Coast Guard Deepwater Program: Background and Issues for Congress

Ronald O'Rourke
Specialist in National Defense
Foreign Affairs, Defense, and Trade Division

Summary

The Deepwater program is a 20- to 25-year acquisition effort to replace or modernize 93 aging Coast Guard ships and 207 aging Coast Guard aircraft. The program’s estimated total acquisition cost is $19 billion to $24 billion. On March 25, 2005 the Coast Guard submitted to Congress a revised implementation plan for the program that alters the planned capabilities and numbers of Deepwater assets and the schedule for acquiring or modernizing them. Some Members of Congress have criticized the revised implementation plan. The Coast Guard’s proposed FY2006 budget requests $966 million for the program. This report will be updated as events warrant.

Background

Introduction. The Coast Guard Deepwater program, known formally as the Integrated Deepwater Systems (IDS) program, is a project to replace and modernize the Coast Guard’s aging fleet of deepwater-capable cutters, patrol boats and aircraft. It is the largest and most complex acquisition program in Coast Guard history. The issue for Congress is whether to approve, reject, or modify the Administration’s funding requests and overall approach for the program. Congress’ decisions on this issue could affect Coast Guard capabilities, Coast Guard funding requirements, and the U.S. shipbuilding and aircraft industry.

Deepwater Missions. The Coast Guard performs a variety of missions in the deepwater environment (which generally means waters more than 50 miles from shore), including the following: drug interdiction, alien migrant interdiction, fisheries enforcement, search and rescue, the International Ice Patrol in northern waters; overseas maritime intercept (sanctions-enforcement) operations, overseas port security and defense, overseas peacetime military engagement; general defense operations in conjunction with the Navy; marine pollution law enforcement, enforcement of lightering (i.e., at-sea cargo-transfer) zones, and overseas inspection of foreign vessels entering U.S. ports.

1 For additional background information on the Deepwater program, see the program’s Internet page at [http://www.uscg.mil/deepwater/].
Coast Guard Deepwater Program: Background and Issues for Congress


Approved for public release; distribution unlimited

Approved for public release; distribution unlimited

unclassified

unclassified

unclassified

Same as Report (SAR)

6

1. REPORT DATE

01 APR 2005

2. REPORT TYPE

3. DATES COVERED

00-00-2005 to 00-00-2005

4. TITLE AND SUBTITLE

Coast Guard Deepwater Program: Background and Issues for Congress

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)


8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

10. SPONSOR/MONITOR’S ACRONYM(S)

11. SPONSOR/MONITOR’S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:

a. REPORT

   unclassified

b. ABSTRACT

   unclassified
c. THIS PAGE

   unclassified

17. LIMITATION OF ABSTRACT

   Same as Report (SAR)

18. NUMBER OF PAGES

   6

19a. NAME OF RESPONSIBLE PERSON

   

Standard Form 298 (Rev. 8-98)

Prepared by ANSI Z39-18
Legacy Deepwater-Capable Assets. The Coast Guard’s “legacy” assets for performing deepwater missions include 93 aging cutters and patrol boats and 207 aging aircraft. Many of these ships and aircraft are expensive to operate (in part because the cutters require large crews), increasingly expensive to maintain, technologically obsolete, and in some cases poorly suited for performing today’s deepwater missions.

Deepwater Program Competition and Contract Award. On June 25, 2002, the Coast Guard announced that an industry team led by Lockheed Martin and Northrop Grumman’s Ship Systems division was the winner of the Deepwater competition and awarded the team a $16.95-billion, 20-year contract. The contract included $11.04 billion for the production of new ships, aircraft, and C4I equipment, and $5.91 billion for operating, maintaining, and sustaining the new Deepwater fleet. The contract may be extended up to 30 years, which would increase its value beyond $17 billion.

Systems to Be Procured or Modernized. On March 25, 2005, the Coast Guard submitted to Congress a revised implementation plan for the Deepwater program that alters the planned capabilities and numbers of Deepwater assets and the schedule for acquiring or modernizing them. The revised implementation plan includes the acquisition or modernization over a 20- to 25-year period of the following ships and aircraft:

Ships, boats, and surface craft:
- 6 to 8 new Large Maritime Security Cutters, or WMSLs (previously called National Security Cutters, or NSCs), displacing about 4,000 tons each (i.e., ships analogous to today’s high-endurance cutters);
- 25 new Medium Maritime Security Cutters, or WMSMs (previously called Offshore Patrol Cutters, or OPCs), displacing about 3,200 tons each (i.e., ships analogous to today’s medium-endurance cutters);
- 43 to 58 new Fast Response Cutters (FRCs) displacing 200 tons each;
- 31 to 33 Long Range Interceptor (LRI) craft displacing 15 tons each; and
- 74 to 91 Short Range Prosecutor (SRP) craft displacing 9 tons each.

