

The seal of the Office of the Special Inspector General for Iraq Reconstruction is a large, circular emblem in the background. It features an eagle with its wings spread, holding an olive branch in its right talon and arrows in its left. The eagle's chest is covered by a shield with vertical stripes. Above the eagle's head is a banner with the word "FIDELITY". The seal is surrounded by text in both English and Arabic. The English text reads "INSPECTOR GENERAL" at the top and "RECONSTRUCTION" at the bottom. The Arabic text reads "مفتش العام" at the top and "إعادة إعمار العراق" at the bottom.

MANAGING SUSTAINMENT  
FOR IRAQ RELIEF AND  
RECONSTRUCTION FUND  
PROGRAMS

**REPORT NUMBER SIGIR-05-022**  
**OCTOBER 24, 2005**



## SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

October 24, 2005

MEMORANDUM FOR U.S. AMBASSADOR TO IRAQ  
COMMANDING GENERAL, MULTI-NATIONAL FORCE - IRAQ  
DIRECTOR, IRAQ RECONSTRUCTION MANAGEMENT OFFICE

SUBJECT: Managing Sustainment for Iraq Relief and Reconstruction Fund Programs (Report No. SIGIR-05-022)

We are providing this 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.

The Chief of Mission of the United States Embassy Baghdad and the Commanding General, Multi-National Force - Iraq did not respond to the draft report. However, we considered comments from the Iraq Reconstruction Management Office on a draft of this report when preparing the final report.

We request comments on the final report from the Chief of Mission of the United States Embassy Baghdad and the Commanding General, Multi-National Force - Iraq by November 14, 2005. Please send management comments in electronic format (Adobe Acrobat file only) to [SIGIRAuditReports@sigir.mil](mailto:SIGIRAuditReports@sigir.mil). Copies of the management comments must contain the actual signature of the authorized official.

We appreciate the courtesies extended to the staff. For additional information on this report, please contact Mr. Joseph T. McDermott by email at [joseph.mcdermott@sigir.mil](mailto:joseph.mcdermott@sigir.mil) or at (703) 428-1100, or Mr. Glenn Furbish by email at [glenn.furbish@iraq.centcom.mil](mailto:glenn.furbish@iraq.centcom.mil) or at (703) 343-8817. See Appendix C for the report distribution.

A handwritten signature in black ink that reads "Stuart W. Bowen, Jr." followed by a period.

Stuart W. Bowen, Jr.  
Inspector General

# Special Inspector General for Iraq Reconstruction

Report No. SIGIR-05-022

October 24, 2005

(Project No. SIGIR-2005-11)

## Managing Sustainment for Iraq Relief and Reconstruction Fund Programs

### Executive Summary

**Introduction.** In November 2003, the United States Congress appropriated \$18.4 billion for the Iraq Relief and Reconstruction Fund (IRRF) to support security, relief, rehabilitation, and reconstruction projects in post-war Iraq. As of September 2005, approximately \$14.3 billion of this funding had been obligated and over 2,500 projects and facilities had been completed and turned over to the Iraqis. Although most IRRF projects provide some level of operations and maintenance training, along with supplies sufficient to maintain the projects for approximately 90 days, it was expected that upon transition of completed facilities, the Iraqis would be responsible for operating the facilities and providing for their long-term maintenance. Some early projects failed after transition, creating a concern that Iraq may lack the resources and skills to sustain the long-term operation of complex facilities. These concerns generated this audit, which addresses the issues of sustainment and capacity development.

For the purposes of this report, sustainment is defined as the ability of the Iraqi government to support IRRF-funded projects and facilities for an extended period of time after U.S. financial, managerial, and technical assistance is terminated. Capacity development is defined as the strengthening of human and technical capabilities to support a society in its development of a more secure and sustainable economy, government, and infrastructure.

**Objectives.** The objectives of this audit were to determine whether:

- adequate plans and programs for the transition and sustainment of construction and non-construction projects have been established by the U.S. organizations responsible for the management of IRRF
- budgets, funding sources, and detailed transitional guidelines have been established to ensure that adequate training, materials, and supplies are provided to the Iraqi government and its citizens to enable them to perform operations and maintenance on construction and non-construction projects placed under their control

**Results.** Progress has been made in identifying the challenges of sustaining the IRRF projects, which directly affects the larger challenges of sustaining a democratic and viable government in Iraq. There is, however, a growing recognition that the Iraqi government is not yet prepared to take over the near- or long-term management and funding of the infrastructure developed through IRRF projects. Millions of dollars in sustainment efforts have been initiated by the Coalition and the Iraqi government. But U.S. funding is limited and the amounts budgeted by the Iraqi government do not appear to be sufficient to ensure the near- and long-term sustainment of completed reconstruction projects.

