



Committee On Finance

Max Baucus, Chairman

NEWS RELEASE

www.senate.gov/~finance

For Immediate Release
Tuesday, March 5, 2002

Contacts: Michael Siegel, Jill Gerber
202-224-4515

STATEMENT BY SENATORS MAX BAUCUS AND CHARLES GRASSLEY
UNITED STATES SENATE

As part of the Finance Committee's ongoing efforts to ensure greater government accountability, we are releasing information pertaining to efforts by the Internal Revenue Service (IRS) to modernize its antiquated computer systems.

Today, the Treasury Inspector General for Tax Administration (TIGTA) issued a final audit report identifying numerous management and accountability weaknesses with the IRS's computer modernization effort. The report entitled, "The Business Systems Modernization Office Needs to Strengthen Its Processes for Overseeing the Work of the PRIME Contractor," March 2002, Reference Number 2002-20-059 can be found on TIGTA's web site at www.treasury.gov/tigta/audit_reports.

The IRS's Business Systems Modernization Office (BSMO) working with PRIME Alliance, a group of contractors headed by Computer Science Corporation, are in charge of planning and implementing the multi-billion dollar effort to transition the outdated IRS computer systems to today's business standards. The objective of TIGTA's review was to determine whether the BSMO had established effective processes to ensure that the PRIME Alliance was delivering high-quality goods and services in a timely and cost-effective manner.

TIGTA analyzed the results from four audits previously conducted and identified significant cost overruns, delays and unnecessary expenditures. In one of the projects reviewed, TIGTA found that approximately \$3.9 million was paid to the PRIME contractor over a 5-month period for hours worked on a task order that was never finalized and was eventually cancelled. In another example, TIGTA looked at IRS's e-Services project designed to provide the means for tax practitioners and other authorized parties to conduct business electronically with the IRS. TIGTA found the project was delayed for 9 months and had a cost overrun of \$4.2 million, 32 percent over the original estimate. Further, the planning phase for the CRM-Exam project intended to provide the ability for IRS revenue agents to more efficiently and accurately compute complex corporate taxes was scheduled to take 10 months and cost \$2.2 million. Instead, the planning phase took 7 months longer and the cost had increased over \$2.5 million to nearly \$4.8 million.

The TIGTA report concludes that the management processes developed by BSMO have not been effectively implemented contributing to lengthy delays and cost increases in the four projects it reviewed. Unless significant improvements made, TIGTA warns that major delays and future cost overruns are inevitable. TIGTA notes that delays could erode confidence in the IRS's ability to deliver modernized systems that are needed to dramatically improve both internal operations and service to taxpayers.

The Finance Committee has been concerned for some time about problems continually encountered by the IRS in upgrading its computer systems. The TIGTA report raises troubling questions about the agency's ability to manage this undertaking and to timely deliver modernized systems within budget. The Committee intends to explore these delays and cost overruns in hearings scheduled for this Spring.

_____ (Report Follows)

**The Business Systems Modernization Office Needs
to Strengthen Its Processes for Overseeing the
Work of the PRIME Contractor**

March 2002

Reference Number: 2002-20-059

March 1, 2002

MEMORANDUM FOR DEPUTY COMMISSIONER FOR MODERNIZATION &
CHIEF INFORMATION OFFICER

FROM: /s/
Pamela J. Gardiner
Deputy Inspector General for Audit

SUBJECT: Final Audit Report – The Business Systems Modernization
Office Needs to Strengthen Its Processes for Overseeing the Work of the PRIME
Contractor (Audit # 200120028)

This report presents the results of our review of the Internal Revenue Service's (IRS) oversight of the contractor hired to integrate its systems modernization efforts. The overall objective of this review was to determine whether the Business Systems Modernization Office (BSMO) had established effective processes to ensure that the contractor (PRIME contractor) was delivering high-quality goods and services in a timely and cost-effective manner. To address this objective, we analyzed the results from four audits we previously conducted of individual systems modernization projects for issues and trends that may affect the systems modernization program as a whole.

