Business Process Reengineering Efforts for Selected Department of the Navy Business System Modernizations: Shipyard Management Information System Investment for Corporate Software

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N2012-0030
2 April 2012
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MEMORANDUM FOR COMMANDER, NAVAL SEA SYSTEMS COMMAND

Subj: BUSINESS PROCESS REENGINEERING EFFORTS FOR SELECTED DEPARTMENT OF THE NAVY BUSINESS SYSTEM MODERNIZATIONS: SHIPYARD MANAGEMENT INFORMATION SYSTEM INVESTMENT FOR CORPORATE SOFTWARE (AUDIT REPORT N2012-0030)

Ref: (a) NAVAUDSVC memo 7510-N2011-NFA000-0085.000, dated 2 NOVEMBER 2010
(b) SECNAV Instruction 7510.7F, “Department of the Navy Internal Audit”

Encl: 1. Status of Recommendations
2. Pertinent Guidance
3. Documentation Provided by Naval Sea Systems Command
4. Management Response from Naval Sea Systems Command

1. Introduction. We have completed the subject audit announced in reference (a). Paragraph 8 provides a summary of audit results. Paragraph 9 of this report provides our recommendation to address the conditions found. The recommendation is addressed to the Commander, Naval Sea Systems Command (NAVSEA). NAVSEA concurred with the recommendation, and planned actions meet the intent of the recommendation. The recommendation is open pending completion of the planned actions.

2. Reason for Audit.
   
a. The audit objective was to verify that supporting documentation for selected Department of the Navy (DON) programs is accurate and meet the Business Process Reengineering requirement defined in Department of Defense (DoD) policy and guidance. The DON Deputy Chief Management Officer requested assistance from the Naval Audit Service to determine if defense business systems undergoing modernization successfully fulfilled requirements to undergo the Business Process Reengineering efforts as required by the Fiscal Year 2010 National Defense Authorization Act.
b. Business Process Reengineering is a systematic, disciplined improvement approach that critically examines, rethinks, and redesigns mission-delivery processes in order to achieve dramatic improvements in performance in areas important to customers and stakeholders.

c. The Fiscal Year 2005 National Defense Authorization Act required, in part, that defense business systems undergoing modernization at a cost of $1 million or more must be in compliance with an enterprise architecture developed by the Secretary of Defense, acting through the Defense Business Systems Management Committee, in order to allow funds to be obligated for that system.

d. The Fiscal Year 2010 National Defense Authorization Act further requires that such systems must undergo business process reengineering efforts in order to allow funds to be obligated. It also stipulates that the appropriate Military Department Chief Management Officer or the DoD Deputy Chief Management Officer is responsible for determining whether or not this requirement is satisfied.

3. Briefings with Management.

a. The 17 November 2010 audit entrance conference was with the Deputy Under Secretary, who is also the Deputy Chief Management Officer. Naval Audit Service participants were the Assistant Auditor General (Financial Management and Comptroller) and the Auditor General of the Navy. The specific topics discussed were the objective and methodology of the audit.

b. The Naval Audit Service was provided with a list of 21 systems awaiting approval by the Deputy Chief Management Officer, from which the auditors selected a number of systems for review. This report documents the results of the review of one of the selected systems: the Shipyard Management Information System Investment for Corporate Software (AIM4RMC).

c. On 7 April 2011, an opening briefing was held with Shipyard Management Information System Investment for Corporate Software representatives and Naval Sea Systems Command audit liaison personnel. The objective, scope, and methodology were discussed. A followup meeting was conducted on 20 May 2011 and audit results were provided to the Command on 25 August 2011.

4. The Federal Managers’ Financial Integrity Act of 1982. The Federal Managers’ Financial Integrity Act of 1982, as codified in Title 31, United States Code, requires each Federal agency head to annually certify the effectiveness of the agency’s internal and accounting system controls. In our opinion, the conditions noted in this report do not
warrant reporting in the Auditor General’s annual Federal Managers’ Financial Integrity
Act memorandum identifying management control weaknesses to the Secretary of the
Navy.

