

METHODOLOGIES FOR REPORTING  
COST-TO-COMPLETE ESTIMATES

**SIGIR-05-027**  
**JANUARY 27, 2006**



## SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

January 27, 2006

MEMORANDUM FOR DIRECTOR, IRAQ RECONSTRUCTION MANAGEMENT  
OFFICE  
COMMANDING GENERAL, GULF REGION DIVISION, U.S.  
ARMY CORPS OF ENGINEERS  
COMMANDING GENERAL, MULTI-NATIONAL SECURITY  
TRANSITION COMMAND-IRAQ  
MISSION DIRECTOR-IRAQ, U.S. AGENCY FOR  
INTERNATIONAL DEVELOPMENT

SUBJECT: Audit Report on Methodologies for Reporting Cost-to-Complete Estimates  
(SIGIR-05-027)

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 mandates the independent and objective conduct of audits relating to the programs and operations funded with amounts appropriated or otherwise made available to the Iraq Relief and Reconstruction Fund. Public Law 108-106, as amended, requires that we provide for the independent and objective leadership and coordination of and recommendations on policies designed to promote economy, efficiency, and effectiveness in the administration of such programs and operations and to prevent and detect waste, fraud, and abuse.

We considered comments from the Iraq Reconstruction Management Office; Gulf Region Division, U.S. Army Corps of Engineers; Multi-National Security Transition Command-Iraq; and U.S. Agency for International Development on the draft of this report when preparing the final report.

We appreciate the courtesies extended to the staff. For additional information on this report, please contact Mr. Joseph T. McDermott at (914) 822-4618, or by email at [joseph.mcdermott@iraq.centcom.mil](mailto:joseph.mcdermott@iraq.centcom.mil); or Ms. Karen Bell at (703) 428-0147, or by email at [karen.bell@sigir.mil](mailto:karen.bell@sigir.mil). For the report distribution, see Appendix D.

A handwritten signature in black ink that reads "Stuart W. Bowen, Jr." with a period at the end.

Stuart W. Bowen, Jr.  
Inspector General

# Special Inspector General For Iraq Reconstruction

SIGIR-05-027

January 27, 2006

## Methodologies for Reporting Cost-to-Complete Estimates

### Executive Summary

This report is one of a series of reports that addressed the reporting of cost-to-complete information for projects funded by IRRF. The report discusses the need for improvements to the processes and procedures used to estimate and report the costs to complete projects funded with Iraq Relief and Reconstruction Funds. Section 2207 of Public Law 108-106 requires a quarterly report to Congress that includes estimates of the cost required to complete each project.

**Introduction.** 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 Iraq Relief and Reconstruction Fund (IRRF), of which \$18.4 billion of the appropriation was designated for Iraq reconstruction. Section 2207 of this law requires a report to Congress every three months that provides updates on the uses of all Iraq Relief and Reconstruction funds on a project by project basis, including estimates of the cost required to complete each project. The report, entitled “Section 2207 Report on Iraq Relief and Reconstruction,” is compiled by the Department of State’s Iraq Reconstruction Management Office (IRMO) from information provided by the Department of State, the Department of Defense, and the U.S. Agency for International Development (USAID). The cost-to-complete information is reported through a companion report to the Section 2207 Report called the “Project Assessment Report” (PAR).

**Objective.** The objective of this audit was to determine the adequacy of methodologies used to estimate and report the costs to complete for projects funded with IRRF. Specifically, we reviewed the cost-to-complete methodologies in the Gulf Region Division-Project and Contracting Office’s (GRD-PCO) Facilities and Transportation sector, specifically those used in the October 2005 Section 2207 Report. We also reviewed similar USAID projects. We also conducted follow-up on our previous recommendation to IRMO regarding the formalization and finalization of cost-to-complete procedures.<sup>1</sup>

**Results.** The Gulf Region Division-Project and Contracting Office (GRD-PCO)<sup>2</sup>, the Multi-National Security Transition Command-Iraq (MNSTC-I), and USAID failed to estimate and report reliable and transparent cost-to-complete information for the IRRF projects we reviewed. MNSTC-I did not submit a report for the September 30, 2005, PAR, and GRD-PCO and USAID submitted reports with errors that were significant enough to undermine users’ confidence in the reporting.

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<sup>1</sup> SIGIR audit report, “Management of Iraq Relief and Reconstruction Fund Programs: Cost-to-Complete Estimate Reporting,” Report Number SIGIR-05-021, October 24, 2005.

<sup>2</sup> The responsibilities of the GRD were consolidated with those of the PCO on December 4, 2005. This report uses the term GRD-PCO for the consolidated entity.

This condition occurred because the IRMO did not provide formal written guidance to the reporting agencies, as we had previously recommended. The condition also occurred because the reporting agencies failed to:

- develop and communicate effective internal guidance
- identify and correct errors in the reports before issuance
- maintain adequate documented support for the calculation of reported estimates-at-completion
- adequately report project scope changes

Failure to effectively compile and report cost-to-complete information as required by Public Law 108-106 excludes important project visibility essential for project management and Congress to make informed management decisions during IRRF program execution. Because the October 2005 Section 2207 Report did not contain accurate cost-to-complete data, Congress could not use the information to assess IRRF program progress or the availability of funds.

**Internal Control Weaknesses.** We found internal control weaknesses. IRMO and the reporting agencies did not develop and communicate effective guidance, maintain documentation supporting significant numbers in the reports, and adequately review reports before issuance.

**Management Actions.** Since our last cost-to-complete review on October 24, 2005, progress has been made in improving cost-to-complete reporting. However, challenges remain. For example, GRD-PCO program management stated that their cost-to-complete reports are now a more effective project management tool, as a result of improvements to the reporting over the last few months. In addition, since the beginning of the audit, GRD-PCO initiated a draft of guidance detailing methodology for compiling the cost-to-complete reports. GRD-PCO has also decided not to use computer modeling as the methodology for determining future costs.

Also, IRMO has recently done a more thorough analysis of data from the cost-to-complete reports, and IRMO management stated that the result is that the reporting is now being used more effectively as a project management tool. IRMO management stated IRMO is now requiring the reporting agencies to limit the use of program contingency for close-out and emergencies, rather than transferring it directly to projects with a funding shortfall. IRMO management stated that this new requirement helps provide a better picture of cost-to-complete. IRMO management also stated that their analysis identified \$7 million from closed projects that had not been transferred back to the pool of available funds. Those funds will now be available for use in ongoing projects.

**Recommendations.** In order to make informed management decisions, IRRF management and Congress require timely, accurate and comprehensive cost-to-complete information. As such, we recommend that the:

1. Director, Iraq Reconstruction Management Office, require IRMO management to take these actions:
  - a. Formalize its cost-to-complete action plan by issuing a formal policy to finalize consistent procedures across all supporting IRRF organizations for the collection and compilation of the cost-to-complete information.

