

EXECUTIVE OFFICE OF THE PRESIDENT OFFICE OF MANAGEMENT AND BUDGET WASHINGTON, D.C. 20503

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M-24-04

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

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FROM: Shalanda D. Young

SUBJECT: Fiscal Year 2024 Guidance on Federal Information Security and Privacy

Management Requirements

Purpose

This memorandum provides agencies with Fiscal Year (FY) 2024 reporting guidance and deadlines in accordance with the Federal Information Security Modernization Act of 2014 (FISMA).¹ It rescinds the following memoranda:

 M-23-03, Fiscal Year 2023 Guidance on Federal Information Security and Privacy Management Requirements

This memorandum does not apply to national security systems,² although agencies are encouraged to leverage this guidance to inform agency national security system management processes.

Introduction

The Administration released the <u>National Cybersecurity Strategy</u> in March 2023, laying out a framework to "drive long-term efforts to defend the Federal enterprise and modernize Federal systems in accordance with zero trust principles that acknowledge threats must be countered both inside and outside traditional network boundaries." This strategy has set clear goals for the Federal Government to build the collective defense of Federal agencies and modernize information technology.

To ensure agencies prioritize these efforts, the Office of Management and Budget (OMB) and the Office of the National Cyber Director (ONCD) jointly released <u>OMB Memorandum M-23-18</u>, <u>Administration Cybersecurity Priorities for the FY 2025 Budget</u> in June 2023. OMB leverages the budget process to assess Agency alignment to the priorities laid out in the National Cyber Strategy and its <u>implementation plan</u>.

¹ 44 U.S.C. §§ 3551 et seq.

² As defined in 44 U.S.C. § 3552.

Agencies continue to make progress implementing the bold changes and significant investments the President outlined in Executive Order 14028, *Improving the Nation's Cybersecurity* (EO 14028), increasing deployment of critical security tools throughout the Federal enterprise and rethinking fundamental approaches to cybersecurity. Sophisticated adversaries will continue to challenge digital defenses in novel ways in an attempt to undermine the Federal IT systems and services the American public relies upon.

EO 14028 is a call to action to modernize Federal systems to meet or exceed leading cybersecurity practices. Building upon this EO, the Office of Management and Budget (OMB) released the Federal Zero Trust Strategy (OMB Memorandum M-22-09, Moving the U.S. Government Toward Zero Trust Cybersecurity Principles), laying out specific goals for agencies to achieve through Fiscal Year 2024. The prioritization of these goals was reflected in OMB Memorandum M-22-16, Administration Cybersecurity Priorities for the FY 2024 Budget, released in partnership with ONCD.

This guidance continues this Administration's effort to use data collected from agency FISMA submissions to improve the security outcomes of Federal IT systems, in accordance with the National Cyber Strategy's call to modernize systems and continue to build our collective defense:

Measuring zero trust implementation: Agencies are required to take discrete steps by FY 2024 to meet the goals of EO 14028 and M-22-09. OMB has worked with agency chief information officers (CIOs) and chief information security officers (CISOs), as well as the Cybersecurity and Infrastructure Security Agency (CISA), to ensure that metrics used in FISMA data collection align with these priorities. OMB will continue to align performance management under FISMA with benchmarks for the implementation of the National Institute of Standards and Technology (NIST) Cybersecurity Framework (CSF) and the agency's zero trust implementation strategy. The Federal Government no longer considers any Federal system or network to be "trusted" unless that confidence is justified by clear data; this means internal traffic and data must be considered at risk. Because modern cyber threat actors have continued to find success in breaching perimeters, it is essential to evaluate cybersecurity measures throughout the entire ecosystem.

Clear, actionable, and outcome-focused data: OMB Memorandum M-22-05, Fiscal Year 2021-2022 Guidance on Federal Information Security and Privacy Management Requirements, initiated significant changes in the Government's approach to FISMA oversight and CIO and Inspector General (IG) metrics collection, and OMB Memorandum M-23-03, Fiscal Year 2023 Guidance on Federal Information Security and Privacy Management Requirements continued to refine that approach. This memorandum builds on that foundation to provide the Executive Office of the President, Congress, and the public with a clear view of agencies' security achievements and challenges. To ensure agencies can continue to focus on outcomes rather than reporting requirements, the FY 2024 CIO metrics will continue to expand the automated reporting of metrics. Even where full automation is not yet achievable, this memorandum requires agencies and CISA to provide performance and incident data to OMB in a machine-readable format. OMB intends for agencies to focus and prioritize their limited resources on collection efforts for data elements that provide critical insight into their security risk posture.

The guidance outlined in this memorandum and associated CIO and Inspector General (IG) metrics will provide clarity on agency maturity in high-impact capability areas and inform riskbased decisions and agency investments while limiting reporting burden.