We also believe that progress has been hampered by the absence of a centralized sustainment office with the authority and responsibility to manage this effort across the jurisdictional boundaries of the operating agency organizations. We identified the Iraq Reconstruction Management Office (IRMO) as the primary Department of State entity involved in managing IRRF projects and deemed it responsible for coordinating sustainment.

We estimate that the Iraqi government would need between \$650 and \$750 million annually to operate and maintain the current projects the U.S has provided or plans to provide through IRRF funding. This estimate rises another 20 to 25 percent if one includes security, salaries, or fuel (to a range of annual requirements for sustainment of between \$750 and \$950 million). To date, Department of State budget officials have identified \$350 million in IRRF funds that could be used to pay for some sustainment costs. The Department of State is also considering deferring some planned IRRF projects to free additional funds for sustainment.

Funding IRRF project sustainment is just one piece of a larger Iraq funding challenge facing the U.S. government. The current Iraqi government does not have a culture of sound operations and maintenance practices; and, according to senior U.S. advisors to the Iraqi ministries, funding for existing infrastructure support is a fraction of what is necessary. In the Ministries of Defense and Interior, for example, the combined gap between requirements and anticipated funding has been estimated at \$7 billion for calendar year 2006. Failure of a sufficient sustainment program within any infrastructure sector will affect the stability of the new Iraqi government.

**Management Actions.** During the course of our audit, we notified IRMO of our concerns about the absence of a central office to coordinate sustainment. To its credit, IRMO responded by taking the important step of creating a coordinating sustainment office. This centralizes leadership for sustainment; but to succeed, the coordinator must be vested with the necessary authority to provide direction for a common sustainment vision and to plan and manage sustainment activities.

**Recommendations.** We recommend that the U.S. Ambassador to Iraq, in coordination with the Commanding General, Multi-National Force-Iraq, direct the new sustainment office to take these actions:

1. Formulate and implement a plan, with clear goals and objectives for the sustainment of IRRF projects.
2. Work with the Director of IRMO and the Senior Sector Leads to determine the capacity of the Iraq government to maintain the IRRF projects.
3. Develop supportable cost estimates for sustaining Iraqi infrastructure for both the near- and long-term and to develop a proposed funding plan that supports these estimates.
4. Review any guidance that the Iraq government's leadership is receiving on sustainment, determine its adequacy, and shore up any shortfalls.

**Management Comments and Audit Response.** IRMO officials concurred with the finding and recommendations. The comments received are fully responsive.

We provided a draft of this report on October 7, 2005, to the Chief of Mission of the United States Embassy Baghdad and the Commanding General, Multi-National Force - Iraq. No management comments to the draft of this report were received. Therefore, we request that the Chief of Mission and the Commanding General provide comments on this final report by November 14, 2005.

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# Introduction

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## Background

On November 6, 2003, the U.S. Congress appropriated \$18.4 billion, through Public Law 108-106, for the Iraq Relief and Reconstruction Fund (IRRF) to fund Iraq reconstruction requirements that had been identified by the Coalition Provisional Authority (CPA) during the summer and fall of 2003. The CPA identified thousands of projects within various infrastructure sectors in Iraq, such as electricity, water, oil, health care, transportation, and education. As of September 20, 2005, approximately \$14.3 billion has been obligated for over 2,500 projects. The majority of projects have been completed, but the largest projects will not be finished until 2006-2007.

IRRF funding covers both construction projects and non-construction requirements. Non-construction requirements include equipment, supplies, training, and materials to support the reconstruction of Iraq's infrastructure. For example, computers are needed to monitor and control electrical and water systems, vehicles are needed to transport materials or to support system maintenance and supplies are needed to transport materials and support system maintenance. Approximately \$5.8 billion in IRRF funding is committed for non-construction items.

**Sustainment and Capacity Development.** In our July 2005 Quarterly Report to the United States Congress, we defined sustainability as a program's ability to deliver its intended benefits for an extended period of time after major financial, managerial, and technical assistance from an external donor is terminated. There is a related term-- capacity development -- which means the provision of structures, systems, tools, capabilities, and training necessary to operate and maintain infrastructure improvements. This includes activities that range from the highest levels of the Iraqi government to the training of operations and maintenance staff at local facilities.