5. **The Federal Information Security Management Act.** The Federal Information
Security Management Act permanently reauthorized the framework laid out in the
Under the provisions of the Federal Information Security Management Act, DoD must
provide Congress with an annual report on DoD’s information assurance posture. The
DON Chief Information Officer submits DON input for the DoD security act report.
Additionally, the security act requires an annual independent evaluation of an agency’s
information security program and practices to determine the effectiveness of such
program and practices. The evaluation required by this section may be based in whole or
in part on an audit, evaluation, or report relating to programs or practices of the
applicable agency. The DON Chief Information Officer can use this report in partially
meeting that requirement.

6. **Background.** In the early 1990’s, the Naval Shipyards completed a major business
process reengineering initiative resulting in the implementation of Project Management
and the associated Advanced Industrial Management program, which remain the business
model and process employed today for complex nuclear-powered submarine and aircraft
carrier maintenance projects. The Shipyard Management Information System Investment
for Corporate Software, a modernization under the Advanced Industrial Management for
Regional Maintenance Centers (AIM4RMC), will allow the Navy to extend their
shipyard production tool suite to additional sites. The AIM4RMC’s project will achieve
savings by retiring an expensive legacy maintenance solution. All areas of ship
maintenance were applied to a functional taxonomy which was used to compare systems
in use and plan the path toward an enterprise solution. The tool suite is functionality and
processes for management and execution of Intermediate and Depot level ship
maintenance. NAVSEA’s Business Process Reengineering System assessment stated that
extending standard processes and tools, while consolidating hosting environments, will
give the Navy more effective management of resources and maintenance execution for
ships.

7. **Scope and Methodology**

   a. The Deputy Under Secretary of the Navy/Deputy Chief Management Officer
requested that the Naval Audit Service assist in assessing selected business process
reengineering efforts’ documentation. We were provided a list of 21 systems with
completed business process reengineering assessments. We agreed to select five systems
from this list. For our selection criteria, we used systems that had requested funds in excess of $1 million and had more than 1,000 users. From these we ordered the systems by requested funding amounts. Using these criteria, we selected the top reengineering efforts from five different system commands; when a command was duplicated at the top of the list of matching criteria, we instead selected the next command that was not duplicated until we had a sample of five commands. The office of the Deputy Under Secretary of the Navy/Deputy Chief Management Officer was apprised of the choices and agreed with them.

b. The Shipyard Management Information System Investment for Corporate Software (AIM4RMC) was one of the five systems selected. Our analysis of this system was conducted from 7 April 2011 through 25 January 2012.

c. We met with Naval Sea Systems Command system personnel and requested a copy of the Business Process Reengineering Assessment form they had submitted to the Deputy Under Secretary of the Navy/Deputy Chief Management Officer. We then asked for documentation that would support answers given on the assessment form. The detailed list of documents that Naval Sea Systems Command system representatives provided is found in Enclosure 3.

d. We reviewed the documents from the Naval Sea Systems Command to ensure that they supported the Business Process Reengineering document submitted to the Deputy Under Secretary of the Navy/Deputy Chief Management Officer. We did not test the data reliability or perform further audit review of the Naval Sea Systems Command system because it was outside the scope of the audit.

e. We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our conclusions based on our audit objective.

8. Audit Results.

a. The results of the audit showed that Naval Sea Systems Command personnel could not provide sufficient documentation for the Business Process Reengineering of the Shipyard Management Information System Investment for Corporate Software (AIM4RMC) to meet the Fiscal Year 2010 National Defense Authorization Act’s (“The Act”) requirements. The Act requires a system such as the Shipyard Management
Information System Investment for Corporate Software satisfy the following requirements:

1. The defense business modernization complies with the enterprise architecture;

2. The business process supported by the defense business modernization will be as streamlined and efficient as practicable; and

