

INDEPENDENT ASSESSMENT

*of the*

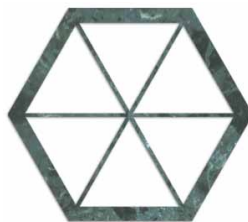
UNITED STATES COAST GUARD  
“Integrated Deepwater System”  
A C Q U I S I T I O N

— I S S U E   B R I E F —

JULY 14, 2001

*by*

ACQUISITION SOLUTIONS, INC.



## **CONTENTS**

INTRODUCTION .....	3
UNDERSTANDING THE INTEGRATED DEEPWATER SYSTEM PROGRAM .....	5
Goals and Objectives .....	5
Acquisition Strategy .....	7
Status of the Acquisition .....	8
ACQUISITION SOLUTIONS’ ASSESSMENT .....	9
FINDING: The Coast Guard has done an exceptional job linking its mission requirements and performance objectives. ....	9
FINDING: Using a two-phased approach should provide superior solutions. ....	10
FINDING: The Coast Guard has taken significant steps to help mitigate risk. ....	10
FINDING: The approach to performance-based service contracting can be improved. ....	12
FINDING: The Integrated Deepwater System acquisition conforms to many elements of capital asset acquisition. ....	13
ACQUISITION SOLUTIONS’ RECOMMENDATIONS TO STRENGTHEN THE ACQUISITION AND MITIGATE RISK .....	14
RECOMMENDATION: Make the Request for Proposals more performance-based. ....	15
RECOMMENDATION: Improve and integrate incentive provisions .....	16
RECOMMENDATION: Improve the contract performance management strategy .....	17
RECOMMENDATION: Work with OMB and appropriators to mitigate and resolve funding issues .....	19
ACQUISITION SOLUTIONS’ BOTTOM LINE .....	21

INDEPENDENT ASSESSMENT of the  
UNITED STATES COAST GUARD  
**“Integrated Deepwater System” Acquisition**  
ISSUE BRIEF  
by ACQUISITION SOLUTIONS

## INTRODUCTION

The United States Coast Guard tasked Acquisition Solutions<sup>1</sup> to perform an independent assessment of the “Integrated Deepwater System” (IDS) acquisition as follows:

*... to conduct an independent review of the Deepwater Phase 2 RFP [Request for Proposals] that identifies contractual risks related to the program and makes recommendations to strengthen the procurement and to mitigate the identified risks.*

In performing this task, the Acquisition Solutions team reviewed (within the required ten working day window) program documents (including the RFP, acquisition plan, capital asset plan and justification (300B) and other documents), the recommendations of the formerly convened expert panel, General Accounting Office and Department of Transportation (DOT) Office of the Inspector General reports, and Congressional testimony.

We also reviewed information in Office of Management and Budget (OMB) Circular A-11 (especially Part 3 on planning, budgeting, and acquisition of capital assets); OMB’s Capital Programming Guide; guidance in the President’s “Blueprint for New Beginnings: A Responsible Budget for America’s Priorities;” and information in the FY 2001 budget on performance-based budgeting.

In addition, we interviewed the following:

- ▶ Integrated Deepwater System (IDS) program staff
- ▶ DOT and OMB budget staff
- ▶ Office of Federal Procurement Policy (OFPP) staff
- ▶ Selected members of the formerly convened expert panel
- ▶ Department of the Navy’s senior contracting official on commercial best practices in shipbuilding
- ▶ Department of the Air Force’s Senior Contracting Official on award term contracting

---

<sup>1</sup> Acquisition Solutions, Inc., is a firm whose core business is assisting federal agencies to identify and implement acquisition reform and successful practices.

Finally, we interviewed and tested our preliminary recommendations with the three contractor teams currently working on phase one of the Integrated Deepwater System acquisition.

During performance of this review, Acquisition Solutions placed special emphasis on analyzing the Coast Guard’s application of both risk reduction and sound acquisition planning. With regard to risk, we focused on the three key principles for managing risk as set forth in OMB’s Capital Programming Guide:

- Avoid or limit the amount of development work
- Make effective use of competition and financial incentives
- Establish a performance-based acquisition management system

In briefings that took place on June 19 and 25, Acquisition Solutions reported its findings and recommendations to an interagency team with top-ranking officials from the United States Coast Guard, Department of Transportation, Office of Management and Budget and the Office of Federal Procurement Policy. The members are listed below.