Sustainable capacity development takes place at five levels and involves a number of different organizations.<sup>1</sup> These levels, in descending order, are:

**Level 5- Infrastructure:** Providing targeted training and mentoring to Iraqis at the plant or facility level to enable the Iraqis to operate and maintain new or renovated facilities, systems, and processes in accordance with design requirements. Contractors lead Level 5 capacity development activities under the supervision and direction of the contract customer (Project and Contracting Office (PCO), Multi-National Security Transition Command – Iraq (MNSTC-I), or U.S. Agency for International Development (USAID)).

**Level 4- Iraqi Ministries:** Establishing functional business and organizational systems within each ministry/sector necessary to support a sustainable infrastructure. USAID, with the support of the Department of State, would have the lead for Level 4 capacity development actions since many of the Level 4 activities are longer-term actions.

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<sup>1</sup> Iraq Capacity Development; PCO Management and Interface Plan, Project and Contracting Office, November 22, 2005.

**Level 3- Inter-Organizational:** Developing and instituting the systems and processes by which all public and private sector Iraqi stakeholders work toward the common goal of creating a sustainable infrastructure. The Department of State, with the support of USAID, would take the lead for Level 3 actions.

**Level 2- Laws and Regulations:** Establishing drivers and requirements that support a sustainable infrastructure. Organizations can function effectively only if the appropriate laws, regulations, and policies are in place at the appropriate level of government. The Department of State, with the support of USAID would take the lead for Level 2 actions.

**Level 1- Policy:** Establishing the strategic policy, vision, and commitment at the highest levels of the Iraqi government structure to enable, facilitate, and promote sustainable capacity development frameworks and activities at the implementation level. The lead for this level of intervention would come primarily from the Department of State.

**Requirements.** The requirement to sustain completed IRRF-funded projects was established in the Public Law that created the IRRF fund. The Act “encourages the United States organizations that receive funds made available by this Act to provide significant financial resources, technical assistance, and capacity building to counterpart organizations led by Afghans and Iraqis respectively.” This requirement was also in Coalition Provisional Authority (CPA) Regulation Number 1, which required the CPA to “exercise the powers of government temporarily to provide for the effective administration of Iraq during the period of transitional administration, to restore conditions of security and stability, to create conditions in which the Iraqi people can freely determine their own political future, including by advancing efforts to restore and establish national and local institutions for representative governance and facilitating economic recovery and sustainable reconstruction and development.”

**Responsibilities.** According to National Security Presidential Directive 36, titled United States Government Operations in Iraq, the Chief of the U.S. Mission in Iraq, under guidance from the Secretary of State, is responsible for the direction, coordination, and supervision of all United States government employees, policies, and activities in-country, except those under the command of an area military commander. This includes the continuous supervision and general direction of all assistance for Iraq. The Directive also creates a temporary organization within the Department of State, called the Iraq Reconstruction Management Office (IRMO), to manage the reconstruction in Iraq.

The Department of State has three implementing agencies responsible for providing acquisition and project management support: the PCO (in conjunction with the US Corps of Engineers); MNSTC-I; and USAID.

The PCO was created by the same Presidential directive that assigned responsibility for IRRF projects to the Department of State. It is a temporary Department of Defense (DoD) organization whose staff is assigned under Chief of Mission authority, and it provides engineering, auditing, and other contract-related services for DoD contracts and for contracts managed by the Department of State and other departments and agencies.

MNSTC-I is a DoD entity, reporting through Multi-National Force-Iraq to the United States Central Command. Along with DoD, the Department of State, and other U.S. agencies, MNSTC-I provides support in training police and other security forces. MNSTC-I’s mission is to organize, equip, and mentor Iraqi security forces in order to



support Iraq's ultimate goal of a unified, stable, and democratic Iraq, which provides a representative government for the Iraqi people.

The USAID manages projects to restore Iraq's vital infrastructure in the areas of electricity, water/sewage, health care, education, communications, and transportation. It also has thousands of small to medium sized projects designed to build civil society and improve the quality of life in Iraq.