- b. In the next Department of State Section 2207 Report, provide data to Congress on the adequacy of cost-to-complete methodologies in the other sectors.
- 2. Commanding General, Gulf Region Division, require the GRD-PCO sector management to:
  - a. Finalize the draft of official written guidance covering the methodology, including roles and responsibilities, for generating cost-to-complete reports. The guidance should be issued as a policy directive and should cover all of the construction sub-sectors, as well as non-construction projects. The guidance should include a future costs projection element to assure full consideration of potential costs. The guidance should be consistent with the guidance provided by IRMO.
  - b. Ensure that the decision not to use computer modeling in the calculation of cost-to-complete is updated and reflected in all current and future guidance.
  - c. Develop a thorough review process to eliminate errors in the reporting spreadsheets. The review process should be written into the guidance.
  - d. Create and maintain a permanent central file to document the calculation of estimates-at-completion (EAC) by project. The requirement to create and maintain the central file should be written into the guidance.
  - e. Develop policies to define significant scope changes. For example, variances reflecting a 15 percent change in schedule, scope, or budget could be used as a metric to define “significant”. The changes should be reported in the quarter the changes occurred by adding supporting schedules to the cost-to-complete report. Require the supporting schedules to be sufficiently descriptive to inform users of differences between what is expected to be completed relative to what was planned.
- 3. Commanding General, Multi-National Security Transition Command-Iraq, require MNSTC-I management to:
  - a. Add the future cost projections component to guidance relating to the calculation of the EACs for construction projects. Develop guidance for non-construction projects including the future cost projections component and the requirement to document calculation of the EACs. The guidance should be consistent with the guidance provided by IRMO.
  - b. Develop a thorough review process to eliminate errors in the reporting spreadsheets. The review process should be written into the guidance.
  - c. Develop policies to define significant scope changes. For example, variances reflecting a 15 percent change in schedule, scope, or budget could be used as a metric to define “significant”. The changes should be reported in the quarter the changes occurred by adding supporting schedules to the cost-to-complete report. Require the supporting schedules to be sufficiently descriptive to inform users of differences between what is expected to be completed relative to what was planned. Identify all projects to be completed with funds other than IRRF by adding footnotes to the cost-to-complete report.

4. USAID Mission Director-Iraq, require USAID management to:
  - a. Develop and distribute official written guidance covering the entire methodology, including roles and responsibilities, for generating cost-to-complete reports. The guidance should be issued as a policy directive. The guidance should cover both construction and non-construction projects, and should include a future costs projections component to assure full consideration of potential costs. This guidance should be consistent with guidance provided by IRMO.
  - b. Develop a thorough review process to eliminate errors in the reporting spreadsheets. The review process should be written into the guidance.
  - c. Create and maintain a permanent central file to document the calculation of EACs by project. The requirement to create and maintain the central file should be written into the guidance.
  - d. Develop policies to define significant scope changes. For example, variances reflecting a 15 percent change in schedule, scope, or budget could be used as a metric to define “significant”. The changes should be reported in the quarter the changes occurred by adding supporting schedules to the cost-to-complete report. Require the supporting schedules to be sufficiently descriptive to inform users of differences between what is expected to be completed relative to what was planned.

**Management Comments and Audit Response.** We did not receive written comments on this report from IRMO. However, in discussions with IRMO senior managers they stated that they would develop formal policies and procedures for the participating agencies. They also said that the January 2006 Section 2207 Report would report the adequacy of cost-to-complete methodologies in the other sectors.

The Commanding General, Gulf Region Division, concurred with the recommendations, and provided information on activities that had occurred since the preparation of the draft of this report. In addition, GRD-PCO officials stated that because of the number of scope changes to projects, rather than footnoting the automated cost-to-complete report, GRD-PCO will develop a supporting schedule summarizing the scope changes by quarter.

The Mission Director-Iraq, USAID, concurred with our recommendations and provided some technical corrections to the report.

MNSTC-I officials concurred with most of our recommendations, but did not concur that it should report cost-to-complete information for non-construction projects.

The management comments that concurred with the findings and recommendations are fully responsive. Additional information and corrections provided were considered and the report was changed accordingly. However, we did not agree with the non-concurrence by MNSTC-I regarding reporting for non-construction projects, because without information on actual program costs, decision makers cannot determine where future investments should be made.

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# Introduction

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## Background

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 Iraq Relief and Reconstruction Fund (IRRF), of which \$18.4 billion of the appropriation was designated for Iraq reconstruction.

**Section 2207 Report.** Section 2207 of Public Law 108-106 requires a report to 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 Iraq Reconstruction Management Office (IRMO). The Section 2207 Report is compiled by IRMO from data provided by the Department of State, the Department of Defense, and the U.S. Agency for International Development (USAID). The cost-to-complete information is reported quarterly through a companion report to the Section 2207 Report called the “Project Assessment Report” (PAR).

**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, to facilitate the transition in Iraq.

**Project and Contracting Office (GRD-PCO).** National Security Presidential Directive 36, “United States Government Operations in Iraq,” May 11, 2004, also established the 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. On December 4, 2005, PCO was consolidated with the Corps of Engineers, Gulf Region Division. As of December 15, 2005, the total IRRF funding apportioned to GRD-PCO F&T sector was \$1.49 billion.

**Multi-National Security Transition Command-Iraq (MNSTC-I).** MNSTC-I is a component of the U.S. Central Command’s Multi-National Forces-Iraq Command. MNSTC-I’s general mission is to help Iraq organize, train, equip, and mentor Iraqi Security Forces in order to transition security tasks to Iraqi control. The Coalition Military Assistance Training Team trains and mentors the provision of garrison support services at eight major division and brigade bases throughout Iraq. Provision of services includes constructing/refurbishing facilities, life support, communications, force protection, and medical support. The Civilian Police Assistance Training Team staffs, equips, organizes, trains, and mentors the Iraqi Police Service forces and Department of Border Enforcement forces. All of the projects are accounted for under the F&T sector, since they are all Security and Justice projects. As of December 15, 2005, the total IRRF funding apportioned to MNSTC-I was \$5.26 billion.

**Corps of Engineers Financial Management System (CEFMS).** GRD-PCO Finance and MNSTC-I use the CEFMS for IRRF financial accounting. The CEFMS was designed as a single entry system so the transactions update, in real time, the general ledger and subsidiary ledgers. In CEFMS, as in other financial accounting systems, general ledger amounts should be in agreement with and supported by subsidiary ledgers and transactions detail amounts.

**U.S. Agency for International Development (USAID).** USAID assists Iraqis in reconstructing their country by working with Iraq's interim government. USAID programs are implemented in coordination with the United Nations, World Bank, International Monetary Fund, coalition country partners, nongovernmental organizations, and private sector partners. The USAID Mission in Iraq carries out programs in education, health care, food security, infrastructure reconstruction, economic growth, community development, local governance, and transition initiatives. As of September 30, 2005, USAID had oversight over two construction projects that were similar to F&T, a hospital and a communications network. As of December 15, 2005, the total IRRF funding apportioned to USAID for those projects was \$120 million.

**Phoenix Accounting System.** USAID formerly obtained financial data from the Mission Accounting Control System (MACS). Currently, USAID is transferring to the Phoenix financial accounting system, which is replacing the MACS. These systems are the USAID-wide finance and accounting systems.

**Facilities and Transportation (F&T) Sector.** IRMO reports project data grouped by ten sectors: Electric Sector; Oil Infrastructure; Water Resources and Sanitation; Security and Law Enforcement; Justice, Public Safety Infrastructure, and Civil Society; Transportation and Telecommunications Projects; Roads, Bridges, and Construction; Health Care; Private Sector Employment Development; and Education, Refugees, Human Rights, Democracy, and Governance.

In April, 2005, the Gulf Region Division-Project and Contracting Office (GRD-PCO) consolidated the seven smaller sectors into one larger sector called Facilities and Transportation Sector (F&T). All, except the Oil, Water, and Electricity sectors, are considered to fall under F&T. Multi-National Security Transition Command-Iraq (MNSTC-I) projects are within the security and justice sectors; therefore, we reviewed those projects since they are similar to F&T. We also reviewed two USAID projects similar to F&T, a hospital and a communications network.

As of December 15, 2005, the total IRRF funding apportioned to all F&T and similar reportable projects was approximately \$6.8 billion. The total comprises GRD-PCO (\$1.45 billion), USAID (\$120 million), and MNSTC-I (\$5.26 billion).

**Cost-to-Complete Estimates.** The cost to complete a project may be defined as the total estimated cost of the project less the total actual cost of work performed to date:

- The estimated cost of a project is the actual direct cost, plus indirect costs or allocable costs to the contract, plus the estimate of costs (direct and indirect) for authorized work remaining.
- The actual cost of work performed to date is the cost (direct and indirect) to date of completed work packages and the completed portion of work packages begun and not yet completed.

