

U.S. OFFICE OF PERSONNEL MANAGEMENT OFFICE OF THE INSPECTOR GENERAL OFFICE OF AUDITS

Final Audit Report

FEDERAL INFORMATION SECURITY MODERNIZATION ACT AUDIT - FISCAL YEAR 2024

Report Number 2024-ISAG-008 October 30, 2024

EXECUTIVE SUMMARY

Federal Information Security Modernization Act Audit - Fiscal Year 2024

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Why Did We Conduct the Audit?

Our overall objective was to evaluate the U.S. Office of Personnel Management's (OPM) security program and practices, as required by the Federal Information Security Modernization Act (FISMA) of 2014. Specifically, we reviewed the status of OPM's information technology security program in accordance with the U.S. Department of Homeland Security's (DHS) FISMA Inspector General Reporting Metrics.

What Did We Audit?

The OPM Office of the Inspector General has completed a performance audit of OPM's general FISMA compliance efforts in the areas defined in DHS's guidance and the corresponding reporting instructions. Our audit was conducted from December 2023 through August 2024 at OPM headquarters in Washington, D.C.

Michael R. Esser Assistant Inspector General for Audits

What Did We Find?

The FISMA Inspector General reporting metrics use a maturity model evaluation system derived from the National Institute of Standards and Technology's Cybersecurity Framework. The Cybersecurity Framework is comprised of nine "domain" areas and the weighted averages of the domain scores are used to derive the agency's overall cybersecurity score. In fiscal year 2024, OPM's cybersecurity maturity level is measured as "3 – *Consistently Implemented*."

The following sections provide a high-level outline of OPM's performance in each of the nine domains from the five cybersecurity framework functional areas:

<u>Risk Management</u> – OPM has defined an enterprise-wide risk management strategy through its risk management council. OPM has developed and implemented policies, procedures, and processes to maintain an up-to-date inventory of its hardware and software.

<u>Supply Chain Risk Management</u> – OPM has defined and communicated an organization-wide Supply Chain Risk Management (SCRM) strategy that addresses risk appetite and tolerance, strategies and controls, processes for consistently evaluating and monitoring supply chain risk, and approaches for implementing and communicating the SCRM strategy.

<u>Configuration Management</u> – OPM has developed, documented, and disseminated baseline configurations and standard configuration settings for its information systems. The agency has an established configuration change control process. However, the agency has not integrated its overall configuration management plan into its continuous monitoring and risk management programs. OPM has also not established a process to document lessons learned from the implementation of its configuration management activities to make improvements to the plan.

<u>Identity, Credential, and Access Management (ICAM)</u> – OPM provided a comprehensive ICAM strategy and Charter detailing its goals and objectives. OPM has enforced multi-factor authentication with Personal Identity Verification cards.

<u>Data Protection and Privacy</u> – OPM has established the Office of the Executive Secretariat, Privacy, and Information Management (OESPIM), which has defined and communicated OPM's privacy program plan and related policies and procedures. However, OESPIM has not consistently conducted and maintained system of records notices (SORNs) for all applicable systems. According to OESPIM, the development of a SORN for all applicable OPM systems is currently in progress.

<u>Security Training</u> – OPM has implemented a security training strategy and program. However, a current gap analysis needs to be conducted to demonstrate any weaknesses in specialized training to achieve the Consistently Implemented maturity level. Additionally, OPM has not provided evidence for how the organization obtains feedback on its security awareness and training information and how that information is used to make improvements.

<u>Information Security Continuous Monitoring</u> – OPM has established information security continuous monitoring policies for its environment. OPM's continuous monitoring strategies address security control monitoring at the organization, business unit, and individual information system levels.

<u>Incident Response</u> – OPM has implemented many of the required controls for incident response. Based upon our audit work, OPM has successfully implemented all the FISMA metrics at the level of *Managed and Measurable*.

<u>Contingency Planning</u> – OPM has implemented several of the FISMA requirements related to contingency planning and continues to improve upon maintaining its contingency plans as well as conducting contingency plan tests on a routine basis.

ABBREVIATIONS

AuthorizationSecurity Assessment and AuthorizationBIABusiness Impact AnalysisCDMContinuous Diagnostics and MitigationCIGIECouncil of the Inspectors General on Integrity and EfficiencyCRMSCybersecurity Risk Management StrategyDHSU.S. Department of Homeland SecurityFICAMFederal Identity, Credential, and Access Management
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CRMSCybersecurity Risk Management StrategyDHSU.S. Department of Homeland Security
DHS U.S. Department of Homeland Security
i v
FIPS Federal Information Processing Standards Publication
FISMA Federal Information Security Modernization Act
FY Fiscal Year
GRC Governance, Risk, and Compliance
ICAM Identity, Credential, and Access Management
IG Inspector General
ISCM Information Security Continuous Monitoring
ISSO Information System Security Officer
IT Information Technology
NIST National Institute of Standards and Technology
OCIO Office of the Chief Information Officer
OESPIM Office of the Executive Secretariat, Privacy, and Information Management
OIG Office of the Inspector General
OMB U.S. Office of Management and Budget
OPM U.S. Office of Personnel Management
PII Personally Identifiable Information
PIV Personal Identity Verification
POA&M Plan of Action and Milestone
RMC Risk Management Council
SCRM Supply Chain Risk Management
SORN System of Records Notices
SP Special Publication
TIC Trusted Internet Connection
VDP Vulnerability Disclosure Policy

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REPORT FRAUD, WASTE, AND MISMANAGEMENT

I. BACKGROUND

The 2002 Federal Information Security Management Act required (1) annual agency program reviews, (2) annual Inspector General (IG) evaluations, (3) agency reporting to the U.S. Office of Management and Budget (OMB) on the results of IG evaluations for unclassified systems, and (4) an annual OMB report to Congress summarizing the material received from agencies. The 2014 Federal Information Security Modernization Act (FISMA) reemphasizes the need for an annual IG evaluation. In accordance with FISMA, we conducted an audit of the U.S. Office of Personnel Management (OPM)'s security program and practices. As part of our audit, we reviewed OPM's FISMA compliance strategy and documented the status of its compliance efforts.

FISMA requirements pertain to all information systems supporting the operations and assets of an agency, including those systems currently in place or planned. The requirements also pertain to information technology (IT) resources owned and/or operated by a contractor supporting agency systems.

FISMA reaffirms the Chief Information Officer's strategic agency-wide security responsibility. At OPM, security responsibility is assigned to the agency's Office of the Chief Information Officer (OCIO). FISMA also clearly places responsibility on each agency's OCIO to develop, implement, and maintain a security program that assesses risk and provides adequate security for the operations and assets of programs and systems under its control.

To assist agencies and IGs in fulfilling their FISMA evaluation and reporting responsibilities, the U.S. Department of Homeland Security (DHS) Office of Cybersecurity and Communications issued the IG FISMA Reporting Metrics. This document provides a methodology and format for agencies to report FISMA audit results to DHS. It identifies a series of reporting topics that relate to specific agency responsibilities outlined in FISMA.

The Council of the Inspectors General on Integrity and Efficiency, OMB, and DHS developed the FISMA IG Reporting Metrics utilizing a maturity model evaluation system derived from the National Institute of Standards and Technology (NIST) Cybersecurity Framework. Our audit and reporting approaches were designed in accordance with the issued guidance.

II. OBJECTIVE, SCOPE, AND METHODOLOGY

OBJECTIVE

Our overall objective was to evaluate OPM's security program and practices, as required by FISMA. Specifically, we reviewed the status of the following areas of OPM's IT security program in accordance with DHS's FISMA IG reporting requirements:

- Risk Management;
- Supply Chain Risk Management;
- Configuration Management;
- Identity, Credential, and Access Management;
- Data Protection and Privacy;
- Security Training;
- Information Security Continuous Monitoring;
- Incident Response; and
- Contingency Planning.