## **Objectives**

The objectives of this audit were to determine whether:

- adequate plans and programs for the transition and sustainment of construction and non-construction projects have been established by U.S. organizations responsible for the management of IRRF, and
- budgets, funding sources, and detailed transitional guidelines have been established to ensure that adequate training, materials, and supplies are provided to the Iraqi government and its citizens to effectively enable them to perform operations and maintenance on construction and non-construction projects placed under their control.

For a discussion of the audit scope and methodology see Appendix A. For definitions of the acronyms used in this report, see Appendix B. For a list of the audit team members, see Appendix D.

# **Sustainment Plans, Programs, and Funding**

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## **Sustainment Plans and Programs**

SIGIR is concerned about the sufficiency of the plans to sustain Iraq's infrastructure. The Iraqi government is not yet prepared to assume the near- and long-term management and funding of U.S.-constructed IRRF projects. Developing an effective sustainment capability for Iraq requires carefully focused efforts from both a legacy and an operations and maintenance perspective. SIGIR defines legacy sustainment as the burden to secure a plan for the long term coordination and maintenance of Iraq's entire infrastructure. And it defines operations and maintenance sustainment as the burden to ensure the near-term funding and management of U.S. constructed projects after transition of those projects to Iraqi control. U.S. plans to address these issues are rapidly evolving. The Department of State has directed its two implementing agencies (the PCO and USAID) to develop sustainment programs for infrastructure facilities and to promote capacity-building initiatives within Iraqi ministries.

As of September 2005, approximately \$425 million in IRRF funds had been spent or programmed for PCO and USAID efforts. However, SIGIR was unable to determine how these efforts were supporting sustainment goals. For example, many PCO activities are associated with basic operations, maintenance, and management of the delivered facilities. A decision to provide sustainment support would require more focused activities. We were unable to obtain information on sustainment costs for the defense and security sectors. Acquisition and project management support for defense projects is provided by MNSTC-I, and it has just initiated an effort to identify its sustainment costs for IRRF-funded projects.

During the course of this audit, SIGIR recommended that IRMO establish a coordinating office for sustainment. To his credit, the Director of IRMO agreed with this recommendation and immediately issued an order establishing just such an office. This kind of responsive management signals agility within the reconstruction program's management that bodes well for the rapid development of a meaningful sustainment program.

IRMO is the primary Department of State entity involved with IRRF projects and is thus inherently responsible for the coordinative supervision and general direction of the sustainment effort. We were concerned that IRMO intended to manage sustainment through bi-weekly coordination meetings on sustainment. We identified the need for explicit centralized leadership to provide a common vision and approach on sustainment. SIGIR expects that this new office and its coordinator will have the authority to direct the planning, coordination, and management of IRRF-related sustainment activities.

### **Plans and Programs**

According to a senior Department of State and IRMO officials, plans for sustaining IRRF-funded projects are still evolving. While sustainment is one of the U.S. Government's top priorities, it is fundamentally shaped by a more pervasive issue namely, Iraq's need to plan for and fund infrastructure sustainment requirements on a nation-wide basis. The shortcomings in Iraq's approach to infrastructure sustainment stems from years of neglect by a totalitarian regime devoted to patronage rather than planning. The Department of State's concern is that the Iraqis will not move toward self sufficiency as long as they believe the U.S. is prepared to step in and support them. Changing this disposition may take several years. Consequently, the IRMO believes that

a more comprehensive solution must go beyond simply funding the continued operation of U.S. Government projects for some set period.

The Department of State and its implementing agencies have undertaken a large number of individual sustainment initiatives and projects to address immediate problems that arose when USAID water projects failed almost immediately after turnover. IRMO, USAID, and PCO took action to ensure that Iraqis were better prepared to sustain projects slated for subsequent transition. For example, \$25 million was reprogrammed from USAID's electrical sector for operations, maintenance, and training assistance at water and sewerage facilities; and \$103 million was reprogrammed to fund operations and maintenance contract services in the electricity sector.

In April 2005, the Department of State dispatched a team to Iraq to assess IRRF projects and provide an in-depth assessment of the sustainment needs. The team also raised concerns about sustainment of projects and recommended that IRMO develop an estimate for post-transfer operations and maintenance expenses for IRRF projects. The underlying impetus for this initiative was to provide Iraqi ministries and specifically the Iraqi Ministry of Finance with a defined cost basis for sustainment so that the Iraqi fiscal year budget could be adjusted to account for this inevitable expense. Based on the initiative's recommendation, IRMO began collecting operations and maintenance cost data.