■ United States Coast Guard

- ▶ Vice Commandant Vice Admiral Thomas H. Collins
- ▶ Vice Admiral Timothy W. Josiah, Chief of Staff
- ▶ Rear Admiral Patrick M. Stillman, Program Executive Officer, Integrated Deepwater System
- ▶ Rear Admiral David R. Nicholson, Director of Resources Directorate
- ▶ Gregory L. Giddens, Deputy Program Executive Officer, Integrated Deepwater System
- ▶ Kenneth D. Gorter, Chief, Major Systems Acquisition Division III

■ Department of Transportation

- ▶ Michael P. Jackson, Deputy Secretary
- ▶ Donna R. McLean, Assistant Secretary for Budget and Programs/CFO
- ▶ Phyllis Scheinberg, Deputy Assistant Secretary for Budget and Programs
- ▶ David Litman, Senior Procurement Executive
- ▶ David Lippold, Program Analyst, Office of Budget and Program Performance
- ▶ Steve Litty, Program Analyst, Office of Budget and Program Performance

- Office of Management and Budget

- ▶ Dr. Lloyd Blanchard, Program Associate Director for General Government Programs
- ▶ Kenneth Schwartz, Deputy Associate Director, Transportation, Commerce, Justice, and Services Division
- ▶ Steve Mertens, Chief, Transportation Branch
- ▶ Michael Cassidy, Program Examiner, Transportation Branch
- ▶ Kay Ely, Associate Administrator for Acquisition Implementation Branch, Office of Federal Procurement Policy
- ▶ Yvette Garner, Procurement Policy Analyst, Office of Federal Procurement Policy.

The results of the assessment are summarized below.

## **UNDERSTANDING THE INTEGRATED DEEPWATER SYSTEM PROGRAM**

Prior to any discussion regarding risks and risk mitigation efforts for the Integrated Deepwater System program, it is essential that all parties share an understanding of the approach that the Coast Guard is taking to satisfy its deepwater requirements. To that end, this section addresses the Integrated Deepwater System goals and objectives, acquisition strategy, and the status of the acquisition.

### **Goals and Objectives**

The Integrated Deepwater System is the Coast Guard's strategy to meet its mission needs through an “integrated system of surface, air, command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) and logistics assets” that will *maximize operational effectiveness while minimizing total ownership costs*.

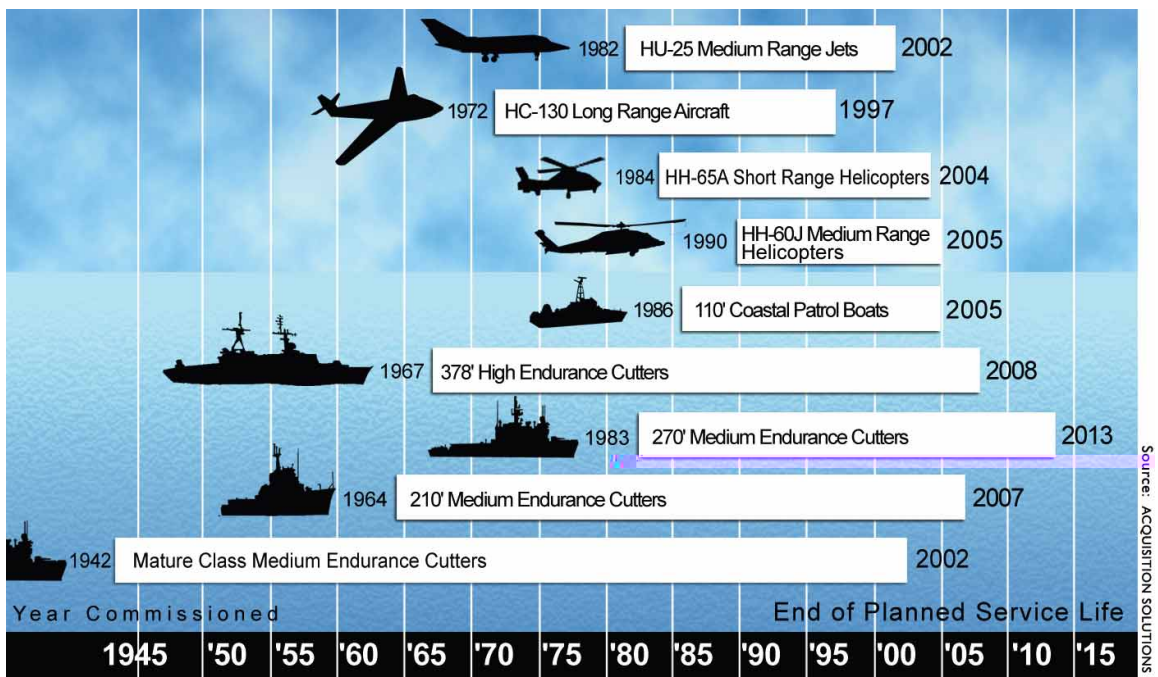
This “System of Systems” will support missions and operations 50 nautical miles or more out to sea, often involving deployments of several months in the deepwater regions around the world. The Coast Guard performs fourteen statutorily mandated missions in four main categories:

- Maritime Law Enforcement

- ▶ Drug Interdiction
- ▶ Alien Migrant Interdiction
- ▶ Fisheries Enforcement
- ▶ General Law Enforcement

- Maritime Safety
  - ▶ Search and Rescue
  - ▶ International Ice Patrol
- National Defense
  - ▶ General Defense Operations
  - ▶ Maritime Interception Operations
  - ▶ Deployed Port Operations, Security and Defense
  - ▶ Environmental Defense Operations
  - ▶ Peacetime Military Engagement
- Marine Environmental Protection
  - ▶ Marine Pollution Enforcement and Response
  - ▶ Lightering Zone Enforcement
  - ▶ Foreign Vessel Inspection

Driving the Integrated Deepwater System requirement is the near-term “block obsolescence” of the vast majority of Coast Guard capital assets (as noted in the Coast Guard’s program documents). Coast Guard deepwater cutters are the 37th oldest of 39 similar fleets worldwide. Eighty-six percent (260 of 301) of deepwater surface and air assets have reached or will reach their end of planned service life within five years.