Ensuring input from across the Federal enterprise: OMB and CISA will continue to support the efforts of the CISO Council's FISMA Metrics Subcommittee, which is tasked with advising OMB on possible refinements and improvements to FISMA guidance and metrics. OMB and the subcommittee reviewed the following in FY 2023 and will continue to support implementation of these areas in FY 2024:

- Prioritizing automation of specific metrics for FY 2024 and beyond, as well as working with agencies to prepare for the necessary processes to ensure accurate data.
- Incorporating Continuous Diagnostic and Mitigation (CDM) data into FISMA reporting.
- Recommending additional methodologies to capture information regarding agency riskbased decisions and mitigations, as well as agencies' reliance upon authorized exceptions to or waivers from the requirements of OMB policies and CISA Emergency Directives and Binding Operational Directives (BODs).

The following topics have broad impacts that OMB, the Council of the Inspectors General on Integrity and Efficiency (CIGIE), and the subcommittee will continue to evaluate and consider for FY 2024:

- Identifying appropriate means and intervals for testing critical systems.
- Clarifying the components and boundaries of FISMA systems so that agencies may identify and assess those systems, including High Value Assets, more consistently.

Improving security-privacy coordination: While independent and separate disciplines, security and privacy also have a close relationship.³ Coordination across these disciplines is essential to managing security and privacy risks and to complying with applicable requirements,⁴ including those outlined in this memorandum. For example, when a breach⁵ occurs, such coordination is critical, and this memorandum underscores the guidance provided on roles regarding tracking and documenting the breach in OMB Memorandum M-17-12, Preparing for and Responding to a Breach of Personally Identifiable Information.

Section I: Increasing Coordination with and Visibility of Continuous Diagnostics and **Mitigation Capabilities**

CISA's Continuous Diagnostics and Mitigation (CDM) Program

The CDM program deploys commercial off-the-shelf CDM security tools to agencies for an initial two-year period, allowing those agencies and CISA to monitor vulnerabilities and threats to their systems in near real-time and to more effectively respond to cyber incidents. This

³ OMB Circular A-130, Managing Information as a Strategic Resource, § 4(h) (July 28, 2016).

⁵ As defined in OMB Memorandum M-17-12, Preparing for and Responding to a Breach of Personally Identifiable Information, § III(C) (Jan. 3, 2017). This definition applies to "breach" throughout this memorandum.

increased situational awareness helps agencies prioritize actions to mitigate or accept cybersecurity risks.

The CISA CDM Program Management Office (PMO) categorizes participating agencies into groups for the purposes of bundling task orders and enabling closer oversight of agencies' CDM implementation. All Chief Financial Officer (CFO) Act agencies, with the exception of the Department of Defense (DOD), participate in CDM, along with dozens of non-CFO Act agencies. While the CDM PMO, working with the General Services Administration (GSA), manages related contracts on behalf of agencies, the agencies are responsible for the state of their cybersecurity posture and must work closely with CISA to accomplish CDM program goals within their own enterprises and to ensure the long-term maintenance and funding of the requisite toolsets. CISA will continue to provide OMB with monthly data on implementation progress by all Federal agencies.

CDM Implementation and Agency Responsibilities and Expectations

Automated Reporting: Agencies are required to report at least 90 percent of Government-furnished equipment (GFE) through the CDM program, as articulated in previous FISMA guidance and consistent with the requirements of BOD 23-01, *Improving Asset Visibility and Vulnerability Detection on Federal Networks*. CISA will continue to provide OMB with performance data, including information on scanning cadence, rigor, and completeness of vulnerability enumeration, as part of the FY 2024 metrics collection process. Agencies must continue to provide data on assets in an automated manner to the maximum extent feasible. Such automated reporting is supported by the adoption throughout each agency of CDM and other technical solutions that provide visibility and automated reporting directly to CISA. The CISO Council FISMA Metrics Subcommittee should continue to identify future metrics for automation in FY 2025. As fully automated identification of certain assets through CDM may not be feasible, agencies must continue to manually report information from their asset inventory into CyberScope.

Acquiring Capabilities: Although agencies may acquire continuous monitoring tools through means other than current or future CDM acquisition vehicles (CDM Dynamic and Evolving Federal Enterprise Network Defense [DEFEND], GSA IT Schedule 70 CDM Tools Special Item Number, etc.), agencies must provide sufficient justification before pursuing acquisition tools not aligned with the CDM program.⁷ A justification memorandum must be sent from the agency CISO to the CDM PMO, the relevant OMB Resource Management Office (RMO), and the OMB Office of the Federal Chief Information Officer (OFCIO) for concurrence. OMB may reevaluate agency justification memoranda.

Agencies must meet all of the CDM Federal Dashboard reporting requirements. Further, when agencies exchange data with the Federal Dashboard, they are responsible for responding to risks identified through the CDM program and the agency dashboard. Agencies are encouraged to

⁶ The CFO Act agencies are defined in 31 U.S.C. § 901(b).

⁷ A justification should be provided from the agency CISO to the CDM PMO, the relevant OMB Resource Management Officer, and the OMB Office of the Federal Chief Information Officer for each contract period of performance to ensure existing tools keep pace with CDM contract vehicle tools.

provide the CDM PMO with feedback on existing tools and input on additional tools that may prove valuable for current or future CDM acquisition vehicles.