The PCO and USAID have taken steps towards preparing their projects and facilities for turnover to the Iraqi Government, and they report a combined \$425 million in sustainment and capacity building activities. In November 2004, the PCO issued an Iraq Capacity Development Management and Interface Plan that defines PCO's roles and responsibilities and describes its interaction with other organizations involved in Iraq reconstruction. According to the PCO plan, the PCO sees its role as limited to what is needed for successful transition of its infrastructure projects to the Iraqis at the system or facilities level (Level 5) (although it has some Level 4 activities). PCO's policy is to ensure that capacity development is properly planned into facilities, equipment, and systems at the time of turnover.

The PCO also has written standard operating procedures that outline responsibilities and identify 12 capacity development deliverables that are required for each PCO contract. These include workforce development plans, operation and maintenance manuals, preventive maintenance plans, approved spare parts lists, management training plans, and on-call service and warranty service. In general, PCO's activities are intended to support the project or facility for up to one year after turnover. PCO has some elements of Level 4 capacity development activities specified in contract task orders. For example, in the electricity sector it provides quality assurance systems as required; and in the oil sector, it provides oil industry technical consulting expertise.

USAID has also engaged in capacity development initiatives, but its actions are not as formalized as PCO's. According to a senior USAID official, capacity development activities similar to those undertaken by PCO are a part of many USAID projects but there is no formal USAID guidance on capacity development and the activities vary by project. USAID does, however, recognize the importance of operations and maintenance training activities and has instituted a number of near- and long-term training and institution strengthening programs. These include a:

- Ministry of Electricity program to train ministry employees and create teams of subject matter experts to assist plant managers. The program also procured a significant number of spare parts.
- Ministry of Electricity program to develop new tariffs, enhance billing and metering, develop regulatory expertise, and enhance financial management systems.
- Ministry of Water and Public Works program to provide operations and maintenance and training assistance at water and sewerage treatment facilities.

USAID has also written a draft Iraq Transition Strategic Plan that identifies USAID's strategy for transforming Iraq from an authoritarian economic state to a market-driven economy. However, the plan does not address the near-term sustainment of IRRF projects (Level 5) until Iraqi government capabilities mature. Rather, it focuses on Levels 1 through 3.

### **New Emphasis on Sustainment and Capacity Development**

Sustainment and capacity development are receiving significant attention from the new U.S. Ambassador to Iraq and the Director of IRMO, both of whom arrived in mid-Summer 2005. The Ambassador requested and received briefings from each ministry on its programs, including sustainment, and continues to receive regular updates. On July 7, 2005, the IRMO Director issued a memo directing each senior consultant to provide a subjective assessment by August 1, 2005, of their ministries' budgetary and sustainment capacity, including whether the ministry can: (1) plan a budget accurately reflecting required operations and maintenance; (2) deliver the required operations and maintenance funds from the national budget; and (3) if plants (within each ministry) can perform operations and maintenance if properly funded. All of the Ministries provided the requested information except for the Ministry of Defense, the largest ministry. Finally, IRMO recently created an Asset Recognition and Transfer Team to deal with the legal, financial, and logistical problems with transition and close-out.

While we recognize the importance and merit of the efforts made thus far by US agencies in Iraq to support completed projects, we cannot assess their ultimate effectiveness until decisions are finalized as to the scope and role the new sustainment office will play in ensuring the long-term viability of the facilities. At present, the bulk of projects completed or underway are at the facility or system level, with few focused on longer term capacity development. For example, of the \$425 million spent or planned on IRRF sustainment activities through September 2005, only \$31.5 million has been for capacity development activities at the Iraq ministry level. IRMO recently formed a Public Sector Working Group whose mandate, in part, is to improve knowledge of capacity development activities occurring above the system or facility level. The group also aims to coordinate support to the ministries and to coordinate capacity building initiatives.

### **Management**

The creation of a single sustainment office, with the authority and responsibility to lead the sustainment effort, will greatly contribute to the execution of a common vision of sustainment in Iraq. We believe IRMO, as the primary Department of State office involved with IRRF projects, is properly responsible for the supervision and direction of this effort. National Security Presidential Directive #36 assigns the Iraq Chief of Mission, under the guidance of the Secretary of State, the responsibility to direct, coordinate, and supervise all United States Government employees, policies, and

activities in-country, except those under the command of an area military commander. The Directive also assigns the Secretary of State responsibility for the continuous supervision and general direction of all assistance for Iraq. Since IRMO is the primary Department of State entity involved directly in IRRF projects, we believe that sustainment responsibilities properly rest with IRMO.