3. The need to tailor commercial-off-the-shelf systems to meet or incorporate unique requirements or interfaces has been eliminated or reduced to the maximum extent practicable.

b. Naval Sea Command could not provide supporting documentation showing economic decisions, plans, or procedures for the Shipyard Management Information System Investment for Corporate modernization. Without adequate documentation, we could not determine that reengineering efforts met enterprise architecture, streamlined and efficient and commercial-off-the-shelf compliance requirements. According to DoD Directive 5015.2, "DOD Records Management Program," of 6 March 2000, it is DoD policy to create, maintain, and preserve information such as records, in any media, that document the transaction of business and mission in wartime and peacetime, to provide evidence of DoD component organization, functions, policies, procedures, decisions, and activities. Proper records management practices protect the legal, financial, and other interests of the Government and its citizens. In addition, Government Accountability Office “Standards for Internal Control in the Federal Government,” of November 1999, states that internal controls, all transactions, and other significant events need to be clearly documented, and the documentation should be readily available for examination. However, according to Naval Sea Systems Command representatives, at the time, they were not disciplined in maintaining documentation. The command provided PowerPoint slides of an October 2009 briefing to the Fleet Maintenance Board of Directors to obtain the final decision with the recommendation to approve the system. Command personnel stated that they recognized this issue and began corrective action after we discussed the issue with them to ensure that supporting documentation is obtained and maintained.

c. **Enterprise Architecture**

   i. The Act requires that the appropriate Chief Management Officer\(^1\) for the Defense Business System Modernization has determined whether the Defense Business

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\(^1\) For the Naval Sea Systems Command, the appropriate chief management officer would be the Deputy Under Secretary of the Navy/Deputy Chief Management Officer.
System Modernization is in compliance with the enterprise architecture. DoD guidance\(^2\) states that the DoD Enterprise Architecture is a federation of descriptions that provide context and rules for accomplishing the mission of the Department. These descriptions are developed and maintained at the Department, Capability Area, and Component levels and collectively define the people, processes, and technology required in the “current” and “target” environments; and the roadmap for transition to the target environment.

ii. The Business Process Reengineering Assessment was provided by Naval Sea Systems Command personnel. However, command personnel could not provide adequate documentation to support the information that was included in the Business Process Reengineering Assessment form. Specifically, we asked command personnel to provide documentation of:

(a) the stakeholders;
(b) the prioritization of stakeholders’ needs;
(c) the system alignment with stakeholder needs and business goals; and
(d) the mission statement (identified in the assessment).

d. **Streamlined and Efficient**

i. The Act requires that the appropriate chief management officer for the defense business system modernization make certain determinations. One of the determinations is whether or not appropriate Business Process Reengineering efforts have been undertaken to ensure that the business process supported by the defense business system modernization will be as streamlined and efficient as practicable.

ii. Naval Sea Systems Command personnel were able to show that the Business Process Reengineering for the Shipyard Management Information System Investment for Corporate Software (AIM4RMC) was annually reviewed and certified. They also provided a charter for the Fleet Maintenance Board of Directors and identified the board as the modernization’s executive steering committee. However, Naval Sea Systems Command personnel could not provide adequate documentation that identified gaps, performance measures, and prioritized improvements for the Shipyard Management Information System Investment for Corporate Software (AIM4RMC). In addition, command personnel could not provide documentation to show a business case for the system, including a formal Change Management Plan, and Team Charter or Project Plan.

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Subj: BUSINESS PROCESS REENGINEERING EFFORTS FOR SELECTED DEPARTMENT OF THE NAVY BUSINESS SYSTEM MODERNIZATIONS: SHIPYARD MANAGEMENT INFORMATION SYSTEM INVESTMENT FOR CORPORATE SOFTWARE (AUDIT REPORT N2012-0030)

e. Commercial-Off-The-Shelf

   i. The Act requires that the appropriate Chief Management Officer for the Defense Business System Modernization make certain determinations. One of the determinations is whether appropriate Business Process Reengineering efforts have been undertaken to ensure that the need to tailor commercial-off-the-shelf systems to meet unique requirements, or incorporate unique interfaces, has been eliminated or reduced to the maximum extent practicable.

   ii. Naval Sea Systems Command personnel were unable to provide sufficient documentation that showed a cost-versus-benefits analysis used to make their decision to use commercial-off-the-shelf products, to include documentation showing how they eliminated or limited the tailoring of commercial-off-the-shelf products.