Resource Allocations: When the CDM PMO procures cybersecurity tools on behalf of an agency to fulfill specific CDM requirements, the PMO will cover the license and maintenance costs of the base year and the maintenance cost for the first option year. Otherwise, CFO Act agencies are responsible for the operations and maintenance costs (e.g., licensing costs) of their CDM-related tools and capabilities. Agencies are required to submit separate, CDM-specific line items in their annual budget documents (see OMB Circular A-11), including their congressional justification documents, as applicable. In addition, each agency should work with its OMB RMO to prepare a spending plan that details the resources (including estimated staff time) dedicated to CDM. Each agency shall, in coordination with its RMO, build CDM requirements into budget plans in future years. For non-CFO Act agencies that are unable to pay for CDM, the CDM PMO will cover all costs.⁸

Section II: Internet of Things

Agencies must have a clear understanding of the devices connected within their information systems to gauge cybersecurity risk to their missions and operations. This includes the interconnected devices that interact with the physical world—from building maintenance systems, to environmental sensors, to specialized equipment in hospitals and laboratories.

To that end, maturing Federal cybersecurity practices for internet of things (IoT) devices is critical in today's increasingly automated world. The prevalence and wide range of IoT devices used by Federal agencies provide new and more complex vectors for cyber threats. Strengthening the cybersecurity posture of IoT devices within the Federal enterprise requires that we ensure foundational cyber protection measures are in place for all such devices connected to Federal systems.

The Internet of Things Cybersecurity Improvement Act of 2020⁹ (IoT Act) required the National Institute of Standards and Technology (NIST) to publish certain guidelines and standards¹⁰ regarding IoT devices. The Act also requires the Director of OMB to conduct a review of agency information security policies and principles for consistency with those NIST guidelines and standards and to issue such policies and principles as may be necessary to ensure alignment.

Following significant engagement with stakeholders and recognizing the vulnerabilities complex IoT devices may create in Federal systems, this memorandum provides additional guidance on identifying and securing such devices.

Scoping and Definitions of Internet of Things Devices and Operational Technology

NIST defines IoT devices as those that have at least one transducer (sensor or actuator) for interacting directly with the physical world and at least one network interface (e.g., Ethernet, Wi-

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⁸ Non-CFO Act agencies must provide written justification to both OMB and CISA for approval.

⁹ Pub. L. No. 116-207 (2020), codified at 15 U.S.C. §§ 278g-3a to -3d.

¹⁰ SP 800-213 and SP 800-213A.

Fi, Bluetooth) for interfacing with the digital world.¹¹ Many IoT devices constitute operational technology (OT), defined by NIST as "[p]rogrammable systems or devices that interact with the physical environment (or manage devices that interact with the physical environment). These systems/devices detect or cause a direct change through the monitoring and/or control of devices, processes, and events. Examples include industrial control systems, building management systems, fire control systems, and physical access control mechanisms."¹²

IoT Inventory

Inventorying agency IoT assets, including those that qualify as OT, is critical for ensuring the cybersecurity posture of an enterprise, as these assets are increasingly interconnected with IT hardware and software. An inventory enables agency CIOs and CISOs to gain visibility over their connected devices and systems, apply appropriate controls (such as those set out in NIST_SP_800-213), and make risk-based decisions about mitigating against cybersecurity threats. Additionally, an inventory enables agencies to more efficiently identify and mitigate vulnerabilities to ensure a more secure and resilient infrastructure. Inventorying is also a necessary prerequisite to establishing a baseline to enable monitoring and detecting unauthorized, abnormal, or potentially malicious activities.

OMB has actively engaged with agencies over the past two years to learn about the diversity of IoT devices prevalent throughout the Federal Government. Based on that engagement, OMB has determined that agencies must prioritize the inventory of IoT devices that are embedded with programmable controllers, integrated circuits, sensors, and other technologies for the purpose of collecting and exchanging data with other devices and/or systems over a network in order to facilitate enhanced connectivity, automation, and data-driven insights across devices and systems. This guidance refers to such devices as "covered IoT assets."

To enhance the U.S. Government's overall cybersecurity posture and to help ensure integrity of systems, agency CIOs shall work with asset owners and operators to establish an enterprise-wide inventory of their agency's covered IoT assets by the end of FY 24. Inventories shall include the following information about all covered IoT assets, including OT:

- 1) Asset Identification: All devices and systems that meet the provided definition of covered IoT assets.
- 2) Asset Description: Including make, model and any relevant specifications or configurations. Each asset should have a unique identifier, such as a serial or asset tag, to distinguish it from other assets.
- 3) Asset Categorization: Factor in the device's function, location, and criticality. Include the following information:
 - a. Identification and/or description of specific agency FISMA and HVA systems associated with the asset; and
 - b. The physical location of the asset (e.g., building, floor, or room number).

