Department of Homeland Security
Office of Inspector General

Review of U.S. Coast Guard Enterprise Architecture Implementation Process
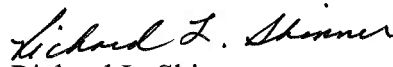
Homeland Security

JUL 2 3 2009

Preface

The Department of Homeland Security (DHS) Office of Inspector General (OIG) was established by the Homeland Security Act of 2002 (*Public Law 107-296*) by amendment to the Inspector General Act of 1978. This is one of a series of audit, inspection, and special reports prepared as part of our oversight responsibilities to promote economy, efficiency, and effectiveness within the department.

This report addresses the strengths and weaknesses of the Coast Guard's enterprise architecture program. It is based on interviews with employees and officials of relevant agencies and institutions, direct observations, and a review of applicable documents.

The recommendations herein have been developed to the best knowledge available to our office, and have been discussed in draft with those responsible for implementation. We trust this report will result in more effective, efficient, and economical operations. We express our appreciation to all of those who contributed to the preparation of this report.

Richard L. Skinner
Inspector General

Contents/Abbreviations

Appendixes

Abbreviation

C4&IT	Command, Control, Communication, Computers, and Information Technology
DHS	Department of Homeland Security
EAB	Enterprise Architecture Board
IT	Information Technology
TEAMS	The Enterprise Architecture Management System

Figures

OIG

Department of Homeland Security
Office of Inspector General

Executive Summary

We audited the United States Coast Guard's (Coast Guard) effort to develop and implement an enterprise architecture to support its business processes and information technology (IT) decision making. The objectives of this audit were to determine the level of compliance with established federal guidance and the Department of Homeland Security's enterprise architecture policies and procedures, and to determine whether the Coast Guard has aligned its strategic plans and individual business priorities within an appropriate enterprise architecture framework.

The Coast Guard has made progress in developing its enterprise architecture by defining its enterprise architecture framework in alignment with both federal and DHS architectures. In addition, its enterprise architecture is aligned with the Coast Guard's IT strategy. These achievements have been possible because of executive support for the enterprise architecture effort.

The enterprise architecture effort is not without challenges, however. Specifically, the Coast Guard enterprise architecture is not yet fully integrated across the Coast Guard. That is, the enterprise architecture does not show fully how major information systems fit together. Additionally, Coast Guard enterprise architecture planning and documentation have not been completed. Coast Guard enterprise architecture management stated that a shortage of staff has been the main reason for not completing enterprise architecture planning and documentation. As a result, the Coast Guard enterprise architecture has realized only partial benefits thus far.

We are recommending that the Commandant of the Coast Guard direct the Office of Enterprise Architecture and Governance to complete and integrate the enterprise architecture data elements, profiles, models, and inventories; and complete the required Coast Guard enterprise architecture documentation. To complete these activities, we also recommend that the Office of Enterprise Architecture and Governance be provided with sufficient resources.

Background

The Coast Guard is a maritime military service within the Department of Homeland Security and one of the nation's five armed services. Its mission is to save lives, safeguard maritime borders, respond to natural and man-made disasters, and interdict illegal drugs. The Coast Guard has a heavy reliance on technology to support and provide information to achieve its mission. In fiscal year 2008, the Coast Guard's IT budget was $610 million.

A critical component of IT decision making is an enterprise architecture. An enterprise architecture that describes and documents the current and desired relationships among business and management processes and IT can help leaders view business and technical information so that they can make important IT investment decisions. In addition, an enterprise architecture can help agencies properly align their resources to agency mission, strategic goals, and objectives.

An enterprise architecture is composed of three main parts—the As-Is enterprise architecture, the Enterprise Transition Plan, and the To-Be enterprise architecture. The As-Is enterprise architecture portrays the existing enterprise, current business practices, and technical infrastructure. The Enterprise Transition Plan shows the transition of the agency's enterprise architecture from its As-Is to its To-Be state. The To-Be enterprise architecture, also known as a Target enterprise architecture, portrays the future business practices and technical infrastructure. The To-Be enterprise architecture should be in line with the agency's strategic plan.

