	United States Government Accountability Office
GAO	Testimony Before the Committee on Oversight and Government Reform, House of Representatives
For Release on Delivery Expected at 10:00 a.m. EST Thursday, February 8, 2007	HOMELAND SECURITY

Observations on the Department of Homeland Security's Acquisition Organization and on the Coast Guard's Deepwater Program

Statement of David M. Walker Comptroller General of the United States





Highlights of GAO-07-453T, a testimony before the Committee on Oversight and Government Reform, House of Representatives

### Why GAO Did This Study

In January 2003, GAO designated the Department of Homeland Security's (DHS) implementation and transformation as high risk because of the size and complexity of the effort and the existing challenges faced by the components being merged into the department. The success of the effort to integrate numerous agencies and organizations into one cabinet-level department rests in large part on DHS's ability to effectively acquire the wide range of goods and services it needs to achieve its mission of protecting the nation from terrorism.

DHS is undertaking a number of large, complex investments as the federal government increasingly relies on contractors for roles and missions previously performed by government employees. One of the department's largest investmentsthe Deepwater program, now estimated to cost \$24 billion-is the Coast Guard's major effort to replace or modernize its aircraft and vessels. Rather than using a traditional acquisition approach, the Coast Guard is using a system integrator to design, construct, deploy, support, and integrate the Deepwater assets.

Today, I would like to discuss (1) the overarching challenges DHS faces in establishing an effective acquisition organization, (2) GAO's prior work on Coast Guard and contractor management of the Deepwater program, and (3) the status of GAO's ongoing reviews.

### www.gao.gov/cgi-bin/getrpt?GAO-07-453T.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Steve Caldwell at (202) 512-9610 or caldwells@gao.gov or John Hutton at (202) 512-7773 or huttonj@gao.gov.

# HOMELAND SECURITY

## Observations on the Department of Homeland Security's Acquisition Organization and on the Coast Guard's Deepwater Program

### What GAO Found

GAO has reported in the past on acquisition management at several components of DHS and has assessed the department's overall acquisition management and oversight efforts. A common theme in these reports is DHS's struggle, from the outset, to provide adequate support to its mission components in acquiring goods and services and to provide departmentwide oversight of its acquisition function. DHS has a stated goal of integrating the acquisition function more broadly across the department. GAO has reported that this goal has not yet been accomplished and has identified key impediments to achieving it. A management directive intended to integrate the acquisition line of business did not provide the Chief Procurement Officer with the enforcement authority needed in practice, and it does not pertain to all component agencies. Also, the procurement organizations within the department remained somewhat autonomous, and centralized acquisition oversight had not been implemented. While DHS's review process for major investments adopts some best practices, key decisionmaking reviews at certain points are not required. Investments that are not reviewed at the appropriate points can face a range of problems-such as redesign-resulting in significant cost increases and schedule delays.

The Coast Guard's Deepwater program illustrates problems that can occur when effective program management and contractor oversight are not in place. In 2001, GAO described the Deepwater project as "risky" due to the unique, untried acquisition strategy for a project of this magnitude within the Coast Guard-a system-of-systems approach with the contractor as the integrator. In 2004, GAO reported that well into the contract's second year, key components needed to manage the program and oversee the system integrator's performance had not been effectively implemented. For example, integrated product teams, comprised of government and contractor employees, are the Coast Guard's primary tool for managing the program and overseeing the contractor. GAO found that the teams had not been effective due to changing membership, understaffing, insufficient training, lack of authority for decision-making, and inadequate communication among members. GAO also reported that, despite documented problems in schedule, performance, cost control, and contract administration throughout the first year of the Deepwater contract, the contractor had received a rating of 87 percent, which fell in the "very good" range and resulted in an award fee of \$4.0 million. GAO's more recent work found that, while the Coast Guard had taken steps to address some of the problems, concerns remained about program management and contractor oversight. In addition to these overall management issues, there have been problems with the design and performance of specific Deepwater assets.

Given the size of DHS and the scope of its acquisitions, GAO is continuing to assess the department's acquisition oversight process and procedures in ongoing work. GAO is also currently reviewing the status of the Deepwater program's implementation and contractor oversight. Mr. Chairman and Members of the Committee:

Thank you for inviting me here today to discuss our reviews of the Department of Homeland Security's (DHS) acquisition organization and the U.S. Coast Guard's Deepwater program. When it was established in March 2003, DHS faced the challenge of integrating 22 separate federal agencies and organizations with multiple missions, values, and cultures into one cabinet-level department.<sup>1</sup> The success of this mammoth task—one of the biggest mergers ever to take place within the federal government—rests in large part on DHS's ability to implement the necessary management structure and processes for effectively acquiring goods and services. A wide range of contractor-provided products, technologies, and services are critical to the department's ability to achieve its mission of protecting the nation from terrorism. For example, DHS has purchased increasingly sophisticated screening equipment for air passenger security, acquired technologies to secure the nation's borders, and is upgrading the Coast Guard's offshore fleet of surface and air assets.