¹¹ NISTIR 8425

¹² NIST SP 800-37, Rev. 2

- 4) Owner/Point of contact: The individual or office responsible for the asset's management, administration, maintenance, and security.
- 5) Vendor/Manufacturer Information: Details about the vendor or manufacturer (e.g., contact information and support channels.)
- 6) Software and Firmware Versions: Where available, record the installed software and firmware versions, including relevant patches or updates applied to the asset.
- 7) Network Connectivity, Integrations and API Information: Include any static IP addresses and interconnective communication with other devices (e.g., uncommon ports, protocols).
- 8) Security Controls: Describe alignment to requirements and controls, such as NIST SP 800-213, SP 800-82, SP 800-53, and other standards and protocols.

Agency inventories meeting other widely-accepted security guidelines, standards, or regulatory frameworks that include the above data points will be acceptable in lieu of the above requirement.

Covered IoT assets have varying risk profiles and levels of criticality to agency missions. Agencies shall prioritize the inventorying of assets whose failure would lead to the disruption of critical functions of systems. Critical functions make use of assets whose compromise or failure would have a serious impact on the safety of individuals or the organization's ability to perform its mission. CIOs must work with agency IoT system owners and operators to document critical functions, as well as the related systems, processes, and assets upon which those functions depend. As part of this process, teams should also evaluate critical attack or disruption pathways adversaries could leverage to compromise critical devices and connected information systems. This data should be used for prioritizing risk mitigation.

Best Practices

Within four months of the issuance of this memorandum, the CISO Council will establish a working group to provide agencies with specialized IoT and OT security best practice playbooks for various sectors used within the Federal Government (e.g., building management systems, industrial control systems, health and medical devices and systems, scientific laboratories, aerospace systems, etc.). These efforts should leverage existing cybersecurity regimes and industry practices wherever feasible, so that IoT technology is appropriately integrated into the security frameworks and programs governing other forms of information technology.

This working group should consist of representatives from agencies with significant IoT and OT inventories, include owners and operators as active participants, and leverage expertise from across the Federal Government.

IoT Waiver Process

The Internet of Things Cybersecurity Improvement Act of 2020¹³ (IoT Act) required the National Institute of Standards and Technology (NIST) to publish guidelines and standards¹⁴ for: (1) the appropriate use by Federal agencies of Internet of Things (IoT) devices; and (2) addressing and sharing information about the security vulnerabilities of those devices.¹⁵ Those standards and guidelines apply to any Federal entity that qualifies as an "agency" within the meaning given in 44 U.S.C. § 3502(1).

The IoT Act specifies particular implementation measures for CFO Act agencies, other than the Department of Defense. Before any of those agencies may enter into a contract for IT or IT services, the agency CIO must review and approve the contract, as required by 40 U.S.C. § 11319(C)(i)(I). Under the IoT Act, if the CIO conducts such a review of a contract for an IoT device, and determines during that review that using the device would prevent the agency from complying with NIST's IoT standards and guidelines, then the agency is prohibited from using the device, procuring or obtaining the device, or renewing a contract to procure or obtain the device. ¹⁶

That prohibition may be waived, but only if the agency CIO first determines that at least one of the following conditions is met:

- 1) The waiver is necessary in the interest of national security;
- 2) Procuring, obtaining, or using the IoT device is necessary for research purposes; or
- 3) The device is secured using alternative and effective methods appropriate to its function.¹⁷

The CIO shall memorialize and justify any such determination in a signed memorandum for the agency head. Upon receiving that memorandum, the agency head may issue a waiver of the prohibition on use or acquisition of the device in question. The waiver must include the following, at a minimum:

- 1) Date of issuance;
- 2) The device(s) and any associated solutions or platforms covered;
- 3) A description of the purposes for which or the circumstances in which the device may be acquired or used.
- 4) The effective period of the waiver, which may not exceed 2 years;
- 5) A copy of the memorandum setting out the CIO's determination; and
- 6) The signature of the agency head or their designee.

A copy of any waiver signed by the agency head must be provided to the agency CIO. CIOs must make these waivers available to OMB OFCIO upon request, and ensure that such waivers are documented in relevant system security plans and shared with acquisition officials for documentation in relevant contract files. OMB has determined no additional policies or clarifications are required at this time for agencies to implement this waiver process.

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¹³ Pub. L. No. 116-207 (2020), codified at 15 U.S.C. §§ 278g-3a to -3d.

¹⁴ SP 800-213 and SP 800-213A.

¹⁵ 15 U.S.C. §§ 278g-3b(a)(1), 278g-3c(a).

¹⁶ 15 U.S.C. § 278g-3e(a).

¹⁷ *Id.* § 278g-3e(b)(1).

Section III: Requirements for FISMA Reporting to OMB and DHS

CIO, IG, and Senior Agency Official for Privacy (SAOP) metrics together provide insight into an agency's information security and privacy performance. To meet FISMA requirements, agencies report the status of their information security and privacy programs to OMB, and IGs conduct annual independent assessments of those programs. OMB and CISA collaborate with interagency partners to develop the CIO FISMA metrics, and with IG partners to develop the IG FISMA metrics to facilitate these processes. OMB also develops SAOP metrics for Federal privacy programs.

