultimately forced PMO to deploy its own infrastructure; increasing start-up costs, operating expenses, and further delay in deploying a computing environment that could serve a virtual workforce.
- Rapid application deployment is difficult under even the most controlled circumstances. However, faced with a general reluctance of technologists to deploy to Iraq, an environment devoid of even the most basic off-the-shelf support and ever-changing program goals, the difficulties in deploying an enterprise system capable of supporting an \$18.4 billion program were considered, at best, severe.
- Further complicating system configuration was the very nature of the PMO organization – a management team drawn from at least seven different project management firms combined with a rotating government staff drawn from at least as many different departments or agencies. Each came with their own vision of program management, application preferences, and standard operating procedures forcing extended consensus management sessions to deliver the most basic approach to managing the IRRF program.

Costs for the PCO Solution

Initial Start-up Costs (1st year). The CPA Requirements Review Board approved using \$15.5 million of appropriated funds to pay for the PCO reporting system. The approval by the Requirements Review Board was contingent on the effort being financed from the \$50 million provided by Congress for IRRF reporting process. According to the senior PCO official responsible for the systems development and operation and maintenance of the system told us that the \$15.5 million only represented the system start-up costs for the PCO Solution and excluded the operations and maintenance costs and the desktop infrastructure costs. We determined that most of the \$15.5 million was disbursed under two contracts: FY5866-04-C-0001 and FY5866-04-C-0005. Both of the contracts were made with TKC Communications, LLC, of Anchorage, Alaska. Under Task Order Number 0001 of contract FY5866-04-C-0005, undated, identifies under item 0001, services are for the Iraqi Ministry of Planning and Program Management Office Joint Use Facility and Document Management Solution.

Table 2 identifies how the majority of the \$15.5 million was disbursed. Further, Table 3 shows the estimates for annual budget from the operations and maintenance funds required for the annual operations and maintenance of the PCO Solution above the development costs.

Table 2. Cost of PCO Solution by Purpose and Task Order Number

PURPOSE	COST	TASK ORDER #	ITEMS ON TASK ORDER	TOTAL COST
Functional Consulting	\$805,869 \$1,368,023 \$1,965,879	TO # 01 TO # 09 TO # 10	OCS and files management Software configuration Software configuration	\$4,139,771
Software	\$2,823,998	TO # 06	MAXIMO, Oracle applications/product support, and additional software ⁶	\$2,823,998
Application Infrastructure	\$124,407 \$1,678,704 \$819,768 \$1,609,600	TO # 05 TO # 07 TO # 13 --	PCO Annex hardware Infrastructure Infrastructure Connally Contracting (satellite connectivity)	\$ 4,232,479
Reporting and Project Management	\$740,000	TO # 11	Portal expansion & maintenance	\$740,000
Database, Help Desk	\$3,082,577	TO # 17	Help Desk	\$3,082,577
TOTAL COST				\$15,018,825

Table 3. Estimated Annual Operating Budget for PCO Solution

FY	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Cumulative
2005	\$3,525,000	\$3,733,000	\$3,733,000	\$3,733,000	\$14,724,000
2006	\$3,733,000	\$3,733,000	\$3,733,000	\$3,733,000	\$14,932,000

⁶ Besides MAXIMO Task Order # 06 contained the following additional software: WebCEO (\$87,500.), Acrobat (\$105,978.26), Visio Professional (\$76,521.74), AutoCAD (\$167,119.57), MS project (\$9,152.17).

Preliminary Results Discussed with IRMO Director

The PCO did not follow established internal control criteria used in the federal government for managing the concept and development of an information technology system, as defined in accordance with applicable federal regulations, policies and procedures. The initial decisions for the requirements and applications that define the PCO IRRF information technology system (PCO Solution) relied on qualitative, judgmental data and analysis rather than quantitative measures. Quantitative measures are normally used in defining and developing system architecture plans for comparing and prioritizing alternative software application; for prototyping prior to implementation; for developing user requirements (software, hardware, communications, operating environment, and other pertinent technical constraints); and for conducting cost-benefit analyses to support continuing management oversight processes.