## Acquisition Strategy

Regarding the Coast Guard’s acquisition strategy and risk mitigation efforts, it is important that all parties share the understanding that the Coast Guard has not crafted the Integrated Deepwater System acquisition simply as a capital asset replacement program. The Coast Guard has taken the approach of describing its mission needs and seeking from private industry (in two phases) an integrated solution that will, in essence, re-engineer its mission processes over a period of up to thirty years. As stated in the Integrated Deepwater System Mission Need Statement:

*The goal of this effort is not to replace ships, aircraft, and sensors with more ships, aircraft, and sensors, but to provide the Coast Guard with the functional capabilities required to achieve mission success safely. Although some traditional assets will undoubtedly result from Concept Exploration, the system mix could also include some very nontraditional tools. It is critical that the Deepwater system be viewed in its totality in order to develop a unified, strategic overview, ensure asset comparability and interoperability, and provide the most affordable solution for the taxpayer.*

In focusing on the mission results rather than the method or the assets, the Coast Guard expanded the range of potential solutions and opened the door to new methods of performing its missions. A good example is tracking icebergs, now performed by manned airplanes that fly over the North Atlantic every two days to visually spot and report iceberg locations to mariners.

In a typical capital asset acquisition, the functional line office would justify a new airplane. The line office could even take the approach of saying that the airplane must have a range of x miles and could (legitimately) call the acquisition performance-based. However, the Coast Guard has taken the description of its need one critical (and very rare) step further ... by saying the requirement is to track icebergs. If this can be done more cost effectively by satellites and sensor and imaging technology, competing contractors can propose this, or other solutions. The requirement is to locate and track icebergs. It is not acquiring a better, faster, more capable manned aircraft to locate and track icebergs.

The result is that the Coast Guard has not limited the potential solution set by the way it has described the requirement, and the competing contractors can build an innovative solution using the most effective types and mix of resources. In its most basic terms, the Coast Guard is seeking to competitively acquire a business process re-engineering effort to improve operational effectiveness and minimize total ownership cost that could potentially span 30 years.



As part of its overall strategy, the Coast Guard has established the guiding principles for acquisition of the Integrated Deepwater System program as follows:

- A performance-based systems engineering approach will be applied to a system of systems with which the Coast Guard will perform its Deepwater missions.
- Commercially available and non-developmental items will be used as the building blocks, components and assets of the IDS. Asset and system readiness will be used as indicators of future operational effectiveness.
- Success will be measured by Deepwater-wide mission operational effectiveness and total ownership cost, not individual asset performance.

These guiding principles relate well to the OMB Capital Programming Guide’s key principles for managing risk, especially in terms of avoiding or limiting the amount of development work and using a performance-based acquisition management system.

## **Status of the Acquisition**

Using a two-phased acquisition approach, three industry teams (awarded conceptual design contracts in 1998) developed their Integrated Deepwater System concepts and solutions as functional designs. During phase one, contractors fully developed their solutions and operational concepts, identified asset performance and cost information, and prepared to propose a phased plan for the acquisition and deployment schedule. Concurrent with the conclusion of the analytical work of this independent assessment and following incorporation of the recommended changes, the Coast Guard released the phase two Request for Proposals in early July 2001 to select, on a best value basis, a single contractor to implement the winning solution. The winning proposal will form the contractual baseline for both improved operational effectiveness and reduced total ownership costs.

Phase two contract award is scheduled for April 2002. The successful contractor will be issued task orders to build and provide the Integrated Deepwater System. The contract will be structured on an “award term” basis. Under the award term provisions, based on the contractor’s performance over the initial five-year contract period, the Coast Guard can authorize additional two to five-year contract periods (up to 30 years total). Successive periods will be characterized by less system development and demonstration work and increased emphasis on mission improvement and reduced ownership costs through production and deployment. The industry partner (prime contractor) will acquire the assets that serve as part of the “System of Systems” under “their proposed modular and evolutionary contract structure.” This approach reduces risk because it breaks tasks into manageable parts and enables the parties to take advantage of “learn as you go” during contract performance.



## ACQUISITION SOLUTIONS’ ASSESSMENT

Acquisition Solutions’ independent assessment of the Integrated Deepwater System acquisition follows:

### **FINDING: The Coast Guard has done an exceptional job linking its mission requirements and performance objectives.**

The Integrated Deepwater System acquisition strategy is built on the Coast Guard’s mission goals and objectives. This mission-based approach is consistent with—

- Statute, such as the Government Performance and Results Act of 1993 and the Federal Acquisition Streamlining Act of 1994.
- Presidential direction in the “Blueprint for New Beginnings: A Responsible Budget for America’s Priorities.”
- Policy, most recently OMB memorandum M-01-15, Performance Goals and Management Initiatives for the FY 2002 Budget.
- Regulation, as set forth in Federal Acquisition Regulation Subpart 37.6, “Performance-Based Contracting.”