For consistency of reporting across the agency, the SAOP and CIO should coordinate on responses to the annual CIO and SAOP metrics, where there may be crossover.

Table I: Annual and Quarterly FISMA Reporting Deadlines (FY 2024)

Activities	Deadlines	Responsible Parties
 Annual CIO and SAOP Metrics Agency Annual Report IG Annual Report Agency Head Letter 	• October 31, 2024 (FY 2024)	All agencies
Annual IG Metrics	• July 31, 2024 (FY 2024, Core metrics + Supplemental Metrics Group 2) ¹⁸	All agencies
Quarterly CIO Metrics	 January 19, 2024 (Q1 FY 2024) April 19, 2024 (Q2 FY 2024) July 19, 2024 (Q3 FY 2024) 	 CFO Act agencies must report on all metrics Non-CFO Act agencies must report on all EO- related metrics¹⁹

Section IV: CIO Reporting

OMB and CISA use CIO metrics reporting to track implementation of NIST standards and cybersecurity-related initiatives, including those in support of EO 14028.

All agencies must update their CIO metrics quarterly. Reflecting the Administration's shift in focus from compliance to risk management, as well as the guidance and requirements outlined in OMB Memorandum M-19-03, Strengthening the Cybersecurity of Federal Agencies by Enhancing the High Value Asset Program, Binding Operational Directive 18-02, Securing High

¹⁸ In FY23, metrics will be Core Metrics plus supplemental metrics and will be evaluated on a 2-year cycle based on a calendar agreed to by Council of the Inspectors General on Integrity and Efficiency (CIGIE), the CISO Council, OMB, and CISA.

¹⁹ Note that only EO metrics will be captured quarterly. Other metrics will be reported semi-annually.

<u>Value Assets</u>, and <u>High Value Asset Program Supplemental Guidance 3.0</u>, the CIO metrics are not limited to assessments and capabilities within NIST security baselines, and agency responses should reflect actual implementation levels.

OMB will identify agency programs that require additional support using CIO metrics and will utilize targeted agency engagement sessions to improve outcomes of agency information security programs and cybersecurity-mission programs.

Section V: IG Reporting

OMB, CISA, CIGIE, agency CISOs, and other stakeholders coordinate in the development of a set of metrics for use by IGs in their evaluation of the effectiveness of agency information security programs and practices. These metrics are referred to as "IG metrics." All agencies will report on IG metrics annually, through an assessment conducted by the agency IG or an independent assessor. OMB is encouraging agencies to continue their shift to a continuous assessment process for their independent assessment. To help facilitate this, OMB and CIGIE treat the IG metrics process as a multi-year cycle, as described below.

OMB has selected a core group of metrics, representing a combination of Administration priorities and other highly valuable controls, that must be evaluated annually. The remainder of the standards and controls are evaluated in metrics on a two-year cycle based on a calendar agreed to by CIGIE, the CISO Council, OMB, and CISA. CFO Act agency IGs should include a summary of the data collected by CSF capability levels in the executive summary of their annual report. This cycle does not in any way limit the scope of IG authority to evaluate information systems on an as-needed or ad-hoc basis.

Historically, the findings of an IG assessment were released alongside annual reporting in October, but the agency assessed may not receive funding to remediate any problems identified until two or more years after the date of the report. To help remedy this situation, starting in FY 2022, OMB shifted the due date of the IG metrics from October to July to better align the release of IG assessments with the development of the President's Budget.

Reflecting OMB's shift in emphasis away from compliance in favor of risk management, IGs are encouraged to evaluate the IG metrics based on the risk tolerance and threat model of their agency, and to focus on the practical security impact of weak control implementations, rather than strictly evaluating from a view of compliance or the mere presence or absence of controls.

OMB will continue to work with CIGIE in evaluating the current process for overall improvements. In FY 2024 OMB and CIGIE will continue to improve on the ways that agencies determine and report on the effectiveness of their cybersecurity program management.

Section VI: SAOP Reporting

As handling privacy issues becomes ever more important to agencies' ability to deliver on their missions, agencies must take appropriate measures to manage privacy risks and comply with privacy requirements.