We also performed an audit focused on one of OPM's major information systems – the White House Fellows System.

SCOPE AND METHODOLOGY

We conducted this performance audit in accordance with the U.S. Government Accountability Office's Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. The audit covered OPM's FISMA compliance efforts throughout fiscal year (FY) 2024.

Like prior years, we requested that OPM conduct a self-assessment. This self-assessment gave OPM the opportunity to document its current maturity level for each metric. We validated OPM's stated/current maturity level throughout the fiscal year and reported on the results of our analysis. Recommendations were made to help OPM attain the desired maturity level if it was higher than the IG assessed maturity level. We reviewed OPM's general FISMA compliance efforts in the specific areas defined in DHS's guidance and the corresponding reporting instructions. We considered the internal control structure for various OPM systems in planning our audit procedures. These procedures were mainly substantive in nature, although we did gain an understanding of management procedures and controls to the extent necessary to achieve our audit objectives. Accordingly, we obtained an understanding of the internal controls for these various systems through interviews and observations, as well as inspection of various documents, including information technology and other related organizational policies and procedures. We utilized this understanding to evaluate the degree to which the appropriate internal controls were designed and implemented. As appropriate, we conducted compliance tests using judgmental samples to determine the extent to which established controls and procedures are functioning as required. The results of the judgmentally selected sample were not projected to the population since it is unlikely that the results are representative of the population.

In conducting our audit, we relied to varying degrees on computer-generated data provided by OPM. Due to time constraints, we did not verify the reliability of the data generated by the various information systems involved. However, we believe that the data was sufficient to achieve the audit objectives, and nothing came to our attention during our audit to cause us to doubt its reliability.

Since our audit would not necessarily disclose all significant matters in the internal control structure, we do not express an opinion on the set of internal controls for these various systems taken as a whole.

The criteria used in conducting this audit included:

- OPM Information Technology Security FISMA Procedures;
- OMB Circular A-108, Publishing System of Records Notices;
- Public Law 114-113, Cybersecurity Workforce Assessment Act of 2015;
- P.L. 113-283, Federal Information Security Modernization Act of 2014;
- NIST Cybersecurity Framework 2.0;
- NIST SP 800-50, Building an Information Technology Security Awareness and Training Program;
- NIST SP 800-53, Revision 5, Security and Privacy Controls for Federal Information Systems and Organizations;

- NIST SP 800-60, Volume 2, Revision 1, Guide for Mapping Types of Information and Information Systems to Security Categories; and
- Federal Information Processing Standards Publication (FIPS) 199, Standards for Security Categorization of Federal Information and Information Systems.

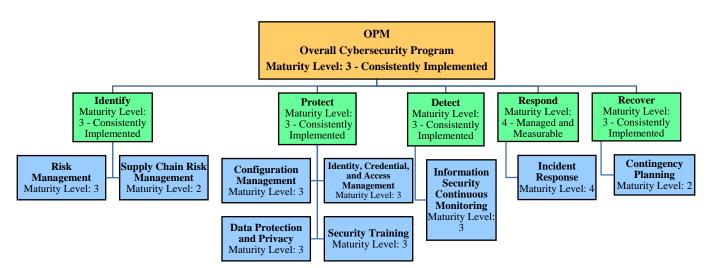
The OPM Office of the Inspector General (OIG), established by the Inspector General Act of 1978, as amended, performed the audit from December 2023 through August 2024 in OPM's Washington, D.C. office.

COMPLIANCE WITH LAWS AND REGULATIONS

In conducting the audit, we performed tests to determine whether OPM's practices were consistent with applicable standards. While generally compliant, with respect to the items tested, OPM's OCIO and other program offices were not in full compliance with all standards, as described in Section III of this report.

A. INTRODUCTION AND OVERALL ASSESSMENT

The FISMA IG Reporting Metrics use a maturity model evaluation system derived from the NIST Cybersecurity Framework. The Cybersecurity Framework is comprised of five "function" areas that map to the nine "domains" under the function areas. These nine domains are broad cybersecurity control areas used to assess the effectiveness of the information security policies, procedures, and practices of the agency. Each domain is comprised of a series of individual metrics, which are the specific controls that we evaluated and tested when assessing the agency's cybersecurity program. Each metric receives a maturity level rating of 1-5. The chart below outlines the overall maturity of OPM's cybersecurity program.



The following table outlines the description of each maturity level rating, as defined by the IG FISMA Reporting Metrics:

Maturity Level	Maturity Level Description	
Level 1: Ad-hoc	Policies, procedures, and strategy are not formalized; activities	
	are performed in an ad-hoc, reactive manner.	
Level 2: Defined	Policies, procedures, and strategy are formalized and	
	documented but not consistently implemented.	
Level 3: Consistently	Policies, procedures, and strategy are consistently	
Implemented	implemented, but quantitative and qualitative effectiveness	
	measures are lacking.	

Level 4: Managed and	Quantitative and qualitative measures on the effectiveness of	
Measurable	policies, procedures, and strategy are collected across the	
	organization and used to assess them and make necessary	
	changes.	
Level 5: Optimized	Policies, procedures, and strategy are fully institutionalized,	
1 -	Toheres, procedures, and strategy are runy institutionalized,	
	repeatable, self-generating, consistently implemented, and	

In previous years, IGs have been directed to utilize a mode-based scoring approach to assess agency maturity levels. Under this approach, ratings throughout the reporting domains were determined by a simple majority, where the most frequent level (i.e., the mode) across the questions served as the domain rating. The same logic was applied to the function and overall information security program level. However, in FY 2021, OMB and the Council of the Inspectors General on Integrity and Efficiency (CIGIE) conducted a pilot to score agencies based on a weighted average for certain priority metrics. One purpose of this pilot was to help evaluate the impacts of these priority metrics and prepare agencies for the possibility of changing the maturity calculation process in the future.

Through analyses of the data obtained through this pilot and the FY 2020 – FY 2022 government-wide IG FISMA reporting, OMB and CIGIE determined that a non-weighted (e.g., calculated) average more closely aligned with the Office of the Inspector General's assessed maturity levels expressed in a numeric format. Therefore, ratings in FY 2024 were based on a calculated average approach, wherein the average of the metrics in a particular domain was used by IGs to determine the effectiveness of individual function areas (*identify*, *protect*, *detect*, *respond*, and *recover*) and the overall program.

There are two distinct groups of metrics: Core and Supplemental. Core Metrics are assessed annually and represent administration priorities, high impact security processes, and essential functions necessary to determine OPM's security program effectiveness. Supplemental Metrics are assessed once every two years and demonstrate activities conducted by security programs and contribute to the overall determination of security program effectiveness. The OPM OIG evaluates all metrics each year. The below table shows the average metric scores for each function.

		FY23	FY24	
Function	Core	Supplemental	Supplemental	FY24 Assessed Maturity
Identify	2.83	3.20	2.67	Consistently Implemented (Level 3)
Protect	2.88	2.80	2.75	Consistently Implemented (Level 3)
Detect	3.00	3.00	3.00	Consistently Implemented (Level 3)
Respond	4.00	4.00	4.00	Managed and Measurable (Level 4)
Recover	2.50	3.00	2.00	Consistently Implemented (Level 3)
Overall				
Maturity	3.04	3.20	2.88	Consistently Implemented (Level 3)

The remaining sections of this report provide the detailed results of our audit. Sections B through J outline how we rated the maturity level of each individual metric, which ultimately determined the agency's maturity level for each domain and function.