An enterprise architecture typically uses a framework that looks at the agency's business and IT information through different perspectives. This framework promotes information sharing and business integration. The framework perspectives include:

- Performance: Information about the measurement of an agency's strategic and business outcomes.
- Business: The functions and activities that an agency performs.
- Information: The information needed to perform the agency's mission and business activities.
- Service: The systems and applications with their capabilities and functions that support information requirements.
- Technology: The underlying technology infrastructure that supports an agency's service delivery.

- Security: How an agency assures the confidentiality, integrity, availability, and privacy of its information.

The Coast Guard's Office of Enterprise Architecture and Governance provides the leadership and direction to ensure effective planning, management, and governance[1] of IT resources and the Coast Guard enterprise architecture. The office's Chief Architect reports directly to the Deputy Chief Information Officer. Figure 1 shows the office's reporting relationships within the Coast Guard.
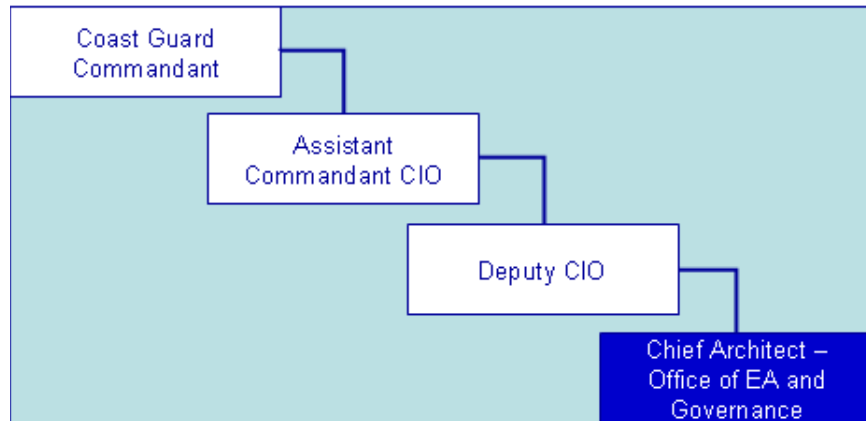

Figure 1: Office of Enterprise Architecture and Governance Reporting Chain

The Office of Enterprise Architecture and Governance responsibilities include:

- Developing, documenting, and maintaining the Coast Guard enterprise architecture and the Coast Guard's IT plans;
- Supporting performance results, mission-technology alignment, information sharing and accessibility, component re-use of IT, systems interoperability and integration, technology standards, and information assurance;
- Validating and maintaining requirements to ensure alignment of the Coast Guard enterprise architecture and IT plans;
- Implementing a repository of IT business and technology information.

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[1] IT Governance helps enterprises to gain value from information and IT while ensuring that IT remains aligned with the enterprise strategy, values, and culture.

The Office of Enterprise Architecture and Governance structure currently contains the organizations shown in Figure 2.
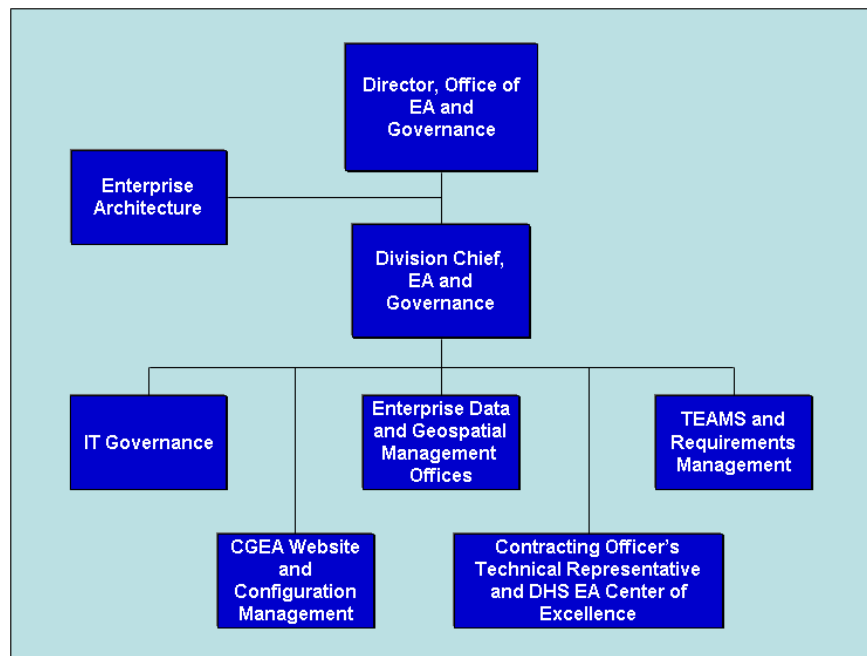