A process for reporting cost-to-complete estimates is an essential component for managing contract performance. Cost-to-complete estimates should be developed as follows:

- Determine the progress toward contract completion to date.
- Determine the cost of the contract work completed to date.
- Estimate the amount of work remaining to be completed.
- Estimate the cost of the work remaining to be completed.
- Calculate variances between the estimated value of work remaining and the remaining budget.
- Determine the reasons for variances from initial estimates and take appropriate action to correct the causes for the variances.

## **Objective**

The objective of this audit was to determine the adequacy of methodologies used to estimate and report the costs to complete for projects funded with IRRF. Specifically, we reviewed the cost-to-complete methodologies in the GRD-PCO Facilities and Transportation sector, specifically those used in the October 2005 Section 2207 Report. We also reviewed similar USAID projects. We also conducted follow-up on our previous recommendation to IRMO regarding the formalization and finalization of cost-to-complete procedures.<sup>3</sup>

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 C. For a list of the audit team members, see Appendix E.

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<sup>3</sup> SIGIR audit report, "Management of Iraq Relief and Reconstruction Fund Programs: Cost-to-Complete Estimate Reporting," Report Number SIGIR-05-021, October 24, 2005.

# **Methodologies for Reporting Cost-to-Complete Information - Facilities and Transportation Sector**

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For the Department of Defense, GRD-PCO and MNSTC-I; as well as the USAID failed to estimate and report reliable and transparent cost-to-complete information for IRRF projects – F&T sector. MNSTC-I did not submit a report for the September 30, 2005, PAR, and GRD-PCO and USAID submitted reports with errors that were significant enough to undermine users' confidence in the reporting.

This condition occurred because the IRMO did not provide formal written guidance to the reporting agencies. The condition also occurred because the reporting agencies failed to:

- develop and communicate effective internal guidance
- identify and correct errors in the reports before issuance
- maintain adequate documented support for the calculation of reported estimates-at-completion
- adequately report project scope changes

Failure to effectively estimate and report cost-to-complete information as required by Public Law 108-106 excludes important project visibility essential for program and project management and Congress to make informed management decisions during IRRF program execution. As we have reported, without current and accurate cost-to-complete data, the funds available for the completion of the IRRF program cannot be determined and the availability of funds for the initiation of new projects cannot be projected.

SIGIR requested cost-to-complete data from GRD-PCO in February, 2005, and then again, in May. The first monthly cost-to-complete report was produced in June, 2005. GRD-PCO and USAID submitted to IRMO cost-to-complete information dated September 30, 2005 as part of the quarterly project assessment report (PAR).

Cost-to-complete information was not reported quarterly before the September 30, 2005 PAR because:

- there was a lack of guidance
- tasks for a number of projects were not identified, or the parties had not reached agreement on all of the tasks that should be included
- cost estimates for some task orders and projects had not yet been definitized
- there was a re-prioritization of tasks to be accomplished as a result of reprogramming of funds
- software was not implemented to efficiently track estimated and actual costs
- the security situation slowed the pace of the design-and-build teams in visiting job sites, resulting in unanticipated costs. The full effect of those costs was not known

**Internal Control Weaknesses.** We found internal control weaknesses. IRMO and the reporting agencies did not develop and communicate effective guidance, maintain

documentation supporting significant numbers in the reports, and adequately review reports before issuance.

## **Iraq Reconstruction Management Office**

In the Special Inspector General for Iraq Reconstruction Audit Report Number SIGIR-05-021, dated October 24, 2005, "Management of Iraq Relief and Reconstruction Fund Programs: Cost-to-Complete Estimate Reporting," we recommended that the Director of the IRMO take action to develop procedures for eliciting cost-to-complete information. IRMO officials agreed and commenced discussions with reporting agencies to develop a formal process to provide the necessary cost-to-complete reports on a monthly basis. Our recommendation in the report stated that IRMO should formalize its cost-to-complete action plan by issuing a formal policy to finalize consistent procedures across all supporting IRRF organizations for the collection and compilation of cost-to-complete information.

The lack of guidance resulted in inconsistency among the different activities in preparing quarterly reports of cost-to-complete information. For example, GRD-PCO includes associated close-out costs in project EACs, but USAID reported associated close-out costs separately and did not include them when calculating the EACs. IRMO has not completed its action plan to issue a formal cost-to-complete reporting policy. However, IRMO has recently done a more thorough analysis of data from the cost-to-complete reports, and IRMO management stated that the result is that the reporting is now being used more effectively as a project management tool. IRMO management stated IRMO is now requiring the reporting agencies to limit the use of program contingency for close-out and emergencies, rather than transferring it directly to projects with a funding shortfall. IRMO management stated that this new requirement helps provide a better picture of cost-to-complete. IRMO management also stated IRMO's analysis identified \$7 million from closed projects that had not been transferred back to the pool of available funds. Those funds will now be available for use in open projects.

Appendix B represents the agreement of IRMO, OMB, and the Special Inspector General for Iraq Reconstruction as to the data fields needed to ensure complete and transparent reporting of cost-to-complete. During the course of this review, IRMO has updated the format of the PAR in anticipation of preparation of the report for the quarter ending December 31, 2005.

## **Project and Contracting Office**

GRD-PCO prepared monthly cost-to-complete reports for every month from June 2005 through September 2005, and submitted the reports to IRMO. GRD-PCO has worked to improve methodologies and the quality of the reporting, and we found there has been improvement since we last reported on GRD-PCO cost-to-complete data in October 2005. GRD-PCO program management stated their cost-to-complete reports are now a more effective project management tool, as a result of improvements to the reporting over the last few months. However, we found that GRD-PCO has not formalized or issued policy or guidance, and is not validating the data it is reporting to IRMO.

**Guidance for Cost-to-Complete Reporting.** In July 2005, GRD-PCO issued an executive summary entitled, "Cost To Complete Reporting," that accompanied the July monthly cost-to-complete report. The executive summary provided an overview of GRD-PCO methodology for compiling cost-to-complete data. The document provides

general information about cost-to-complete reporting including report format. The document states the EAC is developed based on the budget to complete plus the earned value calculations, plus future cost projections validated through computer generated modeling. However, the document is not official guidance because it is not signed or dated. GRD-PCO F&T staff stated there was no formal written guidance regarding the compilation of the cost-to-complete report. One staff person stated he learned the methodology from a predecessor and “typed up my own guidance.”

In September, 2005, GRD-PCO F&T sector provided to SIGIR another document entitled, “Standard Practice for Developing Estimate at Completion (EAC) for Construction Task Orders”. Estimate-at-completion is a crucial number used to calculate cost-to-complete. GRD-PCO F&T personnel also stated the standard practice document was distributed to all F&T personnel responsible for calculating the EACs for construction projects.

The new document was more detailed and provided information about individual responsibilities. However, the document was presented by GRD-PCO as a “memorialization” or “standard practice”, not a policy directive. The document is unsigned and is not dated. In addition, the document only covers development of the EACs for construction task orders, not the methodology for developing the entire cost-to-complete reports. The methodology for the non-construction element has not been documented.

Further, the standard practice document does not specifically require consideration of future cost projections. Also, the executive summary document states amounts are validated through computer modeling. However, GRD-PCO personnel stated computer modeling does not work for the F&T sector because, based on experience, the numbers generated are not realistic. GRD-PCO personnel stated while they do consider future cost projections, they do not validate data with computer models.

**Report Anomalies.** The Project and Contracting Office F&T sector failed to satisfactorily review the September 30, 2005, cost-to-complete report submitted for the PAR to correct anomalies. We identified twenty-seven anomalies in the cost-to-complete field of the PAR for the GRD-PCO F&T projects. We defined an anomaly as any reported amount at least three percent different than the expected amount for the field, based on the arithmetic formula for cost-to-complete (EAC less cumulative expenditures).

