The Business Systems Modernization Quality Assurance Function Has Established a Solid Set of Policies and Procedures That Can Be Further Enhanced

February 2003

Reference Number: 2003-20-067

DEPARTMENT OF THE TREASURY
WASHINGTON, D.C. 20220

February 27, 2003

MEMORANDUM FOR DEPUTY COMMISSIONER FOR MODERNIZATION &
                    CHIEF INFORMATION OFFICER

FROM: Gordon C. Milbourn III
                        Acting Deputy Inspector General for Audit

SUBJECT: Final Audit Report - The Business Systems Modernization
                        Quality Assurance Function Has Established a Solid Set of
                        Policies and Procedures That Can Be Further Enhanced
                        (Audit # 200220017)

This report presents the results of our review of the Business Systems Modernization (BSM) Quality Assurance (QA) function. The overall objective of this review was to identify gaps between the existing BSM QA policies and procedures and best practice QA policies and procedures.

In a previous review by the Treasury Inspector General for Tax Administration, we determined that an independent BSM QA function with policies and procedures had not been established.[1] Since that time, the Internal Revenue Service (IRS) has established a BSM QA function with a solid set of policies and procedures. The BSM QA function has also begun to conduct effective audits of BSM activities.

In summary, while much progress has been made, policies and procedures concerning independence, planning, skills assessments, standards compliance, stakeholder involvement, corrective action processing, and metrics could be enhanced to improve future operations. During the review, we shared our results with the Associate Commissioner, BSM, and the BSM QA Manager. Several actions were taken to address the issues we raised; these actions are discussed throughout the report. For actions that could not be completed during the time period of our review, we provided detailed recommendations to assist the BSM QA function in continuously improving its operations. These recommendations included initiating and documenting an

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[1] *Significant Risks Need to Be Addressed to Ensure Adequate Oversight of the Systems Modernization Effort* (Reference Number 2000-20-099, dated June 2000).

independent path to staff, plan, execute, and report on the status of Business Systems Modernization Office processes and products, enhancing existing QA policies and procedures, and improving BSM QA performance metrics.

Management's Response: The Deputy Commissioner for Modernization & Chief Information Officer generally agreed with our recommendations and is taking appropriate corrective actions to further improve BSM QA procedures. These actions include assessing the appropriateness of including an escalation process in the BSM QA procedures and revising the procedures as necessary, enhancing audit and corrective action procedures, and developing a metrics methodology. We agree that these actions are a good start toward improving the independence and operations of the BSM QA function. Management's complete response to the draft report is included as Appendix IV.

Copies of this report are also being sent to the IRS managers affected by the report recommendations. Please contact me at (202) 622-6510 if you have questions or Gary V. Hinkle, Acting Assistant Inspector General for Audit (Information Systems Programs), at (202) 927-7291.

**The Business Systems Modernization Quality Assurance Function
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Further Enhanced**

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**The Business Systems Modernization Quality Assurance Function
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Background	In 1998, the Internal Revenue Service (IRS) initiated the Business Systems Modernization (BSM) program to modernize its outdated computer systems and related information technology. The BSM program is one of the most complex and expensive efforts ever undertaken by the IRS.

In Fiscal Year (FY) 2000, the Treasury Inspector General for Tax Administration (TIGTA) performed the first in a series of audits to evaluate the IRS' oversight of the new BSM effort.[1] The review included an assessment of the BSM Quality Assurance (QA) function. As a result of the audit, we recommended that the IRS establish an independent QA function that reported directly to the IRS Chief Information Officer (CIO). We also recommended that the IRS finalize and fully implement QA policies and procedures.

Since the completion of our first audit, the IRS has established a BSM QA function, whose mission is to provide BSM senior management with confidence that the products being built and services being provided for all modernization activities are produced by repeatable, standardized, and effective processes and conform to applicable contractual, program, and project requirements. The BSM QA function conducts audits of the Business Systems Modernization Office (BSMO)[2] organizational units, the PRIME[3] Quality Management Office, the TRW[4] QA organization, and other contractor program functions and projects.

Our audit was conducted at the IRS National Headquarters in Washington, D.C., between June and November 2002 in |

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[1] *Significant Risks Need to Be Addressed to Ensure Adequate Oversight of the Systems Modernization Effort* (Reference Number 2000-20-099, dated June 2000).
[2] The IRS created the BSMO to oversee the BSM effort.
[3] The PRIME contractor and integrator for BSM is Computer Sciences Corporation, which heads an alliance of leading technology companies that provide assistance to the IRS.
[4] The TRW Corporation is responsible for developing certain finance-related BSM projects.