As indicated previously, rather than focusing on replacing specific assets, such as ships or aircraft, or on the assets that support a specific mission, the Coast Guard has structured the acquisition to focus on the capability to perform all of its fourteen federally mandated missions in deepwater regions. This aligns with the guidance in OMB’s Capital Programming Guide:

*Functional requirements should not be defined in equipment or software terms, but in terms of the mission, purpose, capability, agency components involved, schedule and cost objectives, and operating constraints. Mission needs are independent of a particular capital asset or technological solution. Such an approach allows the agency the flexibility to evaluate a variety of solutions with an open mind. The key is not to limit potential solutions by too narrowly defining requirements.*

With the focus on missions, the Coast Guard described its needs in terms of the fundamental capabilities the agency needs to carry out all fourteen missions and identified 66 measures of effectiveness. None of the measures of effectiveness relate to capital assets (e.g., aircraft, ships, or computers). Some are used to measure against Government Performance and Results Act goals. All are used to measure program goals that span all deepwater mission areas. These measures address, for example, percentage of lives saved, response time to distress calls, drug

intercepts, and other mission-based measures. This approach conforms to GAO’s guidance to agencies to align their activities, core processes, and resources to support mission-related outcomes.<sup>2</sup>

The Coast Guard has done an exceptional job in linking its mission and performance objectives (based on the Government Performance and Results Act) to the requirements expressed in the phase two RFP and the solutions that industry will propose. The measures of effectiveness will form the basis for measurement of contractor performance.

### **FINDING: Using a two-phased approach should provide superior solutions.**

Over the last three years, phase one of the Integrated Deepwater System acquisition has seen three competitively selected, highly qualified contractor teams work to understand the Coast Guard’s mission needs, to survey the state of the marketplace and the range of potential solutions, and to craft unique and innovative solutions to meet those needs. This acquisition best practice is often referred to as “due diligence.” Its effect can be simply summarized: The more contractors know about agency or program culture, constraints, and requirements, the more likely that they will be able to propose innovative, yet workable solutions. In this case, for the last three years, three highly qualified teams have been “fine tuning” their solutions to improve operational effectiveness and minimize total ownership costs.

As a result of this time spent in planning and research, we anticipate that all proposals should offer the Coast Guard effective technical solutions to mission requirements, mindful of restrictions of cost and not-to-exceed out-year pricing controls. There is another important factor regarding the solutions: The Integrated Deepwater System strategy and approach emphasizes proven, commercial off-the-shelf technology, thus avoiding the high risk associated with design-to-spec or “bleeding edge” technology. We anticipate that Coast Guard will award a contract that encompasses new approaches to meeting their mission needs, improving operational effectiveness while minimizing total ownership costs.

### **FINDING: The Coast Guard has taken significant steps to help mitigate risk.**

Acquisition Solutions found that the Coast Guard had implemented a significant risk mitigation strategy. For example, at the most fundamental level, the strategy is not capital asset replacement, but fulfillment of mission needs that, in performance, will be a vast business process reengineering effort with this overarching goal:

---

<sup>2</sup> GAO, *Executive Guide: Effectively Implementing the Government Performance and Results Act*, GAO/ GGD-96-119, as reported in OMB’s *Capital Programming Guide*, page 3.

maximize operational effectiveness and reduce total ownership cost. The Integrated Deepwater System acquisition plan indicates:

*Rather than focusing on specific assets, like a class of cutter or aircraft, the Project developed a performance specification for an integrated system of assets that is based upon the fundamental capabilities needed to perform the entire portfolio of deepwater missions worldwide.*

This approach conforms with the principles for risk management in OMB’s Capital Programming Guide. For example, Step III.2.2. (which addresses using competition and performance incentives) provides explicitly that requirements should be written, not as detailed design specifications, but rather as broad-based statements of objectives in a manner that allows sources to propose various alternative solutions to meeting the agency’s needs.

Acquisition Solutions found that the Coast Guard’s acquisition approach conformed with other risk mitigation techniques suggested by the Capital Programming Guide and OMB Circular A-11, Part 3, governing capital asset acquisition. These include—

- ▶ Avoiding or limiting the amount of development work
- ▶ Making effective use of competition
- ▶ Modularizing the fielding of capital assets
- ▶ Using phased, successive segments (such as the two-phase approach and successive award terms)
- ▶ Funding phase one (extending planning and tapping the private sector for research, planning, and innovation)
- ▶ Emphasizing benefits and costs in line with IDS objectives to maximize operational effectiveness and minimize total ownership cost
- ▶ Using earned value and similar performance management systems

With regard to human management, another essential risk mitigation technique, Acquisition Solutions recognizes the Coast Guard’s highly qualified Integrated Deepwater System program office and notes the high degree of executive-level support for this mission-critical acquisition.