In January 2003, we designated DHS's implementation and transformation as high risk because of the size and complexity of the effort and the existing challenges faced by the components being merged into the department.<sup>2</sup> Although DHS has made some progress transforming its components into a fully functioning department, this transformation remains high risk.<sup>3</sup> DHS has yet to implement a corrective action plan that includes a comprehensive transformation strategy, and its management systems—including those related to acquisition—are not yet integrated and wholly operational. DHS's acquisition systems will require continued attention to help prevent waste and ensure that DHS can allocate its resources efficiently and effectively.

In fiscal year 2006, DHS reported obligating \$15.6 billion in acquisitions, making it the third largest federal department in spending taxpayer dollars. DHS is undertaking large, complex investments as the federal government increasingly relies on contractors for roles and missions previously performed by government employees. Contractors have an

<sup>&</sup>lt;sup>1</sup> When the department was established, 22 agencies and organizations were brought in; Plum Island Animal Disease Center joined DHS afterward as the 23rd.

<sup>&</sup>lt;sup>2</sup> GAO, *High-Risk Series: An Update*, GAO-03-119 (Washington, D.C.: January 2003).

<sup>&</sup>lt;sup>3</sup> GAO, *High-Risk Series: An Update*, GAO-07-310 (Washington, D.C.: January 2007).

important role to play in the discharge of the government's responsibilities, and in some cases the use of contractors can result in improved economy, efficiency, and effectiveness. At the same time, there may be occasions when contractors are used to provide certain services because the government lacks another viable and timely option. In such cases, the government may actually be paying more than if such services were provided by federal employees. In this environment of increased reliance on contractors, sound planning and contract execution are critical for success. We have previously identified the need to examine the appropriate role for contractors to be among the challenges in meeting the nation's defense needs in the 21st century.<sup>4</sup>

My statement today will focus on the overarching challenges DHS faces in creating an effective, integrated acquisition organization and will discuss our prior work on one of the department's most complex programs—the Coast Guard's Deepwater program. I will also discuss areas where we have related ongoing work.

This testimony is based on our work on DHS's acquisition organization and the Deepwater program. That work was conducted in accordance with generally accepted government auditing standards.

Summary

DHS faces challenges in creating an effective acquisition organization:

• DHS has a stated goal of integrating the acquisition function more broadly across the department. We have reported that this goal has not yet been accomplished and have identified key impediments to achieving it. A management directive intended to integrate the acquisition line of business did not provide the Chief Procurement Officer with the enforcement authority needed in practice, and it does not pertain to the Coast Guard and Secret Service. Also, the procurement organizations within the department remained somewhat autonomous, and centralized acquisition oversight had not been implemented. While DHS's review process for major investments adopts some best practices, key decision-making reviews at certain points are not required.

<sup>&</sup>lt;sup>4</sup> GAO, 21st Century Challenges: Reexamining the Base of the Federal Government, GAO-05-325SP (Washington, D.C.: February 2005).

The Coast Guard's Deepwater program illustrates the type of problems that can occur when effective program management and contractor oversight are not in place:

From the outset, we have expressed concern about the risks involved with • the Coast Guard's acquisition strategy for the Deepwater program. In 2004, we reported that well into the contract's second year, key components needed to manage the program and oversee the system integrator's performance had not been effectively implemented. For example, integrated product teams, comprised of government and contractor employees, are the Coast Guard's primary tool for managing the program and overseeing the contractor. We found that the teams had not been effective due to changing membership, understaffing, insufficient training, lack of authority for decision-making, and inadequate communication among members. We also reported that, despite documented problems in schedule, performance, cost control, and contract administration throughout the first year of the Deepwater contract, the contractor had received a rating of 87 percent, which fell in the "very good" range and resulted in an award fee of \$4.0 million of the maximum \$4.6 million.<sup>5</sup> In 2006, we reported that the Coast Guard had taken steps to address some of the problems we identified.<sup>6</sup> However, the actions had not been adequate to resolve continuing concerns about program management and contractor oversight. In addition to these overall management issues, there have been problems with the design and performance of specific Deepwater assets.

We continue to review DHS's overall acquisition organization and the Deepwater program:

• Clearly, the challenges DHS faces in establishing an effective, integrated acquisition organization will take some time to resolve. We are continuing to assess DHS's progress, as well as examining other aspects of its acquisition function such as its use of performance-based acquisitions.

<sup>&</sup>lt;sup>5</sup> We recently reported on the Department of Defense's use of award and incentive fees. GAO, *Defense Acquisitions: DOD Has Paid Billions in Award and Incentive Fees Regardless of Acquisition Outcomes*, GAO-06-66 (Washington, D.C.: Dec. 19, 2005).

<sup>&</sup>lt;sup>6</sup> GAO, Coast Guard: Changes to Deepwater Appear Sound, and Program Management Has Improved, but Continued Monitoring Is Warranted, GAO-06-546 (Washington, D.C.: Apr. 28, 2006).