Agencies are required to submit their SAOP metrics annually. In addition to those metrics, SAOPs must submit each of the following items as separate documents through CyberScope:

- The agency's privacy program plan;²⁰
- A description of any changes made to the agency's privacy program during the reporting period, including changes in leadership, staffing, structure, and organization;
- The agency's breach response plan;²¹
- The agency's privacy continuous monitoring strategy;²²
- The Uniform Resource Locator (URL) for the agency's privacy program page,²³ as well as the URL for any other sub-agency-, component-, and/or program-specific privacy program pages; and
- The agency's written policy to ensure that any new collection or use of Social Security numbers (SSNs) is necessary, along with a description of any steps the agency took during the reporting period to explore alternatives to the use of SSNs as a personal identifier.²⁴

As described in OMB Circular A-108, Federal Agency Responsibilities for Review, Reporting, and Publication under the Privacy Act, OMB uses these reports from agencies to develop its annual FISMA report to Congress.²⁵

Section VII: Agency Head Letter for Annual Reporting Requirement to OMB

FISMA requires agency heads to be responsible for ensuring their respective agencies maintain protections commensurate with the risk and magnitude of the harm resulting from the unauthorized access, use, disclosure, disruption, modification, or destruction of: (1) information collected or maintained by or on behalf of an agency; or (2) information systems used or operated by an agency or by a contractor of an agency or other organization on behalf of an agency.

Agency heads must maintain awareness of their agency's information security programs and direct CIOs and CISOs to implement appropriate security measures and, where necessary, take remedial actions to address known vulnerabilities and threats.

Agency heads also are ultimately responsible for ensuring the protection of privacy interests and the responsible management of personally identifiable information within the agency. <u>Executive</u>

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²⁰ OMB Circular A-130, Appendix I § 4(c)(2), 4(e)(1).

²¹ OMB Memorandum M-17-12, *Preparing for and Responding to a Breach of Personally Identifiable Information* (Jan. 3, 2017).

²² OMB Circular A-130, Appendix I § 4(d)(9), 4(e)(2).

²³ OMB Memorandum M-23-22, *Delivering a Digital-First Public Experience* (Sept. 22, 2023).

²⁴ OMB Circular A-130, Appendix I § 5(f)(1)(f).

²⁵ OMB Circular A-108 § 13 (Dec. 2016).

Order 13719 requires each agency head to designate or re-designate an SAOP who has agency-wide responsibility and accountability for the agency's privacy program.²⁶

Where there is crossover between their respective areas of responsibility, CIOs, CISOs, and SAOPs must coordinate on the contents of the agency head letter—e.g., in reporting on breaches and major incidents that are breaches, in accordance with the roles for tracking and documenting breaches outlined in OMB Memorandum M-17-12.²⁷

<u>Requirement</u>: OMB requires a signed letter from the agency head to the OMB Director and DHS Secretary as part of the annual reporting package to OMB to verify the agency head's awareness and validate the agency's FISMA report. The letter must contain the following information:²⁸

- A. A detailed assessment of the adequacy and effectiveness of the agency's information security policies, procedures, and practices, including details on their assessment of FY 2023 FISMA CIO metrics;
- B. Details on the total number of information security incidents, ²⁹ including a specification of the total number of breaches, reported through the CISA Incident Reporting System; and
- C. A description of each major incident, if applicable, with the following details:
 - The incident description, including attack vector, response, and remediation actions the agency has completed;
 - o If the major incident was a breach, a description of the affected information³⁰ and the number of individuals potentially affected by the breach;³¹
 - o Threats and threat actors, vulnerabilities, and mission and system impacts;
 - Risk assessments conducted on the information system before the date of the major incident; and
 - The status of compliance of the affected information system with security requirements at the time of the major incident.

<u>Reporting Method</u>: Agencies must upload this letter to CyberScope as part of their annual submission. Agencies shall not send OMB or DHS hardcopy submissions.

Section VIII: Annual Reporting to Congress and the Government Accountability Office

In addition to requiring the submission of agency annual FISMA reports to OMB and DHS, FISMA requires agencies to submit³² their annual FISMA reports to the Chairperson and Ranking Member of the following Congressional committees:³³

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²⁶ OMB Memorandum M-16-24, Role and Designation of Senior Agency Officials for Privacy (Sept. 15, 2016).

²⁷ OMB M-17-12 § VIII.

²⁸ 44 U.S.C. § 3554.

²⁹ FISMA defines "incident" as "an occurrence that – (A) actually or imminently jeopardizes, without lawful authority, the integrity, confidentiality, or availability of information or an information system; or (B) constitutes a violation or imminent threat of violation of law, security policies, security procedures, or acceptable use policies." ³⁰ 44 U.S.C. § 3554(c)(1)(A)(iii)(II).

³¹ 44 U.S.C. § 3554(c)(1)(A)(iii)(I).

³² Agencies should consult with their legislative affairs office (or equivalent) for instructions on how to submit materials to Congress and the GAO.

³³ 44 U.S.C. § 3554.

- 1. House Committee on Oversight and Accountability;
- 2. House Committee on Homeland Security;
- 3. House Committee on Science, Space, and Technology;
- 4. Senate Committee on Homeland Security and Governmental Affairs;
- 5. Senate Committee on Commerce, Science, and Transportation; and
- 6. The appropriate authorization and appropriations committees of the House and Senate.

Additionally, agencies must provide a copy of their reports to the Comptroller General of the United States.

Agency FY 2023 reports are due to Congress and the Government Accountability Office (GAO) **by March 1, 2024**.³⁴

Section IX: Incident Reporting Requirements

OMB is providing the following guidance to assist agencies in submitting incident response data and to promote coordination with the responsible authorities.

