IT Program Assessment
USCG – C4ISR Program

Review

The DHS CIO conducted a comprehensive program review of the United States Coast Guard (USCG) Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) program during September 2011. Program observations include the following:

The USCG C4ISR program provides the hardware and software backbone of the USCG IT network architecture that improves the ability to save lives, enforce maritime laws and contribute to National Security. The surface, air and shore technologies provide the foundation for interoperability with partnerships between the Department of Homeland (DHS), Department of Defense (DoD) and other law enforcement and emergency services agencies.

Surface capabilities
The USCG plans to deliver advanced C4ISR capabilities with its newest surface assets, including the National Security Cutter (NSC) and the Response Boat-Medium (RB-M). Other investments have modernized the legacy cutter fleet's C4ISR equipment, including unclassified and classified computer networking architectures, satellite and marine VHF radio communications; and the Automatic Identification System (AIS), a VHF broadcast system that automatically exchanges a vessel's navigational position, speed, heading and identification information.

Air capabilities
Air capabilities include an integrated improved C4ISR capabilities into the platforms of its aviation product line. These improved capabilities include a powerful new radar, daylight and thermal imaging cameras, a law enforcement radio communication suite, AIS equipment, a 406 MHz direction-finding set, and a mission data recorder.

Shore
Shore capabilities include upgraded communications and computing equipment at USCG Command Centers. The upgraded capabilities include new, solid-state HF transmitters at the Communications Area Master Stations (CAMS) in Virginia and California. The new transmitters include automatic link establishment capability, reducing operator workload, and are smaller, more reliable and less costly to operate and maintain than those being replaced. At the USCG state-of-the-art training Center Petaluma, Calif., this investment has delivered high quality C4ISR equipment to provide students with real-world systems that prepare them for service with the USCG as well as in joint operations with DHS and DoD partners.

The program is composed of eight “Discrete Segments”, which are:

Segment 1:	Completed in June 2009
Segment 2:	Federated system design employing government owned software that facilitates systems integration
Segment 3:	Net-centric, open architecture system configuration
Segment 4:	Addresses technology refresh, cyber security and cyber warfare countermeasures
Segment 5:	In-service and shore-based asset upgrades
Segment 6 – 8:	Post September 2011 mission needs and new asset production alignment

Since the FY10 review, the program continues to experience funding challenges. These challenges and shortfalls are inadequate to design and develop beyond segment 2 of this modernization effort. In addition to these funding challenges, there is the risk that if the C4ISR program does not complete a design to meet the Offshore Patrol Cutter (OPC) Operational Requirements Document (ORD) C4ISR requirements, then the OPC will not be mission ready.

Mitigation Strategy

To mitigate the funding challenges, the C4ISR program has developed a remediation plan that adjusts the eight discrete segments. It subdivides segment two into multiple blocks of capability for release. It eliminates segments six through eight and pushes the dates for segments three and four farther into the future and adjusts the date of segment 5.

To meet the requirement of the OPC, the C4ISR program has develop an executable strategy to leverage the segment 2 design to meet OPC C4ISR requirements within current funding and remediation plan constraints.

Assessment

The C4ISR program has demonstrated flexibility and good program management principles in the face of fiscal realities. It is currently completing segment 2 under budget and its remediation plan should put program status and health on a solid footing and support the accomplishment of all follow-on major milestones. It also plans to update its Acquisition Program baseline (APB) and Lifecycle Cost Estimate (LCCE) in the first quarter of FY12. The OCIO will continue close coordination to assist in any way possible. The CIO assesses the USCG C4ISR program as Level 3 – Medium Risk.

Score: 3