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

An Effective Business Systems Modernization Quality Assurance Organization Has Been Established

The IRS has established an effective BSM QA organization by creating a set of policies and procedures, hiring staff to perform QA activities, conducting effective audits, and enlisting the MITRE Corporation[5] to provide an independent review of BSM QA operations.

Policies and procedures for performing audits and other QA activities were first established in June 2000 and have been refined since that time. In addition, documentation of the purpose and scope of the function has been established.

In March 2001, the BSMO hired the Dynamics Research Corporation to begin conducting QA audits. Before that time, the BSMO supplemented the BSM QA staff with MITRE Corporation personnel. At the end of our audit work, three IRS and seven Dynamics Research Corporation employees were assigned to the BSM QA function.

Since March 2001, the BSM QA function has published five audit reports dealing with a number of critical issues. These audits included a review of the Integrated Master Schedule,[6] the Process Asset Library[7] management process, the acquisition management process, the PRIME Quality Management Office, and the TRW QA organization. We found that the reports raised significant issues and provided important feedback for the areas under review.

The BSM QA function has also recognized the need to continuously improve. During our review, the BSMO tasked the MITRE Corporation to perform an independent review of the BSM QA function to verify that the function

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[5] The MITRE Corporation provides the IRS with specific expertise in managing the systems modernization program.

[6] The Integrated Master Schedule is a collection of project schedules that have been integrated to form a program view that represents project dependencies.

[7] The Process Asset Library is a web-based repository that contains systems life cycle process documentation.

was performing activities according to policy, plans, and procedures. The MITRE Corporation found that the BSM QA function had generally adhered to policies and procedures; however, some improvement opportunities were noted.

Enhancements Can Be Made to Further Improve Quality Assurance Policies and Procedures

Similar to the MITRE Corporation, we identified areas for improvement. During our review, we compared BSM QA policies and procedures to best practice audit procedures. We communicated any areas for improvement to the Associate Commissioner (AC), BSM, and BSM QA Manager. Comments from the AC, BSM, and BSM QA Manager are interspersed throughout the remainder of this report.

The reporting level for the BSM QA function has increased; however, further steps can be taken to enhance independence

We previously recommended that the BSM QA function report directly to the CIO. Currently, the BSM QA function reports to the AC, BSM. The *Government Auditing Standards* indicate that auditors "…should report the results of their audits and be accountable to the head or deputy head of the government entity and should be organizationally located outside the staff or line management function of the unit under audit." While not designated as an internal audit organization, the BSM QA function does perform audits of the BSMO, which is headed by the AC, BSM. In this way, the BSM QA function is similar to an internal audit function.

Current policies and procedures indicate that the AC, BSM, is responsible for: 1) ensuring adequate BSM QA staffing; 2) approving the BSM QA Plan; 3) approving BSM QA policies and procedures; 4) receiving and reviewing status reports; and 5) resolving untimely, unresolved, or ineffective responses to QA reports. Since BSMO audits are within the scope of BSM QA activities, some of these activities might involve a conflict of interest for the AC, BSM (who is directly responsible for BSMO operations).

The current AC, BSM, is considered a "champion" for the BSM QA function; however, we believe that policies and procedures should specifically articulate a clearer independent path to staff, plan, execute, and report on the status of BSMO processes and products should this situation change. Without organizational independence, a future AC, BSM, could eliminate (or not fully staff) the BSM QA function, hold undue influence over BSM QA reporting, or redirect QA resources away from audits of the BSMO.

The AC, BSM, indicated that he did not feel that increasing the independence for the BSM QA function would improve operations because the CIO would not have the time to manage the BSM QA function properly and the focus currently provided by the function would therefore suffer. The AC, BSM, also indicated that he considered BSMO audits to be only a small aspect of the BSM QA mission.

The BSM QA function should implement proactive, risk-based planning

The Control Objectives for Information and Related Technology[8] suggests critical success factors to look for during an independent audit of an information technology program. Two of these critical success factors are: 1) risk-based planning is used to identify business and information technology activities for initial and cyclical reviews, and 2) audits should be planned and conducted proactively.