Incident Reporting

Agencies must report incidents to CISA according to current and updated requirements in the <u>CISA Federal Incident Notification Guidelines</u>.³⁵ This includes events that have been under investigation for 72 hours without successful determination of the event's root cause or nature (i.e., malicious, suspicious, benign).

This reporting also includes determinations for the impact category, attack vector, and incident attributes. CISA then uses these details, as well as several other categories of information, to produce a <u>CISA Cyber Incident Scoring System</u> score, which provides a repeatable and consistent mechanism for estimating the risk of an incident.

To ensure OMB is able to maintain appropriate situational awareness and oversight of incidents impacting the Federal enterprise, CISA will provide OMB with the following:

#	Required Information	Deadline
1	Details received through the CISA Incident	No later than the 15th of each
	Reporting System for all incidents involving Federal	month.
	information or Federal information systems, to be	
	delivered on a monthly basis.	
2	Summary report of all incidents scored as a medium	No later than the 15th of each
	(yellow) priority-level and above, including whether	month.
	these were elevated as a result of a campaign and the	
	weights for each category.	

³⁴ OMB *will not* review, clear, or provide a template for the reports. Agencies should submit reports directly to Congress and the GAO.

³⁵ FISMA also requires agencies to notify and consult with the Federal information security incident center established in 44 U.S.C. § 3556 regarding any information security incidents. 44 U.S.C. § 3554(b)(7)(C)(ii).

Modernizing Incident Reporting

CISA and each agency will ensure data transmitted between agencies and CISA is in a machinereadable format. CISA will continue to provide OMB with data regarding both individual agencies' performance in providing accurate, machine-readable data to CISA, as well as any gaps CISA has in receiving, updating, or maintaining such records.

Major Incident Definition

FISMA directs OMB to define the term "major incident" and further instructs agencies to notify Congress in the event of a "major incident." This memorandum provides agencies with a definition and framework for assessing whether an incident is a major incident for purposes of the congressional reporting requirements under FISMA and provides specific considerations for determining the circumstances under which a breach constitutes a major incident. This guidance does not preclude an agency from reporting an incident or breach to Congress that falls below the threshold for a major incident.

Appropriate analysis of the incident will include the agency CIO, CISO, mission or system owners, and, in the case of a breach, the SAOP, as well. Agencies may consult with OMB and CISA to make a major incident determination.

A major incident is EITHER:

A. An incident that is likely to result in demonstrable harm to the national security interests, foreign relations, or the economy of the United States, or to the public confidence, civil liberties, or public health and safety of the American people.³⁶ Agencies should determine the level of impact of the incident by using the existing incident management process established in National Institute of Standards and Technology (NIST) Special Publication (SP) 800-61, Computer Security Incident Handling Guide,

OR

B. A breach that involves personally identifiable information (PII) that, if exfiltrated, modified, deleted, or otherwise compromised, is likely to result in demonstrable harm to the national security interests, foreign relations, or the economy of the United States, or to the public confidence, civil liberties, or public health and safety of the American people.37

³⁶ Using the CISA Cyber Incident Scoring System, this includes Level 3 events (orange), defined as those that are "likely to result in a demonstrable impact to public health or safety, national security, economic security, foreign relations, civil liberties, or public confidence"; Level 4 events (red), defined as those that are" likely to result in a significant impact to public health or safety, national security, economic security, foreign relations, or civil liberties"; and Level 5 events (black), defined as those that "pose an imminent threat to the provision of wide-scale critical infrastructure services, national government stability, or the lives of US persons."

³⁷ The analysis for reporting a major breach to Congress is distinct and separate from the assessment of the potential risk of harm to individuals resulting from a suspected or confirmed breach. When assessing the potential risk of harm to individuals, agencies should refer to OMB Memorandum M-17-12, Preparing for and Responding to a Breach of Personally Identifiable Information (Jan. 3, 2017).

As with other incidents, agencies should assess each breach on a case-by-case basis to determine whether it meets the definition of a major incident. This memorandum requires a determination of major incident for any unauthorized modification of,³⁸ unauthorized deletion of,³⁹ unauthorized exfiltration of,⁴⁰ or unauthorized access to⁴¹ the PII of 100,000 or more people; however, per the definition provided above, other factors also may lead an agency to determine that a breach is a major incident. OMB Memorandum M-17-12 details breach reporting requirements.

