IT Program Assessment
NPPD - Critical Infrastructure
Technology and Architecture (CITA)

The Department of Homeland Security (DHS) Chief Information Officer (CIO) conducted a program review of the National Protection and Programs Directorate (NPPD)/ Office of Infrastructure Protection (IP) - Critical Infrastructure Technology and Architecture (CITA) program in March 2012.

Description and Background:

The CITA program is a mixed life cycle investment that consolidates program management, technology design, development, test, integration, as well as operations and maintenance activities for NPPD/IP's non-regulatory information technology (IT) systems and applications. The program consists of 19 systems and applications. The CITA program includes numerous IT activities to include the Automated Critical Asset Management System (ACAMS), the IP Gateway, Infrastructure Information Collection System (IICS), Protected Critical Infrastructure Information Management System (PCIIMS), IP Share (IP's instance of the DHS SharePoint service), sector-specific self-assessment capabilities, Web Emergency Operations Center (WebEOC), various tools and applications used by the NPPD/IP Protective Security Advisors (PSAs) and Technical Resource for Incident Prevention (TripWIRE). To date, accomplishments include the establishment of an IP service-oriented architecture, development and implementation of assessment and data collection tools for use by state and sector partners, and the establishment of a Joint Technology Lab located at the DOD-sponsored Multi-Agency Collaboration Environment in order to facilitate the design, development, and testing of NPPD/IP technical solutions. The majority of the CITA systems are in operations and maintenance with some enhancements occurring to existing systems.

The nucleus of the CITA program is the IP Gateway (formerly the Linking Encrypted Network System). The IP Gateway is the external, single sign-on interface through which NPPD/IP's systems and applications are or will be integrated. The IP Gateway/IICS allows users to access, search, retrieve, visualize, and analyze infrastructure data from multiple sources. The IP Gateway/IICS benefits the IP mission by ensuring interoperability and improved access to NPPD/IP IT applications, thereby minimizing development costs and providing improved data quality.

Risks and Issues:

Multiple scope changes have occurred based on NPPD/IP development initiatives in the anticipation of an NPPD/IP realignment. Thus a new Life Cycle Cost Estimate (LCCE) is in the final stage of completion for the more expansive scope to include all NPPD/IP non-regulatory IT.

The CITA program has the following risks:

- Increased cost and schedule delays are due to ill-defined and inconsistent DHS and HP processes by Data Center Management Team at Data Center (DC)2—causing PCIIMS's current 12+ month delay and increased cost of $1.2M.

- Contract support will be adversely impacted by the increase in CITA's life cycle cost
    - CITA's technology development and implementation plans may be adversely impacted as well as the program's performance
    - Difficulty standardizing data collection and information sharing for NPPD/IP IT systems and tools

Mitigation Strategy:

To help mitigate risk to program cost, CITA expanded and refined the technical baseline for NPPD/IP's IT non-regulatory applications. CITA is working with system experts to gather cost information across NPPD/IP, which will be presented in the April 2012 completion of the LCCE. Additionally, the updated work breakdown structure (WBS) enables a more accurate collection of cost data across IP and supports future development, enhancement, and IT modernization efforts. This will provide a basis for analysis and decision making on return on investment.

To support data requirements management, CITA established an NPPD/IP Data Governance Board to enable stakeholders to provide input for data requirements and support infrastructure protection decision making. Additionally, CITA is developing a Configuration Control Board Charter and Management Plan. Currently, there is no mitigation strategy for Data Center delays which continue to be elevated to the NPPD/DHS CIO levels for assistance. During the FY11 DHS CIO Program Review, CITA did not demonstrate evidence to mitigate schedule risk, the program stated that the schedule is developed and executed based on existing resources. Since the FY11 review, the CITA program has documented needs for the IT requirements with signed Mission Needs Statements and Operational Requirements Documents for all ongoing development activities. An Integrated Master Schedule (IMS) and Acquisition Program Baseline are also nearing completion, which will provide additional measures to mitigate and assess schedule and performance risk. To mitigate risk to the IP IT standardizing data collection, CITA is implementing a Standards Management Program.

Assessment:

CITA is a viable program to the DHS infrastructure with significant challenges centered on funding, schedule, and governance. The CITA program is currently developing a program cost estimate to ensure the necessary funds are available for a quality delivery. CITA has developed a WBS and an IMS that are resource loaded and managed appropriately to ensure on-time delivery. Lastly, the program has established an Executive Steering Committee (ESC) as the decision-making body that will assist the program in controlling cost, schedule, and performance, which will help to mitigate identified risk. Dependencies on DHS and HP processes by Data Center Management Team at DC2 will cause concern to program cost and schedule perturbations. Partnering will continue for program success. The CIO assesses the NPPD CITA program as a **Medium Risk**.

Score: <u>3</u>