Aircraft:
- 22 modernized HC-130H/J Long Range Search (LRS) aircraft;
- 20 to 36 new HC-235 Medium Range Search (MRS) aircraft, also known as Maritime Patrol Aircraft (MPA), based on based on the European Aeronautic Defence and Space Company (EADS) CASA HC-235 Persuader MPA aircraft design;
- 42 modernized HH-60J Medium Range Recovery (MRR) helicopters;
- 95 re-engined and modernized HH-65C Multi-Mission Cutter Helicopters (MCHs);
- 45 new HV-911 Eagle Eye VTOL (vertical take-off or landing) Unmanned Aerial Vehicles (UAVs); and
- 4 leased RQ-4A Global Hawk High Altitude Endurance UAVs (HAEUAVs).

Estimated Total Acquisition Cost and FY2006 Funding Request. The Coast Guard estimates the total acquisition cost of the Deepwater program under the revised implementation plan at $19 billion to $24 billion over 20 to 25 years. The Coast Guard’s proposed FY2006 budget requests $966 million for the program. Among other
things, the FY2006 request includes funding for production of the third WMSL, design and acquisition of long-lead items for the first WMSM, initial operating capability of the first FRC, 2 LRIs, C-130H upgrades, HH-60J upgrades, HH-65 re-enginings, and production of the third VUAV.

Issues for Congress

Program Scope and Schedule. The Deepwater program as originally outlined reflected a pre-9/11 analysis of the Coast Guard’s future mission requirements. As a consequence, some observers argued that the Deepwater program would need to be increased in scope to meet the Coast Guard’s post-9/11 mission requirements. A 2004 RAND Corporation report recommended substantially increasing the number of numbers of cutters and aircraft to be acquired under the program. Other observers, including some Members of Congress, argued that the original Deepwater program’s 20- to 22-year acquisition schedule was economically inefficient and too leisurely to meet urgent post-9/11 mission needs, and expressed interest in the idea of compressing the Deepwater acquisition period to as few as 10 years.

A potential key issue for Congress is whether the Coast Guard’s March 2005 revised implementation plan, which is intended to reflect a post-9/11 analysis of future Coast Guard mission requirements (as well as more up-to-date data on the pace at which legacy Coast Guard assets are wearing out), is adequate in terms of program scope and schedule. Rather than substantially increasing numbers of cutters and aircraft to be acquired to meet the Coast Guard’s expanded post-9/11 mission demands, the revised implementation plan increases the individual capability of the ships and aircraft while avoiding substantial increases in quantity. In addition, while accelerating the planned acquisition of some systems within the program, the revised implementation plan maintains the idea of completing the program over a period of 20 or more years. Some Members of Congress have criticized the revised implementation plan on the grounds that it does not provide sufficient transparency, accountability, or predictability; that it increases funding to be spent on modernizing legacy assets at the expense of acquiring new assets; and that it


3 Coast Guard officials indicated that funding the Deepwater program in FY2005 at a level of $1.1 billion would permit the Deepwater program to return to a 20-year schedule ending in 2022. Continuing to fund the program at $1.1 billion per year, they indicated, would permit the program to be completed in 14 years (i.e., by 2016). Section 888(i) of H.R. 5005/P.L. 107-296 directed DHS to report to Congress on the idea of compressing the Deepwater program 20 years to 10 years. On March 12, 2003, the Coast Guard submitted the report, which concluded that compressing the Deepwater acquisition period to 10 years was feasible, that it would increase Deepwater acquisition costs over the five-year period FY2005-FY2011 by about $4.7 billion in then-year dollars but reduce total Deepwater acquisition costs over the long run from $16.022 billion in then-year dollars to $11.473 billion in then-year dollars. (U.S. Coast Guard, Report to Congress on the Feasibility of Accelerating the Integrated Deepwater System, 2003.)
stretches the program out to as much as 25 years rather than compressing it to something less than 20.4

Program Management. The Government Accountability Office (GAO) has long expressed concerns about the Coast Guard’s ability to manage the Deepwater program. On March 17, 2005, GAO testified that within the Coast Guard’s proposed FY2006 budget,

The Deepwater program, which would receive $966 million under the budget request, appears to merit the most ongoing attention. GAO reviews of this program have shown that the Coast Guard clearly needs new or upgraded assets, but the Coast Guard’s contracting approach carries a number of inherent risks that, left unaddressed, could lead to spiraling costs and slipped schedules. The Coast Guard is taking some action in this regard, but GAO continues to regard this approach as carrying substantial risk. Some expansion of cost and slippage in schedule has already occurred.5

A March 2004 GAO report stated:

Over a year and a half into the Deepwater contract, the key components needed to manage the program and oversee the system integrator’s performance have not been effectively implemented. Integrated product teams, the Coast Guard’s primary tool for overseeing the system integrator, have struggled to effectively collaborate and accomplish their missions. They have been hampered by changing membership, understaffing, insufficient training, and inadequate communication among members. In addition, the Coast Guard has not adequately addressed the frequent turnover of personnel in the program and the transition from existing to Deepwater assets.