B. RISK MANAGEMENT

Risk management controls are the tools, policies, and procedures that enable an organization to understand and control risks associated with its IT infrastructure and services. These controls should be implemented throughout the agency and used to support risk-based decision making with limited resources. The sections below detail the results for each individual metric in this domain. <u>OPM's overall maturity level for the Risk Management domain is "3 –</u> <u>Consistently Implemented."</u>

Metric 1 – Inventory of Major Systems and System Interconnections

<u>FY2024 Maturity Level: 4 – Managed and Measurable.</u> OPM has policies and procedures for developing an inventory of information systems. OPM policy states that Information System Security Officers (ISSO) are responsible for generating registration forms. The registration forms are used to inventory internal and external information systems. Public-facing websites, cloud systems, and interconnections are inventoried as a part of the Security Assessment and Authorization (Authorization) process. Interconnections are inventoried as a part of OPM's Information Security Continuous Monitoring (ISCM) strategy. OPM monitors and maintains these inventories and interconnection records in Archer, its Governance, Risk, and Compliance (GRC) tool. The Chief Information Security Officer (CISO) and ISSOs are held responsible for ensuring that inventory monitoring processes follow OPM's ISCM strategy. The CISO is tasked with establishing and overseeing monitoring procedures and inventory. The ISSO is responsible for carrying out the procedures and updating the inventory.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed the maturity level of this metric as *Managed and Measurable*.

Metric 2 – Hardware Inventory

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has a Secure Asset Management Policy that requires that infrastructure managers develop and document an inventory of information system components. The policy includes specific data elements/taxonomy information such as manufacturer, type, model, serial number, and physical location. OPM also utilizes multiple tools to manually capture defined standard date elements, with defined and documented procedures and processes.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 3 – Software Inventory

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has developed and implemented policies, procedures, and processes to maintain an up-to-date software inventory. Currently, OPM leverages its Business Case Exception and Application Whitelist processes to develop and maintain its software inventory. Additionally, OPM performs quarterly reviews of software for FISMA metrics with supporting processes and procedures developed and documented in the CIO FISMA Metrics Standard Operating Procedures. OPM also provided an implementation plan to develop an authoritative software asset inventory.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Defined*. We have assessed this metric as *Defined*.

Metric 4 – System Security Categorization

<u>FY 2024 Maturity Level: 4 – Managed and Measurable.</u> OPM has policies and procedures in place to categorize its systems. ISSOs document the security categorization of their systems based on FIPS 199, NIST SP 800-60, and OPM guidance. The OPM Security Authorization Guide requires that system owners, authorizing officials, and the Chief Information Security Officer are involved with approving the security categorization of systems. OPM utilizes its Enterprise Business Impact Analysis to prioritize the recovery of systems, along with the identification and prioritization of high value assets and activities. Systems that are categorized as high risk or high value assets are allocated more ISSOs. Through these actions OPM has demonstrated that they are allocating resources through data-driven prioritization and system categorization.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed this metric as *Managed and Measurable*.

Metric 5 – Risk Policy and Strategy

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has defined its policies, procedures, and processes to manage cybersecurity risks through its Risk Management Policy and Cybersecurity Risk Management Strategy (CRMS). Through the issuance of the CRMS and development of other resources, OPM has defined policies, procedures, and processes for risk framing, risk assessment, risk response, and risk monitoring. OPM consistently meets the threshold for completing risk assessments within the organizationally defined time frame.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 6 – Information Security Architecture

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has defined its information security architecture by establishing a three-tiered approach, which is comprised of information security architecture at the Agency tier, Program tier, and System tier. OPM's Enterprise Architecture document and Security Reference Model define this information security architecture. OPM has also developed a System and Service Acquisition Policy and FISMA procedures that define system security engineering principles and software assurance processes for mobile applications. Additionally, the System and Service Acquisition Policy and FISMA procedures define and document the roles, responsibilities, and security controls that ensure appropriate security principles are included in OPM's software development lifecycle process. Adherence to security engineering principles is accomplished through the completion of OPM's security impact analysis and security assessment processes.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Defined*. We have assessed this metric as *Defined*.

Metric 7 – Risk Management Roles, Responsibilities, and Resources

<u>FY 2024 Maturity Level: 4 – Managed and Measurable.</u> OPM has defined and communicated the roles and responsibilities of stakeholders involved in the cybersecurity risk management process through risk management policies, the CRMS, and the Risk Management Council (RMC) Charter. The CRMS was developed in accordance with the Enterprise Risk Management strategy to ensure risk management roles are in alignment between the two strategies. OPM ensures communication of roles and responsibilities related to cybersecurity risk management through its SharePoint site, which stores all documents (e.g., policies, templates, processes, procedure guides) related to risk management. The RMC meets routinely and provides input on the cybersecurity risk register. OPM performance standards ensure accountability of cybersecurity personnel and program managers with risk management responsibilities such as allocating resources and implementing risk management processes.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed this metric as *Managed and Measurable*.

Metric 8 – Plan of Action and Milestones

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has implemented and communicated policies and procedures for the effective use of Plan of Action and Milestones (POA&Ms). The policies and procedures address the centralized tracking of security weaknesses, prioritization of remediation efforts, maintenance, and independent validation of POA&M activities. Each POA&M considers risk assessments, security categorizations, control deficiencies, and risk ratings. Using Archer as a risk repository, OPM utilizes POA&Ms to

effectively track and mitigate security weaknesses. Dashboards in Archer allow OPM to see the number of POA&Ms in various stages such as initial, draft, and open.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 9 – Risk Communication

<u>FY 2024 Maturity Level: 3 – Consistently implemented.</u> OPM defines how cybersecurity risks are communicated in a timely manner to all necessary internal and external stakeholders, through a multitude of cybersecurity risk management policies, procedures, and strategies. OPM documents its cybersecurity risks as POA&Ms captured in its GRC tool, Archer. POA&Ms are documented with required criteria, defined within the POA&M Guide, as a part of the tool. ISSOs are responsible for supporting System Owners and Business Program Managers with regards to the management and communication of the POA&Ms. OPM also created enterprise continuous monitoring metrics around POA&Ms to support timely communication and management of cybersecurity risks. An Archer dashboard collects real-time data from the system and is reviewed on a weekly basis.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 10 – Centralized Enterprise-wide Risk Tool

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> Archer has been implemented as OPM's GRC tool to provide a centralized enterprise-wide view of risks across OPM. This includes risk control, remediation activities, dependencies, risk levels, and management dashboards. Through the POA&M guide and ISCM, OPM has defined the requirements for an automated solution, which provides a centralized enterprise-wide view of cybersecurity risks. The POA&M guide provides OPM with a standardized process to identify, document, manage, and remediate risk/weakness. The guide specifically details the process a risk goes through in Archer, and all the various stages needed to be completed before a risk can be resolved. OPM's ISCM strategy defines the extent to which POA&Ms are to be used in Archer, and how Archer will be used for FISMA. Archer also serves as a repository that stores all the systems of the FISMA system inventory, along with all risk controls and remediation activities associated with a system. Furthermore, in Archer, risk scores and levels are identified for systems, along with having a management dashboard.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 11 – Risk Management Other Information

We have no additional comments regarding risk management.