•	Similarly, we continue to review the Deepwater program as it moves into the 5 <sup>th</sup> year of the contract. We recognize that a variety of factors have contributed to the problems we have identified. In some cases, the Coast Guard has taken actions to improve outcomes; in other cases it has either not taken action or actions taken to date have not been effective. We are currently doing work on Deepwater for the House and Senate Appropriations Committees. When we complete our work in several months, we would be happy to provide our results to this committee.
Challenges to Creating an Integrated Acquisition Function at DHS	We have reported in the past on acquisition management at several components of DHS. We have also assessed the department's overall acquisition management efforts. <sup>7</sup> A common theme in these reports is DHS's struggle, from the outset, to provide adequate procurement support to its mission components and to provide departmentwide oversight of its acquisition function. Of the 22 components that initially joined DHS from other agencies, only 7 came with their own procurement support. An eighth office, the Office of Procurement Operations, was created anew to provide support to a variety of DHS entities—but not until January 2004, almost a year after the department was created. DHS has established a goal of aligning procurement staffing levels with contract spending at its various components by the last quarter of fiscal year 2009.
	DHS has set forth a stated goal of integrating the acquisition function more broadly across the department. However, the goal has not been accomplished. In March 2005, we identified key factors impeding accomplishment of the department's objective, including limitations of a 2004 management directive and lack of departmentwide oversight of component acquisition organizations. We also identified potential gaps in the department's knowledge-based approach for reviewing its major, complex investments. On a related issue, a number of systemic acquisition challenges we have identified at the Department of Defense could apply equally to DHS.

<sup>&</sup>lt;sup>7</sup> GAO, Contract Management: INS Contracting Weaknesses Need Attention from the Department of Homeland Security, GAO-03-799 (Washington, D.C.: July 25, 2003); Transportation Security Administration: High-Level Attention Needed to Strengthen Acquisition Function, GAO-04-544 (Washington, D.C.: May 28, 2004); and Homeland Security: Successes and Challenges in DHS's Efforts to Create an Effective Acquisition Organization, GAO-05-179 (Washington, D.C.: Mar. 29, 2005).

Management Directive Has Limitations	In October 2004, the Secretary of DHS signed a management directive entitled "Acquisition Line of Business Integration and Management," the department's principal guidance for leading, governing, integrating, and managing the acquisition function. It directs managers from each component organization to commit resources to training, development, and certification of acquisition professionals. It also highlights the Chief Procurement Officer's broad authority, including management, administration, and oversight of departmentwide acquisition.
	However, we have reported that the directive may not achieve its goal of creating an integrated acquisition organization because it creates unclear working relationships between the Chief Procurement Officer and heads of DHS's principal components. For example, the Chief Procurement Officer and the director of Immigration and Customs Enforcement share responsibility for recruiting and selecting key acquisition officials, preparing performance ratings for the top manager of the contracting office, and providing appropriate resources to support procurement initiatives. The policy leaves unclear how the responsibilities will be implemented or what enforcement authority the Chief Procurement Officer has to ensure that initiatives are carried out.
	Further, the directive does not apply to the Coast Guard or Secret Service, two entities that are required by the Homeland Security Act of 2002 <sup>8</sup> to be maintained as distinct entities within DHS. According to the directive, the Coast Guard and Secret Service are exempted by statute. We are not aware of any explicit statutory exemption that would prevent the application of this directive. Nothing in the document would reasonably appear to threaten the status of these entities as distinct entities within the department or otherwise impair their ability to perform statutory missions. DHS's General Counsel has agreed, telling us that the applicability of the directive is a policy, not legal, matter. Excluding certain components from complying with management directives regarding the acquisition function hampers efforts to integrate the acquisition organization. The Coast Guard, for example, is one of the largest organizations within DHS.

 $<sup>^{8}</sup>$  Pub. L. No. 107-296,  $\S$  821, 888, 116 Stat. 2135 (2002).

Procurement Organizations are Somewhat Autonomous and Lack Departmentwide Oversight

We have reported that DHS's principal organizations are, to a large extent, still functioning much as they did in pre-merger days with regard to acquisition-related functions. Embedded within the seven procurement organizations that came to DHS were, for the most part, the same contracting staffs that joined the department from their former agencies.<sup>9</sup> In addition, the Chief Procurement Officer, who is held accountable for departmentwide management and oversight of the acquisition function, lacks the enforcement authority and has limited resources to ensure compliance with acquisition policies and processes. As of August 2006, according to DHS officials, only five staff were assigned to departmentwide oversight responsibilities. The officials told us that, because their small staff faces the competing demands of providing departmentwide oversight and providing acquisition support for urgent needs at the component level, they have focused their efforts on procurement execution rather than oversight. Our prior work shows that in a highly functioning acquisition organization, the chief procurement officer is in a position to oversee compliance by implementing strong oversight mechanisms.<sup>10</sup> Adequate oversight of acquisition activities across DHS is imperative, in light of the department's mission and the problems that have been reported by us and inspectors general for some of the large components within the department.