## **Sustainment Funding**

The U.S. must develop a sustainment plan with clear goals for IRRF projects and the plan's funding must be defined. The estimated funding for all IRRF project operations and maintenance costs for calendar years 2006 and 2007 (in the electricity, oil, health care, transportation, communications, and water resources and sanitation sectors) would cost from \$550 to \$650 million annually, not including security, salaries, or fuel. If included, these estimated costs could increase overall project costs by 20 to 25 percent. The U.S. portion of these sustainment costs will vary depending on how much operational support we choose to provide (a key decision for the new sustainment office).

We also estimate that, at a minimum, an additional \$90 million annually will be needed for operations and support costs in the security and law enforcement sector. Department of State budget officials have identified \$350 million in IRRF funds that could be used to pay for some sustainment costs, and there is approximately \$1.2 billion identified as uncommitted IRRF funds. But using uncommitted funds to pay additional sustainment costs would require canceling planned projects. Senior U.S. advisors to the Iraqi ministries also believe it is unlikely that the Iraqi government can or will take on a larger funding burden at the present time for sustainment or any other activity.

Funding the sustainment of IRRF projects is just one of the Iraq funding challenges facing the U.S. The current Iraqi government does not have a budgeting program that properly addresses sound operations and maintenance practices; and, according to senior U.S. advisors to the Iraqi ministries, funding for existing infrastructure support is a fraction of what is necessary. In the Ministries of Defense and Interior, for example, the gap between requirements and anticipated funding has been estimated at \$7 billion for calendar year 2006. Failure of sustainment within any infrastructure sector would likely affect the stability of the new Iraqi Government and would be perceived by the Iraqis as a U.S.-caused problem.

### **Sustainment and Capacity Development Funding**

The \$550 to \$650 million sustainment estimate referred to above is based on the short-term operations and maintenance costs for spare parts, consumables, and contracted support. It will also fund other activities related to the performance of routine, preventive, predictive, scheduled, and unscheduled actions aimed at preventing equipment failure or decline. It does not, however, include estimated costs for capacity-building activities at Levels 1 through 3. The estimates for the electricity, oil, health care, transportation, communications, and water resources sectors were developed by the senior U.S. advisors to the respective Iraqi Ministries and are of varying quality. For example, the estimates for the transportation and oil sectors are detailed, bottom-up analyses of operating costs, while other sectors' estimates are based on industry averages of annual operations and maintenance costs in the sector.

MNSTC-I, which manages all projects in the Security and Law Enforcement Sector, has not provided sustainment costs for its projects. At the time IRMO made its information request, MNSTC-I reported that it did not intend to ask for more funds for sustainment; consequently, no report was necessary. MNSTC-I, however, has since started an effort to

determine what those costs may be and expects to have an estimate by approximately October 1, 2005. We estimate MNSTC-I's sustainment costs at approximately \$90 million annually using an IRMO estimating methodology. This methodology estimates annual operations and maintenance costs by adjusting project costs to remove non-recurring costs, such as security, and then applies an industry operations and maintenance average. For security and law enforcement, IRMO has identified the operations and maintenance average as 3 percent. Applied against an estimated \$3 billion in adjusted project costs, we estimate sustainment costs of \$90 million per year. Table 1: Estimated annual operations and maintenance costs for IRRF projects by sector, shows our estimate of sustainment costs for calendar years 2006 and 2007 by sector.

**Table 1: Estimated annual operations and maintenance (O&M) costs for IRRF projects by sector**

Sector	O&M/Sustainment Costs Calendar Year 2006	O&M/Sustainment Costs Calendar Year 2007	Total Cost for Sustainment
Electricity Sector*	\$360,000,000	\$360,000,000	\$720,000,000
Oil Infrastructure	61,000,000	117,000,000	178,000,000
Justice, Public Safety and Civil Society	13,000,000	26,000,000	39,000,000
Roads, Bridges and Construction	765,000	765,000	1,530,000
Health Care	3,300,000	10,000,000	13,300,000
Transportation and Communications	3,825,000	5,950,000	9,775,000
Water Resources and Sanitation**	110,000,000	125,000,000	235,000,000
<b>Total IRMO Costs</b>	<b>\$551,890,000</b>	<b>\$644,715,000</b>	<b>\$1,196,605,000</b>
Law Enforcement and Security	\$90,000,000	\$90,000,000	\$180,000,000
<b>TOTAL</b>	<b>\$641,890,000</b>	<b>\$734,715,000</b>	<b>\$1,376,605,000</b>