Figure 2: Office of Enterprise Architecture and Governance

Results of Audit

Progress Made with the Coast Guard's Enterprise Architecture

Federal guidance requires that agencies develop an enterprise architecture to govern their business processes and IT.[2] Toward that end, the Coast Guard has made significant progress in developing its enterprise architecture. Specifically, the Coast Guard has defined its enterprise architecture framework; completed the majority of its enterprise architecture data profiles, models, and inventories; and aligned its enterprise architecture with its IT strategic plan. These achievements have been, in part, possible because of the Coast Guard's strong executive support for its enterprise architecture program. As a result, it is well positioned to implement an enterprise architecture that aligns to federal mandates and supports the agency's mission.

Enterprise Architecture Framework Defined

The Coast Guard has defined an enterprise architecture framework that is intended to provide a blueprint for modernizing and transforming the Coast Guard's IT systems to meet future mission capabilities and requirements. When fully implemented, the Coast Guard enterprise architecture can help assure that the Coast Guard business strategy and IT investments are aligned to support its vision and missions. This assurance can promote interoperability, reduce duplication, and optimize overall mission performance to allow the Coast Guard to respond rapidly, effectively, and positively to opportunities and challenges.

The Coast Guard enterprise architecture framework[3] shown in Figure 3 contains the six perspectives that will allow stakeholders to compare and relate information across mission and organizational boundaries to promote information sharing and integration. These perspectives align to both the Federal and DHS Enterprise Architectures.

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[2] *E-Government Act of 2002*, Public Law 107-347.
[3] United States Coast Guard, *Enterprise Architecture Executive Handbook*, Release 2 (March 2008).

Figure 3: Coast Guard's Enterprise Architecture Framework

Enterprise Architecture Profiles, Models, and Inventories Mostly Completed

Each Coast Guard enterprise architecture framework perspective contains three levels of data detail, known as profiles, models, and inventories.

- Profile: Provides executive decision-makers with a graphic view of strategic-level data to simplify complex information concerning the various enterprise architecture perspectives.
- Model: Provides a graphical view of mid-level data and its connections between the enterprise architecture perspectives, such as the relationships between processes, entities, and information exchanges.
- Inventory: Provides a detailed view and description of the data within each enterprise architecture perspective.

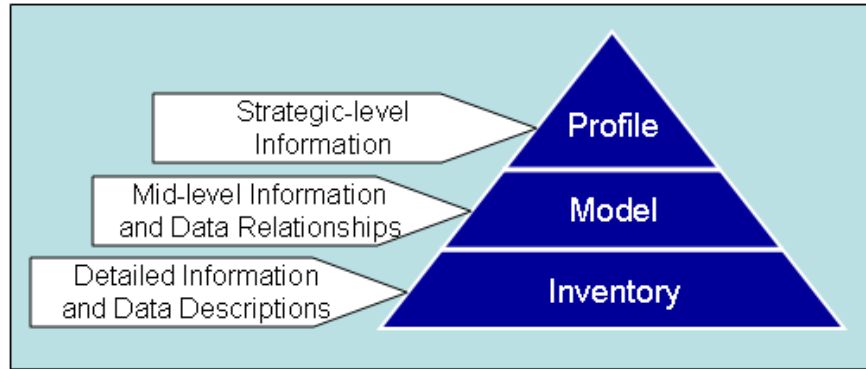These data levels are shown in Figure 4.