Knowledge-based<br/>Acquisition Review<br/>ProcessSome DHS organizations have large, complex, and high-cost acquisition<br/>programs—such as the Coast Guard's Deepwater program—that need to<br/>be closely managed. DHS's investment review process involves several<br/>different levels of review, depending on the dollar threshold and risk level<br/>of the program. Deepwater, for example, has been designated as a level 1<br/>investment, meaning that it is subject to review at the highest levels within<br/>the department. We reported in 2005 that DHS's framework for reviewing<br/>its major investments adopts several best practices from lessons learned<br/>from leading commercial companies and successful federal programs that,<br/>if applied consistently, could refine its ability to reduce risk to meet cost<br/>and delivery targets.11 One of these best practices is a knowledge-based<br/>approach for managers to hold reviews at key decision points in order to

<sup>11</sup> GAO-05-179.

<sup>&</sup>lt;sup>9</sup> GAO-05-179.

<sup>&</sup>lt;sup>10</sup> GAO, Best Practices: Taking a Strategic Approach Could Improve DOD's Acquisition of Services, GAO-02-230 (Washington, D.C.: Jan. 18, 2002).

reduce risk before investing resources in the next phase of a program's development. For example, DHS's investment review policy encourages program managers to demonstrate a product's design with critical design reviews prior to a production decision.

However, we have found that, based on our extensive body of work on this knowledge-based approach, additional program reviews could be incorporated into the process as internal controls to better position DHS to make well-informed decisions on its major, complex investments. For example, DHS does not require a review to ensure that an investment's design performs as expected before investing in a prototype. We also reported that DHS review processes permitted low-rate initial production to be well underway before a mandatory review gave the go-ahead to proceed to production. A review prior to initiating low-rate initial production was not mandatory; rather, it was held at the discretion of the Investment Review Board (IRB). Our best practices work shows that successful investments reduce risk by ensuring that high levels of knowledge are achieved at these key points of development. We have found that investments that were not reviewed at the appropriate points faced problems-such as redesign-that resulted in cost increases and schedule delays. It is not clear how the Deepwater acquisition has been influenced by the department's investment review process. According to a DHS official, an IRB review of the Deepwater acquisition program baseline, scheduled for January 2007, was postponed.

In its Performance and Accountability Report for fiscal year 2006, DHS stated that it has improved its process for investment reviews by providing greater clarity on DHS policies and procedures. It acknowledges that developing and maintaining the capability needed to achieve DHS missions requires a robust investment program. DHS also states that its components are now required to report on the status of major investments on a quarterly basis and to submit information to ensure that investments are staying within established baselines for cost, schedule, and performance. The report says that the department will identify and introduce acquisition best practices into the investment review process by the first quarter of fiscal year 2008.

Systemic Acquisition Challenges We have identified a series of systemic acquisition challenges for complex, developmental systems, based mostly on our reviews of Department of Defense programs. In principle, many may apply equally to DHS as it moves forward with its major, complex investments. Some of these challenges include:

• • • • •	Program requirements are often set at unrealistic levels, then changed frequently as recognition sets in that they cannot be achieved. As a result, too much time passes, threats may change, and/or members of the user and acquisition communities may simply change their minds. The resulting program instability causes cost escalation, schedule delays, fewer quantities, and reduced contractor accountability. Program decisions to move into design and production are made without adequate standards or knowledge. Contracts, especially service contracts, often do not have measures in place at the outset in order to control costs and facilitate accountability. Contracts typically do not accurately reflect the complexity of projects or appropriately allocate risk between the contractors and the taxpayers. The acquisition workforce faces serious challenges (e.g. size, skills, knowledge, succession planning). Incentive and award fees are often paid based on contractor attitudes and efforts versus positive results, such as cost, quality, and schedule. Inadequate government oversight results in little to no accountability for recurring and systemic problems.
Deepwater Program Is Illustrative of Problems Stemming from Lack of Effective Program Management and Contractor Oversight	The Deepwater program is the Coast Guard's major effort to replace or modernize its aircraft and vessels. It has been in development for a number of years. Between 1998 and 2001, three industry teams competed to identify and provide the assets needed to transform the Coast Guard. In 2001, we described the Deepwater project as "risky" due to the unique, untried acquisition strategy for a project of this magnitude within the Coast Guard. <sup>12</sup> Rather than using the traditional approach of replacing classes of ships or aircraft through a series of individual acquisitions, the Coast Guard chose to use a system-of-systems acquisition strategy that would replace its deteriorating assets with a single, integrated package of aircraft, vessels, and unmanned aerial vehicles, to be linked through systems that provide C4ISR, <sup>13</sup> and supporting logistics.

<sup>&</sup>lt;sup>12</sup> GAO, Coast Guard: Progress Being Made on Deepwater Project, but Risks Remain, GAO-01-564 (Washington, D.C.: May 2, 2001).