\*Electricity Includes IRRF I & II

\*\* Water includes Fuels & Employee Costs

### **Challenges in Identifying Sustainment Funding and Costs**

One of the objectives of our review was to specify sustainment costs for IRRF-funded projects. However, funding IRRF projects is just one piece of a larger funding challenge

facing the U.S. government. IRRF, for example, is just one of several U.S.-funded or directed projects devoted to Iraq relief and reconstruction. Public Law 108-11, also known as IRRF-1, provided \$2.5 billion, much of which was used for the rehabilitation of Iraqi infrastructure, primarily oil production and electricity generation. Military assistance programs, such as the Commanders' Emergency Response Program (CERP), also have initiated infrastructure projects, such as repairing and refurbishing water and sewer lines and upgrading schools and clinics. About \$1.4 billion has been expended for CERP program activities. We did not assess sustainment costs associated with these projects. However, some estimates in Table 1 include IRRF-1 projects.

The sustainment of U.S.-funded projects is just one piece of the total sustainment burden facing the Iraqi Government. As mentioned, the Iraqi operations and maintenance culture has been severely affected by many years under a totalitarian regime, in which there were actual disincentives to strategic and long-term operations and maintenance practices. Several U.S. senior advisors to the Iraqi ministries told us their ministries have billions of dollars of unfunded support requirements beyond those imposed by the IRRF. Perhaps the biggest gap is in the Ministry of Interior, where budget analysts estimate the gap between requirements and anticipated funding at approximately \$7 billion for calendar year 2006. While the responsibility to sustain existing infrastructure belongs to the Iraqis, an infrastructure failure within any sector, regardless of whether that failure is the responsibility of an Iraqi or U.S. project, will affect the stability of the new Iraqi Government and will be perceived by the average Iraqi citizen as a U.S.-caused problem.

#### **Challenges to Sources of Sustainment Funding**

At present, few new sources for sustainment funding have been identified. According to IRMO, USAID, and MNSTC-I budget officials, there is nothing in their Fiscal Year 2006 budgets for new sustainment spending, and they received no budget guidance directing them to plan for sustainment. At the request of the U.S. Ambassador to Iraq, the IRMO budget office identified \$350 million that could be applied to sustainment in calendar year 2006. Additionally, it has identified \$1.2 billion in uncommitted funds. However, using additional IRRF funds for sustainment will probably require canceling planned projects.

Additional sustainment funding by the Iraqi Government appears unlikely. We interviewed senior U.S. advisors to the Iraqi ministries to discuss the ability of their respective ministries to take on the sustainment of IRRF projects. They stated that the Iraqi calendar year 2005 budget contains little or no funding for operations and maintenance activities for existing infrastructure. Consequently, the core sustainment issue on the Iraqi side of the ledger goes beyond merely supporting new IRRF projects and facilities and cuts to the need for a fundamental change in budgeting perspective. The ministries' calendar year 2006 budgets are due October 15, 2005, but the senior U.S. advisors we spoke with were not optimistic that these budgets would include additional operations and maintenance funds for sustainment.

Oil revenues are the primary source of funding for Iraqi Government operations, and recent increases in oil prices have the potential to offer some relief. Unofficial estimates of Iraqi oil revenues indicate that the Iraqi government's calendar year 2006 budget could increase by as much as \$10 billion because of oil price increases. According to the senior U.S. consultant to the Iraqi Ministry of Finance, Iraq intends to spend any revenue increases on revenue producing activities, such as increasing oil production. Consequently, the amount available for sustainment remains in question. Internal reforms within the Iraqi Government could also increase the funding available for sustainment activities. At present, food, fuel, water, and electricity are all subsidized by the Iraqi Government. Reducing subsidies and charging fees for basic government

services such as water, electricity, and trash removal could ease some of the financial stress the new Iraqi Government is facing and open up funding streams for infrastructure sustainment.

## **Management Actions**

During the course of our audit, we notified IRMO of our concerns about the absence of a central office to coordinate sustainment. To its credit, IRMO responded by taking the important step of creating a coordinating sustainment office. This centralizes leadership for sustainment; but to succeed, it must be vested with the necessary authority to provide directive coordination of a common sustainment vision affecting the planning and management of sustainment activities.