Figure 4: Enterprise Architecture Perspective Data Levels

Once the three data levels for each perspective are completely documented, an enterprise architecture is considered to be fully integrated and can then be used to provide valuable relationships among enterprise-level processes and IT.

The Coast Guard has identified all of the enterprise architecture data profiles, models, and inventories for each of the six enterprise architecture perspectives. In addition, the Coast Guard has defined and documented the majority of these levels of data. Specifically, 21 of the 24 profiles, 4 of the 7 models, and 15 of the 22 inventories identified have been entered into the Coast Guard enterprise architecture. Figure 5 shows the completion of these Coast Guard enterprise architecture data elements.
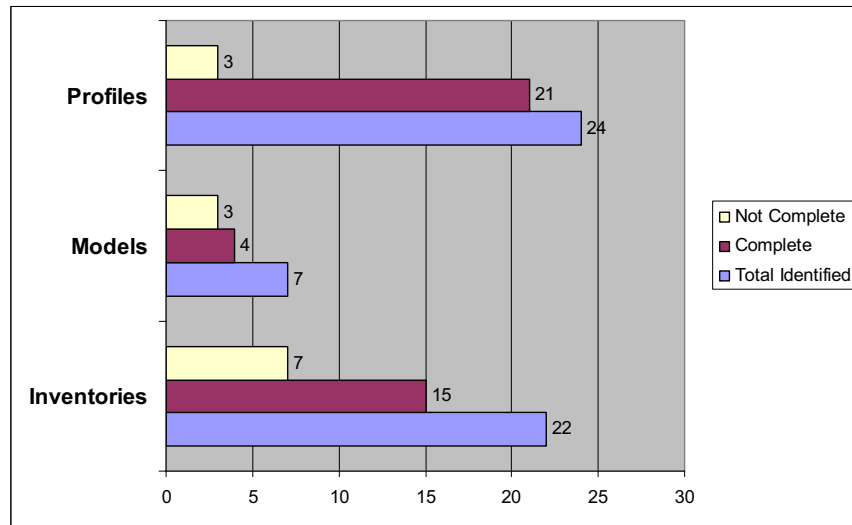

Figure 5: Enterprise Architecture Profiles, Models, and Inventories

Although enterprise architecture documentation has yet to be completed, the Coast Guard has already begun using the Coast Guard enterprise architecture. For example, program managers responsible for technology implementation projects have begun to

refer to the Coast Guard enterprise architecture's IT inventory when beginning new IT projects. In addition, Coast Guard enterprise architecture's IT products and standards inventory is referred to almost daily to identify existing IT products and technical standards used to deliver Coast Guard services and IT capabilities. Regular use of these inventories should help to identify and prevent potential duplication of technology across the agency.

Enterprise Architecture Aligned to IT Strategy

The Coast Guard enterprise architecture effort generally aligns to the agency's overall IT strategy. The Coast Guard's IT Strategic Plan identifies five high-level goals relating to Information, Technology, Governance, Organizational Excellence, and Security. The Coast Guard has developed enterprise architecture-specific milestones for three of the five goals—Information, Technology, and Governance. Also, the Coast Guard reports that it has achieved all of the fiscal year 2008 enterprise architecture milestones for these three goals, as follows:

Information
The IT Strategic Plan defines the Information goal as improving and encouraging information sharing, quality, efficiency, and compliance throughout the Coast Guard. The enterprise architecture 2008 milestones identified and met for the Information goal include:

- Published the Coast Guard Information Management Strategy,
- Completed the Systems Development Life Cycle of the enterprise architecture repository, The Enterprise Architecture Management System (TEAMS),
- Completed certification and accreditation for TEAMS, and
- Established the Enterprise Data Management Office and the Enterprise Geospatial Management Office.