For example, the project code 32000 (Penal Facilities) contains an anomaly in the cost-to-complete field. The reported cost-to-complete is \$39,209,525. The EAC is \$82,734,929. The cumulative expenditures are \$15,407,550. We would expect cost-to-complete to be \$67,327,379 ( $82,734,929 - 15,407,550$ ). The difference between what is expected and what is reported is an apparent understatement of \$28,117,854 ( $67,327,379 - 39,209,525$ ) or 41.8 percent of the expected cost-to-complete amount. The reason for the error could not be determined by analyzing the report.

GRD-PCO also provided an additional data field called “extended cost-to-complete”. GRD-PCO defined extended cost-to-complete as cost-to-complete plus costs of sustainability for fiscal year 2006. However, we identified 228 anomalies out of 295 possible lines in the report, where the reported extended cost-to-complete was different than the expected extended cost-to-complete.

For example, the project code 15000 (Public Safety Training & Facilities) contains an anomaly in the extended cost-to-complete field. The reported extended cost-to-complete

is \$39,279,411. The reported cost-to-complete is \$25,202,866 and the fiscal year 2006 sustainability cost is approximately \$921,703. We would expect extended cost-to-complete to be \$26,124,569 (25,202,866 + 921,703). The difference between what is expected and what is reported is an apparent overstatement of \$13,154,842 (39,279,411 – 26,124,569) or 50.4 percent of the expected amount. It appears, in many cases, that the spreadsheet adds the EAC, instead of the cost-to-complete, to the sustainability cost to arrive at extended cost-to-complete.

The GRD-PCO cost-to-complete report had fields for contract completion date, scheduled completion date, and actual completion date. However, some projects contained an actual completion date after the September 30, 2005, report date. For example, task order 18635 in the health sector is identified as 46 percent complete, but the report lists an actual completion date of January 20, 2006. It is illogical to report an actual completion date after the report date. GRD-PCO F&T staff acknowledged there were errors in the reporting of actual completion dates.

In addition to a few MNSTC-I projects contracted through GRD-PCO, the GRD-PCO cost-to-complete report also included data for MNSTC-I projects not contracted through GRD-PCO. When assembling the data for those projects, GRD-PCO simply used EACs that would result in a zero variance. The EACs were not properly calculated, and the inclusion of these projects will result in duplicate reporting when MNSTC-I starts issuing cost-to-complete reports. GRD-PCO personnel stated they intend to remove the non-GRD-PCO MNSTC-I projects from the reporting.

GRD-PCO personnel agreed there were errors in the report. GRD-PCO personnel stated they are working to improve the reporting spreadsheets and eliminate anomalies.

**Documentation of Reported Amounts.** GRD-PCO failed to maintain adequate documentation to support the calculation of the EAC for each project. Cost-to-complete is simply the result of an arithmetic equation (EAC less cumulative expenditures). However, EAC, which is the total expected cost of the project, must be calculated to arrive at cost-to-complete.

GRD-PCO program management stated that each project manager has primary responsibility for the calculation of the EAC for each project under his or her authority. However, there is no permanent central file containing documentation of the EACs, and GRD-PCO personnel did not know if project managers were maintaining documentation of the calculations. In addition, there is no guidance requiring each project manager to provide written documentation supporting his or her calculation.

The cumulative expenditures amount is drawn from a report run in CEFMS. GRD-PCO personnel in the F&T sector stated they do not have documentation to support cumulative expenditures amounts reported in the cost-to-complete reports. GRD-PCO relies upon the accuracy of CEFMS<sup>4</sup>.

**Reporting project scope changes.** GRD-PCO failed to provide information in the September 30, 2005, PAR alerting readers to significant scope changes in the projects. For example, the scope of a project in the health sector was significantly changed when GRD-PCO decided to construct fewer facilities. GRD-PCO issued monthly cost-to-

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<sup>4</sup> SIGIR has not audited CEFMS; however, for more information on the reliability of data drawn from CEFMS, see GAO report 01-89 “Significant Weaknesses in Corps of Engineers’ Computer Controls”, October, 2000, and GAO follow-up report 02-589 “Corps of Engineers Making Improvements But Weaknesses Continue”, June, 2002.

complete reports for July and August 2005 that identified the scope changes in footnotes. However, the submission for the September 30, 2005, PAR contained no footnotes or any other numbers or text to explain the change in scope of the health project.

## **Multi-National Security Transition Command-Iraq**

MNSTC-I failed to submit a cost-to-complete report for the September 30, 2005, PAR. However, MNSTC-I developed procedures and plans to submit a report for the December 31, 2005, PAR.

**Guidance for Cost-to-Complete Reporting.** MNSTC-I issued authoritative guidance detailing the process for reporting cost-to-complete information for construction projects. The MNSTC-I guidance directs the contracting agencies, Air Force Center for Environmental Excellence and Gulf Region Division, regarding how to calculate the EACs. However, MNSTC-I failed to include a provision for future cost projections. Future cost projections are a critical component for assessing the total cost of the project.

MNSTC-I has not issued guidance relating to non-construction projects.

**Documentation of Reported Amounts.** Personnel at MNSTC-I stated that the contracting agencies are responsible for documenting calculation of the EACs. While MNSTC-I does not keep support for the reported EAC amounts, the issued guidance requires contracting agencies to maintain documentation of the calculation.

Like GRD-PCO, MNSTC-I uses CEFMS to obtain the cumulative expenditures data. MNSTC-I personnel stated that support for the amounts drawn from CEFMS reports are maintained by the contracting agencies. MNSTC-I personnel stated that the contracting agencies are expected to keep invoices on file, and that the agencies can produce the invoices upon request to support a cumulative expenditures number, if necessary.

## **U.S. Agency for International Development**

USAID submitted a cost-to-complete report for the September 30, 2005 PAR. However, we found that USAID has not formalized or issued policy or guidance, and is not validating the data it is reporting to IRMO.

**Guidance for Cost-to-Complete Reporting.** The US Agency for International Development has not developed and communicated effective guidance for estimating and reporting cost-to-complete information. On June 2, 2005, SIGIR made a specific request for policies and procedures relating to cost-to-complete reporting. USAID communicated their procedures orally with SIGIR auditors, but USAID stated they would not provide cost-to-complete methodology in writing until they received instruction from IRMO.

USAID obtains financial data from USAID-wide financial systems. However, the USAID contractor employee primarily responsible for compiling the USAID cost-to-complete submission for the September 30, 2005, PAR stated he used data provided by the contractor, rather than data from USAID systems. The lack of formal guidance resulted in an over-reliance on information provided by a contractor.

**Report Anomalies.** USAID failed to thoroughly review the September 30, 2005, cost-to-complete reports to correct anomalies. USAID reported two construction task orders

that were similar to the F&T sector, a hospital and a communications network, with a total value of \$120 million.

We identified an anomaly in the cost-to-complete field for the totals row (for all sectors) in the USAID PAR. The reported cost-to-complete in the totals line is \$961,389,057. The total EACs are \$1,331,211,678. The total cumulative expenditures are \$581,194,360. We would expect cost-to-complete to be \$750,017,318 (1,331,211,678 – 581,194,360). The difference between the reported cost-to-complete and the calculated cost-to-complete is an apparent overstatement of \$211,371,739 (961,389,057 – 750,017,318). The report was in error by including indirect costs of \$211,371,739 in the total cumulative expenditures, but not including the amount in the total EACs.

We also identified an anomaly in the PAR where USAID separated programmatic close-out costs from the EAC. The programmatic close-out costs are reported in a separate column, and the cell formula for the close-out costs is three percent of EAC. This means the close-out costs are not being included in the EACs, which are undervalued by three percent for all USAID projects as a result. The total amount of the separated close-out costs for all projects was approximately \$19.3 million. The EAC is the total cost to complete the project, and the associated programmatic close-out costs are part of the total costs.

**Documentation of Reported Amounts.** USAID failed to maintain supporting documentation for the calculation of the EAC for each project. It appears USAID simply used the budgeted amount for the project as the value of the EAC.