The Coast Guard’s use of “not to exceed” out-year pricing will help focus both the contractor and the Government on managing to program price/cost limitations. While use of not-to-exceed pricing (combined with determinations of fair and reasonable pricing, as discussed in the ensuing recommendations) will provide cost discipline, we are concerned that the contractual limitations could ultimately restrict the Coast Guard’s ability to manage the program. For example, we anticipate that budget realities can and will move requirements from one period into another. For example, if budget reductions in year four are replaced by increased funding in

year six, Coast Guard could find that adding year-four requirements to year six could impact the not-to-exceed ceiling in the out years. We want to ensure that the Coast Guard can adjust the not-to-exceed limits based on actual program restructuring.

Additionally, the Coast Guard is in the process of finalizing development of a sophisticated post-award, baseline-tracking program called Maritime Operational Simulation. This program will provide measurement of the operational effectiveness of both the Coast Guard’s legacy baseline and the contractor’s solution. The Coast Guard plans to continually refine this tool to ensure accurate performance measurement.

Finally, the Coast Guard has provided “exit ramps” should the contractor’s performance falter. While the Integrated Deepwater System acquisition has the potential for a 30-year contract life, contract terms will be awarded (if merited) in increments based on performance in a relatively new and innovative type of a contract called “award term.” Annually, the contractor will be appraised if their current level of performance would earn them a two, three, four, or five-year extension. This interim notification will provide feedback on award term performance prior to formal notification of the contract extension.

### **FINDING: The approach to performance-based service contracting can be improved.**

Acquisition Solutions viewed the RFP as taking more of a weapons systems approach than a performance-based approach. While the Coast Guard did an admirable job in linking the requirement to the mission, the proposed RFP did not carry that concept through. It presented, in considerable detail, system integration statements of work with the associated reports and data item deliverables. As such, it failed to adequately link performance and incentives. For example, the only performance aspect of the contract was the award term provision. The RFP noted that incentives would be developed after award. In a true performance-based solicitation, the contract is structured around the performance measures with strong linkage between performance and incentives. As defined by the Federal Acquisition Regulation:

*“Performance-based contracting” means structuring all aspects of an acquisition around the purpose of the work to be performed with the contract requirements set forth in clear, specific, and objective terms with measurable outcomes as opposed to either the manner by which the work is to be performed or broad and imprecise statements of work.*

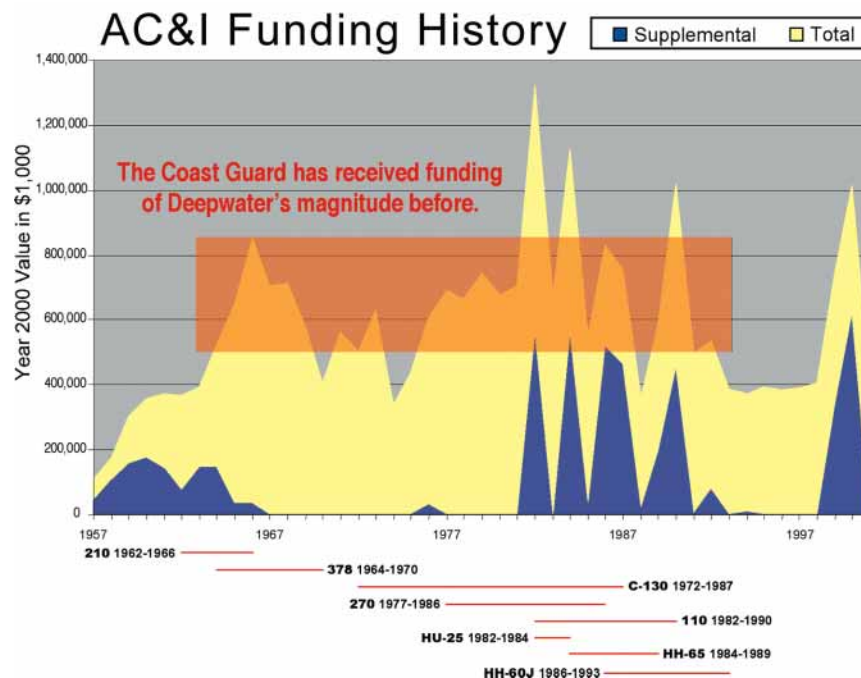
While the Coast Guard performed the most difficult task associated with implementing a performance-based contract, namely the linkage of requirements to mission performance, they failed to continue that concept into the RFP.

## **FINDING: The Integrated Deepwater System acquisition conforms to many elements of capital asset acquisition.**

The Integrated Deepwater System project conforms to many of the central elements of OMB Circular A-11, Part 3, governing capital asset acquisition. For example, especially with regard to planning, the Coast Guard has done an exceptional job “grounding” the Integrated Deepwater System acquisition in mission-based performance.

In addition, the Coast Guard had examined risk and taken steps to mitigate it, as described above. In the sections that follow, Acquisition Solutions recommends additional measures to strengthen this framework.