In summary, the BSMO developed various management processes intended to ensure the PRIME contractor delivers quality goods and services within expected time frames. As of the completion of our audit, however, many of these processes were still maturing and some had not yet been effectively implemented. This contributed to delays and cost increases in the four projects we reviewed. To date, the IRS and the PRIME contractor have been overly optimistic about their timetable for delivering modernized systems given the immaturity of their management processes. As the BSMO continues its ongoing work to strengthen its processes for overseeing the PRIME contractor, improvements in the areas noted below will be needed if the IRS' systems modernization effort is to avoid major delays and cost increases in the future. Further delays could erode confidence in the IRS' ability to deliver modernized systems that are needed to dramatically improve both internal operations and service to taxpayers.

1.

While the BSMO has made improvements in its contracting practices, processes had not been implemented to require defined and negotiated requirements and costs prior to the contractor personnel beginning work. Instead, the BSMO issued "level-of-effort" task orders to the PRIME contractor, which paid them for hours worked rather than deliverables produced until negotiations were completed. It is important to start work with negotiated contracts so that team members are clear on the specific deliverables required and the associated quality standards they need to address. In one of the projects we reviewed, approximately \$3.9 million was paid to the PRIME

contractor over a 5-month period for hours worked on a task order that was never finalized and was eventually cancelled.

- Performance-based contracting processes had not been fully implemented. Although quality review processes had been established to monitor contractor deliverables, most of the task orders we evaluated did not contain incentives or disincentives to further encourage contractor timeliness and quality. While the BSMO can withhold payment to the contractor until quality products are delivered, this option does not provide any compensation for delays in delivering promised improvements to taxpayers. In addition, when quality problems were identified, the BSMO did not always require that the contractor stop and address the problems before progressing to the next project phase.

-

Project monitoring processes did not adequately capture project cost information. Currently, actual costs are measured against estimated costs for the current phase (milestone) of the project rather than the project's full budget. In addition, accurate measurements of internal IRS costs are not included in project monitoring data, and the measurement system has not been validated. Without an accurate accounting of all project costs, it is difficult for the IRS and the Congress to determine if a project is worth the investment.

-

Project managers did not establish accountability for upcoming tasks or include reserve time for unplanned events in project schedules. Currently, the PRIME contractor assigns tasks to a group rather than to the individuals in that group. Therefore, the BSMO has no assurance that the individual employees with the skills necessary to do the job will be assigned to critical project tasks. In addition, reserve time for unplanned events was not built into project schedules even though these events have continually occurred on all projects. Allowing for unscheduled events, such as the time needed to resolve problems identified during the testing phase of projects, will provide more realistic estimates of project delivery dates.

In order to address the above conditions, task orders with clearly defined requirements and expectations should be completed for the next project development phase prior to exiting the current phase. The task orders should be performance-based, including incentives and disincentives, when contracting for key phases in the project life cycle. To enable better monitoring of project development, progress should be measured against the entire project budget rather than just the current development phase, the IRS should include accurate internal cost data in these measurements, and the BSMO should validate the accuracy of the measurement system. Lastly, key individuals should be included on assignment schedules for upcoming project tasks, and the project teams should review and implement "lessons learned" from previous projects in developing project schedule and cost estimates. Addressing these conditions should improve the development of ongoing and future modernization projects.

Management's Response: Management's response was due on February 25, 2002. As of February 26, 2002, management had not responded to the draft report.

Copies of this report are also being sent to the IRS managers who are affected by the report recommendations. Please contact me at (202) 622-6510 if you have questions or Scott E. Wilson, Assistant Inspector General for Audit (Information Systems Programs), at (202) 622-8510.

