



LESSONS IN INSPECTIONS OF U.S.-FUNDING STABILIZATION AND RECONSTRUCTION PROJECTS

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SPECIAL INSPECTOR GENERAL FOR IRAQ RECONSTRUCTION

SIGIR's Inspections Program

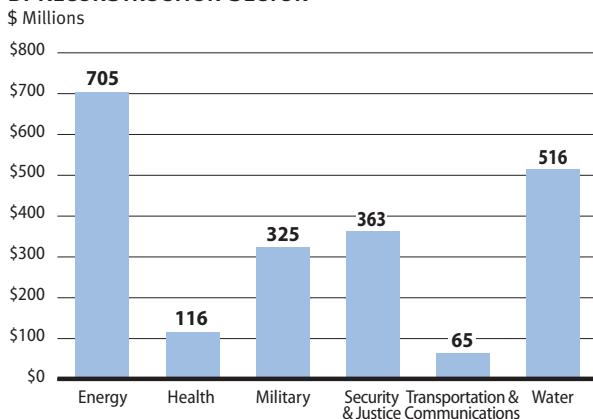
In June 2005, SIGIR established its Inspections Directorate to focus on the rapid assessment and reporting of U.S.-funded reconstruction work in Iraq. Over the next five years, SIGIR sent teams of experienced engineers and auditors to a cross section of project sites throughout the country. SIGIR selected projects from each reconstruction sector, from large and small contractors, from different geographic areas, from each of the major U.S. agencies, and from different funding sources. Also considered in the selection of projects were the requests of military commanders and Department of State officials; the significance of the project; the likelihood of fraud or waste; and allegations about specific projects, sites, and contractors.

In assessing construction projects, SIGIR aimed to determine the following:

- Were projects properly designed?
- Were projects built in accordance with contract specifications?
- Were adequate contractor quality control (QC) and government quality assurance (QA) in place?
- Was Iraqi sustainability considered and planned for?
- Were projects likely to meet their stated objectives?

For sustainment project assessments, SIGIR inspected completed projects to determine if the projects were at full capability or capacity when accepted by the U.S.

CONTRACT VALUE OF PROJECTS INSPECTED, BY RECONSTRUCTION SECTOR



Note: Data not audited. Numbers affected by rounding.



Work at Chamchamal Correctional Facility inspected by SIGIR.

government, when transferred to the GOI, and when observed by SIGIR inspectors during site visits.

The work of SIGIR's Inspections Directorate ended in April 2010, just as major U.S. construction projects were winding down and as the sovereign Iraq was assuming greater control of the reconstruction program. In all, SIGIR issued 170 reports, providing snapshots of reconstruction activities valued at nearly \$2.1 billion. Of the 116 in-progress projects that SIGIR inspected, almost one-half did not meet the contract specifications and had major deficiencies. Of the 54 completed projects assessed, more than three-fourths had deficiencies, with 14 having major deficiencies that, if left unaddressed, would place those projects in jeopardy.

Lessons Learned from Inspecting Projects in a Contingency Environment

During the course of its 170 project assessments, SIGIR's Inspections Directorate identified 13 essential lessons about project planning, execution, and oversight in a stabilization and reconstruction operation:

1. Achieve a secure environment before initiating major reconstruction activities.
2. Enforce contracts to reward good performance and hold poor performers accountable.
3. Design projects in accord with the host nation's capacity to maintain and sustain them.



Inspection at the Falluja Waste Water Treatment System.

4. If a project requires sophisticated equipment, encourage the host nation to contract for operations and maintenance with a qualified contractor until organic capacity is established.
5. Base project reporting on actual construction progress and not on the amount that the contractor has been paid to date.
6. Ensure that contractor invoices are reviewed by U.S. construction management before payment is made.
7. Do not allow construction activities to begin before detailed drawings have been prepared and approved.
8. Design projects that anticipate potential limitations of electrical power and potable water sources.
9. Require oversight managers to regularly visit sites as part of a project's quality assurance program.
10. When designing projects, work with host-nation users to create effective, usable, and culturally sensitive facilities.
11. Enhance coordination and decision making by consolidating all project data in a unified information management system.
12. Do not underestimate the importance of relatively small "last-mile" projects to the success of large-scale reconstruction projects.
13. Minimize use of "nested tiers" of subcontractors in stabilization and reconstruction operations.

Best Practices of SIGIR's Inspections Program

The unpredictable and challenging environment in Iraq helped shape the approach used by SIGIR's Inspections Directorate in conducting assessments of individual construction projects. This approach could serve as a template, or at least as a starting point, for project assessments in other contingency operations.

1. Provide reconstruction officials with near real-time reporting.
2. Team engineers with auditors.
3. Report on complex technical topics in accessible language.
4. Use graphics to explain complex engineering issues.
5. Prepare for rapid but effective inspections.
6. Whenever possible, visit project sites in person.
7. Visit as many projects as possible early in the construction phase.
8. Develop alternative approaches to executing inspections.
9. Support the host government's IG system.
10. Always consider sustainability in assessing reconstruction projects.
11. Engage with host-country end users and government officials when developing the reconstruction program.
12. Establish working relationships with all parties involved in the reconstruction effort.
13. Become an informational resource for reconstruction officials.
14. Perform assessments in all sectors throughout the country.
15. Complement and augment existing audit and investigative functions.

Lessons Learned Report

Published in December 2011, *Lessons in Inspections of U.S.-funded Stabilization and Reconstruction Projects* is SIGIR's sixth Lessons Learned report. It provides further details on how SIGIR implemented its Inspections program and what lessons SIGIR derived from its assessment of projects in a war zone. The report also summarizes SIGIR's most significant and notable project assessments.



The complete report is available on the SIGIR website, www.sigir.mil.

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