Technology
The IT Strategic Plan defines the Technology goal as delivering mission-focused, interoperable, innovative, and net-centric Command, Control, Communications, Computing, and IT (C4&IT) using enterprise-wide solutions, and optimized infrastructure, and electromagnetic spectrum frequency. The enterprise architecture 2008 milestones identified and met for the Technology goal include:

- Finalized the Enterprise Architecture Board (EAB) submission form, and
- Published release 2 of the Coast Guard Enterprise Architecture Executive Handbook.

Governance

The IT Strategic Plan defines the Governance goals as providing C4&IT governance to meet requirements and encourage effective enterprise architecture, capital planning and investment control, systems development life cycle, project management, and performance measurement processes. The enterprise architecture 2008 milestones identified and met for the Governance goal include:

- Published release 2 of the Coast Guard Enterprise Architecture Executive Handbook,
- Supported the DHS Office of Inspector General's audit of the Coast Guard's Enterprise Architecture,
- Conducted EAB reviews,
- Published the Coast Guard Information Management Strategy,
- Completed the TEAMS system development life cycle, and
- Completed certification and accreditation for TEAMS.

The progress made in completing the enterprise architecture-specific milestones demonstrates the Coast Guard's commitment to ensuring the strategic alignment of its enterprise architecture effort to the overall agency goals for improving IT direction. As a result, the Coast Guard is in a good position to use the Coast Guard enterprise architecture to achieve its IT strategic goals and to provide the agency with an effective way to identify cost savings opportunities and to reduce redundancy across its IT environment.

Executive Support

The Coast Guard's enterprise architecture development has been successful thus far due to the commitment and support provided by Coast Guard management. For example, Coast Guard management showed its commitment to the enterprise architecture program through approval of the enterprise architecture Board charter. The charter gives the Board the authority to make recommendations to the Coast Guard's Investment Review Board, including guidance on IT investment decisions. From December 2007 to September 2008, the Coast Guard's enterprise architecture Board reviewed 30 proposed IT projects. The results of these reviews were used by the Investment Review Board to make IT investment decisions better aligned to the Coast Guard's mission.

The Coast Guard further showed its support by selecting a senior Coast Guard officer as a subject matter expert to work with the Office of Enterprise Architecture and Governance, who is committed for three years to provide enterprise architecture support and insight into the Coast Guard's business processes.

Challenges Remain to Complete Enterprise Architecture Efforts

Although significant progress has been made, the Office of Enterprise Architecture and Governance has struggled to complete the Coast Guard enterprise architecture. Specifically, it has not integrated the enterprise architecture or completed plans and enterprise architecture documentation because of staffing shortages. Until these actions are completed, the Coast Guard will not realize the full benefits of its enterprise architecture and the program risks losing executive support.

Coast Guard Enterprise Architecture Not Integrated Fully

The Coast Guard has not fully integrated its enterprise architecture. Integration is needed to show how the data from various major information systems fits together. There are 3 profiles, 3 models, and 7 inventories for the enterprise architecture that have not been completed. The 3 profiles not completed are:

- C4&IT Performance Profile: The C4&IT performance metrics as they relate to the DHS performance areas and federal enterprise architecture Business Reference Model.
- Balanced Scorecard for C4&IT: An overview of Coast Guard C4&IT performance related to business process, learning and growth, customers, and finances.
- External Services Profile: Provides a high-level view of systems leveraged at the Coast Guard but managed outside the Coast Guard.

The 3 models not completed are:

- Unified Performance Logic Model: A framework for planning, managing, measuring, and evaluating Coast Guard enterprise architecture programs. It illustrates the cause and effect linkages between program activities and outcome results.
- Business Models: Displays Coast Guard enterprise architecture business activities and can be used to identify dependencies, redundancies, and gaps between the Coast Guard's activities.
- Applications to Business Activities Matrix: Describes the relationship between Coast Guard services and activities.

