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# **Special Focus on Post Conflict Infrastructure Issues**

## **Iraq & Afghanistan General Accounting Office Program Management Improvement Recommendations**

### **Recommendations of the Special Inspector General for Iraq Reconstruction**

USAID Infrastructure Workshop

December 17, 2007

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## **USG Iraq Infrastructure Development & The Office of the Special Inspector General for Iraq Reconstruction (SIGIR- Slide I)**

- Iraq Relief & Reconstruction Fund (IRRF) & Related Funds. Total Appropriations – Approx. \$26.5 billion. Principal Program Manager was DOD.
- Infrastructure (Electricity, Oil, Water, Sanitation, Transportation, Telecom, Roads, etc.) Total Funds programmed originally approximately \$13 billion but reduced to \$9 billion after changes in reconstruction priorities and reflecting the need for unanticipated security expenditures (+\$1.8 billion)
- USAID Managed 99 projects (developing/rehabilitating over 1600 facilities) with total investment of approximately \$6 billion.
- SIGIR – Created by Congress in October 2004 to provide oversight of the IRRF and other expenditures associated with Iraqi reconstruction. Oversight is provided via audits (98), field inspections, project assessments (80) and criminal investigations (over 300) into potential fraud, waste and abuse of funds. Reports quarterly to Congress outlining key findings on Iraq reconstruction efforts. See P.L. 108-106, 109-102 & 109-440; <http://www.SIGIR.mol/about/law.aspx>.



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## **USG Iraq Infrastructure Development & The Office of the Special Inspector General for Iraq Reconstruction (SIGIR- Slide II)**

**SIGIR Infrastructure Project Assessment Reports** – Electricity (12), Water (9), Oil (1) & Roads (1). 12 Reports contained deficiency findings, 11 do not.

### **SIGIR Infrastructure Related Significant Audit or Other Non-Project Reports:**

- IRAQ Reconstruction: Lessons in Program and Project Management, 03/2007
- Award of Sector Design-Build Construction Contracts, 07/2004
- Review of Bechtel's Spending under Phase II Iraq Reconstr. Contract, SIGIR-07-009
- GRD-PCO/USAID Mgmt. of the Transfer of IRRF Projects to Iraqi Gov., SIGIR-06-007
- Agency Management of the Close-out Process for IRRF Contracts, SIGIR-07-010
- Fact Sheet on Roles and Responsibilities of US Government Organizations Conducting IRRF-Funded Reconstruction Activities, SIGIR-07-008
- Fact Sheet on Services and Uses of US Funding Provided in Fiscal Year 2006 for Iraq Relief and Reconstruction, SIGIR-07-005



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# IRAQ Reconstruction: Lessons in Program and Project Management

## Lessons Learned as identified by SIGIR in this March 2007 Report:

- Importance of coordination of all USG Reconstruction & Stabilization Efforts (DOD, USAID & Others)
- Institutionalize better project management systems, policies and initiatives
- Integrate & consult with counterparts at every level of the program planning and execution process
- Design & implement flexible programs and projects that yield both short and long-term benefits
- Develop procedures to successfully manage non-US appropriated funds
- Develop comprehensive planning for Infrastructure & Human Capacity Development
- Provide for well-resourced and uninterrupted oversight of reconstruction programs to ensure effective monitoring from the outset and to permit real-time adjustments

In “**Audit Report – Award of Sector Design-Build Construction Contracts,**” CPA-IG urged enhanced contract oversight where contracts are awarded based on competition but where the facilities to be built can not be defined at the time of the competitive procurement.



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# SIGIR Project Assessment Structure

- **Completeness/Definiteness of Design** – 4 Deficiency Findings based upon incomplete or insufficiently detailed design. Design must be specific enough to permit successful construction & to commission all equipment.
- **Construction/Equipment Installation Meets Design Standards** – 2 Deficiency Findings. See Mosul Dam, SIGIR PA-07-105 where deficiencies in all components were found.
- **Contractor/USG/Iraqi Gov. Quality Control** – 4 Deficiency Findings. Quality Management Documentation must be timely & accurate, and consistent with construction/design requirements. See Al Wathiba Water Treatment Plant, SIGIR PA-05-002.
- **Sustainability** – 8 Deficiency Findings. Covers provision of adequate spare parts, training counterparts to operate and maintain facility and provision of operational & maintenance manuals. See Electrical Substation Sustainment, SIGIR PA-06-082.
- **Satisfaction/Consistency with Task Order Objectives** – Achieved if stated objectives of Task Order met, if no deficiencies are found.



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## Additional Failings which can prevent Satisfaction of Infrastructure Development Objectives

- **Assurance of Adequate Inputs** - Fuel for generation, electric supply for transmission/distribution, water/chemicals for supply/sanitation facilities. Absence of fuel for generation and electric power were burdens to the Iraq reconstruction program.
- **Sequencing of Infrastructure Projects** – Electric substations & water supply projects constructed where no electric supply, transmission connections or distribution outlets exist and thus project is not placed in service until months after completion. Substation/water projects energization delayed due to delays in related projects.
- SIGIR did not assess some problems as “deficiencies,” recognizing the great pressure improve basic infrastructure services which necessitated concurrent building of integrated projects.
- **Integration of Counterparts in Project Development & Management** – “SIGIR Lessons Learned – Project Management” urges involvement of counterparts from the beginning. Design/construction must be to established counterpart standards. Counterparts may also be required to play a role in project acceptance and quality control. Counterparts must ultimately operate and maintain rehabilitated facilities successfully.