Further, it is our belief that the Coast Guard’s approach to Integrated Deepwater System funding conforms to OMB’s principles of financing in at least two aspects. One is moving from incremental funding to the principle of full funding, which we interpret to mean (at least in part) basing investment and appropriations decisions on some measure of their full cost. (It is worth noting, however, that this shift in funding approach may cause the fully funded mission-based requirement to appear less attractive than the “seemingly” smaller programs that incremental funding suggests.) Another principle involves addressing concerns about the “lumpiness” or “spikes” in a capital account (illustrated below in the Coast Guard’s acquisition, construction, and improvements (AC&I) funding history) that may create a bias against the acquisition of justified assets. In this case, the Integrated Deepwater System project addresses this concern by having an acquisition plan that identifies the associated target funding levels over an extended period of time and contains the ability to mitigate the impact of funding fluctuations.



Source: Integrated Deepwater System Acquisition Plan

## **ACQUISITION SOLUTIONS’ RECOMMENDATIONS TO STRENGTHEN THE ACQUISITION AND MITIGATE RISK**

Prior to addressing the risks associated with the Integrated Deepwater System effort, there are three important facts to face.

- First, risk is part of every acquisition. There will always be significant cost, schedule, and performance risks inherent in projects of this size, scope, and complexity.
- Second, outsourcing a difficult task does not make it any easier: The Coast Guard still must identify existing, potential, and emerging risks and develop measures to mitigate and manage the risks.
- Third, this is a mission-essential, unavoidable requirement and major investment is inevitable: There is a bill that must be paid.

It is well understood that a major investment is inevitable. The question is, how best to acquire the resources with a minimum of risk and maximum of effectiveness and efficiency?

In our assessment, the primary challenges that the Coast Guard faces in the Integrated Deepwater System acquisition are:

- Long term, single-source contract
- Ability to accurately measure contractor performance
- Cultural ability of the Coast Guard to implement change
- Cost and budget process
- Need for adaptability

In responding to these risks, Acquisition Solutions recommends that the Coast Guard take additional steps in four primary areas:

- Make the Request for Proposals more performance-based
- Improve and integrate incentive provisions
- Improve the contract performance management strategy
- Work with OMB and appropriators to mitigate and resolve funding issues



## **RECOMMENDATION: Make the Request for Proposals more performance-based.**

As currently structured, the Request for Proposals does not contain a performance measurement plan or integrate the performance measures and metrics into a comprehensive incentive program. To resolve the lack of performance measures and metrics, Acquisition Solutions recommends requiring the offerors to identify in their proposals a performance measurement plan that is integrated around their proposed solution. Our recommendation differs from the traditional approach to drafting a performance-based acquisition, wherein the Government would be tasked to identify the performance measures and metrics. This is not the best approach in the case of the Integrated Deepwater System acquisition in that the solutions are not yet known. OMB acknowledges this in the Capital Programming Guide:

*If given the opportunity, industry can be helpful in proposing innovative solutions. Requirements in solicitations should be written not as detailed design specifications, but rather as broad based statements of objectives (or targets) for asset function and performance, including long term O&M costs, that allow sources to propose various alternative solutions to meeting the agency's needs. Additionally, making effective use of competition and financial incentives will help the agency obtain better cost, schedule, and performance goals at contract inception.*

While this is an excellent foundation, there is one further step that can be taken to enhance the performance foundation of the acquisition. Consider this: Although the existing RFP has a mission-based and performance-based foundation, it is unrealistic to anticipate that the Coast Guard can fully define how contractor performance will be measured ... because the Coast Guard does not know what the contractors' approaches and solutions are. There is a simple, and eminently logical approach: We recommend that the competing firms be required to propose their measures and metrics for performance measurement and tracking, *consistent with each firm's unique approach and solution*. That way, the Coast Guard can not only evaluate the solution, but also the quality of the metrics and where the metrics “set the bar” for performance.

Further, the quality of the metrics, including the linkage of what and how performance will be measured, provides a unique insight into how well the contractor understands the relationship between their solution and mission achievement. It will show not only who has the best solution, but also who can provide the best way to measure and track that solution's performance against the overarching program requirement of *maximizing operational effectiveness while minimizing life-cycle costs*. In this



manner, the performance baseline will be established in the contract and the contractor will be assessed against that baseline periodically throughout contract performance.

Because the successful contractor’s proposal will help set the baseline for performance, the Coast Guard will establish from the outset the essential “public-private partnership” that such a mission-essential acquisition demands. There are many, many benefits of this approach, but chief among them is that the Coast Guard would be soliciting (and would benefit from) the innovativeness, resourcefulness, and creativity of the private sector in solving problems ... all being proposed in a competitive environment.

### **RECOMMENDATION: Improve and integrate incentive provisions**

While the mission-based nature of the acquisition and use of an award term ap-

*money, than spending it.* If the incentives are right, and if the contractor and the agency share the same goals, risk is largely controlled and effective performance is almost the inevitable outcome. This approach will help ensure that the contractor is just as concerned — generated by self-interest in winning all available award fees and award terms — about every element of contract performance, whether maximizing operational efficiency overall, reducing subcontract costs, or ensuring the adequacy of post-award subcontractor competition and reasonableness of prices, as is the Coast Guard.