9. Recommendation. We recommend that Naval Sea Systems Command:

   Recommendation 1. Establish management internal controls to ensure that all documentation that supports Business Process Reengineering Assessment Form responses is maintained and readily accessible.

   Naval Sea Systems Command Response to Recommendation 1. Concur. Naval Sea Systems Command will establish management internal controls to ensure that all documentation that supports Business Process Reengineering (BPR) will be in alignment with the recommendations of this audit and the DCMO BPR Section 1072 guidance of April 30, 2011 for all development/modernization efforts requiring a BPR Assessment Form going forward. The target completion date is December 31, 2012.

   Naval Audit Service Response. Planned actions meet the intent of the recommendation, which is open pending their completion.

10. Followup Guidelines.

   a. Recommendation 1 to Naval Sea Systems Command is open pending completion of agreed-to actions, and is subject to monitoring in accordance with reference (b). Management should provide a written status report on the recommendation within 30 days after the target completion date.

   b. Please provide all correspondence to the Assistant Auditor General for Financial Management and Comptroller Audits, XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX,
Subj: BUSINESS PROCESS REENGINEERING EFFORTS FOR SELECTED DEPARTMENT OF THE NAVY BUSINESS SYSTEM MODERNIZATIONS: SHIPYARD MANAGEMENT INFORMATION SYSTEM INVESTMENT FOR CORPORATE SOFTWARE (AUDIT REPORT N2012-0030)

with a copy to the Director, Policy and Oversight, XXXXXXXXXXXXXXX, XXXXXXXXXXXXXXXX. Please submit correspondence in electronic format (Microsoft Word or Adobe Acrobat file), and ensure that it is on letterhead and includes a scanned signature.

11. Any requests for this report under the Freedom of Information Act must be approved by the Auditor General of the Navy as required by reference (b).

12. We appreciate the cooperation, courtesies, and professional assistance extended to our auditors during this audit effort.

XXX

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Assistant Auditor General
Financial Management and Comptroller Audits

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## Enclosure 1:
### Status of Recommendations

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<td>Establish management internal controls to ensure that all documentation that supports Business Process Reengineering Assessment Form responses is maintained and readily accessible.</td>
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3 / + = Indicates repeat finding.
4 / O = Recommendation is open with agreed-to corrective actions; C = Recommendation is closed with all action completed; U = Recommendation is undecided with resolution efforts in progress.
5 If applicable.
Enclosure 2:

**Pertinent Guidance**

The Clinger-Cohen Act 1996 (Public Law 104-106, Division E), 10 February 1996. Section 5123, “Performance And Results-Based Management,” requires the head of an executive agency to analyze the missions of the executive agency and, based on the analysis, revise the executive agency’s mission-related processes and administrative processes as appropriate before making significant investments in information technology that is to be used in support of the performance of those missions.

Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (Public Law 108–375), 28 October 2004. Section 2222, “Defense business systems: architecture, accountability, and modernization,” provides the conditions for obligation of funds for defense business system modernization. It does not allow funds appropriated to the Department of Defense (DoD) to be obligated for a defense business system modernization that will have a total cost in excess of $1 million unless certain requirements are met. These requirements include the need for (1) certification by the approval authority designated for the defense business system, and (2) the system to be in compliance with the enterprise architecture (developed by the Secretary of Defense, acting through the Defense Business Systems Management Committee).