See: Management of the Mansuria Electrical Reconstruction Project, SIGIR-05-024; Al Kaffat & Al Seraji Substations, SIGIR PA-05-007 & 008; Mosul Dam, SIGIR PA-07-105



## Additional Failings which can prevent Satisfaction of Infrastructure Development Objectives – Slide 2

- **The most frequent & serious problems identified in SIGIR Reports are related to sustainability & project turnover to the Iraqi Government:**
- **Sustainability:** Several electric generation facilities were catastrophically damaged due to improper maintenance or operations by the Iraqi Ministry, and failure to provide or control spare parts and O&M manuals occurred several times. Problems occurred despite 60,000 hours of O&M training.
- USG then adopted a build/train/transfer approach, with major TA programs for O&M for up to a year at electric & water facilities. For example, a further O&M Contract for electric plant to cover a full year period costing \$81 million was implemented in light of these catastrophic failures. Separate contracts for spare parts were used. Concerns remained with Iraq's ability to maintain/operate the plant due to inadequate operating revenues.

See Doura Power Station Units 5 & 6, SIGIR PA-07-103 (“Hard Tripping” caused by transmission system power surges; dust & oil accumulation in “Exciter”; unauthorized tapping of electricity directly from the generation plant); Qudas Power Plant Turbine Restoration Project & Qudas Power Plant Expansion Project, SIGIR PA-07-101 & 104; Project Phoenix Restore Qudas Gas Turbine Units to Operation, SIGIR PA-05-029; Umm Qasr Water Scheme, SEGOR PA-05-028



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## Additional Failings which can prevent Satisfaction of Infrastructure Development Objectives – Slide 3

- **Project Turnover to the Iraqi Government:** In its Reports, “GRD-PCO/USAID Management of the Transfer of IRRF Projects to Iraqi Government”, SIGIR concludes that: “A formal asset recognition and transfer process is necessary to enable the Iraqi government to integrate the completed project assets into a nation-wide infrastructure management plan; adequately budget for sustaining the transferred project assets; account for the assets; and leverage the project assets to obtain financing for additional projects from world markets.” Advance notification of future transfer and sufficient information to permit Iraqi Government preparations to receive and operate needs to be provided to the operating ministry, any sector or system planning ministry and the Ministry of Finance, which must allocate O&M funds. Appropriate documentation of transfer is required.
- **Funding Priority Changes:** These occurred often in Iraq, and affected the ability to complete projects.



# Review of Bechtel's Spending under its Phase II Iraq Reconstruction Contract

Original Award: \$1.8 billion. Actual Total Spent: \$1.33 billion. USAID managed.

24 Job Orders – 14 water & sanitation, 8 power, 1 telecom, 1 buildings

Results Achieved:     11 Job Orders clearly met defined objectives  
                              10 Job Orders clearly did not achieve original objectives  
                              3 had unclear objectives or achieving objectives was unclear

Causes of Results Achieved:

- (i) Ever changing Iraq security situation caused delays & increased costs
- (ii) Ever changing funds availability/delays & changing work scope/priorities
- (iii) Objectives not well defined in Job Order
- (iv) Under staffing in Contract Administration & Project Management



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# Review of Bechtel's Spending under its Phase II Iraq Reconstruction Contract

## Lessons Learned:

### (i) Strong Contract Administration & Adequate Staffing are critical to success

- 2 Full Time Staff insufficient to manage \$1+ billion/24 Job Order contract
- Some Job Orders' objectives vaguely written
- Bechtel Contract Monitoring Reports data not fully analyzed by USG staff

### (ii) Clear Understanding & Review of Costs is Important to Successful Contract Management

- Bechtel Project Monitoring Reports not fully reviewed
- Bechtel Monitoring Reports classified 20% to 25% of total project costs as "Other" which is too large and too non-descriptive.
- Job Order Completion Costs often varied from Original Cost estimate by 25% to 100% or more

**(iii) Support costs** exceeded 25% of Total Project costs and should have been reduced. Justification for level of such costs was not always provided.



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## **Iraq & Afghanistan General Accounting Office Program Management Improvement Recommendations**

- Develop a detailed Strategic Plan with specific objectives and milestones for infrastructure reconstruction
- Provide adequate program management staffing of Reconstruction Programs. Cost-Plus Contracts require expanded program management effort.
- Plan for sustainability early & fully
- Develop performance measures that are not simply project based, but also measure infrastructure service improvements
- Recognize that delays in funding, award, mobilization will delay service improvements



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## Recommendations

- **Control the controllable:** Adequate project management staffing, clearer Job Orders, review monitoring & cost Reports, and plan for project assessment components as project proceeds
- Develop early a plan to **integrate counterparts into project management** to assure effective **project turnover**
- Plan early for **Sustainability:** spare parts, TA for O&M
- Recognize and Plan as best as you can for **the uncontrollable:** funding delays & priority changes, sequencing issues
- Recognize the **complexity and interrelationship of infrastructure systems. Include counterpart capacity building** for the entire system, not simply the physical facility upon which you are working

Thank you for your attention. (email address: [whall@usaid.gov](mailto:whall@usaid.gov))