Delivering a New Asset to the Coast Guard

Innovation Expo, November 2009
The Steps to Acquire an Asset

1. Mission Need (Operators)
2. Cost Analysis (Acquisition/Technical Authority/Sponsor)
3. Project Approval (Vice Commandant/DHS)
4. Requirements (Sponsor)
5. Engineering Analysis (Technical Authority)
6. Project Management (Acquisition/Technical Authority/Sponsor)
7. Delivery (Acquisition Technical Authority Operator)

Feedback arrow pointing up to the top of the diagram.
The Steps to Acquire an Asset

Mission Need (Operators)

Requirements (Sponsor)

Project Management (Acquisition, Technical Authority, Operator)

Delivery (Acquisition, Technical Authority, Operator)
The Mission Need

Rather than replacing boats, or even fleets, on a one for one basis, the capabilities, structure and citing of the required shore-based response boat force has been identified through data analysis and coordinated with operational commanders.
11 MISSIONS, 1 PLAN, 1 BUDGET
DCO MANAGEMENT & BUDGET PROCESS

Strategy → Budget → Mission Execution

YEARLY TIMELINE

Spring
Refresh

Summer

Fall
Resource

Winter

Implement

Spring
MSAM Phases

MAJOR SYSTEMS ACQUISITION MANUAL (MSAM) PHASES

ARP - Acquisition Review Process
SELC - Systems Engineering Life Cycle
CDR - Critical Design Review
Sponsor Representative’s Function

• Responsible for requirements generation and management

• Prepares and/or supports the following products:
  - Mission Analysis Reports
  - Mission Needs Statement
  - Concept of Operations
  - Operational Requirements Document

• Operational Test and Evaluation (OT&E)

• Develop Tactics Policy

Response Boat – Medium (RB-M) Project Example

The RB-M project has focused on incorporating the input from the operational commanders into developing a more capable platform. The requirements developed from this input has greatly influenced the design.
The Steps to Acquire an Asset

- Requirement
- Engineering Analysis (Technical Authority)
- Cost Analysis (Acquisition/Technical Authority/Sponsor)
- Project Management
- Delivery (Acquisition/Technical Authority/Operated)
Technical Authority Functions

- Examine new technology
- Asset Project Office (APO)
- CG-LIMS – Logistics Management Systems
- Collect maintainer input
- Life-cycle Planning (Integrated Logistics Support Plan)
- Market Research
- Engineering Analysis (Feasibility)
- Engineering Change Proposals (ECP)

Response Boat – Medium (RB-M) Project Example

Technological and design features will improve search object tracking, water recovery efforts, crew comfort, and maneuvering/intercept capabilities for defense operations. With the latest developments in integrated navigation and radiotelephony, command and control will be greatly enhanced, as will crew safety.
Market Research

Who is responsible for Market Research and why?

- Conducted by everyone involved in acquisition
- Identify opportunities for use of commercial products or services to meet defense needs
- Access to latest technology -- state-of-the-market technology integrated into systems and assets
- Reduce costs
- Reduce acquisition time
- Write specifications and SOWs to allow companies to offer commercial items and services
The Steps to Acquire an Asset
Develop an Acquisition Strategy

- How will you develop the item (COTS, NDI, New Design Development)?
- How will you contract for the item (Cost vs Fixed Price, Fee Structure)?
- How will you test the item (Contractor approved, Government, or develop new test procedures)?
- How will you produce the item (is it viable to have multiple vendors and/or solutions)?
- How will you field the item (Which unit, how many items, when needed)?

Response Boat – Medium (RB-M) Project Example

The RB-M is designed to use existing facilities and minimize the learning curve to ensure a quick and smooth transition. Life cycle support is part of the design - not just parts support, but all logistics, including training, maintenance, repair, and future upgrades.
Commercial off-the-shelf (COTS) Adapt/Ruggedize Integrate COTS or NDI Subsystem Development with Commercial or NDI Components New Design Development

Development Cost

Development Time

Cost/Schedule/Performance Tradeoffs
Determining the Type of Specifications for a Contract

**Detailed Specifications**
- Contains design solutions
- How requirements are to be achieved
- How an item is to be fabricated
- How an item is to be constructed

**Performance Specifications**
- Defines function of item
- Environment in which it must operate
- Interface/Interchangeability requirements
- Criteria for verifying performance
Contract Type Balances Risk

- Firm Fixed Price
- Fixed Price Incentive (firm target)
- Cost-Plus-Incentive Fee
- Cost Plus Fixed Fee
- Time and Materials/Labor Hour Contract
- Contractor Risk
- Government Risk
Contract Award- What’s Next?

• Managing a Protest (Don’t be surprised)

• Good Contract Administration is critical to Program Success!
Project Approval

- DHS approval
- Congressional authorization
- Resources identified and budget determined by Congress
- USCG (through DHS) allocates the resources

Response Boat – Medium (RB-M) Project Example

January 2000 - Shore-based Response Boat System Capability Replacement Major Acquisition Project Charter is authorized.
Project Management

- Project Management - Proactively paying attention to cost, schedule, and performance
- Understanding and preparing for the major decision points using the MSAM
- DHS is the Milestone Decision Authority for major acquisitions
- Involving the Sponsor and Technical Authorities every step of the way
- Using third party assessments to improve information for decision makers
- Leveraging partnerships within DHS and DoD
- Credentialed acquisition professionals

Response Boat – Medium (RB-M) Project Example

*The RB-M Acquisition Project is a two-phased procurement to quickly acquire and field an operationally effective and suitable craft to meet Coast Guard needs. The acquisition strategy takes advantage of the growing technology and maturing global design base for marine craft, and to select an effective and suitable boat.*
The Steps to Acquire an Asset

[Diagram with steps: Requirement, Project Management, Acquisition, Technical Authority, Operator, Delivery]
The key strengths of the successful RB-M project are its solid foundation of validated requirements, its use of established best practices for engineering and manufacturing, and its close relationship with the technical authority and the sponsor.

- Training
- Sustainment Methodology in Place (Logistics)
- Warranty/ Contract support in place
- Responsive to operator (User feedback)
- CG-LIMS- Data Driven Mission Support
Acquiring and delivering an asset to the field requires the entire Coast Guard’s involvement.
QUESTIONS?

http://www.uscg.mil/acquisition
The Steps to Acquire an Asset

Mission Need (Operators)

Requirements (Sponsor)

Cost Analysis (Acquisition/Technical Authority/Sponsor)

Engineering Analysis (Technical Authority)

Project Approval (Vice Commandant/DHS)

Project Management (Acquisition/Technical Authority/Sponsor)

Delivery (Acquisition Technical Authority Operator)
2009 Innovation Expo
Virginia Beach