The Coast Guard’s assessment of the system integrator’s performance in the first year of the contract lacked rigor. For example, comments from the technical specialist responsible for monitoring the design and delivery of ships were not included in the evaluation scores. Further, the factors that formed the basis for the award fee determination were unsupported by quantifiable metrics.... Further, the Coast Guard has not yet begun to measure the system integrator’s performance on the three overarching goals of the Deepwater program — operational effectiveness, total ownership cost, and customer satisfaction. Its original plan of measuring progress on an annual basis has slipped, and Coast Guard officials have not projected a time frame for when they will be able to hold the contractor accountable for progress against these goals....


Competition is critical to controlling costs in the Deepwater program and a guiding principle of Department of Homeland Security acquisitions. Concerns about the Coast Guard’s ability to rely on competition as a means to control future costs contributed to GAO’s description of the Deepwater program in 2001 as “risky.” Three years later, the Coast Guard has neither measured the extent of competition among suppliers of Deepwater assets nor held the system integrator accountable for taking steps to achieve competition. Deepwater’s acquisition structure is such that the two first-tier subcontractors have sole responsibility for determining whether to hold competitions for assets or to provide these assets themselves. The Coast Guard has taken a hands-off approach to “make or buy” decisions made at the subcontractor level. As a result, questions remain about whether the government will be able to control costs.6

A June 2004 GAO report stated:

The degree to which the Deepwater program is on track with its original 2002 integrated acquisition schedule is difficult to determine because the Coast Guard has not updated the schedule. Coast Guard officials said they have not updated it because of the numerous changes Deepwater experiences every year and the cost, personnel, and time involved. However, in similar acquisitions — those of the Department of Defense (DOD) — cost, schedule, and performance updates are fundamental to congressional oversight.... Updating the acquisition schedule... on a more timely basis is imperative so that annual Coast Guard budget submissions can allow Congress to base decisions on accurate information.... The additional $168 million [provided by Congress] in fiscal year 2004, while allowing the Coast Guard to conduct a number of Deepwater projects that had been delayed or would not have been funded in fiscal year 2004, will not fully return the program to its original 2002 acquisition schedule. Reasons include all work originally planned for fiscal year 2004 was not funded and some will have to be delayed to fiscal year 2005; delivery of some assets has fallen so far behind schedule that ensuring their original delivery dates is impossible; and nonfunding reasons have caused delays, such as greater than expected hull corrosion of patrol boats delaying length extension upgrades.7

A November 2004 report by the DHS Inspector General stated:

Maintaining the operational readiness of critical legacy assets is a major challenge to the Coast Guard.... The Coast Guard estimates that sustaining its deteriorating legacy assets will escalate to $145 million in fiscal year 2005, further challenging the Coast Guard to rethink plans and schedules for maintaining or replacing legacy assets. Revisiting maintenance, upgrade, and replacement decisions for legacy assets may disrupt the Deepwater contractor’s plans and schedules and, therefore, could greatly increase future program costs.8

---

Industrial Base. Accelerating and expanding procurement of NSCs and OPCs is an option for bolstering the industrial base that builds surface combatants for the Navy.9

Legislative Activity in 2004

Coast Guard and Maritime Transportation Act of 2004 (H.R. 2443/P.L. 108-293). The conference report (H.Rept. 108-617 of July 20, 2004) on H.R. 2443 (P.L. 108-293 of August 9, 2004), which was previously known as the Coast Guard authorization bill, authorizes $1.1 billion for the Deepwater program (Section 101); permits the Coast Guard to consult with the Office of Naval Research and other federal agencies on innovative construction alternatives for the program (Section 222), and requires a report on prime contractor performance and Coast Guard management of the Deepwater program (Section 621). (See pages 3-4, 14, 36-37, 65-66, 75, and 92 of the conference report.)


That the Secretary of Homeland Security shall submit to the Congress, in conjunction with the President’s fiscal year 2006 budget, a new Deepwater baseline that identifies revised acquisition timelines for each asset contained in the Deepwater program; a timeline and detailed justification for each new asset that is determined to be necessary to fulfill homeland and national security functions or multi-agency procurements as identified by the Joint Requirements Council; a detailed description of the revised mission requirements and their corresponding impact on the Deepwater program’s acquisition timeline; and funding levels for each asset, whether new or continuing: (Page 10; see also page 58.)

The report directs the Coast Guard to report to the appropriations committees within 30 days of enactment on its plans for maintaining its legacy assets, and to submit quarterly reports to the committees on this plan beginning in FY2006 (page 58). The report also directs DHS, in conjunction with the Coast Guard, to provide an analysis of options concerning the Coast Guard’s existing force of deepwater-capable patrol boats (pages 59-60).

9 For additional discussion of this issue, see CRS Report RS21059, Navy DD(X) and CG(X) Programs: Background and Issues for Congress, by Ronald O’Rourke and CRS Report RL32109, Navy DD(X), CG(X), and LCS Ship Acquisition Programs: Oversight Issues and Options for Congress, by Ronald O’Rourke.