 $<sup>^{\</sup>rm 13}$  C4ISR refers to command, control, communications, computer, intelligence, surveillance, and reconnaissance.

System Integrator Concept and the Role of Contractors	In June 2002, the Coast Guard awarded the Deepwater contract to Integrated Coast Guard Systems (ICGS). ICGS—a business entity jointly owned by Northrop Grumman and Lockheed Martin—is a system integrator, responsible for designing, constructing, deploying, supporting, and integrating the Deepwater assets to meet Coast Guard requirements. The management approach of using a system integrator has been used on other government programs that require system-of-systems integration, such as the Army's Future Combat System, a networked family of weapons and other systems. This type of business arrangement gives the contractor extensive involvement in requirements development, design, and source selection of major system and subsystem subcontractors.
	Government agencies have turned to the system integrator approach when they believe they do not have the in-house capability to design, develop, and manage complex acquisitions. Giving contractors more control and influence over the government's acquisitions in a system integrator role creates a potential risk that program decisions and products could be influenced by the financial interest of the contractor (who is accountable to its shareholders), which may not match the primary interest of the governmentmaximizing its return on taxpayer dollars. The system integrator arrangement creates an inherent risk, as the contractor is given more discretion to make certain program decisions. Along with this greater discretion comes the need for more government oversight and an even greater need to develop well-defined outcomes at the outset.
	The proper role of contractors in providing services to the government is currently the topic of some debate. I believe there is a need to focus greater attention on what type of functions and activities should be contracted out and which ones should not. There is also a need to review and reconsider the current independence and conflict of interest rules relating to contractors. Finally, there is a need to identify the factors that prompt the government to use contractors in circumstances where the proper choice might be the use of civil servants or military personnel. Possible factors could include inadequate force structure, outdated or inadequate hiring policies, classification and compensation approaches, and inadequate numbers of full-time equivalent slots.
Performance-based Acquisition	The Deepwater program has also been designated as a performance-based acquisition. When buying services, federal agencies are currently required to employ—to the maximum extent feasible—this concept, wherein acquisitions are structured around the results to be achieved as opposed to the manner in which the work is to be performed. That is, the

	government specifies the outcome it requires while leaving the contractor to propose decisions about how it will achieve that outcome. Performance-based contracts for services are required to include a performance work statement; measurable performance standards (i.e., in terms of quality, timeliness, quantity, etc.) and the method of assessing contractor performance against these standards; and performance incentives, where appropriate. If performance-based acquisitions are not appropriately planned and structured, there is an increased risk that the government may receive products or services that are over cost estimates, delivered late, and of unacceptable quality.
Assessments of Deepwater Program	In 2001, we reported that the Deepwater project faced risks, including the ability to control costs in the contract's later years; ensuring that procedures and personnel were in place for managing and overseeing the contractor; and minimizing potential problems with developing unproven technology. <sup>14</sup> We noted that the risks could be mitigated to varying degrees, but not without management attention. Our assessment of the Deepwater program in 2004 found that the Coast Guard had not effectively managed the program or overseen the system integrator. <sup>15</sup> We reported last year that the Coast Guard had revised its Deepwater implementation plan to reflect additional homeland security responsibilities as a result of the September 11, 2001, terrorist attacks. <sup>16</sup> The revised plan increased overall program costs from the original estimate of \$17 billion to \$24 billion. Overall, the acquisition schedule was lengthened by 5 years, with the final assets now scheduled for delivery in 2027.
	Our reported concerns in 2004 and in subsequent assessments in 2005 and 2006 have centered on three main areas: program management, contractor accountability, and cost control through competition. While we recognize that the Coast Guard has taken steps to address our findings and recommendations, aspects of the Deepwater program will require continued attention, such as the risk involved in the system-of-systems approach with the contractor acting as overall integrator. A project of this

<sup>14</sup> GAO-01-564.

<sup>&</sup>lt;sup>15</sup>GAO, Contract Management: Coast Guard's Deepwater Program Needs Increased Attention to Management and Contractor Oversight, GAO-04-380 (Washington, D.C.: Mar. 9, 2004).

<sup>&</sup>lt;sup>16</sup> GAO-06-546.