We determined that an informal planning process was being used to determine priorities and to select the modernization processes, programs, and projects to receive QA audit coverage. Currently, the BSM QA Manager discusses the priorities with the AC, BSM, and establishes a 6-month rolling audit schedule. The BSM QA Manager and the

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[8]The Control Objectives for Information and Related Technology is a generally applicable and accepted standard for good information technology security and control practices that provides a reference framework for management, users, and information systems audit, control, and security practitioners.

AC, BSM, meet frequently to discuss program status and priorities and to make revisions to the QA audit schedule.

Without a formal risk-based planning process, the BSM QA function may not be reviewing BSM processes, programs, and projects with the highest risks and priorities. Using informal methods to identify priorities and establish the audit schedule could allow significant risks in critical BSM activities to go undiscovered. The MITRE Corporation's recently completed independent review of the BSM QA function supports the need for a formal, proactive, risk-based planning process.

To assist in the effort to improve proactive, risk-based planning, we provided the AC, BSM, with an example of a risk-based planning model that could be used for planning audits. The AC, BSM, agreed that a more formal process was needed and stated that he felt that risk-based planning was being conducted; however, the method had not been documented. We determined that not having a documented risk-based planning method was due to the function's relatively early stage of development.

Management Action: The BSMO has identified improvements to the QA planning process as a high-level goal for FY 2003.

The BSM QA function should analyze current and future skills needs

Human capital is defined by the National Academy of Public Administration as the "identification of competencies and skills … needed to realize an organization's mission and operating goals." According to the General Accounting Office (GAO), acquiring and developing staffs whose size and skills meet agency needs is one of the most pervasive challenges now facing the Federal Government.[9]

During our review, the IRS and contractor employee turnover rates were extremely high. According to the BSM QA Manager, some of this turnover was to correct the skill

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[9] *NASA Management Challenges: Human Capital and Other Critical Areas Need to be Addressed* (GAO-02-945T, dated July 2002).

mix within the BSM QA function. In a changing environment, it is important that needed skills are documented so that current and future BSM QA and contractor personnel can be assessed to determine if staff are collectively qualified or need training. Without an analysis of skill levels, the BSM QA function may not be able to meet the *Government Auditing Standards*, which require that audit teams collectively possess the knowledge and skills needed to conduct an audit.

However, the BSM QA function had not assessed current skill levels against needed skills. To assist in the effort to improve QA human capital planning, we provided the AC, BSM, and the BSM QA Manager with an example of a model that could be used for assessing skills gaps. We determined that not conducting detailed human capital planning was due to the function's relatively early stage of development.

Management Action: The BSM QA Manager stated that she had begun working on general and specific competencies needed within the BSM QA program and had developed a proposed training plan. This action is in addition to human capital actions being taken at the Modernization, Information Technology and Security (MITS) Services level of the IRS.

Both the TIGTA and the GAO have reported weaknesses regarding human capital planning within the BSMO.[10] According to the IRS, the MITS Services organization will be establishing a MITS Services-wide skills inventory. The MITS Services organization has also created a human factors life cycle and conducted interviews with its executives to determine current and future skills gaps.

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[10] *Significant Risks Need to Be Addressed to Ensure Adequate Oversight of the Systems Modernization Effort* (Reference Number 2000-20-099, dated June 2000); and *Business Systems Modernization: IRS Needs To Better Balance Management Capacity with Systems Acquisition Workload* (GAO-02-356, dated February 2002).

Since there is an outstanding recommendation to improve human capital planning, we are not making any additional recommendations at this time.

The BSM QA function should plan and execute audits using a recognized, professional standard

The *Government Auditing Standards* require a reference in each audit report to the standard being used for conducting the audit. The audit plans prepared by the BSM QA function did not include a reference to a recognized professional standard that would be followed. Also, only three of the five audit reports we reviewed included a reference to a professional standard.

Without following a recognized professional standard, audits may not be conducted uniformly and may not be comparable. We determined that a professional standard was not included in the QA documentation due to the function's relatively early stage of development.

Audit communications during fieldwork should be improved

The *Government Auditing Standards* require that audit results be reported timely. In our opinion, interim reporting to those being audited helps ensure conformity with this standard.

The BSM QA procedures require communication during various phases of the audit, including planning, preparation, performance, and reporting. However, this contact does not include status reporting during fieldwork with anyone other than BSM QA management.