National Defense Authorization Act For Fiscal Year 2010 (Public Law 111-84), 28 October 2009. This Act requires that the appropriate chief management officer for the defense business system modernization has determined whether or not:

(A) The defense business system modernization is in compliance with the enterprise architecture; and

(B) Appropriate business process reengineering efforts have been undertaken to ensure that:

   (1) the business process to be supported by the defense business system modernization will be as streamlined and efficient as practicable; and

   (2) the need to tailor commercial-off-the-shelf systems to meet unique requirements or incorporate unique interfaces has been eliminated or reduced to the maximum extent practicable.

Office of the Secretary of Defense – Deputy Chief Management Officer: Interim Guidance for the Implementation of Section 1072 of the Fiscal Year 2010 National Defense Authorization Act – Business Process Reengineering, 1 April 2010. The purpose of this document is to provide additional interim guidance:

- For the implementation of new Fiscal Year 2010 National Defense Authorization Act requirements;
• For the proper use of the interim business process reengineering assessment forms; and
• To answer many of the frequently asked questions that have been raised.

Final assessment criteria is expected to be aligned with this interim guidance and specify additional details on artifacts, deliverables, tollgates, roles, and responsibilities of those resources involved in system application and the overall business process reengineering assessment for Investment Review Board review.


It states, in part, the DoD policy that:

• The DoD Enterprise Architecture, which is consistent with Office of Management and Budget Circular A-130, “Management of Federal Information Resources,” (28 November 2000) and composed of DoD enterprise and Component levels, shall be maintained and applied to guide investment portfolio strategies and decisions, define capability and interoperability requirements, establish and enforce standards, guide security and information assurance requirements across DoD, and provide a sound basis for transition from the existing environment to the future; and

• Investments in information solutions shall be managed through a capital planning and investment control process that:
  (1) Is performance and results-based;
  (2) Provides for analyzing, selecting, controlling, and evaluating investments, as well as assessing and managing associated risks;
  (3) Interfaces with the DoD key decision support systems for capability identification; planning, programming, budgeting, and execution; and acquisition; and
  (4) Requires the review of all information technology investments for compliance with architectures, information technology standards, and related policy requirements.
The following are the documents provided by the Naval Sea Systems Command. We reviewed and analyzed these documents to determine if they were accurate and met Business Process Reengineering requirements defined in Department of Defense policy, guidance, and law.

1. Business Process Re-engineering Assessment, 8 December 2010
2. Annual Review Economic Viability, extracted 5 April 2011
3. Fleet Maintenance Board of Directors Minutes, 19 October 2009
Enclosure 4:

Management Response from Naval Sea Systems Command

From: Commander, Naval Sea Systems Command
To: Auditor General of the Navy (Attn: AUD-3)

Subj: DRAFT AUDIT REPORT ON BUSINESS PROCESS REENGINEERING EFFORTS FOR SELECTED DEPARTMENT OF THE NAVY BUSINESS SYSTEM MODERNIZATIONS: SHIPTARO MANAGEMENT INFORMATION SYSTEM INVESTMENT FOR CORPORATE SOFTWARE

Ref: (a) NAVAUDSVC ltr 7510 N2011-NEA000-0985.003 of 25 Jan 12

Encl: (1) NAVSEA Response to the Subject Report

1. In response to reference (a), enclosure (1) provides the NAVSEA response to the subject report. Based on our review of the subject report, we concur with the report’s recommendation.

2. The point of contact for this audit is [redacted] who may be reached at [redacted] or email: [redacted]

By direction

Copy to:
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NAVSEA (SEA 001, SEA 04)

The Naval Sea Systems Command management response is not being treated as FOOU in this final report

Recommendation #1: Establish management internal controls to ensure that all documentation that supports Business Process Reengineering Assessment Form responses is maintained and readily accessible.

Management Response: Concur. NAVSEA will establish management internal controls to ensure that all documentation that supports Business Process Reengineering (BPR) will be in alignment with the recommendations of this audit and the DCMO BPR Section 1072 guidance of April 30, 2011 for all development/modernization efforts requiring a BPR Assessment Form going forward.

Target Completion Date: December 31, 2012
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