C. <u>SUPPLY CHAIN RISK MANAGEMENT</u>

The Supply Chain Risk Management (SCRM) metrics deal with SCRM strategy throughout the organization. The sections below detail the results for each individual metric in this domain. **OPM's overall maturity level for the SCRM domain is "3** – *Consistently Implemented.*"

Metric 12 – SCRM Strategy

<u>FY 2024 Maturity Level: 3 – Consistently Implemented</u>. OPM has defined and communicated an organization wide SCRM strategy by publishing SCRM Implementation Procedures and Guidelines. The document identifies OPM's SCRM strategy that addresses risk appetite and tolerance, strategies and controls, processes for consistently evaluating and monitoring supply chain risk, and approaches for implementing and communicating the SCRM strategy. This document is stored on OPM's SharePoint site allowing for communication of the SCRM strategy to reach stakeholders.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 13 – SCRM Policies and Procedures

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has implemented the agency's SCRM strategy and System Acquisition Policy that includes procedures, scope, roles and responsibilities, and baseline supply chain related controls. The SCRM Implementation Procedures and Guidelines document security policies, baseline configurations, IT acquisition guidance, and implementation instructions for agency-wide use. Lessons learned by the RMC are also documented to support the efforts by OPM to review and update its SCRM policies, procedures, and processes.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 14 – Adherence to Cybersecurity and Supply Chain Requirements

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has defined and communicated policies and procedures to ensure products, system components, systems, and services adhere to its cybersecurity SCRM requirements. OPM's documented SCRM Implementation Procedures and Guidelines define the risk mitigation strategies for the acquisition process of hardware, commercial off-the-shelf software, custom software supported by contract, open-source software,

and services. To confirm contractors are meeting their contractual SCRM obligations, OPM Contracting Officers review contractors past performance.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Defined*. We have assessed this metric as *Defined*.

Metric 15 – Component Authenticity

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM's SCRM Implementation Procedures and Guidelines define and communicate its component authenticity policy and procedures. Our review of this document determined that OPM has addressed procedures (e.g., out-of-band hashes, encryption, digital signature, transmission security) to detect and prevent counterfeit components from entering the organization. Additionally, OPM's SCRM Implementation Procedures and Guidelines define procedures to maintain configuration control over organizationally defined components awaiting repair or service and requirements and procedures for reporting counterfeit system components.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Defined*. We have assessed this metric as *Defined*.

Metric 16 – SCRM Additional Information

We have no additional comments regarding SCRM.

D. CONFIGURATION MANAGEMENT

Configuration Management controls allow an organization to establish information system configuration baselines, processes for securely managing changes to configurable settings, and procedures for monitoring system software. The sections below detail the results for each individual metric in this domain. <u>OPM's overall maturity level for the Configuration</u> <u>Management domain is "3 – Consistently Implemented."</u>

Metric 17 – Configuration Management Roles, Responsibilities, and Resources

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> In FY 2024, OPM demonstrated that individual roles and responsibilities for configuration management were defined through OPM's Secure Asset Management Policy, Information Technology Security FISMA Procedures, and Cybersecurity and Privacy Policy, and were communicated across the agency.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 18 – Configuration Management Plan

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has defined and documented enterprise level configuration management policies and procedures that outline roles and responsibilities, institute a change control board, and define processes for implementing configuration changes. However, the agency has not integrated its overall configuration management plan into its continuous monitoring and risk management programs.

OPM does not integrate its overall configuration management plan into its risk management and continuous monitoring programs.

OPM has also not established a process to document lessons learned from the implementation of its configuration management activities to make improvements to the plan.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Defined*. The recommendation below is to assist OPM with attaining the *Consistently Implemented* maturity level.

NIST SP 800-128 states that "An information system is composed of many components How these information system components are networked, configured, and managed is critical in providing adequate information security and supporting an organization's risk management process."

Without an integrated enterprise configuration management plan and documented lessons learned, there is an increased risk that the configuration management process will not effectively manage the system security settings that protect the OPM environment.

Recommendation 1 (Rolled forward from FY 2023)

We recommend that OPM integrate its configuration management plan into the risk management and continuous monitoring programs, and utilize lessons learned to make improvements to the plan.

OPM's Response:

"Concur. OPM has matured the configuration management program and will integrate it with the risk management and continuous monitoring programs. The configuration management program will also codify processes in the Enterprise Change Management program to incorporate lessons learned that OPM will use to make improvements. OPM will provide updated documentation including lessons learned to OIG during the FY 2025 FISMA audit fieldwork."

OIG Comment:

As part of the audit resolution process, we recommend that OPM provide the Internal Oversight and Compliance Office with evidence that the agency implemented this recommendation. This statement applies to all subsequent recommendations in this audit report that the OCIO agrees to implement.

Metric 19 – Baseline Configurations

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has developed, documented, and disseminated its baseline configuration and component inventory policies and procedures for all information systems in use by OPM. The baseline contains the scope, document renewal and review timeline, applicable regulations, and minimum configuration settings for each information system. These baseline configurations are published on the OCIO-Cyber SharePoint site for all designated personnel to access. Additionally, the organization uses lessons learned in implementation to make improvements to its baseline configuration policies and procedures.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 20 – Security Configuration Settings

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has developed, documented, and disseminated its policies and procedures in the form of hardening guides that define configuration settings and common secure configurations tailored specifically to OPM's environment. Additionally, OPM has established a process to document and track deviations from the hardening guides and has developed methods for capturing lessons learned to improve its policies and procedures.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 21 – Flaw Remediation and Patch Management

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has developed, documented, and disseminated its established guidance pertaining to its patch management program. OPM has a tailored process to incorporate flaw remediation into the agency's configuration management processes. OPM also has a documented Patch Management Policy and has defined its configuration management policies and procedures.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Defined*. We have assessed this metric as *Defined*.

Metric 22 – Trusted Internet Connection Program

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has developed, documented, and disseminated its Trusted Internet Connection Implementation Plan. The plan also describes the agency's strategy, capacity, and alternative security controls pertaining to the Trusted Internet Connection Program. Security capability protections and network traffic are demonstrated within the plan.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Defined*. We have assessed this metric as *Defined*.

Metric 23 – Configuration Change Control Management

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has developed and documented policies and procedures for controlling configuration changes. The policies address the necessary change control steps and documentation required to approve information system changes. Our test work indicated that OPM has updated its configuration change control process to include project plans and additional reviews and approvals and is consistently adhering to its change control procedures.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 24 - Vulnerability Disclosure Policy

<u>FY 2024 Maturity Level: 3 – Consistently Implemented</u>. OPM has a vulnerability disclosure policy as part of its vulnerability management program for internet-accessible federal systems. The policy addresses the scope, types of testing allowed, reporting mechanisms, timely feedback, and remediation efforts of the agency's vulnerability research programs. OPM has also demonstrated that it consistently implements its Vulnerability Disclosure Policy (VDP). In addition, OPM has updated the relevant fields at the .gov registrar to ensure appropriate reporting by the public, ensured that all internet-accessible systems are included in the scope of its VDP, and increased the scope of systems covered by its VDP, in accordance with DHS Binding Operational Directive 20-01.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 25 – Configuration Management Other Information

We have no additional comments regarding configuration management.