**The Business Systems Modernization Office Needs to Strengthen Its
Processes for Overseeing the Work of the PRIME Contractor**

Table of Contents

Background Page 1

Task Order Requirements and Costs Were Not Finalized Prior to
Allowing Contractor Personnel to Begin Work Page 2

Recommendation 1: Page 5

Task Orders Did Not Contain Contractor Incentives and Disincentives Page 5

Recommendation 2: Page 6

Project Monitoring Information Was Not Complete or Accurate
and Had Not Been Validated Page 7

Recommendations 3 through 5: Page 9

Project Schedules Did Not Provide Complete Accountability for
Tasks or Recovery Time for Unplanned Events Page 10

Recommendations 6 and 7: Page 11

Appendix I – Detailed Objective, Scope, and Methodology Page 12

Appendix II – Major Contributors to This Report Page 15

Appendix III – Report Distribution List Page 16

Appendix IV – Related Treasury Inspector General for Tax
Administration Audit Reports Page 17

The Business Systems Modernization Office Needs to Strengthen Its Processes for Overseeing the Work of the PRIME Contractor

Background

The Internal Revenue Service (IRS) is in the process of modernizing its information technology systems. This effort is known as Business Systems Modernization (BSM). The IRS formed the BSM Office (BSMO) to manage this effort and to oversee the PRIME Alliance, a group of contractors headed by the Computer Sciences Corporation (CSC). The CSC, also known as the PRIME contractor, was hired to help design and integrate the various modernization projects.

To obtain funding for BSM from the Congress, the BSMO prepares a BSM Expenditure Plan¹ that lists each project and the estimated costs and delivery dates. After the funding is received from the Congress, the BSMO issues task orders to the CSC that identify specific work and costs for defined project deliverables.

The BSMO and the CSC are required to follow a structured systems development process called the Enterprise Life Cycle (ELC). The ELC requires that certain project deliverables are completed and ready for review at key points (milestones) in the development process. The BSMO is responsible for establishing processes and procedures to ensure that the deliverables produced by the CSC meet defined requirements and are produced in a timely and cost-effective manner.

The BSMO established a quality review process to determine whether products delivered by the CSC meet required criteria at certain points. The CSC and the BSMO use project tracking techniques to monitor progress.

The overall objective of this review was to determine whether the BSMO had established effective processes to ensure that the CSC was delivering high-quality goods and services in a timely and cost-effective manner. To accomplish this, we analyzed the results of four audits conducted in Fiscal Year 2001 on the following projects to identify issues and trends that affect the BSM program as a whole (see Appendix IV for details on these four project audits).

- Customer Communications - 2001 Release (CC01) - upgrades the IRS' telephone communications system to more efficiently and effectively handle taxpayer calls.
- Telecommunications Enterprise Strategic Program (TESP) - provides the telecommunications needs for modernization projects and develops a long-term IRS telecommunications strategy.
- e-Services - provides the means for tax practitioners and other authorized parties to conduct business electronically with the IRS.
- Customer Relationship Management - Examination (CRM-Exam) - provides the ability for revenue agents to more efficiently and accurately compute complex corporate taxes.

¹ Formerly called the Information Technology Investment Account (ITIA) Expenditure Plan.

The Business Systems Modernization Office Needs to Strengthen Its Processes for Overseeing the Work of the PRIME Contractor

This audit was conducted in accordance with *Government Auditing Standards*. Detailed information on our audit objective, scope, and methodology is presented in Appendix I. Major contributors to this report are listed in Appendix II.

Task Order Requirements and Costs Were Not Finalized Prior to Allowing Contractor Personnel to Begin Work

At the time of our audits, the BSMO did not have processes in place to require task orders to be defined and negotiations finalized prior to allowing work to begin on the projects. Instead, the BSMO issued “level-of-effort” task orders, for which the CSC was paid for hours worked rather than deliverables produced. Project cost and schedule estimates were exceeded in part because the BSMO did not have clearly defined requirements and expectations prior to initiating work on projects.