Other Observations:

- The system was not able to electronically link the major applications together to accomplish its mission. System applications, by design, are supposed to electronically share data, minimizing the requirements of manual data entry and enforce data standardization and quality. The key data element that enables the delivery of a singular data set across this system is the project number, referred to in the software application Maximo as the Unique Requirements Identifier. The capability is missing for capturing the Unique Requirements Identifier as a separate data field in Corps of Engineer's Financial Management System. Consequently, a significant amount of labor is required to manually reconcile the financial and program management data sets.
- Key data fields and information were not being maintained and critical management functions were not being accomplished within the system as deployed. This lack of data precludes PCO from meeting the full intent of the congressional mandate and hampers the work of others who rely upon the PCO data set for reporting purposes.

Appendix E. Acronyms

CEFMS	Corps of Engineer's Financial Management System
CPA	Coalition Provisional Authority
DoD	U.S. Department of Defense
GAO	U.S. Government Accountability Office
GRD-PCO	Gulf Region Division-Project and Contracting Office
IIMS	Iraq Infrastructure Management System
IMU	IRMO Information Management Unit
IRMO	Iraq Reconstruction Management Office
IRMS	Iraq Reconstruction Management System
IRRF	Iraq Relief and Reconstruction Fund
IT	Information Technology
ITWG	Information Technology Working Group
MNSTC-I	Multi-National Security Transition Command-Iraq
OMB	Office of Management and Budget
PCO	Project and Contracting Office
PMO	Project Management Office
RMS	Resident Management System
SIGIR	Special Inspector General for Iraq Reconstruction
SPS	Standard Procurement System
USACE	U.S. Army Corps of Engineers
USAID	U.S. Agency for International Development

Appendix F. Report Distribution

Department of State

Secretary of State

Senior Advisor to the Secretary and Coordinator for Iraq

U.S. Ambassador to Iraq

Director, Iraq Reconstruction Management Office

Mission Director-Iraq, U.S. Agency for International Development

Inspector General, Department of State

Department of Defense

Secretary of Defense

Deputy Secretary of Defense

Director, Defense Reconstruction Support Office

Under Secretary of Defense (Comptroller)/Chief Financial Officer

Deputy Chief Financial Officer

Deputy Comptroller (Program/Budget)

Inspector General, Department of Defense

Director, Defense Contract Audit Agency

Director, Defense Finance and Accounting Service

Department of the Army

Assistant Secretary of the Army for Acquisition, Logistics, and Technology

Principal Deputy to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology

Deputy Assistant Secretary of the Army (Policy and Procurement)

Director, Project and Contracting Office

Commanding General, Joint Contracting Command-Iraq/Afghanistan

Assistant Secretary of the Army for Financial Management and Comptroller

Chief of Engineers and Commander, U.S. Army Corps of Engineers

Commanding General, Gulf Region Division

Auditor General of the Army

U.S. Central Command

Commanding General, Multi-National Force-Iraq

Commanding General, Multi-National Security Transition Command-Iraq

Commander, Joint Area Support Group-Central

Other Federal Government Organizations

Director, Office of Management and Budget

Comptroller General of the United States

Inspector General, Department of the Treasury

Inspector General, Department of Commerce

Inspector General, Department of Health and Human Services

Inspector General, U.S. Agency for International Development

President, Overseas Private Investment Corporation

President, U.S. Institute for Peace

Congressional Committees and Subcommittees, Chairman and Ranking Minority Member

U.S. Senate

- Senate Committee on Appropriations
 - Subcommittee on Defense
 - Subcommittee on State, Foreign Operations and Related Programs
- Senate Committee on Armed Services
- Senate Committee on Foreign Relations
 - Subcommittee on International Operations and Terrorism
 - Subcommittee on Near Eastern and South Asian Affairs
- Senate Committee on Homeland Security and Governmental Affairs
 - Subcommittee on Federal Financial Management, Government Information and International Security
 - Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of Columbia