In the absence of such interim reporting, there can be greater difficulty in reaching agreements, as well as a tendency to receive negative feedback from those being audited. Incorporating such status reporting during fieldwork could result in corrective actions being taken timelier, as well as the receipt of more timely input from those being audited.

After we discussed this issue with the AC, BSM, and the BSM QA Manager, the BSM QA Manager stated that the function had worked hard on improving communications

during planning and reporting. However, it now needed to focus on improving communications during audit fieldwork.

Management Action: The BSM QA Manager indicated that more frequent status briefings have already been initiated in a current audit and that procedures would be revised in the future.

Corrective action processing procedures can be improved

The BSM QA function performs process audits to determine if processes conform to applicable plans, standards, procedures, and requirements. When the audit team identifies findings or observations during the review, they are reported in either Corrective Action Reports (CAR) or Improvement Opportunity reports. CARs are issued for findings, while Improvement Opportunity reports are issued for observations. The BSM QA procedures define findings as non-adherence to a standard and observations as improvements to existing processes or documentation (e.g., procedures which are out-of-date, incomplete, unclear, or confusing).

The BSM QA contractor is required to monitor and validate that corrective actions have been taken. In addition, BSM QA procedures require that priorities be assigned to the corrective actions. We determined that procedures could be improved in both of these areas.

Procedures for assigning priorities can be improved

We reviewed a judgmental sample of eight CARs and found that the lowest priority was improperly assigned to six of the CARs. Although the procedures list the priorities and the elements that make up the priorities, the procedures do not provide a formal method for assigning the priorities to individual CARs. The six CARs that were assigned the lowest priority included findings such as modernization products could be delivered with unresolved quality issues, the PRIME Quality Management Office was not sufficiently independent, and not all program and project QA activities were being performed.

The BSM QA Manager explained that the CAR procedures were outdated and did not apply when the CARs were first generated. Therefore, the BSM QA function did not use the procedures to assign priorities. Instead, the priorities were informally assigned to the CARs (i.e., no reasons were documented explaining why a particular priority was assigned). Without appropriate priorities being assigned, corrective actions may not receive appropriate priority attention or visibility.

Management Action: The BSM QA Manager stated that a follow-up audit of the PRIME Quality Management Office has been initiated to review the corrective actions taken on the CARs, including the six CARs that were identified as having an inappropriate priority rating.

The BSM QA Manager also indicated that revisions to the verification and validation procedures have been drafted, including a method of assigning priorities to corrective actions.

<u>Corrective actions were closed before they were verified and validated</u>

We reviewed a judgmental sample of eight CARs and one Improvement Opportunity report and found that the corrective actions in six of the CARs were not verified and validated. Although the six CARs were closed, the BSM QA function did not obtain sufficient evidence that the corrective actions had been completed prior to closure. The unresolved issues in these six CARs include potential quality defects in delivered modernization products and programs or projects that the PRIME Quality Management Office had never audited.

These issues were identified because the BSM QA corrective action verification and validation processes are still maturing. For example, we noted that the procedures did not require the creation of a follow-up audit or monitoring plan to ensure that corrective actions were completed. Without an adequate follow-up process, the BSM QA function has no assurance that the problems identified in the CARs have been corrected.

Management Action: The BSM QA function initiated a follow-up review of the PRIME Quality Management Office. The audit will include a review of the status of prior corrective actions. The BSM QA Manager also indicated that revisions to the verification and validation procedures have been drafted. The procedures will include definitive guidance on developing appropriate issue (or finding) statements, setting a timeline for completion of the corrective actions, and preparing follow-up and monitoring plans as appropriate.

Measuring the performance of the QA program could be improved

The BSM QA procedures require that metrics be developed and captured to assist in achieving QA objectives and measuring the effectiveness of the QA program. The QA procedures include quality goals and objectives and contain the metrics to be captured and analyzed. The Control Objectives for Information and Related Technology suggests that an effective QA system should include well-defined, measurable quality standards. Also, the system should contain key goal indicators to measure the effectiveness of the QA program, such as increased customer satisfaction with services rendered.

Our review showed that the BSM QA measurement process is still maturing. Although QA metrics were defined in the QA procedures and some metrics were captured, procedures for the selection and use of metrics need to be improved. We noted that metrics to determine the effectiveness of the BSM QA function had not been established, standards had not been developed to analyze against actual metrics, and metrics were not consistently captured and analyzed. We also noted that certain metrics were being captured that could be counter-productive due to their focus on quantity versus quality.