E. IDENTITY, CREDENTIAL, AND ACCESS MANAGEMENT

The Federal Identity, Credential, and Access Management program is a government-wide effort to help Federal agencies provision access to systems and facilities to the right person, at the right time, for the right reason. The sections below detail the results for each individual metric in this domain. <u>OPM's overall maturity level for the Identity, Credential, and Access</u> <u>Management domain is "3 – Consistently Implemented."</u>

Metric 26 – ICAM Roles, Responsibilities, and Resources

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has individual policies and procedures that define roles and responsibilities for specific aspects of Identity, Credential, and Access Management (ICAM). OPM has developed an ICAM strategy to align and consolidate the agency's ICAM investments, monitor programs, and ensure awareness and understanding. Roles and responsibilities for all users are incorporated in a comprehensive ICAM strategy.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 27 – ICAM Strategy

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM provided an ICAM Strategy and Charter detailing its goals/milestones and objectives. Further, OPM is consistently capturing, updating, and sharing lessons learned on the effectiveness of its ICAM policy, strategy, and road map.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 28 – Personnel Risk

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has defined and implemented processes for assigning personnel risk designations and performing appropriate screenings prior to granting access to its systems. Additionally, OPM re-screens individuals when they change positions, or the risk designation of their current position is changed.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 29 – Access Agreements

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has defined and implemented centralized processes for developing, documenting, and maintaining access agreements for all users of the network. All personnel are required to review and acknowledge access agreements

prior to being granted initial access to systems and on an annual basis thereafter, as a part of IT Security and Privacy Awareness training.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 30 – Multi-factor Authentication with PIV

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM enforces multi-factor authentication for non-privileged users of its systems and networks by using a personal identity verification (PIV) card and password. This includes remote access to networks. Digital identity risk assessments are performed for each system to ensure that authentication processes provide the appropriate level of assurance.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 31 – Strong Authentication Mechanisms for Privileged Users

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM enforces multi-factor authentication for privileged users of its systems and networks by using a PIV card and password. OPM utilizes tools including an enterprise password vault to manage privileged user access to the OPM network and its back-end servers. Digital identity risk assessments are performed for each system to ensure that authentication processes provide the appropriate level of assurance.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 32 – Management of Privileged User Accounts

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has defined its policies for provisioning, managing, and reviewing privileged accounts that include procedures for logging, approval and tracking, and inventorying and validating. OPM ensures that its processes for provisioning are consistently implemented by periodically reviewing privileged accounts within its environment for appropriateness.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 33 – Remote Access Connections

<u>FY 2024 Maturity Level: 3 – Consistently Implemented</u>. OPM has implemented a variety of controls for remote access connections such as the use of approved cryptographic modules,

system time outs, and event logging. OPM ensures that FIPS 140-2 validated cryptographic modules are implemented for its remote access connection methods, remote access sessions time out after eight hours of a session or after 30 minutes of idle time, and that remote users' activities are logged and reviewed based on risk.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 34 – ICAM Other Information

We had no additional information about OPM's ICAM program.

F. DATA PROTECTION AND PRIVACY

The Data Protection and Privacy metrics deal with the controls over the protection of personally identifiable information (PII) that is collected, used, maintained, shared, and disposed of by information systems. The sections below detail the results for each individual metric in this domain. <u>OPM's overall maturity level for the Data Protection and Privacy domain is "3 – *Consistently Implemented.*"</u>

Metric 35 – Data Protection and Privacy Policies and Procedures

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has an established Office of the Executive Secretariat, Privacy, and Information Management (OESPIM). OESPIM has defined and communicated its privacy program plan and related policies and procedures for the protection of PII that is collected, used, maintained, shared, and/or

OPM has not developed a SORN for all applicable OPM systems currently in use.

disposed of by OPM's information systems. In addition, roles and responsibilities for the effective implementation of the organization's privacy program have been defined and the organization has determined the resources and optimal governance structure needed to effectively implement its privacy program.

However, OESPIM has not consistently conducted and maintained system of records notices (SORNs) for all applicable systems. The development of a SORN for all applicable OPM systems is currently in progress.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Defined*. The recommendation below is to assist OPM with attaining the *Consistently Implemented* maturity level.

NIST SP 800-53, Revision 5, states that the agency publishes SORNs in the Federal Register, and keeps system of records notices accurate, up-to-date, and scoped in accordance with policy.

Office of Management and Budget, Circular No. A-108, Publishing System of Records Notices, states that "The Privacy Act requires agencies to publish a SORN in the Federal Register describing the existence and character of a new or modified system of records. A SORN is comprised of the Federal Register notice(s) that identifies the system of records, the purpose(s) of the system, the authority for maintenance of the records, the categories of records maintained in the system, the categories of individuals about whom records are maintained, the routine uses to which the records are subject, and additional details about the system."

Failure to publish a SORN with the most recent information about the system's records increases the risk that privacy violations could occur.

Recommendation 2

We recommend that OESPIM develop a SORN for all applicable systems.

OPM's Response:

"Non-Concur. OPM agrees that SORNs should be developed for all OPM systems of records. However, OPM has policies and procedures in place for compliance with SORN requirements and the finding and recommendation are not merited. To the extent that this recommendation is based specifically on the White House Fellows program, the absence of a SORN in that instance does not support a finding regarding OPM's overall SORN compliance. Even with regard to WHF, no negative finding is merited given that our identification of a potential need for a SORN and our ongoing work to determine an appropriate path forward demonstrate that data protection and privacy policies and procedures are in fact being followed."

OIG Comment:

The basis for this finding is related to the lack of a SORN for the White House Fellows system. However, the FY 2024 FISMA Metrics state the organization must consistently implement "its privacy program by conducting and maintaining privacy impact assessments and system of records notices for all applicable systems." Since we did not see evidence of the SORN for the White House Fellows System, this metric cannot be considered consistently implemented for the FY 2024 FISMA report.

Metric 36 – Data Protection and Privacy Controls

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM's policies and procedures have been consistently implemented for the specified areas, including (i) use of FIPS-validated encryption of PII and other agency sensitive data, as appropriate, both at rest and in transit, (ii) prevention and detection of untrusted removable media, and (iii) destruction or reuse of media containing PII or other sensitive agency data.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 37 – Data Exfiltration Prevention

<u>FY 2024 Maturity Level: 4 – Managed and Measurable.</u> OPM has defined policies to prevent data exfiltration from its IT environment and to implement enhanced network defenses. OPM has implemented controls to monitor inbound and outbound network traffic, as well as ensure that all traffic passes through a web content filter. In addition, OPM has implemented a process to measure the effectiveness of the controls on an ongoing basis.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed this metric as *Managed and Measurable*.

Metric 38 – Data Breach Response Plan

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has consistently implemented its Data Breach Response Plan and has participated in table-top exercises. OPM has also documented lessons learned within its Incident Report Form. Additionally, OPM has utilized a Breach Response Team that can identify specific individuals affected by a breach, send notice to the affected individuals, and provide those individuals with credit monitoring and repair services, as necessary.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 39 – Privacy Awareness Training

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has defined and communicated its Privacy Awareness Training Program policy and is consistent with NIST criteria. This policy describes role-based privacy training distributed on an annual basis. OPM also has tailored annual privacy training, which is distributed to the OPM workforce.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Defined*. We have assessed this metric as *Defined*.

Metric 40 – Data Protection and Privacy Other Information

We had no additional information about OPM's data protection controls or privacy program.

G. SECURITY TRAINING

FISMA requires that all government employees and contractors take annual IT security awareness training. In addition, employees with IT security responsibility are required to take

specialized training specific to their job function. OPM has a strong history of providing its employees with IT security awareness training for the ever-changing risk environment and has made progress in providing tailored training to those with significant security responsibilities. The sections below detail the results for each individual metric in this domain. <u>OPM's overall</u> **maturity level for the Security Training domain is "3** – *Consistently Implemented.*"

Metric 41 – Security Training Policies and Procedures

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has established an agencywide IT security awareness training program. Roles and responsibilities for stakeholders are defined and communicated across the agency. OPM continues to mature its security training program by consistently collecting and analyzing performance measures of training activities.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 42 – Assessment of Workforce

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM stated that there were no new resource gaps within its workforce, however a current gap analysis needs to be conducted to demonstrate any weaknesses in specialized training to achieve the *Consistently Implemented* maturity level. The analysis should define work roles and document gaps between the optimal proficiency level and current proficiency level (similar to the skills gap assessment provided to the Office of the Inspector General in 2018).

OPM has not developed a current gap analysis to demonstrate any weaknesses in specialized training for their workforce.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Defined*. The recommendation below is to assist OPM with attaining the *Consistently Implemented* maturity level.

The Federal Cybersecurity Workforce Assessment Act of 2015 requires agencies to implement "a strategy for mitigating any gaps identified ... with the appropriate training and certification for existing personnel."