The cumulative expenditures amount reported in the September 30, 2005, PAR was derived from data provided by the contractor managing the projects. USAID personnel stated they have copies of invoices on file and can support any cumulative expenditures number in the cost-to-complete report.

**Reporting Project Scope Changes.** USAID failed to provide information in the September 30, 2005, PAR alerting readers to significant scope changes in the projects. Because we only reviewed two projects that were similar to the F&T sector and both were in the early stages of construction, it is possible neither had a significant scope change.

## Conclusion

GRD-PCO, MNSTC-I, and USAID were required by Public Law 108-106 to submit cost-to-complete information to IRMO for the PAR for the quarter ending September 30, 2005.

However, MNSTC-I did not submit a cost-to-complete report for the quarter. In addition, the three reporting entities failed to develop proper guidance, adequately review reports before submission, document the calculation of critical numbers, and note significant scope changes in the reporting.

We conclude that IRMO, as well as GRD-PCO, MNSTC-I, and USAID (the reporting entities) failed to develop methodologies to assure reliable and transparent cost-to-complete reporting. Failure to effectively compile and report cost-to-complete information as required by Public Law 108-106 excludes important project visibility essential for project management and Congress to make informed management decisions during IRRF program execution. Because the October 2005 Section 2207 Report did not

contain accurate cost-to-complete data, Congress could not use the information to assess IRRF program progress or the availability of funds.

## **Recommendations, Management Comments, and Audit Response**

In order to make informed management decisions, IRRF management and Congress require timely, accurate and comprehensive cost-to-complete information. As such, we recommend the:

1. Director, Iraq Reconstruction Management Office, require IRMO management to take these actions:
  - a. Formalize its cost-to-complete action plan by issuing a formal policy to finalize consistent procedures across all supporting IRRF organizations for the collection and compilation of the cost-to-complete information.
  - b. In the next Department of State Section 2207 Report, provide data to Congress on the adequacy of cost-to-complete methodologies in the other sectors.
2. Commanding General, Gulf Region Division, require the GRD-PCO sector management to:
  - a. Finalize the draft of official written guidance covering the methodology, including roles and responsibilities, for generating cost-to-complete reports. The guidance should be issued as a policy directive and should cover all of the construction sub-sectors, as well as non-construction projects. The guidance should include a future costs projection element to assure full consideration of potential costs. The guidance should be consistent with the guidance provided by IRMO.
  - b. Ensure that the decision not to use computer modeling in the calculation of cost-to-complete is updated and reflected in all current and future guidance.
  - c. Develop a thorough review process to eliminate errors in the reporting spreadsheets. The review process should be written into the guidance.
  - d. Create and maintain a permanent central file to document the calculation of estimates-at-completion (EAC) by project. The requirement to create and maintain the central file should be written into the guidance.
  - e. Develop policies to define significant scope changes. For example, variances reflecting a 15 percent change in schedule, scope, or budget could be used as a metric to define “significant”. The changes should be reported in the quarter the changes occurred by adding supporting schedules to the cost-to-complete report. Require the supporting schedules to be sufficiently descriptive to inform users of differences between what is expected to be completed relative to what was planned.
3. Commanding General, Multi-National Security Transition Command-Iraq, require MNSTC-I management to:
  - a. Add the future cost projections component to guidance relating to the calculation of the EACs for construction projects. Develop guidance for

- non-construction projects including the future cost projections component and the requirement to document calculation of the EACs. The guidance should be consistent with the guidance provided by IRMO.
- b. Develop a thorough review process to eliminate errors in the reporting spreadsheets. The review process should be written into the guidance.
  - c. Develop policies to define significant scope changes. For example, variances reflecting a 15 percent change in schedule, scope, or budget could be used as a metric to define “significant”. The changes should be reported in the quarter the changes occurred by adding supporting schedules to the cost-to-complete report. Require the supporting schedules to be sufficiently descriptive to inform users of differences between what is expected to be completed relative to what was planned. Identify all projects to be completed with funds other than IRRF by adding footnotes to the cost-to-complete report.
4. USAID Mission Director-Iraq, require USAID management to:
- a. Develop and distribute official written guidance covering the entire methodology, including roles and responsibilities, for generating cost-to-complete reports. The guidance should be issued as a policy directive. The guidance should cover both construction and non-construction projects, and should include a future costs projections component to assure full consideration of potential costs. This guidance should be consistent with guidance provided by IRMO.
  - b. Develop a thorough review process to eliminate errors in the reporting spreadsheets. The review process should be written into the guidance.
  - c. Create and maintain a permanent central file to document the calculation of EACs by project. The requirement to create and maintain the central file should be written into the guidance.
  - d. Develop policies to define significant scope changes. For example, variances reflecting a 15 percent change in schedule, scope, or budget could be used as a metric to define “significant”. The changes should be reported in the quarter the changes occurred by adding supporting schedules to the cost-to-complete report. Require the supporting schedule be sufficiently descriptive to inform users of differences between what will be completed relative to what was planned.

**Management Comments and Audit Response.** We received written comments to the draft of this report from officials at GRD-PCO, USAID, and MNSTC-I. We did not receive written comments from IRMO, but discussed the report and its recommendations with senior IRMO managers.

IRMO managers told us that they concurred with our recommendation to issue a formal policy to finalize consistent procedures across all supporting IRRF organizations. They also said that the January 2006 Section 2207 Report would discuss the adequacy of cost-to-complete methodologies in the other sectors.

The Commanding General, Gulf Region Division, concurred with the recommendations, and provided more recent information on activities that had occurred since the preparation of the draft of this report. In addition, GRD-PCO officials stated that because of the number of scope changes to projects, rather than footnoting the automated cost-to-

complete report, GRD-PCO will develop a supporting schedule summarizing the scope changes by quarter. Comments were fully responsive.

The Mission Director-Iraq, USAID, concurred with our recommendations and stated that they would develop a written mission policy and procedures for estimating CTC that included controls for validating and revalidating estimates. USAID also said that it would seek to coordinate with IRMO to develop a mutually agreeable methodology for calculating CTC estimates. However, they said that any methodology used by USAID would reflect USAID's definition of a project and USAID's requirements, policies, procedures and limitations. USAID also stated that it would create and maintain a permanent central file to document the calculation of EACs by project. USAID did question our use of the term facilities and transportation sector projects, stating that it is not a term used by USAID. Consequently, they questioned whether the anomalies we identified pertained to USAID projects. We agree, and have changed our report as appropriate. However, standardized reporting still applies to USAID activities, as it has construction projects that must be included in Section 2207 Reports. These include one hospital project and one communication project. Comments were fully responsive.

MNSTC-I officials concurred with most of our recommendations, but did not concur that it should provide cost-to-complete information for non-construction projects. MNSTC-I stated that it already reported cost-to-complete information in the quarterly Section 2207 Reports in the form of obligation and outlay data. However, we believe this information does not provide decision makers with the necessary transparency as to the actual cost to complete non-construction projects. For example, MNSTC-I sometimes uses non-IRRF funds to complete projects after IRRF funds are fully expended. Without information on actual program costs, decision makers cannot determine where future investments should be made.

## Appendix A. Scope and Methodology

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In March 2005, we initiated an audit to determine whether the information systems used by U.S. government organizations result in effective and reliable program management information. This audit report is the third report on cost-to-complete (Project No. SIGIR-2005-08.2). It discusses procedures and processes used to develop and report cost-to-complete estimates for IRRF projects.

Due to time and resource considerations, we limited the scope of the audit to GRD-PCO's F&T sector and similar projects in MNSTC-I and USAID. Furthermore, we limited the scope of the audit to the three organizations that received the largest apportionment of funds – GRD-PCO, USAID, and MNSTC-I.

To gain an understanding of each entity's operations and processes for developing and reporting cost-to-complete information, we interviewed management personnel from IRMO, GRD-PCO; MNSTC-I and USAID. We also reviewed organization charts and websites to obtain background information and to determine responsibilities.