In some cases contract negotiations were not finalized for several months after work began on the task orders. It is important to start work with negotiated contracts so that team members are clear on the specific deliverables required and the associated quality standards they need to address. Until negotiations are completed and requirements are final, the project team works towards what they believe will be the finalized requirements, and the BSMO may have to pay for hours spent on deliverables that eventually are not needed or used.

For example, approximately \$3.9 million was paid to the CSC over a 5-month period for hours worked on a TESP task order that was never finalized and was eventually cancelled. On the CRM-Exam project, approximately \$700,000 was paid to the CSC over a 60-day period for hours worked on a task order before requirements and costs were finalized.

One reason the BSMO allowed the CSC to begin work prior to completing negotiations on the task orders and finalizing requirements was to enable the CSC to provide input to the project requirements. Another reason was to avoid gaps in funding the projects that could result in the loss of valuable contractor expertise.

While help defining the requirements was needed, delays in completing the task order negotiations contributed to significant delays in completing project work and cost increases from estimates originally presented to the Congress. The project milestones we reviewed were delayed from 4 to 9 months, while cost increases ranged from nearly \$700,000 to over \$13 million from original estimates presented to the Congress.

For example, the CRM-Exam project team originally estimated they would complete their project planning phases in 10 months at a cost of \$2.2 million. However, the planning phases took 7 months longer to complete than estimated, and the costs had increased over \$2.5 million to nearly \$4.8 million. According to BSMO management, these cost increases and delays were due in part to the fact that estimates developed for the Congress are produced prior to the development of proposals and completion of negotiations for the individual task orders. As a result, once

The Business Systems Modernization Office Needs to Strengthen Its Processes for Overseeing the Work of the PRIME Contractor

requirements were finally defined, costs and time to address these requirements were substantially more than originally estimated.

Another project that incurred delays and cost increases was the e-Services project. The e-Services project team originally estimated they would complete the design phase of the project by September 2000 at a cost of \$3.8 million.² When we completed our audit work on the e-Services project, the completion date had slipped 9 months to June 2001, and the estimated cost had increased over \$13 million to \$17.2 million.³ According to BSMO management, the delays and cost increases were due in part to a significant change in requirements subsequent to the initial estimates, and the project was ahead of other projects it was dependent upon for direction. However, had the requirements been better defined at the beginning of the project, the delays and cost increases could have been significantly reduced.

According to Federal Acquisition Regulations,⁴ performance-based contracting methods require statements of work that define requirements in clear, concise language identifying specific work to be accomplished. Recent General Accounting Office testimony⁵ indicates that there is a very high risk that systems will not be developed timely and within budget, or not meet the needs of the business processes they are intended to support, when requirements are not well defined.

Management Actions

At the time of our audit, the BSMO was developing procedures to require defined task orders prior to allowing project teams to progress into the next phase. However, the procedures documenting this new effort were not available for our review prior to the completion of our audit work.

Recommendation

To ensure the CSC delivers high-quality goods and services in a cost-effective and timely manner, the BSMO should:

1. Finalize and implement procedures that require the completion of fully defined and negotiated task orders for the next project phase prior to exiting the current development phase or

² According to project officials, this initial figure did not include Competitive Systems Acquisition costs associated with the design phase.

³ According to project officials, this figure includes full design costs, including some costs that were originally projected for the subsequent phase.

⁴ Federal Acquisition Regulation (FAR), 48 C.F.R. § 37.602-1 (1999).

⁵ *Federal Acquisition: Trends, Reforms, and Challenges* (GAO/T-OCG-00-7, dated March 16, 2000).

The Business Systems Modernization Office Needs to Strengthen Its Processes for Overseeing the Work of the PRIME Contractor

milestone. The BSMO's milestone exit review should ensure that task orders for the next phase or milestone contain measurable performance standards, specific deliverables, costs, and due dates.

Management's Response: Management's response was due on February 25, 2002. As of February 26, 2002, management had not responded to the draft report.