Failure to identify gaps within an IT security training program increases the risk that OPM staff are not fully prepared to address the security threats facing the agency.

Recommendation 3 (Rolled forward from FY 2023):

We recommend that OPM develop and conduct an updated assessment of its workforce's knowledge, skills, and abilities to identify any skill gaps and specialized training needs.

OPM's Response:

"Concur. OPM will conduct and update the workforce assessment in FY 2025. To meet our goal of the managed and measurable maturity level, we will build on our existing procedures and ensure that targeted training and talent acquisition are incorporated and executed. Please note that for the OCIO the training and technical certification programs that we implemented in FY 2021 have proven very effective. OCIO can provide an expansive list of staff members who have achieved technical certifications in a key technology focus area as further proof of closing our former technology skills gaps. OPM will provide evidence to OIG once the documentation is prepared."

Metric 43 – Security Awareness Strategy

<u>FY 2024 Maturity Level: 3 – Consistently Implemented</u>. OPM has developed a security awareness and training strategy that is consistently implemented to maintain a security awareness program tailored to the mission and risk environment. OPM also continues to conduct its gap analysis and periodic reassessment of organizational skills related to security awareness and training.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 44 – Tracking IT Security Training

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has defined and tailored its security awareness policies, procedures, and related material based on FISMA requirements. Further, the organization ensures all information system users are provided initial security awareness training and periodically thereafter.

OPM does not have a process to obtain feedback on its security awareness and training information.

However, OPM has not provided evidence for how the organization obtains feedback on its security awareness and training information and how that information is used to make improvements.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed this metric as *Defined*. The recommendation below is to assist OPM with attaining the *Consistently Implemented* maturity level.

NIST SP 800-53 Revision 5, states that the agency provides feedback on organizational training results to organization-defined personnel.

NIST SP 800-50, states that the agency's "Formal evaluation and feedback mechanisms are critical components of any security awareness, training, and education program. Continuous

improvement cannot occur without a good sense of how the existing program is working. In addition, the feedback mechanism must be designed to address objectives initially established for the program. Once the baseline requirements have been solidified, a feedback strategy can be designed and implemented."

Failure to obtain training feedback does not allow OPM to analyze participant satisfaction on the quality of the course in terms of how engaging it is, how much knowledge is retained, and how that retained knowledge has impacted the agency.

Recommendation 4

We recommend that OPM obtain feedback on its security awareness and training program and use the information to make improvements to the IT security training program.

OPM's Response:

"Concur. OPM procured updated training and assessment tools that will enable the agency to solicit and obtain feedback from participants. In FY 2025, OPM will use the tools to analyze participant satisfaction on the quality of the course. We will gage how engaging the course is, how much knowledge is retained, and how retained knowledge has impacted the agency."

Metric 45 – Tracking Specialized IT Security Training

<u>FY 2024 Maturity Level: 4 – Managed and Measurable.</u> OPM employees with significant information security responsibilities are required to take specialized security training in addition to the annual awareness training. The OCIO uses a database to track the security training taken by employees identified as having security responsibility. One example of the specialized training program involves the OCIO conducting targeted phishing exercises/emails for individuals with security responsibilities, tracking the exercise results, and following up as needed.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed this metric as *Managed and Measurable*.

Metric 46 – Security Training Other Information

We have no additional comments regarding the security training program.

H. INFORMATION SECURITY CONTINUOUS MONITORING

ISCM controls involve the ongoing assessment of control effectiveness in support of the agency's efforts to manage information security vulnerabilities and threats. The sections below detail the results for each individual metric in this domain. <u>OPM's overall maturity level for</u>

<u>the Information Security Continuous Monitoring domain is "3 – Consistently</u> <u>Implemented."</u>

Metric 47 – ISCM Policies Strategy

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has established ISCM policies for its environment. OPM's continuous monitoring strategies address security control monitoring at the organization, business unit, and individual information system levels. At the organization and business unit levels, the ISCM strategies define how the agency's activities support risk management in accordance with organizational risk tolerance. At the information system level, the ISCM program has established processes for monitoring security controls for effectiveness and reporting any findings. OPM has also implemented a lessons learned process into updating its policies and processes.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 48 – ISCM Roles, Responsibilities, and Resources

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has established policies and procedures to describe its ISCM configuration, roles, and duties for its ISCM team. OPM has ensured that its workforce is performing ISCM responsibilities with its utilization of ISCM reports and dashboards.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 49 – Ongoing Security Assessments

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has consistently implemented its processes for performing ongoing security control assessments, granting system authorizations, and monitoring security controls for individual systems.

Regarding controls testing, we found that all systems are following the security control-testing schedule that the OCIO has mandated. OPM is reporting the security status of information systems to the CIO and Authorizing Official for the systems at least quarterly.

Regarding system Authorizations, we reviewed 51 system Authorizations that contained Ongoing Security Authorization schedules, POA&Ms, System Security Plans, Security Assessment Reports, and Authorization to Operate memorandums, and have concluded OPM has established its processes for performing system authorizations.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 50 – Measuring ISCM Program Effectiveness

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has defined the performance measures and requirements that will be used to assess the effectiveness of its ISCM program, achieve situational awareness, and control ongoing risk. In addition, OPM has defined the format of reports, frequency of reports, and the tools used to provide information to individuals with significant security responsibilities. The ISCM program includes POA&Ms, Authorizations, and ongoing security controls assessments. OPM has demonstrated that it is capturing the qualitative and quantitative performance measures for POA&Ms and Authorizations. We also observed qualitative and quantitative performance measures captured for the systems that completed the ongoing security controls assessments.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 51 – ISCM Other Information

We have no additional comments regarding OPM's ISCM program.

I. <u>INCIDENT RESPONSE</u>

Incident response is an organized approach for responding to cyber-attacks in an effective manner and limiting the damage, repair costs, and down time of critical information systems. OPM has an effective incident response program. The sections below detail the results for each individual metric in this domain. <u>OPM's overall maturity level for the Incident Response</u> domain is "4 – *Managed and Measurable.*"

Metric 52 – Incident Response Policies, Procedures, Plans, Strategies

<u>FY 2024 Maturity Level: 4 – Managed and Measurable.</u> OPM's incident response policies, procedures, plans, and strategies have been defined, communicated, and consistently implemented. OPM monitors and analyzes qualitative and quantitative performance measures on the effectiveness of its incident response program and is consistently capturing and sharing lessons learned to implement updates to the program as appropriate.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed this metric as *Managed and Measurable*.

Metric 53 – Incident Roles and Responsibilities

<u>FY 2024 Maturity Level: 4 – Managed and Measurable.</u> OPM has defined roles and responsibilities related to incident response, and its incident response teams have adequate resources (people, processes, and technology) to manage and measure the effectiveness of incident response activities.

In the self-assessment OPM conducted, the maturity level goal for this metric was Managed and Measurable. We have assessed this metric as *Managed and Measurable*.

Metric 54 – Incident Detection and Analysis

<u>FY 2024 Maturity Level: 4 – Managed and Measurable.</u> OPM employs a classification system for its incident response program to efficiently analyze and prioritize any reportable or detectable incidents. It has implemented security tools with the ability to analyze activity patterns to identify precursors and indicators of threats, which detect and prevent intrusions. OPM has developed profiling techniques on its networks and systems to detect security incidents more effectively. OPM also monitors and analyzes the qualitative and quantitative performance measures on the effectiveness of its incident detection and analysis policies and procedures.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed this metric as *Managed and Measurable*.