We met with IRMO management, GRD-PCO Project Management, GRD-PCO Financial Management, USAID Directors, and MNSTC-I Commanders to discuss the contractual requirements and agency methodologies used to determine project status and to calculate and report cost-to-complete estimates. We also held discussions with OMB and IRMO on management requirements of cost-to-complete. Appendix B represents the agreement of IRMO, OMB, and the Special Inspector General for Iraq Reconstruction as to the data fields needed to ensure complete and transparent reporting of cost-to-complete.

We reviewed available procedures, both formal and in-progress, that described the processes, methodology, responsibilities, documentation standards and formats for cost-to-complete reporting.

We analyzed GRD-PCO F&T and USAID cost-to-complete reports submitted to IRMO for the September 30, 2005, PAR to determine if data is properly reflected in the report, if the arithmetic calculations were correct, and if significant project scope changes were reported. We also analyzed GRD-PCO F&T cost-to-complete monthly reports for July and August, 2005.

We met with representatives from GRD-PCO and Air Force Center for Environmental Excellence to review contract management procedures.

We performed this audit from May 14, 2005 through December 31, 2005, in accordance with generally accepted government auditing standards.

**Use of Computer-Processed Data.** We reviewed cost-to-complete reports that were compiled in Excel spreadsheets based on data taken from reports run in financial accounting computer systems. The data in the GRD-PCO cost-to-complete report was taken from reports run in CEFMS. We did not audit CEFMS<sup>5</sup>. USAID's financial

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<sup>5</sup> For more information on the reliability of data drawn from CEFMS, see GAO report 01-89 "Significant Weaknesses in Corps of Engineers' Computer Controls", October, 2000, and GAO follow-up report 02-589 "Corps of Engineers Making Improvements But Weaknesses Continue", June, 2002.

accounting system was formerly the MACS, but USAID is currently transitioning to the Phoenix accounting system. We did not audit MACS or Phoenix. Moreover, the person primarily responsible for compiling the USAID submission for the September 30, 2005, PAR stated he used data provided by the contractor managing the projects.

**Prior Coverage.** Special Inspector General for Iraq Reconstruction 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.

Special Inspector General for Iraq Reconstruction 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; and (2) they could not consolidate information from their management information systems because they were not integrated.

## Appendix B. Definition of Reporting Terms<sup>6</sup>

DATA FIELD	DEFINITION
Task Order	An order for the performance of a task during the period of a task order indefinite delivery contract for services that do not procure or specify a firm quantity of services (other than a minimum or maximum quantity)
Sector	PL 108-106 Section 2207 report sector
Sub-Sector	PL 108-106 Section 2207 subsector
URI	Unique Requirements code
Project Name/ Description	Name and short description of project
DB/Prime Contractor	Name of prime contractor to which US Agency awarded contract
Sub or other contract	Name(s) of any subs or other contractors the prime is using
Original Start Date	Original date when project was supposed to begin under the original Project Identification Form (PIF) or original estimate
Actual Start date	Date by which project is currently scheduled to begin
Target completion date	Original date by which project was to have been completed
Projected completion date	Current date by which project is projected to be complete
Authorized Amount	Amount Authorized and Apportioned for the Project Code
Original PIF Value	Project Identification Form Amount budgeted for project when the original PIF was completed (for the first 2207 report)
Definitized (Y/N)	Yes, if a project has been completely definitized
Definitized Value	The dollar amount budgeted for the project, according to the definitization of the project
Contingency %	Percent of PIF, revised estimate or definitized amount that includes built-in contingency amount.
Committed to Date	Amount committed for the project
Obligated to Date	Amount of Contract Award
Reserve	Any reserve (security, strategic, floating, etc.) that is not included in current project estimate but is allocated against each specific project. If such a reserve is not allocated by project, but by sector or task order (ATO), please add a separate line item to data call, labeling it as a reserve.
Associated Close Out Costs	The current estimate of project close-out costs, or contract close-out costs that will be booked against each project.
Demobilization Costs	The current estimate of project demobilization costs, or contractor demobilization costs that will be booked against each project.
Cumulative Expenditures	Amount of Contract Expenditures (includes accounts payable plus disbursements, work that is completed)
Certified Commitments	Requirements not yet obligated (project contingencies or pending modifications)
Undelivered Orders	Amount of Unexpended Balance on the Contract (work yet to be accomplished)
Budget to Complete	Undelivered Orders Amount plus Certified Amount
cost-to-complete	Estimated cost to complete the project based on the difference between the Estimate to Complete and the Current cost incurred to date.
Variance	Indicates sufficiency of program funds for estimated cost to complete
Earned Value or % Complete	The % of the project complete, as measured against the baseline schedule, cost and scope
Most Recent Estimate Date	The date of the most recent estimate at completion

<sup>6</sup> The list is current as of the September 30, 2005, PAR. As a result of efforts by IRMO to improve cost-to-complete, the reporting terms list will change for the December 31, 2005, PAR.

DATA FIELD	DEFINITION
Value of Most Recent Estimate	The dollar amount budgeted for the project, according to the most recent estimate (if no new estimate has been done from the original PIF, leave blank)
Estimate At Completion	The estimate of what the project is expected to cost by the time it is completed
Variance explanation	Rationale of variance between estimate/definitized value and EAC

## Appendix C. Acronyms

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CEFMS	U.S. Army Corps of Engineers Financial Management System
EAC	Estimate at Completion
F&T	Facilities and Transportation Sector
GRD-PCO	Gulf Region Division-Project and Contracting Office
IRMO	Iraq Reconstruction Management Office
IRRF	Iraq Relief and Reconstruction Fund
MACS	Mission Accounting Control System
MNSTC-I	Multi-National Security Transition Command-Iraq
PAR	Project Assessment Report
USAID	U.S. Agency for International Development

## **Appendix D. Report Distribution**

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### **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  
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

### **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  
Commander, 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 Defense Organizations**

Director, Defense Contract Audit Agency

## **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  
Mission Director – Iraq, U.S. Agency for International Development

## **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 E. Audit Team Members**

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

Glenn Furbish

William Shimp

# Management Comments

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

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REPLY TO  
ATTENTION OF

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

CEGRD-CG

15 January 2006

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

SUBJECT: Draft SIGIR Audit Report – Methodologies for Reporting Cost-to-Complete  
Estimates

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 concurs with the findings and recommendations contained in the draft report. Additionally, we are providing comments to be considered when the final report is prepared.
3. We appreciate your review of the Methodologies for Reporting Cost-to-Complete Estimates and your recommendations to improve the estimation process. Thank you for the opportunity to provide our written comments for incorporation as an appendix in the final audit 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

# Management Comments

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



**USAID | IRAQ**  
FROM THE AMERICAN PEOPLE

### MEMORANDUM

TO: Joseph T. McDermott  
Assistant Inspector General for Audit  
Special Inspector General for Iraq Reconstruction (SIGIR)

FROM: Dawn Liber, Mission Director, USAID/Iraq 

DATE: January 15, 2005

SUBJECT: USAID Response to SIGIR Draft Audit Report on Methodologies for Reporting Cost-to-Complete Estimates, Report No. SIGIR-05-027 (Project No. SIGIR- 2005-08.02)

USAID/Iraq is pleased to present this response to the SIGIR draft report. Tab A includes our response to SIGIR's draft audit findings for USAID/Iraq. Tab B includes our response to SIGIR's draft recommendations for USAID/Iraq.

Below are our general comments on the draft report.

