Review

The DHS CIO conducted a comprehensive program review of the USCG- Coast Guard Business Intelligence (CGBI) program on February 3, 2010. USCG – Business Intelligence is an IT integration activity to provide a set of processes and tools which turns Coast Guard data from disparate/federated, but authoritative data systems already in use, into a searchable, analytical data warehouse for analytic decision making through the use of business intelligence. The CGBI program is in the Operations and Maintenance phase of the programmatic lifecycle; having completed the development and systems integration requirements. While they still incorporate enhancements and systems changes as part of O&M, no new development activities are currently underway at this time. The program has been able to achieve a significant amount of functionality on a relatively modest development budget (~$14 million over 7 years).

CGBI employs an engineering approach of federated data objects (cubes and reports) to collect, store and render information. It is a system that is accessible through the internet/intranet and provides all major functional components through the web interface (no client/server requirements). By integrated data from pre-existing data sources it did not require new data stores to be created, taking very strong advantage of capabilities and systems already in place. The program is compliant with the appropriate segment of the enterprise architecture(s) as defined by the DHS EA organization. While offering a standard set of capabilities, formats and structures for data, the system can also support dynamic generating of data such as scorecards, OPAR, dashboards and risk.

Some findings of the DHS CIO Program Review of USCG - CGBI, include the following:

- As with all federated BI capabilities there is not always uniform agreement on the qualitative nature of the data gathered. Federated source systems are not under the control of CGBI, only referenced by it.
- This is not a real-time system. Individual availability and data refresh times are controlled the source system owners.
- There are additional analytics, reports, etc., that USCG would like to be able to provide. At the current time the data needed to provide this information is available in the current federated data model.

Assessment

Overall the USCG – BI is a strong IT analytic capability that is serving the needs of the user community well. The management of the program has made sure to leverage where they could and only develop new functionality where necessary. They are working to integrate with some of the upcoming enterprise systems, are compliant with the overall architecture for the Department.

Score: 4