Metric 55 – Incident Handling

<u>FY 2024 Maturity Level: 4 – Managed and Measurable.</u> OPM has defined its processes for incident handling in an incident response manual. The processes include containment strategies for various types of major incidents, eradication activities to eliminate components of an incident, and mitigation techniques for exploited vulnerabilities. OPM uses metrics to measure the impact of successful incidents and is quickly able to mitigate related vulnerabilities on other systems so that they are not subject to the same exploitation.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed this metric as *Managed and Measurable*.

Metric 56 – Sharing Incident Response Information

<u>FY 2024 Maturity Level: 4 – Managed and Measurable.</u> OPM has a documented policy that defines how incident response information will be shared with individuals that have significant security responsibility. Controls are in place to ensure that security incidents are reported to DHS, law enforcement, the Office of the Inspector General, and Congress in a timely manner. OPM has developed and implemented incident response metrics to measure and manage the timely reporting of incident information to organizational officials and external stakeholders.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed this metric as *Managed and Measurable*.

Metric 57 – Contractual Relationships in Support of Incident Response

<u>FY 2024 Maturity Level: 4 – Managed and Measurable.</u> OPM collaborates with DHS and other parties, when needed, for technical assistance, surge resources, and any special requirements for

quickly responding to incidents. OPM uses third party contractors, when needed, to support incident response processes. OPM also utilizes software tools provided by DHS for intrusion detection and prevention capabilities.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed this metric as *Managed and Measurable*.

Metric 58 – Technology to Support Incident Response

<u>FY 2024 Maturity Level: 4 – Managed and Measurable.</u> OPM identified and fully defined its requirements for incident response technologies. OPM has implemented incident response tools to collect and retain data consistent with the agency's incident response policy, plans, and procedures. OPM utilizes the incident response tools to monitor and analyze qualitative and quantitative incident response performance measures across the agency. OPM uses the data collected from these tools to generate monthly reports for stakeholders on the effectiveness of its incident response program.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Managed and Measurable*. We have assessed this metric as *Managed and Measurable*.

Metric 59 – Incident Response Other Information

We have no additional comments regarding OPM's incident response capability.

J. <u>CONTINGENCY PLANNING</u>

Contingency planning includes the policies and procedures that ensure adequate availability of information systems, data, and business processes. The sections below detail the results for each individual metric in this domain. <u>OPM's overall maturity level for the Contingency Planning</u> domain is "3 – *Consistently Implemented.*"

Metric 60 – Contingency Planning Roles and Responsibilities

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has a policy describing the agency's contingency planning program roles and responsibilities as well as system-level contingency planning documents that assign individuals to specific recovery activities. To address gaps related to contingency planning activities, the role of system owners has been reevaluated and responsibilities will be communicated in a future Investment Review Board meeting. Additionally, OPM has begun providing routine Authorizing Official training and has held an agency-wide briefing related to FISMA roles.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 61 – Business Impact Analysis

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> Identifying an organization's essential mission and the risks facing its business functions are critical elements in developing contingency plans. OPM has defined its policies and procedures for conducting Business Impact Analyses (BIAs) and has performed an enterprise level BIA and system level BIAs for all its major systems. OPM uses a template to create all system level BIAs.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 62 – Contingency Plan Maintenance

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has developed policies and procedures, which define contingency plan development, maintenance, and integration with other continuity areas. The process for developing information system contingency plans covers all relevant phases including activation, notification, recovery, and reconstitution.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Defined*. We have assessed this metric as *Defined*.

Metric 63 – Contingency Plan Testing

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has established its information security strategy and policy, and its information system contingency planning strategies, policies, and procedures, including the requirements to perform tests or exercises. Additionally, OPM has implemented routine testing to ensure that contingency plans can be executed successfully in the event of a disaster. OPM has also established a Contingency Planning Manager role that is responsible for developing the contingency plan test and overseeing the execution of that test.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Defined*. We have assessed this metric as *Defined*.

Metric 64 – Information System Backup and Storage

<u>FY 2024 Maturity Level: 2 – Defined.</u> OPM has defined its policies, procedures, processes, strategies, and technologies for information system backup and storage, including the use of alternate storage and processing sites and redundant array of inexpensive disks, as appropriate. The organization has considered alternative approaches when developing its backup and storage strategies, including cost, environment maximum downtimes, recovery priorities, and integration with other contingency plans.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Defined*. We have assessed this metric as *Defined*.

Metric 65 – Communication of Recovery Activities

<u>FY 2024 Maturity Level: 3 – Consistently Implemented.</u> OPM has defined how the planning and performance of recovery activities are communicated to internal stakeholders and executive management teams. OPM has provided information on the planning and performance of recovery activities, which is consistently communicated to relevant stakeholders and executive management teams, who utilize the information to make risk-based decisions.

In the self-assessment OPM conducted, the maturity level goal for this metric was *Consistently Implemented*. We have assessed this metric as *Consistently Implemented*.

Metric 66 – Contingency Planning Other Information

We have no additional comments regarding contingency planning.

APPENDIX I – Detailed FISMA Results by Metric

Metric Number and Description	Metric Maturity Level	Domain Maturity Level	Function Maturity Level	U.S. OPM Overall Maturity Level
1 - Inventory of Major Systems and System Interconnections	4	Risk Management	Identify	Agency Overall
2 - Hardware Inventory 3 - Software Inventory	3	Level 3: Consistently	Level 3: Consistently	Level 3: Consistently
4 - System Security Categorization	4	Implemented	Implemented	Implemented
5 - Risk Policy and Strategy 6 - Information Security Architecture	3			
7- Risk Management Roles, Responsibilities, and Resources	4			
8 – Plan of Action and Milestones	3			
9 - Risk Communication 10 - Centralized Enterprise-wide Risk Tool	3			
11 - Risk Management Other Information -	n/a			
12 - SCRM Policies and Procedures	3	Supply Chain Risk		
 13 - Implementation of SCRM 14 - Ensure 3rd parties follow SCRM Requirements 	2	Management		
15 - Maintaining and Monitoring SCRM	2	Level 3: Consistently		
16 - SCRM Other	n/a 3	Implemented		
17 - Configuration Mgt. Roles, Responsibilities, and Resources	2	Configuration	Protect	
18 - Configuration Management Plan 19 - Baseline Configurations	3	Management Level 3: Consistently	Level 3: Consistently	
20 - Security Configuration Settings	3	Implemented	Implemented	
21 - Flaw Remediation and Patch Management 22 - Trusted Internet Connection Program	2 2			
22 - Trusted Internet Connection Program 23 - Configuration Change Control Management	3			
24 - Vulnerability Disclosure Policy	3			
25 - Configuration Management Other Information	n/a 3	Identify and Access		
26 - ICAM Roles, Responsibilities, and Resources	5	Management		
27 - ICAM Strategy	3	Level 2: Consistently		
28 - Personnel Risk 29 - Access Agreements	3 3	Level 3: Consistently Implemented		
30 - Multi-factor Authentication with PIV	3			
 31 - Strong Authentication Mechanisms for Privileged Users 32 - Management of Privileged User Accounts 	3			
33 - Remote Access Connections	3			
34 - ICAM Other Information - Contractor Access Management	n/a			
35 - Data Protection and Privacy Policies and Procedures	2	Data Protection and Privacy		
36 - Data Protection and Privacy Controls37 - Data Exfiltration Protection	3 4	Level 3: Consistently		
38 - Data Breach Response Plan	3	Implemented		
39 - Privacy Awareness Training	2			
40 - Other Information - Data Protection and Privacy 41 - Security Training Policies and Procedures	n/a 3	Security Training		
42 - Assessment of Workforce	2	Security framing		
43 - Security Awareness Strategy	3	Level 3: Consistently Implemented		
44 - Tracking IT Security Training 45 - Tracking Specialized IT Security Training	2 4			
46 - Other Information - Security Training Program	4 n/a			
47- ISCM Strategy	3	Continuous	Detect	
47- ISCM Strategy 49 - ISCM Roles, Responsibilities, and Resources	3	Monitoring Level 3: Consistently	Level 3: Consistently	
50 - Ongoing Security Assessments	3	Implemented	Implemented	
51 - Measuring ISCM Program Effectiveness	3			
51 - ISCM Other Information 52 - Incident Response Policies, Procedures, Plans, and Strategies	n/a 4	Incident Response	Respond	
53 - Incident Response Folicies, Floredares, Flans, and Strategies 53 - Incident Roles and Responsibilities	4	mendent Response	Respond	
54 - Incident Detection and Analysis	4	Level 4: Managed and Measurable	Level 4: Managed and Measurable	
55 - Incident Handling	4			
56 - Sharing Incident Response Information 57 - Contractual Relationships in Support of Incident Response	4 4			
57 - Contractual Relationships in Support of Incident Response 58 - Technology to Support Incident Response	4 4			
59 - Incident Response Other Information	n/a			
60 - Contingency Planning Policies and Procedures	3	Contingency	Recover	
61 - Business Impact Analysis 62 - Contingency Plan Maintenance	3	Planning Level 3: Consistently	Level 3: Consistently Implemented	
63 - Contingency Plan Testing	2	Implemented	Implemented	
64 - Information System Backup and Storage	2			
65 - Communication of Recovery Activities 66 - Contingency Planning Other Information	3 n/a			
66 - Contingency Planning Other Information	n/a			