Task Orders Did Not Contain Contractor Incentives and Disincentives

Although the BSMO indicated that it was following performance-based contracting processes, the task orders we evaluated did not uniformly contain incentives or disincentives to encourage quality and timeliness. BSMO officials indicated they did not uniformly include incentives and disincentives in task orders because they wanted to avoid developing an adversarial relationship with the CSC. Officials in BSMO also stated that disincentives were not needed since the BSMO had the option of withholding payments from the CSC until satisfactory performance was achieved.

While withholding payments to the CSC may address quality concerns, it does not provide any compensation to the IRS for project delays that could have a significant impact on other projects or on promised taxpayer benefits.

Government policy⁶ states that agencies should negotiate a contract type and price that will result in reasonable contractor risk and provide the contractor with the greatest incentive for efficient and economical performance.

Although incentives and disincentives were not included in the task orders to address potential problems with the quality of contractor deliverables, quality review processes have been developed to ensure that all CSC deliverables are reviewed prior to allowing the CSC to move on to a new phase in the project development. Using these processes, the BSMO identified some quality problems with products provided by the CSC in the projects we reviewed.

For example, the BSMO quality review process identified various concerns with significant CC01 project work products, such as the Quality Management Plan, the System Life Cycle Management Plan, the System Design Report, and the key Security Documents, as the project moved from the design phase into development, and additional work was required to address the issues identified. The delays in completing these work products impacted the project direction and expectations and resulted in further delays in development and deployment.

The BSMO also identified several concerns with deliverables from the TESP and e-Services project teams. The IRS executive team required the TESP project team to address its issues prior to approving the project to move forward into its next phase. Although the e-Services project was allowed to proceed into the next phase, we believe several issues that the quality review

⁶ Federal Acquisition Regulation (FAR) 48 C.F.R. § 16.103 (1999).

The Business Systems Modernization Office Needs to Strengthen Its Processes for Overseeing the Work of the PRIME Contractor

team identified should have been addressed prior to allowing the project team to proceed.

Even though the BSMO worked with the CSC to rectify these issues, in some cases it allowed the CSC to proceed into the next phase in project development prior to these issues being addressed, and in others quality problems caused delays in approval of a milestone. Because incentives and disincentives were not included in the task orders, the BSMO was not able to obtain compensation for these delays and quality problems.

Recommendation

To ensure the IRS' interests are protected, the BSMO should require that:

2. Task orders for system design, development, and implementation be performance-based whenever possible. These task orders should include incentive provisions to reward contractors for good performance and quality assurance deduction schedules to discourage unsatisfactory performance. The incentive and disincentive provisions should be based on measurement against predetermined performance standards and review plans.

Project Monitoring Information Was Not Complete or Accurate and Had Not Been Validated

The BSMO and CSC were not adequately monitoring and measuring the costs of the projects as they were being developed. Monitoring of project progress is an important process to enable successful project completion within required time frames and budgets.

To accomplish project monitoring, the CSC is using a "best practices" process called earned value management. This process measures actual cost and work accomplished against the budgeted cost and planned work scheduled. Variances between these actual and planned factors are analyzed and provided to management for decision-making.

While a project monitoring process has been implemented, improvements are needed in the following areas to enable more accurate monitoring for all projects:

- **Costs are currently being measured against individual milestone estimates rather than complete project budgets.**
- **Accurate measurements for the IRS' internal costs are not currently included in project monitoring data.**
- **The system used by the CSC to produce project monitoring data has not been validated by the BSMO.**

Costs are measured against individual milestone estimates rather than complete project budgets

The Business Systems Modernization Office Needs to Strengthen Its Processes for Overseeing the Work of the PRIME Contractor

ELC guidelines state that earned value techniques should measure the cost of the project over its life cycle. However, the current earned value measurement process only measures costs of the project against estimates for the current milestone.