First, as you know, P.L. 108-106 ("IRRF legislation") does not include a Facilities and Transportation (F&T) sector per se. SIGIR states that it utilized the Gulf Region Division – Project and Contracting Office's (GRD-PCO) consolidation of seven of the ten IRRF sectors under P.L. 108-106 into one large sector, referred to as F&T (which excludes oil, water and electricity), as the "mega" sector subject to review under this. As USAID has not adopted this methodology for implementing or reporting on IRRF sectors under that legislation, we cannot state with any certainty that SIGIR's audit included an accurate review of USAID projects in what SIGIR defines as the F&T sector. Indeed, the legislation does not include such a sector in its text. SIGIR's use of this PCO-created sector may explain why it concluded that USAID had some anomalies and deficiencies in its reporting. Given SIGIR's adoption of the PCO F&T sector, we likewise question SIGIR's assertion that "[a]s of September 30, 2005, USAID had oversight over two F&T construction projects plus non-construction projects. As of December 15, 2005, the total IRRF funding apportioned to USAID for F&T projects was \$1.67 billion." Again, the use of a category not adopted by USAID may explain why SIGIR found certain USAID anomalies and deficiencies noted in the draft report.

Further, SIGIR's recommendations to the Iraq Reconstruction and Management Office (IRMO) includes a suggestion that it "[r]equest from Congress a waiver from the IRRF legislation's reporting requirement to report cost-to-complete information on a project level basis." We believe this recommendation to be inappropriate because the IRRF legislation does not include a definition of the term

U.S. Agency for International Development  
Iraq Mission, APO AE 09316  
Fax +1(202)216-6276

"project" nor does it require that all agencies implementing IRRF-funded projects have similar definitions of the term "project." In the absence of a definition in the law - or a clear policy directive from IRMO at the outset of IRRF-funded Iraq reconstruction, USAID defined a "project" in accordance with its individual requirements, policies and procedures. Given the above, we do not believe it appropriate to seek waiver of something that is not expressly required by, or defined in, the IRRF legislation. Moreover, a post-facto imposition of a uniform definition of "project" for all IRRF-reporting purposes, by either IRMO or SIGIR, would not facilitate the accurate reporting of data. A better approach is for both IRMO and SIGIR to recognize that projects may be defined differently by various IRRF implementing agencies and to approve a reporting system that takes these differences into account while still ensuring that accurate, transparent, and verifiable CTC information is reported for IRRF-funded projects. No Congressional action is required for this.

As of December 2005, USAID has a new accounting system known as Momentum 6.0 accounting system, or Phoenix. This accounting system is used by several government agencies including the State Department, and has become USAID's centralized accounting system. USAID/Iraq successfully migrated all of its financial data to Phoenix from its previous accounting system, Mission Accounting Control System (MACS), and has verified the accuracy of all migrated data.

Please note also that USAID did not include close-out costs in its cost-to-complete (CTC) estimates (EACs), because we followed the guidance provided to us by IRMO in calculating such costs.

Finally, we appreciate SIGIR's analysis and comments on CTC data included in our September 30, 2005 Project Assessment Report (PAR) for construction activities. As you are aware, this is the first PAR report that we have been required to complete. In the future, particularly when our new policy and procedural guidance for estimating and reporting CTC for IRRF projects goes on-line, we will be able to respond more comprehensively to requests for CTC information, from both SIGIR and IRMO.

**Response to Draft Finding for USAID in SIGIR Draft Audit Report on Methodologies for Reporting Cost-to-Complete Estimates, Report No. SIGIR-05-027 (Project No. SIGIR- 2005-08.02)**

**Draft Finding 1:** USAID failed to estimate and report reliable and transparent cost-to-complete (CTC) information for IRRF projects – Facilities and Transportation (F&T) sector.

**USAID Response to Draft Finding 1:** USAID disagrees with this draft finding. The data included in our September 2005 Project Assessment Report (PAR) (which covers construction projects only) is both reliable and transparent, reflecting information included in our official financial management system as well as official and unofficial but verifiable information maintained by our Acquisition and Assistance and Infrastructure Offices. This finding may in fact reflect a disagreement or misunderstanding over the methodology used to develop CTC, which is an issue that USAID will address in implementing SIGIR's first draft recommendation to USAID. See Tab B. Please note, moreover, our comments and concerns concerning SIGIR's use of GRD-PCO's F&T "mega" sector in the cover letter to this response.

**Draft Finding 2:** USAID submitted reports with errors that were significant enough to undermine the users' confidence in the reporting.

**USAID Response to Draft Finding 2:** USAID disagrees with this finding. The methodology used in our September 2005 PAR was consistent. Indeed, SIGIR was able to determine the basis behind the methodology, which is indicative of users' (which we understand to be SIGIR and IRMO, among others) understanding of the methodology and resulting data. Nevertheless, USAID will seek to ensure that, through the development of a written Mission policy and procedures for estimating CTC, controls for validating and revalidating estimates will be delineated

**Draft Finding 3:** USAID reported CTC information at the task order level, instead of the project level, as proscribed by P.L. 108-106.

**USAID Response to Draft Finding 3:** USAID disagrees with this finding. We officially report CTC estimates in our PAR report at the contract level, and unofficially through verifiable and reliable information at the Job Order level. Moreover, as noted above, since the IRRF legislation does not define a "project" for the purposes of IRRF, USAID utilized its own policies and procedures to define a project. This approach is not proscribed by P.L. 108-106.

**Draft Finding 4:** USAID failed to develop and communicate effective internal guidance [for estimating CTC]

**USAID Response to Draft Finding 4:** In developing our CTC for the September 2005 PAR, USAID utilized its established financial, contractual, programmatic and related policies and procedures to estimate CTC, which included necessary inputs from trend analysis and other reports submitted by the USAID infrastructure program management contractor, and which information reflected requirements under the contractor's scope of work. Although there is no legal requirement to develop internal guidelines for estimating CTC for IRRF-funded projects, we will, in

**TAB A**

accordance with SIGIR's recommendation, develop such guidance as indicated in our response to Draft Finding 2, above. We will seek to coordinate with IRMO to develop a mutually agreeable methodology for calculating CTC estimates, which reflects USAID's definition of a "project" and USAID's requirements, policies, procedures and limitations.

**Draft Finding 5:** USAID failed to identify and correct errors in the reports [for CTC] before issuance.

**USAID Response to Draft Finding 5:** Please see our response to Draft Finding 2, above. Based on lessons learned from our first PAR submission, we will ensure that our written policy and procedures for estimating and reporting CTC data delineate controls for validating and revalidating CTC estimates.

**Draft Finding 6:** USAID failed to maintain adequate documented support for the calculation of reported estimates-at-completion

**USAID Response to Draft Finding 6:** USAID disagrees with this draft finding. Documented support for USAID's CTC estimates included in the September 2005 PAR are maintained in USAID's Financial Management, Acquisition and Assistance, and Infrastructure Offices. Files maintained in the latter two offices include trend analyses for construction projects that are developed by the USAID infrastructure contractor and discussed with USAID. These trend analyses are used, in part, to help track CTC estimates for USAID construction projects. Nevertheless, in developing our written Mission policy and procedures for estimating and reporting CTC data, we will ensure that the policy includes a requirement to maintain documents support for CTC estimates in a manner deemed appropriate by the Mission.

**Draft Finding 7:** USAID failed to adequately report project scope changes

**USAID Response to Draft Finding 7:** SIGIR does not define the terms "project scope changes" or "significant scope changes," terms used interchangeably in the draft report. USAID defines these terms in accordance with its normal practice, policy and procedure. For the purposes of PAR, USAID defines "significant scope changes" as those that require a written amendment to a Job Order. For non-construction IRRF projects, they are those that require a formal written amendment to the scope of work or program description of the instrument under which the project is implemented.

USAID will include a requirement to report "significant scope changes" in our Mission policy and procedure on estimating and reporting CTC estimates, which is in development.

**Response to Draft Recommendation for USAID in SIGIR Draft Audit Report on Methodologies for Reporting Cost-to-Complete Estimates, Report No. SIGIR-05-027 (Project No. SIGIR- 2005-08.02)**

**Draft Recommendation 1(a):** Develop and distribute official written guidance covering the entire methodology, including roles and responsibilities, for generating cost-to-complete reports.