KEY Yellow – Defined Green – Consistently Implemented or higher

APPENDIX II – Status of Prior OIG Audit Recommendations

<u>Rec #</u>	Recommendation	<u>Recommendation History</u>	Current Status
1	We recommend that OPM integrate its configuration management plan into the risk management and continuous monitoring programs, and utilize lessons learned to make improvements to the plan.	New in 2023	OPEN: Rolled forward as Report 2024-ISAG-008 Recommendation 1
2	We recommend that the OCIO implement a process to apply critical operating system and third-party vendor patches in a 30-day window according OPM policy. (Rolled forward from 2021)	Rolled Forward from 2021	Closed during FY 2024
3	We recommend that OPM maintain an accurate inventory of its network connections, including details on the service provider, cost, capacity, traffic volume, logical/physical configurations, use cases, and topological data for the agency's TIC process.	New in 2023	Closed during FY 2024
4	We recommend that OPM develop and implement a roadmap or other documentation that contains progress in meeting milestones.	New in 2023	Closed during FY 2024
5	We recommend OPM document lessons learned that are incorporated into its ICAM Policy.	New in 2023	Closed during FY 2024
6	We recommend that OPM define its process for provisioning, managing, and reviewing privileged accounts. (Rolled Forward from FY 2021)	Rolled Forward from 2021	Closed during FY 2024
7	We recommend that OPM consistently utilize resources that perform the privacy roles and responsibilities that have been defined across OPM.	New in 2023	Closed during FY 2024
8	We recommend that OPM develop and conduct an updated assessment of its workforce's knowledge, skills, and abilities to identify any skill gaps and specialized training needs.	New in 2023	OPEN: Rolled forward as Report 2024-ISAG-008 Recommendation 3
9	We recommend OPM document lessons learned that are incorporated into its ISCM policies and strategy.	New in 2023	Closed during FY 2024
10	We recommend that the OCIO ensure that all OPM's major systems have contingency plans in place and that they are reviewed and updated annually. (Rolled forward from 2014)	Rolled Forward from 2014	Closed during FY 2024
11	We recommend that OPM test the contingency plans for each system on an annual basis. (Rolled forward from 2008)	Rolled Forward from 2008	Closed during FY 2024

APPENDIX III



Officer

UNITED STATES OFFICE OF PERSONNEL MANAGEMENT Washington, DC 20415

September 27, 2024

MEMORANDUM FOR:	Eric Keehan Chief, Information Systems Audit Group Office of the Inspector General
FROM:	Guy Cavallo Chief Information Officer
	Kirsten J. Moncada Executive Director, Office of the Executive Secretariat, Privacy, and Information Management
SUBJECT:	Office of Personnel Management Response to the Office of the Inspector General Federal Information Security Modernization Act Audit – FY24 (Report No. 2024-ISAG- 008)

Thank you for the opportunity to provide comments to the Office of the Inspector General (OIG) draft report, the Federal Information Security Modernization Act (FISMA) Fiscal Year 2024, Report No. 2024-ISAG-008. The OIG comments are valuable and afford us the opportunity to assess our operations and to inform our continuous efforts to enhance the privacy and security of the data that the Office of Personnel Management (OPM) receives and possesses.

We appreciate OIG's focus on continual progress toward enhanced privacy and cybersecurity as set forth by the FISMA maturity model and underlying metrics. The self-assessment is a useful tool to inform the actions required to improve our privacy and cybersecurity posture. OPM will continue working with OIG to achieve a mutual understanding of the FISMA maturity model that was introduced in fiscal year (FY) 2024.

OPM concurs with 3 of the 4 OIG's recommendations issued this year. As appropriate, responses to OIG's recommendations including the planned corrective actions are below.

<u>Recommendation 1 (Rolled forward from FY 2023)</u>: We recommend that OPM integrate its configuration management plan into the risk management and continuous monitoring programs, and utilize lessons learned to make improvements to the plan.

Management Response: Concur. OPM has matured the configuration management program and will integrate it with the risk management and continuous monitoring programs. The configuration management program will also codify processes in the Enterprise Change Management program to incorporate lessons learned that OPM will use to make improvements. OPM will provide updated documentation including lessons learned to OIG during the FY 2025 FISMA audit fieldwork.

<u>Recommendation 2</u>: We recommend that OESPIM develop a SORN for all applicable systems.

Management Response: Non-Concur. OPM agrees that SORNs should be developed for all OPM systems of records. However, OPM has policies and procedures in place for compliance with SORN requirements and the finding and recommendation are not merited. To the extent that this recommendation is based specifically on the White House Fellows program, the absence of a SORN in that instance does not support a finding regarding OPM's overall SORN compliance. Even with regard to WHF, no negative finding is merited given that our identification of a potential need for a SORN and our ongoing work to determine an appropriate path forward demonstrate that data protection and privacy policies and procedures are in fact being followed.

Recommendation 3 (Rolled forward from FY 2023): We recommend that OPM develop and conduct an updated assessment of its workforce's knowledge, skills, and abilities to identify any skill gaps and specialized training needs.

Management Response: Concur. OPM will conduct and update the workforce assessment in FY 2025. To meet our goal of the managed and measurable maturity level, we will build on our existing procedures and ensure that targeted training and talent acquisition are incorporated and executed. Please note that for the OCIO the training and technical certification programs that we implemented in FY 2021 have proven very effective. OCIO can provide an expansive list of staff members who have achieved technical certifications in a key technology focus area as further proof of closing our former technology skills gaps. OPM will provide evidence to OIG once the documentation is prepared.

<u>Recommendation 4</u>: We recommend that OPM obtain feedback on its security awareness and training program and use the information to make improvements to the IT security training program.

Management Response: Concur. OPM procured updated training and assessment tools that will enable the agency to solicit and obtain feedback from participants. In FY 2025, OPM will use the tools to analyze participant satisfaction on the quality of the course. We will gage how engaging the course is, how much knowledge is retained, and how retained knowledge has impacted the agency.

cc:

David Marsh Chief of Staff

Erica Roach Chief Financial Officer

Mark Lambert Associate Director, Merit System Accountability and Compliance Director, Internal Oversight and Compliance

Melvin Brown Deputy Chief Information Officer

Larry Allen Associate Chief Information Officer, IT Strategy & Policy

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Webb Lyons General Counsel



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