FISMA Lessons Learned

Beth Serepca

Team Leader OIG U.S. Nuclear Regulatory Commission March 13, 2008 House Hearing on Federal IT Security: "The Future of FISMA," June 7, 2007

"When it comes to information security, the federal government can and *should be the leader*. FISMA requires each agency to create a *comprehensive risk-based approach* to agency-wide information security management. It is intended to make security management an *integral part* of an agency's operations and to ensure we are actively using *best practices* to secure our systems.

Sure, the law has its critics – mainly from failing agencies and those who misunderstand what it was designed to do. Certainly, we want to avoid a "check the box" mentality. We need to incentivize strong information protection policies. We need to pursue a goal of security rather than compliance." **Opening Statements**

Ranking Minority Member, Tom Davis

Benefits and Challenges with Annual FISMA Reporting

- Improving collaboration between the Office of Inspector General (OIG) and Chief Information Officer (CIO)
- Providing fast-paced reporting that addresses changing IT security threats and requirements
- Increasing awareness of IT security risks and need for senior management attention
- Paving new ground in the absence of a standard methodology for assessing information security programs and system controls
- Considering both internal and external security controls and impact on agency operations

Improving Collaboration between the OIG and the CIO to Achieve FISMA Objectives

- Working together, CIOs and IGs are improving the quality of agencies' C&A and POA&M processes
- Audits promote a risk-based approach by considering progress toward agency-specific IT security goals
- Audit standards ensure quality results and help to resolve potential disagreements
- Verifying technical controls through collaborative test procedures confirms status of required system security controls
- New operational procedures promote fast-paced reporting and better address the changing e-gov environment

Paving New Ground with Information Security Program and System Security Audits

- Developing and implementing IT audit skills, tools, and test procedures in support of FISMA
 - Building audit teams with specialized skills in information security
 - Vulnerability, database, and web application scanning tools
 - Audit methodologies that cover NIST SP 800-53 control families and address high risk issues
- Assessing controls for sensitive data including personally identifiable information, financial, and mission-specific information
- Privacy control audits overlapping with FISMA

Increasing Awareness of IT Security Risks and Need for Senior Management Attention

- OMB's summary report on GISRA, FY 2001 identified <u>six common weaknesses</u>:
 - 1. Senior management attention
 - 2. Security education & awareness
 - 3. Measuring performance
 - 4. Funding and integrating security into capital planning and investment control (making IT security part of the business process)
 - 5. Ensuring contractor services are adequately secure
 - 6. Detecting, reporting, and sharing information on vulnerabilities

Increasing Awareness of IT Security Risks and Need for Senior Management Attention (continued)

 GAO-08-496T <u>Information Security</u>: "Although Progress Reported, Federal Agencies Need to Resolve Significant Deficiencies"

Despite reported progress, federal agencies continue to confront long standing information security control deficiencies. Common Concerns Regarding Information Security

Federal Agency Data Protection Act billOMB does not support legislation as stated.

Lessons Learned with FISMA Audits

- Successful IS program implementation requires shared goals, clear roles and responsibilities, and agencywide and system-level performance measures
- Working closely with both system owners, the CIO, and system security officials to identify risks and vulnerabilities and verify security controls
- Changing threat, vulnerability, and control environment calls for continual infusion of new audit methodologies, skills, tools, and training
- Considering both internal and external security controls
- Communication and collaboration with other teams including system, program, and financial statement auditors and other stakeholders

Questions & Contact Info.

Beth Serepca Team Leader, OIG Nuclear Regulatory Commission <u>Beth.Serepca@NRC.GOV</u> 301-415-5911