U.S. House of Representatives

- House Committee on Appropriations
 - Subcommittee on Defense
 - Subcommittee on Foreign Operations, Export Financing and Related Programs
 - Subcommittee on Science, State, Justice and Commerce and Related Agencies
- House Committee on Armed Services
- House Committee on Government Reform
 - Subcommittee on Management, Finance and Accountability
 - Subcommittee on National Security, Emerging Threats and International Relations
- House Committee on International Relations
 - Subcommittee on Middle East and Central Asia

Appendix G. Audit Team Members

This report was prepared and the audit was conducted under the direction of Joseph T. McDermott, Assistant Inspector General for Audit, Office of the Special Inspector General for Iraq Reconstruction. The staff members who contributed to the report include:

W. Dan Haigler

Walt Keays

Management Comments

U.S. Ambassador to Iraq



Embassy of the United States of America

The Ambassador

Baghdad, Iraq

February 13, 2006

Mr. Stuart W. Bowen, Jr.
Special Inspector General for Iraq Reconstruction
400 Army Navy Drive
Arlington, Virginia 22202

Dear Mr. Bowen:

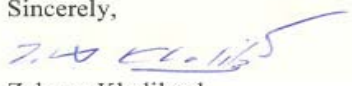
Thank you for the opportunity to comment on the SIGIR Draft Audit 06-001, The Evolution of the Iraq Reconstruction Management Systems (IRMS). In general, we agree with the findings of the audit and have taken substantial corrective action to address these shortcomings, which first became apparent in the last quarter of 2005.

We concur with the recommendations relevant to the transfer of the IRMS system to the Iraqi Government. An IRMS Migration Working Group has been authorized to look at the policies relating to transfer of the IRMS and its content to the proper Iraqi authorities. The group includes U.S. and Iraqi participation and is led by the IRMO Offices of Communications and Information Technology. Preliminary discussions have been held with the acting Iraqi National Chief Information Officer and the Ministers of Communications and Planning to define Iraqi management requirements and transfer policies. This working group will also identify and manage the software export control issues and alternative solutions, as well as software version control and licensing issues as required.

IRMO is pro-actively working with implementing agencies to ensure that the IRMS program provides improved data collection, consolidation, standardization and reporting. Currently, a unified production system is in place with secure access to all implementing agencies. This system can now produce reports that were difficult to achieve in 2005 at the time of the study.

For further, more detailed comments compiled by IRMO, please see the attached Tab A. The Mission appreciates the efforts of SIGIR in preparing this draft audit.

Sincerely,


Zalmay Khalilzad

Management Comments

Commanding General, Gulf Region Division, U.S. Army Corps of Engineers



REPLY TO
ATTENTION OF

CEGRD-CG

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
GULF REGION DIVISION
BAGHDAD, IRAQ
APO AE 09316

11 February 2006

MEMORANDUM FOR Special Inspector General for Iraq Reconstruction, 400 Navy Drive,
Arlington, VA 22202

SUBJECT: Draft SIGIR Audit Report – The Evolution of the Iraq Reconstruction Management
System (SIGIR-06-001)

1. The purpose of this memorandum is to provide the U.S. Army Corps of Engineers, Gulf Region Division response to the subject draft audit report.
2. The Gulf Region Division was an addressee on the report; however the recommendations were addressed to IRMO. Consequently, GRD has no response to the recommendations. We are providing comments for consideration and inclusion in the final report.
3. We appreciate your review of the Iraq Reconstruction Management System. Thank you for the opportunity to provide our written comments for incorporation into the final report.
4. If you have any questions, please contact Mr. Milton Naumann at (540) 665-5064 or his email Milton.Naumann@tac01.usace.army.mil.

Encl


WILLIAM H. MCCOY
Brigadier General, USA
Commanding