In many regards, improvement and integration of the incentive aspects of this contract represent the ultimate in risk reduction. Aligning the Coast Guard’s and contractor’s goals and objectives results in shared responsibility for contract success.

We anticipate that the performance-based and incentive-based structure of this contract will harness powerful pressures to meet performance and cost reduction goals, significantly reducing program risk. The incentive structure will encourage both the contractor and the Coast Guard to be vigilant about removing obstacles that may hinder the achievement of the overall program goals. For example, if a new technology allows equipment to be operated with fewer Coast Guard FTEs, and the Coast Guard fails to reduce related manning levels, the contract’s incentive arrangements should alert both the contractor senior management and the Coast Guard that efficiencies are not being achieved. The contract’s share-in-savings provisions which are linked to achieving operational effectiveness and reducing total ownership costs will help avoid this type of obstacle.

## **RECOMMENDATION: Improve the contract performance management strategy**

There are two predominant post-award issues, one that deals with pricing and the other with the Coast Guard’s overall approach to contract performance management. Regarding the former, when an agency establishes a long-term, single-award contract, there are inherent concerns about whether out-year task orders or delivery orders will be “fairly and reasonably” priced. Since the Federal Acquisition Regulation addresses this situation,<sup>3</sup> Acquisition Solutions recommends that the Coast Guard ensure that this topic is specifically addressed in a contract performance management plan. We note that other aspects of the Coast Guard’s strategy (as discussed above) mitigate the effect ... by the use of a not-to-exceed pricing strategy and by the incentive structure of the contract through which the contractor shares the Coast Guard’s goal of reducing total ownership costs.

---

<sup>3</sup> Federal Acquisition Regulation 16.505(b)(3) and 15.402, Pricing Policy.

With regard to overall approach to contract performance management, Acquisition Solutions recommends that the Coast Guard rely less on management by contract, and more on management by relationship. At its most fundamental level, contracting is much like a marriage. It takes work by both parties throughout the life of the relationship to make it successful.

While the long-term nature of the contract is considered a risk, it is also an opportunity. Consider, for example, the public-private partnership that was the Apollo Program. Other, more recent examples exist, but they all share the same common characteristics:

- ▶ Trust and open communication
- ▶ Strong leadership on both sides
- ▶ Ongoing, honest self-assessment
- ▶ Ongoing interaction
- ▶ Creating and maintaining mutual benefit or value throughout the relationship

These “enablers” simply allow both parties to continually focus on ways to improve mission requirements while reducing total operational cost.

Acquisition Solutions suggests several means to shift the focus from management by contract to management by relationship. First, encourage the winning contractor to identify ways to reduce Government-directed management overhead requirements and other “cost drivers.” An example is reducing the requirement for earned value reporting on every task and delivery order to only those critical few deliverables (such as ships) where earned value management is appropriate. While the entire program will be managed under an umbrella performance management system, not all tasks need to be managed using earned value reporting. For tasks of lesser risk, complexity, and expense, a less costly approach to measuring cost, schedule, and performance of Deepwater program elements can be used. This type of action will set the stage for the contractor and Government to work together to identify more effective and efficient ways to measure and manage the program. Second, institutionalize this approach in a Customer Process Improvement Working Group that includes contractor, program, and contracting representatives. Third, at a higher level, establish a “Board of Directors,” comprised of top officials from the government and its winning partner (including the CEOs of the major contractors on the winning team), with a formal charter that requires continual open communication, self-assessment, and ongoing interaction. Finally, establish a relationship with counterpart officials at the IRS and Customs Bureau, both of which are undergoing

major modernization efforts using a single “prime” contractor. The purpose of such interagency relationships is to share best practices and lessons learned.

And, “just in case,” Acquisition Solutions suggests that the contracting equivalent of a “prenuptial agreement” be included when the contract is awarded. The agreement would provide for the transfer of the major team members (subcontractor) contractual relationship, to the Coast Guard (or to a replacement systems integrator). For example, the subcontractor assembling a new Coast Guard cutter would continue to operate while competition for a new systems integrator is conducted.

*(GPRA). ... To effectively evaluate program performance, agencies will need data on the full, annual costs of programs, including capital usage. Therefore, GPRA’s requirements may drive changes in the budget account structure and other elements of the budget process ...”<sup>4</sup>*

The Administration’s interest in performance-based budgeting and Coast Guard’s interest in mission-related, performance-based acquisition appear to be a good match. As we reported in our Acquisition Directions™ Advisory, “The FY 2001 Performance-Based Budget,” in February 2000, one of the priority management objectives was to use performance information to improve program management and budget decision-making.

*“The challenge agencies will be facing this year is better integration of performance information into budget and resource allocations. This will enable agencies to know “the cost of achieving goals.” As acknowledged by the Administration—*

*The task is not simple. The agencies must define their specific goals, determine the proper level of resources, assess which programs are working, and fix those that are not.*

*Over the next year, OMB plans to work with agencies to better integrate planning and budgeting and to systematically associate costs with programs. We expect that this process will hasten the transformation of the budget into a performance-based budget.”*

This clearly brings new challenges, illustrated during this independent assessment. When entering into a solutions-based contract such as the Integrated Deepwater System, the agency does not yet know what resources will be acquired ... or what the mix of resources will be. This magnifies the inherent “disconnect” between budget requirements and procurement realities. Some things are just not known early enough in the acquisition process to become “information bites” for the budget process.