Without a good measurement process, IRS management cannot ensure an effective and efficient BSM QA function is in place. To assist in the effort to improve the QA metric program, we provided the AC, BSM, and BSM QA

Manager with examples of best practices metrics that could be used for QA activities.

Management Action: The BSMO has identified developing QA measures as a high-level goal for FY 2003.

Recommendations

To ensure that the BSM QA function continues to improve, we recommend that the BSM QA Manager:

1. Initiate and document an independent path to staff, plan, execute, and report on the status of BSMO processes and products.

Management's Response: The BSMO QA Office will assess the appropriateness of including an escalation process in the BSM QA procedures and revise the procedures as necessary.

Office of Audit Comment: We agree that this action is a good start toward improving the independence of the BSM QA function.

2. Enhance existing QA policies and procedures.

    a. Select and document a recognized professional audit standard that is followed when planning, executing, and reporting audits.

    b. Institute and document an interim reporting process to interested stakeholders (e.g., those being audited) during fieldwork.

    c. Develop, implement, and document a formal risk-based planning process to select modernization processes, programs, and projects for coverage.

    d. Revise procedures to include a methodology for assigning priorities to the corrective actions.

    e. Require follow-up audit plans and monitoring plans be developed to guide verification and validation activities.

f. Require meetings be held with those responsible for taking corrective actions to reach agreement on what corrective actions will be implemented and when the implementation should be completed.

Management's Response: The Deputy Commissioner for Modernization & CIO agreed with the recommendation and plans to enhance audit and corrective action procedures.

3. Improve BSM QA performance metrics.

a. Develop standards to analyze against the actual metrics to measure the progress in achieving goals and objectives.

b. Develop a procedure and methodology for uniformly selecting, capturing, analyzing, and using metrics.

c. Incorporate best practice metrics into the QA procedures.

d. Remove or minimize metrics that focus strictly on capturing numbers because they may be counter-productive.

Management's Response: The Deputy Commissioner for Modernization & CIO agreed with the recommendation and plans to develop a metrics methodology.

Detailed Objective, Scope, and Methodology

The overall objective of this review was to identify gaps between the existing Business Systems Modernization (BSM) Quality Assurance (QA) policies and procedures and best practice QA policies and procedures. To accomplish our objective, we determined if any gaps existed between best practice QA policies and procedures and current BSM QA policies and procedures and evaluated any ongoing improvement or corrective actions being taken in the following areas:

A. Independence.

B. Planning.

C. Metrics and Management Information Systems.

D. Standards Compliance.

E. Stakeholder Involvement.

F. Corrective Action Processing.

G. Skills/Training Needs.

Major Contributors to This Report

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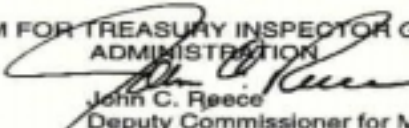Office of Management Controls N:CFO:F:M
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The Business Systems Modernization Quality Assurance Function Has Established a Solid Set of Policies and Procedures That Can Be Further Enhanced

Appendix IV

Management's Response to the Draft Report

DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, D.C. 20224

DEPUTY COMMISSIONER

FEB 1 8 2003

MEMORANDUM FOR TREASURY INSPECTOR GENERAL FOR TAX
ADMINISTRATION

FROM: John C. Reece
Deputy Commissioner for Modernization &
Chief Information Officer

SUBJECT: Draft Audit Report: The Business Systems Modernization Quality
Assurance Function Has Established a Solid Set of Policies and
Procedures That Can Be Further Enhanced (Audit # 200220017)

We are very pleased that your audit work confirms the improvements we have made to
the policies and procedures of the Business Systems Modernization (BSM) Quality
Assurance (QA) Office. Improving service to taxpayers is one of the primary goals of
the IRS modernization program. The BSM program is one of the largest modernization
programs in the Federal government. It is, therefore, a complex, dynamic, and
challenging effort.

The BSM Quality Assurance Office (BSM QA) plays a key role in ensuring that the
PRIME contractor and other modernization vendors are meeting their quality
management objectives in developing modernized systems. We are pleased with your
audit work, the open communication, and the constructive engagement your team used
throughout the audit. We are encouraged by your recognition that we have established
a solid and effective BSM QA organization. We also recognize that further
enhancements are needed.