	magnitude will likely continue to experience other problems as more becomes known.
Program Management	In 2004, we reported that more than a year and a half into the Deepwater contract, the key components needed to manage the program and oversee the system integrator had not been effectively implemented. For example, integrated product teams, comprised of government and contractor employees, are the Coast Guard's primary tool for managing the program and overseeing the contractor. We found that the teams had not been effective due to changing membership, understaffing, insufficient training, lack of authority for decision making, and inadequate communication among members.
	Although some efforts have been made to improve the effectiveness of the integrated product teams, we have found that the needed changes are not yet sufficiently in place. In 2005, we reported that decision making was to a large extent stove-piped, and some teams lacked adequate authority to make decisions within their realm of responsibility. <sup>17</sup> One source of difficulty for some team members has been the fact that each of the two major subcontractors has used its own management systems and processes to manage different segments of the program. We noted that decisions on air assets were made by Lockheed Martin, while decisions regarding surface assets were made by Northrop Grumman. This approach can lessen the likelihood that a system-of-systems outcome will be achieved if decisions affecting the entire program are made without the full consultation of all parties involved. In 2006, we reported that Coast Guard officials believed collaboration among the subcontractors to be problematic and that ICGS wielded little influence to compel decisions among them. For example, when dealing with proposed design changes to assets under construction, ICGS submitted the changes as two separate proposals from both subcontractors rather than coordinating the separate proposals into one coherent plan. According to Coast Guard performance monitors, this approach complicates the government review of design changes because the two proposals often carried overlapping work items, thereby forcing the Coast Guard to act as the system integrator in those situations.

<sup>&</sup>lt;sup>17</sup> GAO, Coast Guard: Progress Being Made on Addressing Legacy Asset Condition Issues and Program Management, but Acquisition Challenges Remain, GAO-05-757 (Washington, D.C.: July 22, 2005).

	In addition, we reported in 2004 that the Coast Guard had not adequately communicated to its operational personnel decisions on how new and old assets would be integrated and how maintenance responsibilities would be divided between government and contractor personnel. We also found that the Coast Guard had not adequately staffed its program management function. Despite some actions taken to more fully staff the Deepwater program, we reported that in January 2005 shortfalls remained. While 244 positions were assigned to the program, only 206 were filled, resulting in a 16 percent vacancy rate.
Contractor Accountability	In 2004, we found that the Coast Guard had not developed quantifiable metrics to hold the system integrator accountable for its ongoing performance and that the process by which the Coast Guard assessed performance after the first year of the contract lacked rigor. For example, the first annual award fee determination was based largely on unsupported calculations. Despite documented problems in schedule, performance, cost control, and contract administration throughout the first year, the program executive officer awarded the contractor an overall rating of 87 percent, which fell in the "very good" range. This rating resulted in an award fee of \$4.0 million of the maximum of \$4.6 million.
	We also reported in 2004 that the Coast Guard had not begun to measure the system integrator's performance on the three overarching goals of the Deepwater program—maximizing operational effectiveness, minimizing total ownership costs, and satisfying the customers. Coast Guard officials told us that metrics for measuring these objectives had not been finalized; therefore they could not accurately assess the contractor's performance against the goals. However, at the time, the Coast Guard had no time frame in which to accomplish this measurement.
Cost Control through Competition	In 2004, we reported that, although competition among subcontractors was a key vehicle for controlling costs, the Coast Guard had neither measured the extent of competition among the suppliers of Deepwater assets nor held the system integrator accountable for taking steps to achieve competition. <sup>18</sup> As the two major subcontractors to ICGS, Lockheed Martin and Northrop Grumman have sole responsibility for determining whether to provide the Deepwater assets themselves or to hold

<sup>18</sup> GAO-04-380.

competitions—decisions commonly referred to as "make or buy." We noted that the Coast Guard's hands-off approach to make-or-buy decisions and its failure to assess the extent of competition raised questions about whether the government would be able to control Deepwater program costs.

Failure to control costs can result in waste of taxpayer dollars. Along with my several colleagues in the accountability community, I have developed a definition of waste. As we see it, waste involves the taxpayers in the aggregate not receiving reasonable value for money in connection with any government funded activities due to an inappropriate act or omission by players with control over or access to government resources (e.g., executive, judicial or legislative branch employees, contractors, grantees or other recipients). Importantly, waste involves a transgression that is less than fraud and abuse and most waste does not involve a violation of law. Rather, waste relates primarily to mismanagement, inappropriate actions, or inadequate oversight.

# Status of<br/>RecommendationsWe made 11 recommendations in 2004 in the areas of management and<br/>oversight, contractor accountability, and cost control through<br/>competition. In April 2006, we reported that the Coast Guard had<br/>implemented five of them. Actions had been taken to• revise the Deepwater human capital plan;<br/>• develop measurable award fee criteria;<br/>• implement a more rigorous method of obtaining input from Coast Guard<br/>monitors on the contractor's performance;<br/>• include in the contractor's performance measures actions taken to<br/>improve the integrated product teams' effectiveness; and<br/>• require the contractor to notify the Coast Guard of subcontracts over \$10<br/>million that were awarded to the two major subcontractors.<sup>19</sup>

The Coast Guard had begun to address five other recommendations by

initiating actions to establish charters and training for integrated product teams;

<sup>&</sup>lt;sup>19</sup> Our 2004 recommendation was to use a \$5 million threshold because Lockheed Martin, one of the major subcontractors, uses that amount as the threshold for considering its suppliers major. The Coast Guard decided to use the \$10 million threshold based on the criteria in the make-or-buy program provisions of the Federal Acquisition Regulation.