The 7 inventories not completed are:

- Functional Statements: Describes the roles and missions of the Coast Guard headquarters offices.
- Information Inventory: Shows all information objects, produced, archived, and/or required for Coast Guard enterprise architecture activities, reporting, and decision making, and their relationship within the DHS Conceptual Data Model.
- Information Exchange Matrix: Identifies the information transfers that are necessary to achieve Coast Guard tasks.
- Information Dictionary: Identifies, defines, and provides additional data to describe items listed in the information inventory.
- Services Inventory: Aligns Coast Guard applications and systems to the federal enterprise architecture. As such, it helps to explain the services offered by each of the Coast Guard's applications and systems.
- External Services Inventory: Describes systems managed outside the Coast Guard and is organized by grouping applications to systems. The content includes attributes across each of the six Coast Guard perspectives and provides a baseline mapping assets to the DHS and federal enterprise architectures.
- Frequency Spectrum Inventory: Lists the frequency spectrums necessary for the Coast Guard's mission operations.

Figure 6 shows the profiles, models, and inventories completed and not completed for the six enterprise architecture perspectives.

Perspectives

	Performance	Business	Information	Service	Technology	Security
Profiles (strategic-level data)	Performance Profile Core Missions	Business Profile	Information Profile	System Profile		
	Performance Profile C4&IT	Value Chain Alignment	Data Profile	Services Profile	IT Products and Standards Profile	Security Profile
	Balanced Scorecard C4&IT	USCG CONOPS	GIS Profile	External Services Profile	C4 Products Profile	
		USCG Snapshot		Command Center Profile	Network Profile	
		Major Programs Profile			Frequency Spectrum Profile	
		Sector Commands Profile		C4&IT Transition Portfolio Profile		
		USCG Cutters & Aircraft Profile		C4&IT Transition Timeline Profile		
Models (mid-level data)	Unified Performance Logic Model	Business Models	Data Models	System Models	Network Models	
		Organization Charts		Application to Business Activities Matrix		
Inventories (detailed-level data)	Performance Inventory	Business Inventory	Information Inventory	Systems Inventory		
	USCG Posture Statement	USCG Strategy for Maritime SSS	Data Inventory	Services Inventory	IT Products and Standards Inventory	Security Inventory
		Functional Statements	GIS Inventory	External Services Inventory	C4 Products Inventory	
		Activity Dictionary	Information Exchange Matrix		Infrastructure Inventory	
		USCG Universal Task Library	Information Dictionary		Frequency Spectrum Inventory	
		USCG Operational Nodes		C4&IT Transition Inventory		

Key: Completed / Not Completed

Figure 6: Status of Products for Profiles, Models, and Inventories

Without a full set of "As Is" profiles, models, and inventories, the Coast Guard has been unable to integrate fully the Coast Guard enterprise architecture across the six defined perspectives. As a result, the Coast Guard may be hindered in its ability to use its enterprise architecture effectively to increase interoperability, reduce duplication of IT, and optimize the agency's overall mission performance.

Coast Guard Enterprise Architecture Plans and Documentation Not Complete

Although the Office of Enterprise Architecture and Governance has completed a significant amount of planning and governance documentation, several plans and documents still require completion. For example, the To-Be enterprise architecture and the Transition Plan have not been completed. Without the To-Be enterprise architecture, the Coast Guard has not defined its future business practices and technical infrastructure. The Transition Plan, which is developed after completion of the To-Be enterprise architecture, would show how the Coast Guard intends to move from its current, As-Is enterprise architecture to its target, To-Be enterprise architecture.

Also, the enterprise architecture charter, program plan, and concept of operations for two enterprise architecture organizations, the Enterprise Data Management Office and the Geospatial Management Office, have not been developed. Once complete, an enterprise architecture charter should identify the initial roles and

responsibilities of work teams and establish the enterprise architecture phases and tasks required. Program plans describe both the "as-is" and the "to-be" environments of the enterprise, as well as a method to transition from the "as-is" to the "to-be." Finally, a concept of operations is intended to describe both the current business environment and the future process planned to manage operations.

Completely documented models within the enterprise architecture framework are necessary to improve the Coast Guard's ability to achieve its mission-based business objectives, reduce cost, and improve IT and business performance. The incomplete enterprise architecture plans and documentation could result in duplication of effort and increased IT costs. Until the Coast Guard can complete its target architecture and transition plan, it will have a reduced ability to identify IT gaps, redundancies, inefficiencies, and opportunities for technology and process improvement.