According to project personnel, the current task order process makes monitoring against complete project budgets difficult because costs are negotiated by project phase rather than by complete project. As a result, it is difficult to use the current earned value data to determine whether each project is progressing according to the course established when it was initiated.

The Clinger-Cohen Act of 1996⁷ requires the agency Chief Information Officer to monitor the performance of information technology programs of the agency. This includes evaluating the performance of those programs on the basis of applicable performance measures and advising the agency head regarding whether to continue, modify, or terminate the programs or projects. Current earned value data is of little value in assisting program management in determining whether the project team is on track to meet original requirements, time periods, and costs and whether investment in the project should be continued, because it is limited by project phase.

Accurate measurements for the IRS' internal costs are not currently included in project monitoring data

The BSMO has not yet established an effective means to accurately track and report IRS labor, hardware, and software maintenance costs associated with projects. Therefore, these costs are not always included as part of the earned value analysis.

For example, we compared the data provided by the IRS for expenses related to its employees working on the e-Services project to a figure we calculated based on 17 employees working on the project for 16 months. We determined that the reported expenses for IRS employees working on the e-Services project were understated by approximately \$1.6 million during the period October 1999 through January 2001.

Project personnel from e-Services indicated that it is difficult to ensure project employees, especially those who do not work full-time on the project team, use the correct codes for charging their time. However, the ELC indicates that an appropriate measure of total project cost should include any indirect costs, and without an accurate accounting of these costs, actual return on investment cannot be accurately calculated.

The system used by the CSC to produce project monitoring data has not been validated

⁷ Pub. L. No. 104-106 §§ 5125(c)(2); formerly known as The Information Technology Management Reform Act of 1996. B.6.11 and B.6.12, Section 5125(c)(2).

The Business Systems Modernization Office Needs to Strengthen Its Processes for Overseeing the Work of the PRIME Contractor

The CSC is required to provide accurate and complete earned value data. In response to an earlier audit report, *Significant Risks Need to Be Addressed to Ensure Adequate Oversight of the Systems Modernization Effort* (Reference Number 2000-20-099, dated June 2000), the BSMO stated that it would review the system the CSC uses to produce earned value measures and other project monitoring tools.

However, at the time of our four project reviews, the BSMO had not validated the system because the CSC had not provided the information necessary for this review. It is critical to ensure that the system is producing accurate data because the BSMO relies on this data to make crucial business decisions.

Management Actions

For Fiscal Year 2002, the IRS plans to begin an earned value monitoring process, based on a recurring evaluation of the CSC's internal management control practices and samples of internal and external data. The procedures documenting this new effort were not available for our review prior to the completion of our audit.

Recommendations

To enable effective monitoring of project progress, the BSMO should take the following actions:

3. Require the CSC to begin evaluating project progress against the entire project budget rather than just the current milestone figures.
4. Provide accurate IRS internal cost data to the CSC for inclusion in project monitoring data.
5. Follow through with plans to validate the system used to produce earned value project measures.

Project Schedules Did Not Provide Complete Accountability for Tasks or Recovery Time for Unplanned Events

Processes to ensure individual accountability for tasks were not followed by the CSC. Project managers assigned tasks to a group rather than to the individuals in that group. As a result, the BSMO had no assurance that the CSC assigned employees with the necessary skills to complete critical project tasks and that those employees would be available when needed. The ELC states that, during the execution stage, the project manager must develop individual Task Assignment Schedules based on the project work packages.

When we discussed this issue with the BSMO and the CSC, the CSC indicated it does not believe individual task assignment information is useful in managing the projects.

The Business Systems Modernization Office Needs to Strengthen Its Processes for Overseeing the Work of the PRIME Contractor

In addition, project managers did not follow best practices to ensure adequate time was allocated for tasks. Reserve time was not built into the project schedules to allow for project delays or unplanned events, even though these types of events have continually occurred on all projects. Reserve time is especially critical when the project schedule is aggressive, as it was in several of the projects we evaluated. Allowing for unscheduled events, such as the time needed to resolve issues identified during the testing phase of projects or quality concerns with other deliverables, would provide more realistic estimates of project delivery dates.