	<ul> <li>improving communications with field personnel regarding the transition to Deepwater assets;</li> <li>devising a time frame for measuring the contractor's progress toward improving operational effectiveness;</li> <li>establishing criteria to determine when to adjust the project baseline; and developing a plan to hold the contractor accountable for ensuring adequate competition among suppliers.</li> <li>We determined that, based on our work, these recommendations had not been fully implemented.</li> <li>The Coast Guard disagreed with and declined to implement one of our recommendations, to establish a baseline to determine whether the system-of-systems acquisition approach is costing the government more than the traditional asset replacement approach. While we stand behind our original recommendation, the Coast Guard maintains that the cost to implement this recommendation would be excessive.</li> </ul>
Performance and Design Problems	In addition to overall management issues discussed above, there have been problems with the design and performance of specific Deepwater assets. For example, in February 2006, the Coast Guard suspended design work on the Fast Response Cutter (FRC) due to design risks such as excessive weight and horsepower requirements. <sup>20</sup> The FRC was intended as a long-term replacement for the legacy 110-foot patrol boats. Coast Guard engineers raised concerns about the viability of the FRC design (which involved building the FRC's hull, decks, and bulkheads out of composite materials rather than steel) beginning in January 2005. In February 2006, the Coast Guard suspended FRC design work after an independent design review by third-party consultants demonstrated, among other things, that the FRC would be far heavier and less efficient than a typical patrol boat of similar length, in part, because it would need four engines to meet Coast Guard speed requirements. In moving forward with the FRC acquisition, the Coast Guard will end up with two classes of FRCs. The first class of FRCs to be built would be based on an adapted design from a patrol boat already on the market to expedite delivery. The Coast Guard would then pursue development of a

<sup>&</sup>lt;sup>20</sup>GAO, Coast Guard: Status of Deepwater Fast Response Cutter Design Efforts, GAO-06-764 (Washington, D.C.: June 23, 2006).

follow-on class that would be completely redesigned to address the problems in the original FRC design plans. Coast Guard officials now estimate that the first FRC delivery will slip to fiscal year 2009, at the earliest, rather than 2007 as outlined in the 2005 Revised Deepwater Implementation Plan.

In addition to problems with the FRC design, problems have also been discovered with the long-term structural integrity of the National Security Cutter's (NSC) design, which could pose operational and financial impacts to the Coast Guard. The Commandant of the Coast Guard recently stated that internal reviews by Coast Guard engineers, as well as by independent analysts have concluded that the NSC as designed will need structural reinforcement to meet its expected 30-year service life. In addition, a recent report by the DHS Inspector General indicated that the NSC design will not achieve a 30-year service life based on an operating profile of 230 days underway per year in General Atlantic and North Pacific sea conditions and added that Coast Guard technical experts believe the NSC's design deficiencies will lead to increased maintenance costs and reduced service life.<sup>21</sup>

In an effort to address the structural deficiencies of the NSC, the Commandant has stated that the Coast Guard is taking a two-pronged approach. First, the Coast Guard is working with the contractors to enhance the structural integrity of hulls three through eight that have not yet been constructed. Second, after determining that the NSC's structural deficiencies are not related to the safe operation of the vessel in the near term, the Coast Guard has decided to address the deficiencies of hulls one and two as part of depot-level maintenance, planned for several years after they are delivered. The Commandant stated that he decided to delay the repairs to the first two NSC hulls in an effort to prevent further cost increases or delays in construction and delivery.

Further, the Deepwater program's conversion of the legacy 110-foot patrol boats to 123-foot patrol boats has also encountered performance problems. The Coast Guard had originally intended to convert all 49 of its 110-foot patrol boats into 123-foot patrol boats in order to increase the patrol boats' annual operational hours. This conversion program was also intended to add additional capability to the patrol boats, such as enhanced

<sup>&</sup>lt;sup>21</sup> Department of Homeland Security, Office of Inspector General, *Acquisition of the National Security Cutter*, U.S. Coast Guard, OIG-07-23 (Washington, D.C.: Jan. 23, 2007).

	and improved C4ISR capabilities, as well as stern launch and recovery capability for a small boat. However, the converted 123-foot patrol boats began to display deck cracking and hull buckling and developed shaft alignment problems, and the Coast Guard elected to stop the conversion process at eight hulls upon determining that the converted patrol boats would not meet their expanded post-9/11 operational requirements.
Problems Have Operational Consequences	The design and performance problems illustrated above have clear operational consequences for the Coast Guard. In the case of the 123-foot patrol boats, the hull performance problems cited above led the Coast Guard to suspend all normal operations of the eight converted normal 123- foot patrol boats effective November 30, 2006. The Commandant of the Coast Guard has stated that having reliable, safe cutters is "paramount" to executing its missions, such as search and rescue and migrant interdiction. <sup>22</sup> The Coast Guard is exploring options to address operational gaps resulting from the suspension of the 123-foot patrol boat operations. In regard to the suspension of FRC design work, as of our June 2006 report, Coast Guard officials had not yet determined how changes in the design and delivery date for the FRC would affect the operations of the overall system-of-systems approach. However, because the delivery of Deepwater assets are interdependent within this acquisition approach, schedule slippages and uncertainties associated with potential changes in the design and capabilities of the new assets have increased the risks that
	the Coast Guard may not meet its expanded homeland security performance requirements within given budget parameters and milestone dates.
Additional Reviews Ongoing	Given the size of DHS and the scope of its acquisitions, we are continuing to assess the department's acquisition oversight process and procedures in ongoing work. For example, we are currently reviewing DHS's use of contractors to provide management and professional services, including the roles they are performing and how their performance is overseen. In addition, the conference report to the Department of Homeland Security Appropriations Act for Fiscal Year 2007 <sup>23</sup> directed DHS's Chief
	<sup>22</sup> Coast Guard Suspends Converted Patrol Boat Operations, November 30, 2006, U.S.