## **Conclusion**

The PCO's Capacity Development Management and Interface Plan correctly pointed out that strong leadership and guidance is required for effective implementation of capacity development activities conducted by all U.S.-funded sources, including USAID, the PCO, and the MNSTC-I. We commend the Department of State for addressing this responsibility to lead by creating the sustainment coordination office. We are cautiously optimistic that this first step will energize the US program to secure an effective sustainment plan for Iraq's infrastructure. This office must have the power to coordinate sustainment among the diverse entities and systematically address the individual sector requirements so as to achieve consistently positive results.

To succeed, a common vision will need to disseminate from the top, followed by extensive coordination between the parties and the identification of financial resources to fund the initiative. Regardless of source, funding will be necessary to cover the direct operating expenses of IRRF projects until Iraqi Government capabilities mature to the point that the individual ministries can budget, manage, and direct operations and maintenance resources. Further, a clear understanding of each ministry's total operations and maintenance support requirements is needed along with a budget forecast to clearly identify the risks to the current U.S. investment. Where gaps exist, a sound strategy needs to be in place that is supported by a budget. Delays in identifying these funding gaps and confirming sources for this funding only add to the risk of an already fragile infrastructure.

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

**We recommend that the U.S. Ambassador to Iraq, in coordination with the Commanding General, Multi-National Force-Iraq, direct the new sustainment office to take these actions:**

- 1. Formulate and implement a plan, with clear goals and objectives for the sustainment of IRRF projects.**



- 2. Work with the Director of IRMO and the Senior Sector Leads to determine the capacity of the Iraq government to maintain the IRRF projects.**
- 3. Develop supportable cost estimates for sustaining Iraqi infrastructure for both the near- and long-term and to develop a proposed funding plan that supports these estimates.**
- 4. Review any guidance that the Iraq government's leadership is receiving on sustainment, determine its adequacy, and shore up any shortfalls.**

#### **Management Comments and Audit Response.**

IRMO officials concurred with the finding and recommendations. The comments received are fully responsive.

We provided a draft of this report on October 7, 2005, to the Chief of Mission of the United States Embassy Baghdad and the Commanding General, Multi-National Force - Iraq. No management comments to the draft of this report were received. Therefore, we request that the Chief of Mission and the Commanding General provide comments on this final report by November 14, 2005.

## **Appendix A. Scope and Methodology**

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To determine if the Department of State had adequate plans and programs for the transition and sustainment of construction and non-construction projects paid for with IRRF funds, we interviewed Iraq Reconstruction Management Office representatives including the Director of Strategic Sector Programs, and the Director of Development. We then interviewed senior U.S. advisors to the Iraqi ministries to discuss planning and any guidance they may have received. In addition, we discussed the capabilities of their respective ministries and their ability to deliver and support a budget. To gather additional information on planning, we also interviewed personnel from the three implementing agencies; the Project and Contracting Office, the U.S. Agency for International Development, and the Multi-National Security Transition Command – Iraq. We determined at each agency if they had received any guidance or instruction on planning for transition and sustainment of IRRF projects; and we discussed the efforts, if any, they were making to sustain their IRRF projects.

To determine if budgets, and funding sources, have been established to ensure that adequate training, materials, and supplies are provided to the Iraqi government and its citizens to effectively enable them to perform operations and maintenance on construction and non-construction projects placed under their control, we conducted interviews with IRMO budget officials and with officials in the Office of Strategic Sector Programs.

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

**Use of Computer-Processed Data.** We did not use computer-processed data to perform this audit.

**Prior Coverage.** There have been no audits performed concerning the Iraq Relief and Reconstruction Fund with the same or similar objectives as this audit.

## **Appendix B. Acronyms**

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CERP	Commanders' Emergency Response Program
CPA	Coalition Provisional Authority
DoD	Department of Defense
IRMO	Iraq Reconstruction Management Office
IRRF	Iraq Relief and Reconstruction Fund
MNSTC-I	Multi-National Security Transition Command – Iraq
PCO	Project and Contracting Office
USAID	U.S. Agency for International Development

## **Appendix C. 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 D. Audit Team Members**

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The Office of the Assistant Inspector General for Auditing, Office of the Special Inspector General for Iraq Reconstruction, prepared this audit report. The staff members who contributed to the report include:

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