**USAID Response to Draft Recommendation 1(a):** We agree. USAID has reviewed its current practice for estimating and reporting CTC data and is developing official guidance that will reflect lessons learned from the first PAR submission, and take into full consideration the reporting requirements, SIGIR's audit report recommendation, and applicable USAID and other federal regulations, policies and procedures. We recognize the possible need for future revisions to our guidance due to subsequent IRMO guidance and other considerations. We should have its official guidance in place no later than 45 days after the date of this response.

**Draft Recommendation 1(b):** Develop a thorough review process to eliminate errors in the reporting spreadsheets. The review process should be written into the guidance.

**USAID Response to Draft Finding 1(b):** We agree.

**Draft Recommendation 1(c):** Create and maintain a permanent central file to document the calculation of EACs by project. The requirement to create and maintain the central file should be written into the guidance.

**USAID Response to Draft Recommendation 1(c):** We agree. This will be accomplished as part of the guidance developed in response to Draft recommendation 1(a), above.

**Draft Recommendation 1(d):** Identify all significant scope changes to task orders for projects by adding permanent footnotes to the cost-to-complete report. Require the footnotes be sufficiently descriptive to inform users of differences between what will be completed relative to what was planned. The requirement to identify scope changes should be written into guidance.

**USAID Response to Draft Recommendation 1(d):** We agree. This will be accomplished as part of the guidance developed in response to Draft recommendation 1(a), above. The guidance will include definitions of terms to better ensure a mutual understanding of the reported information by all users.

# Management Comments

## Commanding General, Multi-National Security Transition Command-Iraq

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MULTI-NATIONAL SECURITY TRANSITION COMMAND-IRAQ  
BAGHDAD, IRAQ  
APO AE 09316

22 January 2006

Mr. Joseph T. McDermott  
Assistant Inspector General for Audit  
Special Inspector General for Iraq Reconstruction  
400 Army Navy Drive  
Arlington, VA 22202

Sir,

I am pleased to provide our response to the three recommendations addressed to this command as contained in your draft audit report on Methodologies for Reporting Cost-to-Complete Estimates, Report No. SIGIR-05-027, 18 January 2006. We appreciate your efforts to help us perform our mission better.

If you have any questions or require other assistance, please contact LTC Kenneth Wherry, Chief of my Internal Audit team at DSN (318) 852-1351.

Sincerely,

Encl

  
JAMES K. GREER  
COL, AR  
Chief of Staff

**COMMAND RELY  
OFFICE OF THE SPECIAL INSPECTOR GENERAL FOR IRAQ  
RECONSTRUCTION AUDIT OF METHODOLOGIES FOR REPORTING  
COST-TO-COMPLETE ESTIMATES  
REVISED DRAFT AUDIT REPORT SIGIR SIGIRI-05-027, 18 JAN 2006**

**Finding – Methodologies For Reporting Cost-to-Complete Estimates**

**Audit Objective:** The audit objective of this audit was to determine the adequacy of methodologies used to estimate and report the costs to complete for projects funded with Iraqi Relief and Reconstruction Funds (IRRF). Specifically, we reviewed the cost-to-complete methodologies in the Facilities and Transportation sector. We also conducted a follow-up on our previous recommendation to the Iraqi Reconstruction Management Office (IRMO) regarding the formalization and finalization of cost-to-report procedures.

**Audit Conclusion:** The Gulf Region Division-Project and Contracting Office (GRD-PCO), the Multi-National Security Transition Command-Iraq (MNSTC-I) and the U.S. Agency for International Development (USAID) were required by Public Law 108-106 to submit cost-to-complete information to IRMO for the Project Assessment Report (PAR) for the quarter ending September 30, 2005.

However, MNSTC-I did not submit a cost-to-complete report for the quarter. In addition, the three reporting entities failed to develop proper guidance, adequately review reports before submission, document the calculation of critical numbers, and note significant scope changes in the report.

We conclude IRMO and all three reporting entities failed to develop methodologies to assure reliable and transparent cost-to-complete reporting. Failure to effectively compile and report cost-to-complete information as required by Public Law 108-106 excludes important project visibility essential for project management and Congress to make informed management decisions during IRRF program execution. Because the October Section 2207 Report did not contain accurate cost-to-complete data, Congress could not use the information to assess IRRF program progress or the availability of funds.

**Recommendations 3.a. – 3.c. – Commanding General, Multi-National Security Transition Command-Iraq:**

**Recommendation 3.a.** Add the future cost projections component to guidance relating to the calculation of the Estimates At Completion (EAC) for construction projects. Develop guidance for non-construction projects including the future cost projections component and the requirement to document calculation of the EACs. The guidance should be consistent with the guidance provided by IRMO.

**Command Reply:** Concur In Part.

**Construction Projects:** Concur. Effective October 25, 2005, MNSTC-I Cost to Complete (CTC) Methodology Memorandum (enclosed) tasks our contracting agencies (i.e. Air Force Center for Environmental Excellence, Gulf Region Division-Project and Contracting Office, and the Joint Contracting Command-Iraq), to conduct a continuous review of all open construction contracts and to utilize earned value calculations, and technical and pricing reviews to calculate future cost projections. If that cost projection exceeds the current authorized awarded amount, the contracting agency will submit a cost-to-complete funding request through the appropriate J7 program manager to determine if funds are available to complete the project.

**Non-construction Projects:** Non-concur. MNSTC-I provides all information/reports as required by Public Law 108-106 through the quarterly 2207 report. Since December 2003, MNSTC-I has completed eight quarterly reports for both construction and non-construction projects. The 2207 report provides by project code, all accomplishments for the reporting period, changes from the prior period, and anticipated accomplishments for the next reporting quarter. Additionally, the report provides by project code, the current annual funding, obligations, disbursements, and reallocations or changes affecting the program. To date, neither IRMO nor Congress have requested CTCs for non-construction projects.

**Recommendation 3.b.** Develop a thorough review process to eliminate errors in the reporting spreadsheets. The review process should be written into the guidance.

**Command Reply:** Concur. Effective October 25, 2005, MNSTC-I began utilizing the Corps of Engineers Financial Management System (CEFMS) on a daily basis to validate all CTC computations to reduce errors in our reporting CTC spreadsheet. We have also included this review process in our CTC Methodology Memorandum.

**Recommendation 3.c.** Develop policies to define significant scope changes. For example, variances reflecting a 15 percent change in schedule, scope, or budget could be used as a metric to define significant. The changes should be reported in the quarter the changes occurred by adding supporting schedules to the cost-to-complete report. Require the supporting schedule to be sufficiently descriptive to inform users of differences between what is expected to be completed relative to what was planned. Identify all projects to be completed with funds other than IRRF by adding footnotes to the cost-to-complete report.

**Command Reply:** Concur in Part.

**Significant Scope Changes:** Concur. Effective October 25, 2005, a policy to define significant scope changes was incorporated into the original MNSTC-I CTC

methodology. On December 1, 2005, MNSTC-I began annotating the CTC spreadsheet with any scope changes in the quarter they occurred.

**Adding CTC Supporting Schedules to CTC Reports:** Concur in Part. We only annotate the spreadsheet with the amount of the scope change. We rely on our contracting agencies to provide us with the scope change details. We have changed our CTC methodology to read: If the CTC is caused by a project scope change, it will also be annotated as such on the J7 CTC spreadsheet and be able to reference descriptive information to inform users of differences what will be completed relative to what was planned. This CTC descriptive reference and supporting schedules, to include scope changes, will be provided by MNSTC-I's contracting agencies (AFCEE, GRD-PCO and JCCI) upon request.

**Other Funding Footnotes:** Concur. Effective December 1, 2005, MNSTC-I began annotating the CTC spreadsheet with notes describing which projects were completed with funds other than IRRF. Also, as of January 16, 2006, we have included this requirement in our CTC methodology.