Enterprise Architecture Staffing is Limited

Coast Guard executives stated that enterprise architecture profiles, models, inventories, and necessary documentation have not been completed due to staff shortages. The Coast Guard's enterprise architecture staffing included 8 full-time personnel. Enterprise architecture management has identified a need for at least 15 full-time staff or equivalent contractor support.

Enterprise architecture management stated that current staff worked well together and had significant experience in the areas of governance, enterprise architecture software use, business architecture design, project management, and communications. However, there is a need for additional staff with expertise in program management, data architecture, application architecture, and geospatial knowledge. Enterprise architecture management stated that without adequate staff, it will be difficult to complete enterprise architecture integration, documentation and planning, and benefits communication activities.

Coast Guard management recognizes its enterprise architecture staffing challenges. Specifically, in May 2009, the Office of Enterprise Architecture and Governance assessed its staffing needs to ensure that the Coast Guard enterprise architecture program has sufficient staff with the right skills and experience. The assessment addresses both the strengths and weaknesses of current staff and identifies the number of additional full-time staff needed broken down by their roles and required skills.

The Office of Enterprise Architecture and Governance also identified the activities that it could accomplish with the additional staff. For example, the Office could begin the development of business architecture models, the development and maintenance of the Coast Guard Data Asset Catalog, Enterprise Data Catalog, and Data Asset Repository, and expand support of the Coast Guard's efforts to establish, monitor, and maintain C4&IT governance.

Enterprise Architecture Benefits Realized Partially

The completion of the enterprise architecture framework and the availability of documented IT systems and standards have provided the Coast Guard with some benefits. For example, the framework provides a common structure that helps stakeholders to understand the various business and technical information within the Coast Guard. Also, the IT systems and standards documented within the Coast Guard's enterprise architecture have provided program managers with the ability to identify IT products already in use.

However, enterprise architecture management was unable to provide specific examples of where the Coast Guard enterprise architecture has reduced cost, identified duplicative IT, or better aligned IT to the agency's mission and goals. Without completing the enterprise architecture integration and documentation activities, it will be difficult for the Coast Guard to demonstrate enterprise architecture benefits, which may result in loss of enterprise architecture program executive and stakeholder support.

Recommendations

We recommend that the Commandant of the Coast Guard direct the Office of Enterprise Architecture and Governance to:

1. Complete and integrate the enterprise architecture data profiles, models, and inventories.

2. Complete required enterprise architecture documentation.

We also recommend that the Commandant of the Coast Guard:

3. Provide the Office of Enterprise Architecture and Governance with sufficient resources to complete required enterprise architecture activities.

Management Comments and OIG Analysis

We obtained written comments on a draft of this report from the Chief of the Office of Budget and Programs. We have included a copy of the comments in their entirety in Appendix B.

In the comments, the Chief of the Office of Budget and Programs concurred with our recommendations and stated that corrective actions have been initiated to resolve deficiencies identified. We believe that such efforts are good steps toward mitigating the various issues we raised in our report and look forward to learning more about continued progress and improvements in the future.

In response to recommendation 1, the Chief of the Office of Budget and Programs stated that the Office of Enterprise Architecture and Governance continues to work to complete and integrate data profiles, models, and inventories and is working to close the gap on the seven inventories not yet complete as well as the three models not finalized.

Responding to recommendation 2, the Chief of the Office of Budget and Programs stated that the To-Be enterprise architecture and Transition Plan are currently under development. Additionally, several other planning documents, including an enterprise architecture charter, program plan, and concept of operations are under development.

In response to recommendation 3, the Chief of the Office of Budget and Programs stated that the Coast Guard is committed to providing the Office of Enterprise Architecture and Governance with the appropriate level of resources, given overall enterprise architecture development requirements.

We reviewed the Coast Guard enterprise architecture to determine the level of compliance with established federal guidelines and DHS enterprise architecture policies and procedures, and to determine whether the Coast Guard has aligned its strategic plans and business priorities within an appropriate enterprise architecture framework.