The ability to manage and procure modernized systems of this magnitude is critical
to ensure the success of the BSM program. Recently, five core BSM projects
achieved a Level 2 rating by the Software Engineering Institute (SEI) on a
universally accepted Software Acquisition Capability Maturity Model (SA CMM)
scale. SEI's model is accepted worldwide as a best practice in software acquisition
management. The Level 2 designation indicates that the BSM organization has a
set of repeatable, disciplined management processes that increases the probability
of our modernization program's success. We are the first civilian agency and the
first multi-system program to achieve Level 2 (and one of only a handful worldwide).

In the area of planning, metrics and skills assessment, we are already identifying the
standards against which we will build the QA policies and procedures. In addition, we
are embedding continuous process improvement plans for the program to ensure these
policies and procedures reflect the needs of the program.

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Our plan for FY 2003 and beyond is extremely challenging. It will require all our commitment and dedication, and your continued assistance to deliver the modernized systems of the future for America's taxpayers.

Attached are responses to your individual recommendations. If you have any questions, please contact me at (202) 622-6800, or Fred Forman, Associate Commissioner for Business Systems Modernization, at (202) 622-3376.

Attachment

Draft Audit Report - The Business Systems Modernization Quality Assurance Function
Has Established a Solid Set of Policies and Procedures That Can Be Further Enhanced
(Audit # 200220017)

I. To ensure that the BSM QA function continues to improve, we recommend that the BSM QA Manager:

Recommendation No. 1: Initiate and document an independent path to staff, plan, execute, and report on the status of BSMO processes and products

Assessment of Cause(s): The AC, BSM, indicated that he did not feel that increasing the independence for the BSM QA function would improve operations because the CIO would not have the time to manage the BSM QA function properly, and the focus currently provided by the function would therefore suffer. The AC, BSM, also indicated that he considered BSMO audits to be only a small aspect of the BSM QA mission.

Corrective Action No. 1: The BSMO Quality Assurance Office will assess the appropriateness of including an escalation process in the Quality Assurance procedures and revise the procedures as necessary.

Implementation Date: September 30, 2003

Responsible Official: Associate Commissioner for Business Systems Modernization

Recommendation No. 2: Enhance existing QA policies and procedures.

a. Select and document an audit standard that is followed when planning, executing, and reporting audits.

b. Institute and document an interim reporting process to interested stakeholders (e.g., those being audited) during fieldwork.

c. Develop, implement, and document a formal risk-based planning process to select modernization processes, programs, and projects for coverage.

d. Revise procedures to include a methodology for assigning priorities to the corrective actions.

e. Require follow-up audit plans and monitoring plans be developed to guide verification and validation activities.

f. Require meetings be held with those responsible for taking corrective actions to reach agreement on what corrective actions will be implemented and when the implementation should be completed.

Assessment of Cause (s): It was determined that not having a more formal process for QA policies and procedures, such as planning, executing and reporting audits; a documented risk-based planning method; and procedures on a methodology for assigning and monitoring corrective actions, was due to the QA function's relative early stage of development.

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Draft Audit Report – Additional Improvements are Needed in the Application of
Performance-Based Contracting to Business Systems Modernization Projects
(Audit # 200120045)

Corrective Action No. 2: We agree with this action. The BSM Quality Assurance
(QA) organization is enhancing the audit and the corrective action procedures and
developing the procedures with a risk-based planning process.

Implementation Date: September 30, 2003

Responsible Official: Associate Commissioner for Business Systems
Modernization

Recommendation No 3: Improve BSM QA performance metrics.

a. Develop standards to analyze against the actual metrics to measure the
progress in achieving goals and objectives.

b. Develop a procedure and methodology for uniformly selecting, capturing,
analyzing, and using metrics.

c. Incorporate best practice metrics into the QA procedures.

d. Remove or minimize metrics that focus strictly on capturing numbers because
they may be counter-productive.

Assessment of Cause (s): It was determined that the not having a complete BSM
QA measurement process methodology in place was due to the QA function's
relative early stage of development.

Corrective Action No 3: We agree with this action. The BSMO Quality
Assurance metrics methodology and procedures will be developed and
incorporated into the BSMO QA procedures.

Implementation Date: September 30, 2003

Responsible Official: Associate Commissioner for Business Systems
Modernization