IG PCIE Panel on FISMA
Information Security and Privacy
Advisory Board

Judy Gordon
Assistant Inspector General for Systems Evaluation
U.S. Department of Commerce
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Has Commerce Enhanced Security Under FISMA?

Information Security Is Improving Under FISMA.

- Our initial independent evaluations found numerous problems:
  - Historically, senior management has given information security little attention and support.
  - Because of this neglect, IT security weaknesses were pervasive and placed sensitive systems at serious risk.
Has Commerce Enhanced Security Under FISMA?

- Initial evaluations found
  - Security plans failed to provide foundation for security control assessment.
  - Security control assessments did little more than scan for vulnerabilities.
  - Few systems received continuous monitoring.
  - Protection of government information in contracts received little attention.
Has Commerce Enhanced Security Under FISMA?

Since FISMA
- Senior management gives greater attention to information security.
- Improvements have followed:
  - Department-wide information security policy and program.
  - Bureau security programs, practices, and controls.
  - Information security in contracts.
  - System certification and accreditation.

Yet much remains to be done to establish a repeatable process for ensuring an adequate, consistent information security program throughout the Department.
Is C&A Just a Paperwork Exercise?
Is C&A Just a Paperwork Exercise?

- C&A is essential for effective information security, and if done correctly, it
  - Helps ensure system security controls are appropriate and working as intended.
  - Better enables senior management officials to spend IT security dollars on highest priority needs.

- Commerce continues to improve its C&A, but needs to significantly enhance security control assessments.
Systems are certified and accredited though many controls are not assessed . . .
Extract from Finding on Adequacy of Security Control Assessment From Recent OIG C&A Review

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<thead>
<tr>
<th>Control Name</th>
<th>Application Server</th>
<th>DB Server</th>
<th>Domain Controller</th>
<th>Mail</th>
<th>Application Server</th>
<th>Workstations</th>
<th>Application 1</th>
<th>Oracle DB</th>
<th>Router</th>
<th>Firewall</th>
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<tr>
<td>AC-2 Account Management</td>
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How Do We Approach FISMA Reviews?

- We assign them to highly skilled technical staff.
  - Educational backgrounds and professional experience in computer science and information security.
  - Certifications:
    - Certified Information Systems Security Professional (CISSP)
    - Certification and Accreditation Professional (CAP)
    - Certified Ethical Hacker (CEH)
    - NSA INFOSEC Assessment Methodology (IAM)
    - NSA INFOSEC Evaluation Methodology (IEM)
    - Certified Information Security Manager (CISM)

- We follow PCIE Quality Standards for Inspections.
How Do We Approach FISMA Reviews?

- Our criteria are
  - NIST standards and guidance.
  - OMB guidance.
  - Department of Commerce IT security policy.

- Our focus has been on
  - C&A, especially quality and completeness of security control assessments.
    - Does authorizing official have enough information about remaining vulnerabilities?
  - Secure configuration settings (CM-6).
  - Continuous monitoring.
How Well Does Commerce Follow NIST Standards and Guidance?

- Users continue to wrestle with application of the standards.
- All parties would benefit from a better understanding of NIST framework and associated standards and guidance.
  - Authorizing officials, system owners, certification agents, information security officers, and C&A support contractors.
- Commerce CIO’s office has been providing training.
- It would be helpful for NIST to develop examples of required C&A documents.
  - Security plans, risk assessments, security control assessment plans and assessment results.
Is Senior Management On Board With FISMA?

- FISMA is supported by senior management of Department as well as senior bureau management.
- However, authorizing officials and system owners often appear to not understand or accept their responsibilities.
What Progress Has Your Agency Made in Protecting Citizens’ Privacy?

- Revising policy to better address privacy requirements.
- Using 30-minute “time-out” policy.
- Encrypting data on mobile devices.
- Preparing solicitation for two-factor authentication.
- Reporting incidents to DHS within one hour.