When we discussed this issue with the BSMO and the CSC, the CSC indicated that its practice is not to separately allocate reserve or recovery time.

The BSMO and CSC will continue to be overly optimistic about their timetable for delivering modernized systems if more effective techniques are not developed for estimating reserve time and ensuring work is assigned to available individuals with the required skills. Further delays in projects could erode confidence in the IRS' ability to deliver modernized systems that are needed to dramatically improve both internal operations and service to taxpayers.

Management Actions

The BSMO is working closely with the CSC to improve project schedule estimates. Using experience gained with the initial projects, the BSMO and CSC plan to incorporate additional time into project schedules to provide for thorough reviews by IRS stakeholders.

Recommendations

To increase the likelihood of timely delivery of projects, the BSMO should ensure that:

- 6. Individual Task Assignment Schedules are used for critical project tasks.**
- 7. Project managers use “lessons learned” from previous BSM projects in developing time estimates for critical tasks. Until those lessons are effectively implemented, project schedules should include reserve time to compensate for delays or unplanned events.**

The Business Systems Modernization Office Needs to Strengthen Its Processes for Overseeing the Work of the PRIME Contractor

Appendix I

Detailed Objective, Scope, and Methodology

The overall objective of this review was to determine whether the Business Systems Modernization Office (BSMO) had established effective processes to ensure that the Computer Sciences Corporation (CSC), also known as the PRIME contractor, was delivering high-quality goods and services in a timely and cost-effective manner. To accomplish this, we analyzed the results of the following project audits we conducted in Fiscal Year 2001 for issues and trends that may affect the Business Systems Modernization (BSM) program as a whole:

- **Customer Communications - 2001 Release (CC01)** - upgrades the Internal Revenue Service's (IRS) telephone communications system to more efficiently and effectively handle taxpayer calls.
- **Telecommunications Enterprise Strategic Program (TESP)** - provides the telecommunications needs for modernization projects and develops a long-term IRS telecommunications strategy.
- **e-Services** - provides the means for tax practitioners and other authorized parties to conduct business electronically with the IRS.
- **Customer Relationship Management - Examination (CRM-Exam)** - provides the ability for revenue agents to more efficiently and accurately compute complex corporate taxes.

Audit teams performed fieldwork for the four project audits and for this trend analysis audit in the IRS National Headquarters and the BSMO facilities in New Carrollton, Maryland.

These four audits, as well as this trend analysis review, were performed between February 2000 and October 2001.

To complete our work on this review, we conducted the following tests:

1. **Obtained sufficient background on the subject area by reviewing the following documents:**

- Capability Maturity Model guidelines issued by the Software Engineering Institute.
- Enterprise Life Cycle (ELC) guide.
- Relevant BSMO documents.

**The Business Systems Modernization Office Needs to Strengthen Its
Processes for Overseeing the Work of the PRIME Contractor**

- Core Business Systems Executive Steering Committee meeting minutes and pre-meeting reading material.**
- Audit plans and reports from the four project audits.**
- The BSM Quality Assurance Assessment of the Acquisition Management Process.**
- Task orders for all four project audits.**
- Relevant General Accounting Office and Inspector General reports.**

II. Identified common successes and failures among the four projects reviewed.

- A. Obtained and reviewed reports, audit plans and workpapers from the four subject audits.**
 - 1. Reviewed audit workpaper files.**
 - 2. Interviewed audit team members and managers to identify extent of project scope and to discuss issues identified.**
- B. Identified trend results in the four audits (both positive and negative).**
 - 1. Reviewed briefing documents, memoranda, and reports.**
 - 2. Created a matrix with results from each audit.**
 - 3. Analyzed the matrix for trends (positive and negative).**
- C. Interviewed audit team members as needed to clarify issues.**
- D. Reviewed documentation of previously conducted interviews of BSMO program officials to evaluate project integration and dependencies and the effect of issues on the BSM program.**

