IT Program Assessment
FEMA- National Flood Insurance Program (NFIP) Information Technology Systems and Services (ITS&S) Program

The Department of Homeland Security (DHS) Office of the Chief Information Officer (OCIO) conducted a program health review of the Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) Information Technology Systems and Services program (NFIP ITS&S). This assessment represents the program's status through March 2012.

Description and Background:

The NFIP ITS&S program previously focused efforts on the development of the NextGen system to acquire needed functionality; however, as a result of a previous CIO assessment and an OMB-led TechStat, the NextGen development was cancelled. NFIP ITS&S now focuses on:

- The activities necessary to sustain the legacy system

- Planning a new path forward to replace the NFIP legacy System

FEMA has taken several positive steps to ensure the success of the NFIP ITS&S program, including:

- Hiring a new program executive and deputy program manager

- Establishing a Program Management Office (PMO)

- Supporting the PMO's efforts to get the program on the right track

- Implementing active oversight of the program

- Establishing a FEMA NFIP Legacy System Change Control Process

- Establishing an Executive Steering Committee (ESC)

In support of sustaining the legacy system, they have initiated a network redesign project to address numerous Security Assessment Reports

The OMB TechStat produced two action items specifically focused on the path forward planning effort. They were to 1) conduct market research and 2) define the case for change. In response to these action items, the NFIP PMO took the following actions:

1) They visited more than 30 NFIP vendors, NFIP write your own companies (WYOs), NFIP contractors, other NFIP stakeholders, and industry experts. The PMO collected and compiled a large array of information on business models, technology platforms, and best practices. They created a presentation that summarized the information and briefed both the NFIP ESC and to the DHS CIO.
2) Using the information gained through the market research and discussions conducted at the two presentations, they presented a case for change from the

NFIP business perspective and were granted approval to proceed with collecting and compiling a complete set of business requirements.

This information was provided to OMB and the action items were closed. FEMA was also directed to perform an assessment of the failed NextGen system to see if any of the components could be reused, if called for, in the path forward.

The NFIP program is leveraging the DHS Systems Engineering Life Cycle for this program. They will:
- Create a Statement of Objectives for gathering and documenting business requirements
  - This includes a Mission Needs Statement (MNS), which has been drafted and approved
- Create a test strategy
  - This will be useful for both validating any appropriate NextGen functionality as well as all new functionality included in the replacement system
- Document test cases
  - This will be useful for both validating any appropriate NextGen functionality as well as all new functionality included in the replacement system
- Design any new business processes that may be applicable

The NFIP program initiated the requirements gathering activity with an introductory meeting held February 28, 2012. They followed up with meetings held in the first two weeks of March with the representatives of the Federal Insurance and Mitigation Administration (FIMA), the business owner.

Risks and Issues:
The chief risk facing the NFIP program is: If the requirements for the follow-on system cannot be identified, then the legacy system will have to continue to support the flood insurance industry.

The NFIP program has encountered many issues in their efforts to assess the NextGen system. These issues include:
- Poor documentation an stewardship of the hardware and software led to a reverse engineering effort to capture and document the legacy system
- The hardware was in various states of functional capability

Mitigation Strategy:
The program has taken steps to mitigate the risk of not developing the necessary requirements by:
- Establishing an ESC that provides program oversight and ensuring appropriate representation from the IT and business communities.
- Working closely with the Requirements Engineering Center of Excellence (RECOE) to ensure they follow successful practices in gathering requirements.

The program was also able to overcome the lack of documentation issue and the poor condition of the hardware by employing highly-talented engineers to make the hardware and software operational. The hardware has been brought to a level of operation that is stable enough to conduct the analysis, but will not be useful beyond that point.

Assessment:

The FEMA NFIP program has clearly learned important lessons from the failed NextGen development effort and is positioning them to avoid the repetitive mistakes. They are maintaining the legacy system as they plan for and build the future system. They have chartered an ESC that is providing program oversight. They have developed and approved a MNS to provide the basis of the requirements for the new system. Concomitantly, they are working with the RECOE to ensure they use successful practices in gathering requirements and they have begun the requirements definition process with the Flood Insurance Mitigation Administration for the follow-on system. The CIO is pleased with the progress that has been made with the program, but recognizes there are still challenges ahead as the NextGen system is catalogued and assessed while the requirements for the follow-on system are defined. Therefore, the CIO assess the FEMA NFIP ITS&S program as a **Moderately High Risk** investment.

Score: 2