Coast Guard Suspends Converted Patrol Boat Operations, November 30, 2006, U.S. Coast Guard, Office of Public Affairs.

<sup>&</sup>lt;sup>23</sup> H.R. Conf. Rep. No. 109-699, at 118 (2006).

Procurement Officer to develop a procurement oversight plan, identifying necessary oversight resources and how improvements in the department's performance of its procurement functions will be achieved. We have been directed to review the plan and provide our observations to congressional committees. We are also reviewing the department's use of performancebased acquisitions.

We will also continue to review Deepwater implementation and contract oversight. We are currently reviewing aspects of the Deepwater program for the House and Senate Appropriations Committees' Subcommittees on Homeland Security.<sup>24</sup> Our objectives are to review (1) the status of the development and delivery of the major aviation and maritime assets that comprise the Coast Guard's Deepwater program; (2) the history of the contract, design, fielding, and grounding of the converted 123-foot patrol boats and operational adjustments the Coast Guard making to account for the removal from service of the 123-foot patrol boats; and (3) the status of the Coast Guard's implementation of our 2004 recommendations on Deepwater contract management for improving Deepwater program management, holding the prime contractor accountable for meeting key program goals, and facilitating cost control through competition. We will share our results with those committees in April of this year.

# Concluding Observations

Due to the complexity of its organization, DHS is likely to continue to face challenges in unifying the acquisition functions of its components and overseeing their acquisitions—particularly those involving large and complex investments. Although the Coast Guard has taken actions to improve its management of the Deepwater program and oversight of the system integrator, problems continue to emerge as the program is implemented. DHS and the Coast Guard face the challenge of effectively managing this program to obtain desired outcomes while making decisions that are in the best interest of the taxpayer. Given its experience with Deepwater, the department would be wise to apply lessons learned to its other major, complex acquisitions, particularly those involving a system integrator.

<sup>&</sup>lt;sup>24</sup> This work is based on Conference Committee Report language (H.R. Conf. Rep. No. 109-699, at 118 (2006)) incorporating GAO reporting provisions contained in a House Appropriations Committee Report (H.R. Rep. No. 109-476, at 15 (2006)).

	Mr. Chairman, that concludes my statement. I would be happy to respond to any questions you or other Members of the Committee may have at this time.
Contacts and Acknowledgements	For information about this testimony, contact Steve Caldwell at (202) 512- 9610 or John Hutton at (202) 512-7773. Other individuals making key contributions to this testimony include Michele Mackin, Christopher Conrad, and Adam Couvillion.

This is a work of the U.S. government and is not subject to copyright protection in the United States. It may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

GAO's Mission	The Government Accountability Office, the audit, evaluation and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.
Obtaining Copies of GAO Reports and Testimony	The fastest and easiest way to obtain copies of GAO documents at no cost is through GAO's Web site (www.gao.gov). Each weekday, GAO posts newly released reports, testimony, and correspondence on its Web site. To have GAO e-mail you a list of newly posted products every afternoon, go to www.gao.gov and select "Subscribe to Updates."
Order by Mail or Phone	The first copy of each printed report is free. Additional copies are \$2 each. A check or money order should be made out to the Superintendent of Documents. GAO also accepts VISA and Mastercard. Orders for 100 or more copies mailed to a single address are discounted 25 percent. Orders should be sent to:
	U.S. Government Accountability Office 441 G Street NW, Room LM Washington, D.C. 20548
	To order by Phone: Voice: (202) 512-6000 TDD: (202) 512-2537 Fax: (202) 512-6061
To Report Fraud,	Contact:
Waste, and Abuse in Federal Programs	Web site: www.gao.gov/fraudnet/fraudnet.htm E-mail: fraudnet@gao.gov Automated answering system: (800) 424-5454 or (202) 512-7470
Congressional Relations	Gloria Jarmon, Managing Director, JarmonG@gao.gov (202) 512-4400 U.S. Government Accountability Office, 441 G Street NW, Room 7125 Washington, D.C. 20548
Public Affairs	Paul Anderson, Managing Director, AndersonP1@gao.gov (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, D.C. 20548