III. Determined causes of issues affecting multiple projects.

- A. Reviewed audit workpapers to identify potential causes for issues identified as affecting more than one project.**
- B. Reviewed documentation of previously conducted interviews of project managers, Contracting Officer Technical Representatives, Government Task Managers, and BSMO Personnel to determine causes, significance of issues, and potential recommendations.**
- C. Interviewed audit teams as needed to clarify results and comments from project managers.**

**The Business Systems Modernization Office Needs to Strengthen Its
Processes for Overseeing the Work of the PRIME Contractor**

IV. Determined the impact of issues on the BSM program and quantify outcome of proposed corrective actions.

- A. Reviewed workpapers and interviewed auditors to identify tests in which outcomes have been quantified and determined whether corresponding issues can be projected against other BSM projects.**
- B. Reviewed documentation of interviews of project managers and BSMO personnel to evaluate significance of issues and potential outcomes of planned corrective actions.**

**The Business Systems Modernization Office Needs to Strengthen Its
Processes for Overseeing the Work of the PRIME Contractor**

V. Developed recommendations to address issues and improve project quality and timeliness throughout the BSM program.

- A. Reviewed workpapers to identify project level recommendations for issues affecting multiple projects.**
- B. Interviewed audit teams to clarify issues.**
- C. Determined whether project level recommendations can be rolled into program level corrective actions.**
- D. Reviewed documentation of previously conducted interviews of project managers and BSMO personnel to evaluate proposed recommendations.**

**The Business Systems Modernization Office Needs to Strengthen Its
Processes for Overseeing the Work of the PRIME Contractor**

Appendix II

Major Contributors to This Report

Scott E. Wilson, Assistant Inspector General for Audit (Information Systems Programs)

Scott Macfarlane, Director

Tammy L. Whitcomb, Audit Manager

Eulala Davis, Senior Auditor

Charles Winn, Senior Auditor

George Franklin, Auditor

**The Business Systems Modernization Office Needs to Strengthen Its
Processes for Overseeing the Work of the PRIME Contractor**

Appendix III

Report Distribution List

Commissioner N:C
Deputy Commissioner N:DC
Associate Commissioner, Business Systems Modernization M:B
Advisor to Associate Commissioner, Business Systems Modernization M:B
Deputy Associate Commissioner, Program Management M:B
Deputy Associate Commissioner, Systems Integration M:B
Director, Tax Administration Modernization M:B:TAM
Director, Infrastructure Modernization M:B:IF
Chief Counsel CC
National Taxpayer Advocate TA
Director, Legislative Affairs CL:LA
Director, Office of Program Evaluation and Risk Analysis N:ADC:R:O
Office of Management Controls N:CFO:F:M
Audit Liaison:
 Associate Commissioner, Business Systems Modernization M:B

**The Business Systems Modernization Office Needs to Strengthen Its
Processes for Overseeing the Work of the PRIME Contractor**

Appendix IV

Related Treasury Inspector General for Tax Administration Audit Reports

Progress in Developing the Customer Communications Project Has Been Made, But Risks to Timely Deployment in 2001 Still Exist (Reference Number 2001-20-055, dated March 2001).

The Customer Relationship Management Examination Project Experienced Delays and Increased Costs, But Lessons Learned Should Improve Future Modernization Projects (Reference Number 2001-20-140, dated August 2001).

The Telecommunications Modernization Project Provided Some Benefits, But Process Improvements Are Needed for Future Projects (Reference Number 2001-20-143, dated August 2001).

Improvements Are Needed in the Management of the e-Services Project to Enable Timely Progress Towards Future Goals (Reference Number 2001-20-144, dated September 2001).