There is another acquisition-related consideration. It is our experience that as agencies move toward use of performance-based services, they will not necessarily gain title to capital assets. Hence, such buys are not viewed as capital asset acquisitions, and buyers assume that capital asset policy does not apply. Yet such

---

<sup>4</sup> “Budget Issues: Budgeting for Federal Capital,” General Accounting Office, GAO/AIMD-97-5, November 1996.

mission-critical acquisitions could benefit from the risk reduction and management techniques that apply to capital asset acquisitions. Policy clarification may be needed in this and related areas discussed in this independent assessment.

While it is clear that a “system of systems,” performance-based approach requires a different funding model from traditional capital asset requests, we believe the Integrated Deepwater System program is no less subject to the realities of the budget process than any other program. Funds can and will be added and deleted from the program over the course of its development and implementation.

However, in implementing a performance-based acquisition, the Integrated Deepwater System program office will be in a better position to document the impact of funding on performance. They will also be better able to mitigate the program impact of budgetary changes by reprioritizing expenditures within their integrated systems. For example, in facing a budget cut, the Coast Guard and Deepwater contractor could identify and increase funding in a particular area to bring that performance in earlier, countering the budget-related delay of another function. This provides significantly more flexibility than the traditional capital asset program where the program office has to make do with fewer capital assets (e.g., one ship and not the three requested in the budget).

In summary, it is clear that OMB, the Department of Transportation, and Coast Guard all share an important objective in documenting and justifying budget requests ... namely, maximizing budget decisions to obtain the biggest “bang for the buck.” The more effectively that Coast Guard can document the impact of funding decisions on mission performance, the better all parties will be at making informed budget decisions.

## **ACQUISITION SOLUTIONS’ BOTTOM LINE**

It is important to understand that Acquisition Solutions views the Integrated Deepwater System acquisition as a potentially 30-year business process re-engineering effort, not simply a capital asset replacement program. The contrast is in the focus — less on the resources and their deployment, and more on mission-based performance — as is well illustrated by the iceberg example.<sup>5</sup> In further explanation, the objective is contract performance that is focused on finding more effective ways to improve operations, use technology to advance mission effectiveness, and reduce total operational cost. In meeting these objectives, we anticipate that the prime contract could pay for itself many times over.

---

<sup>5</sup> See page 7.

Acquisition Solutions strongly supports this approach as being in alignment with existing laws, regulations, and policies. This project has been well conceived, developed, and managed. We laud its focus on mission and the freedom it has given the competing contractor teams to innovate.

We have made recommendations to strengthen the performance base of the acquisition, to mitigate risk, and establish a “partnership in performance,” rather than a “manage by contract, bid and bash” approach. The focus of our recommendations has been to closely align Coast Guard and contractor objectives. In our view, this alignment is the ultimate in risk reduction strategies: both the government and the contractor share the same goals and objectives.

After comprehensive review of this acquisition, we believe the Coast Guard did an exceptional job defining Integrated Deepwater System requirements in terms of its Government Performance and Results Act (GPRA) mission objectives. The requirements are stated not in terms of capital asset performance, but rather as mission measures of effectiveness. This represents the “hard part” of any performance-based acquisition and can act as a model for other agencies.

Adopting the recommendation to require offerors to identify performance metrics and measures that link their unique solution to the Coast Guard’s GPRA-derived measures of effectiveness will provide the capability to track performance against the baseline. Additionally, also at our recommendation, the Coast Guard has incorporated a robust incentive program, inclusive of award term, award fee, value engineering change proposals (VECP), and share-in-savings arrangements. By integrating the performance metrics and measures with the incentive program and linking them to the baseline performance capability requirements, the Coast Guard will have a comprehensive system in place to assess progress toward, and to deliver on, the overarching performance requirement of Integrated Deepwater System program: improved operational effectiveness and reduced total cost of ownership.

It has been our experience that conducting the source selection and getting on contract is the easy part. Post-award performance and meeting mission requirements is by far the more difficult task. Acquisition Solutions firmly believes that the tools are now in place for success in the Integrated Deepwater System Program. It is up to the Coast Guard and the winning contractor to deliver on the promise.

During the course of this assessment, the Coast Guard requested that Acquisition Solutions review their proposed RFP changes to determine if the revisions captured both the letter and intent of our recommendations. We were pleased to see that, in all cases, our recommendations were clearly and comprehensively incorporated into the RFP document. In fact, our observation is that the Coast Guard not only



implemented the recommendations, but also viewed them as a very positive step and “adopted” them as their own. The revised RFP, containing our recommended program improvements, was released as this report was being prepared.

Acquisition Solutions is pleased that we were asked to provide an independent review of this important program. We believe our observations and recommendations have strengthened the procurement and provided a performance and incentive structure that will go a long way to mitigating program risks. We look forward to the Integrated Deepwater System being a model of performance-based success.