We researched and reviewed federal guidance and standards and DHS' guidance regarding enterprise architecture, governance, and Capital Planning and Investment Control. Using this information we developed a data collection approach consisting of analyzing documentation, interviewing staff, attending system walkthroughs, and observing board meetings to accomplish our audit objectives.

We interviewed staff members from various Coast Guard organizations with responsibility for and knowledge of enterprise architecture activities at Coast Guard's headquarters in Washington, DC. These interviews were performed to obtain a better understanding of Coast Guard enterprise architecture. Interview questions were based on DHS' guidance and policies; and Coast Guard's policies, procedures, and related enterprise architecture management and governance practices.

We conducted our audit from April 2008 through April 2009 under the authority of the *Inspector General Act of 1978*, as amended. We conducted this performance audit according to 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 findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The principal OIG points of contact for this audit are Frank Deffer, Assistant Inspector General for Information Technology Audits, and Richard Harsche, Director of Information Management. Major OIG contributors to the audit are identified in Appendix C.

U.S. Department of
Homeland Security

United States
Coast Guard

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7501

1 5 JUL 2009

MEMORANDUM

From: T. W. JONES, CAPT
COMDT (CG-82)

Reply to   CG-823
Attn of: Mark Kulwicki
(202) 372-3533

To: Assistant Inspector General
Information Technology Audits
Department of Homeland Security

Subj: RESPONSE TO REPORT: "U.S COAST GUARD ENTERPRISE ARCHITECTURE
IMPLEMENTATION PROCESS"

Ref: (a) DHS OIG Report of June 10, 2009

1. This memorandum responds to the Office of Inspector General's (OIG) report findings in
reference (a), and describes progress in implementing the recommendations contained therein.

2. The Coast Guard CONCURS with the findings and recommendations in the report, and
corrective actions have been initiated to resolve deficiencies identified by the audit team.

3. If you have any questions, my point of contact is Mr. Mark Kulwicki at (202) 372-3533.
Alternatively, you may reach our Chief of External Coordination, CDR Todd Offutt, at (202)
372-3535.

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Enclosure   (1) USCG Comments

UNITED STATES COAST GUARD (USCG) RESPONSE
ON THE DEPARTMENT OF HOMELAND SECURITY
INSPECTOR GENERAL DRAFT REPORT

**TITLE: "U.S. COAST GUARD ENTERPRISE ARCHITECTURE
IMPLEMENTATION PROCESS"**

COAST GUARD'S GENERAL COMMENTS ON DHS OIG FINDINGS:

The Coast Guard concurs with the findings in the report.

SPECIFIC COAST GUARD RESPONSES TO DHS OIG RECOMMENDATIONS:

Recommendation #1: Complete and integrate the enterprise architecture data profiles,
models, and inventories.

CONCUR: The Office of Enterprise Architecture and Governance (CG-66) continues
to work with the Geospatial Management Office (GMO) and other Department of
Homeland Security components to complete and integrate data profiles, models and
inventories. CG-66 is acting to close the gap on the seven inventories not yet
complete as well as the three models cited in the detailed recommendations (Unified
Performance Logic Model, Business Models and Applications to Business Activities
Matrix).

Recommendation #2: Complete required enterprise architecture documentation.

CONCUR: Specifically, the 'To-Be' enterprise architecture and Transition Plan are
currently under development. In addition to these two documents, the enterprise
architecture charter, program plan, and concept of operations for the Enterprise Date
Management Office (EDMO) and the GMO are also under development.

Recommendation #3: Provide the Office of Enterprise Architecture and Governance
with sufficient resources to complete required enterprise architecture activities.

CONCUR: The Coast Guard believes it has the appropriate level of resources
committed to the effort, given the Service's overall requirements and available
resources.

Richard Harsche, Director, Department of Homeland Security, Information Management

Ernest Bender, Audit Manager, Department of Homeland Security, Information Management

Karen Nelson, Senior Auditor, Department of Homeland Security, Information Management

Erin Dunham, Auditor, Department of Homeland Security, Information Management

Charles Twitty, Referencer, Department of Homeland Security, Information Technology Audits

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