Reporting Major Incidents

A. Reporting to OMB and CISA

- Agencies must report to CISA and the OMB OFCIO within 1 hour of determining a
 major incident occurred, and should update OMB OFCIO and CISA within 1 hour of
 determining that an already-reported incident or breach is a major incident.⁴² Agencies
 must reach out to both entities directly.
- Pursuant to <u>Presidential Policy Directive-41 (PPD-41)</u>, <u>United States Cyber Incident Coordination</u>, if a cyber incident is a major incident, it is also a "significant cyber incident." Thus, a major incident as defined above will also trigger the coordination mechanisms outlined in PPD-41 and potentially require participation and actions from a Cyber Unified Coordination Group.
- Agencies should use the points of contact in Section X for reporting major incidents.
- When a breach is determined to be a major incident, the agency's principal security operation center and SAOP must coordinate on tracking and documenting the major incident, in accordance with the roles outlined in OMB Memorandum M-17-12.⁴³

B. Reporting to Congress and Inspectors General

• An agency must notify the appropriate Congressional committees and its Office of the Inspector General (OIG) of a major incident no later than seven days after the date on which the agency determines that it has a reasonable basis to conclude that a major incident, including a breach constituting a major incident, has occurred.⁴⁴

³⁸ "Unauthorized modification" is the act or process of changing components of information and/or information systems without authorization or in excess of authorized access.

³⁹ "Unauthorized deletion" is the act or process of removing information from an information system without authorization or in excess of authorized access.

⁴⁰ "Unauthorized exfiltration" is the act or process of obtaining, without authorization or in excess of authorized access, information from an information system without modifying or deleting it.

⁴¹ "Unauthorized access" is the act or process of gaining without permission logical or physical access to Federal information or a Federal information system, application, or other resource.

⁴² This reporting is limited to the time after a major incident determination is made and not just the detection of the incident; it is expected that an agency will take some time to determine if an incident or breach reaches the threshold to be considered "major."

⁴³ OMB M-17-12 § VIII.

⁴⁴ FISMA requires notification of the appropriate authorization and appropriations committees of Congress, as well as the House of Representatives Committees on: (1) Oversight and Government Reform; (2) Homeland Security;

- This report should take into account the information known at the time of the report, the sensitivity of the details associated with the incident, and the classification level of the information.
- When a major incident has occurred, the agency must also supplement its initial notification to Congress with pertinent updates within a reasonable period of time after additional information relating to the incident is discovered. The supplemental report must include summaries of:
 - o The threats and threat actors, vulnerabilities, and impacts relating to the incident;
 - o The risk assessments conducted of the affected information systems before the date on which the incident occurred;
 - o The status of compliance of the affected information systems with applicable security requirements at the time of the incident; and
 - o The detection, response, and remediation actions.
- In addition, agencies must supplement their initial major incident report to Congress with another report no later than 30 days after the agency discovers a breach constituting a major incident. 45 This supplemental report must include:
 - A summary of information available about the breach, including how the breach occurred, based on information available to agency officials on the date the agency submits the report;
 - O An estimate of the number of individuals affected by the breach, including an assessment of the risk of harm to affected individuals based on information available to agency officials on the date the agency submits the report;
 - o A description of any circumstances necessitating a delay in providing notice to affected individuals; and
 - o An estimate of whether and when the agency will provide notice to affected individuals.

Section X: Contact Information and Additional Resources

Agencies will find requirements, contact information, and appropriate points of contact for incident reporting and agency questions regarding this guidance at https://go.max.gov/e5sEF9.

This site also includes resources for agencies, such as the Cyber Incident Principal's Playbook, that may enhance and supplement internal processes and procedures for responding to incidents.

Agencies should direct privacy-related matters to OMB's Office of Information and Regulatory Affairs (OIRA) at privacy-oira@omb.eop.gov.

ATTACHMENT

Appendix A: Additional CISA Responsibilities and Agency Implications

and (3) Science, Space, and Technology. In the Senate, notification must be provided to the Committees on: (1) Homeland Security and Governmental Affairs, and (2) Commerce, Science, and Transportation. 44 U.S.C. § 3554(b)(7)(C)(iii)(III), (c)(1)(A).

⁴⁵ FISMA requires notification to be provided to the same committees identified above in the preceding footnote, plus the Committee on the Judiciary in each house of Congress. 44 U.S.C. § 3553 note.

APPENDIX A: Additional CISA Responsibilities and Agency Implications

Scanning Internet-Accessible Addresses and Systems

As required by FISMA, CISA presently provides numerous services to agencies in the interest of improving Federal information security. These responsibilities are subject to OMB oversight and applicable legal requirements.

In furtherance of its legal responsibilities and consistent with applicable law, regulation, policy, and existing Memoranda of Agreement with agencies, CISA scans internet-accessible addresses and segments of Federal civilian agency systems for vulnerabilities on an ongoing basis, as well as in response to newly discovered vulnerabilities.

No prior agency authorization is needed for one Federal agency to perform non-invasive vulnerability scanning of another Federal agency's internet-accessible systems. Federal agencies should expect that any system accessible over the public internet is being scanned for vulnerabilities by various parties at all times, and factor this into their security operations accordingly.

For CISA's vulnerability scanning service to be effective, it should, to the greatest extent possible, observe the same behavior in Federal systems that an adversary would be able to observe. Similarly, the origin and behavior of the scanning service should be unpredictable. To guarantee this type of emulation, CISA should initiate its vulnerability scanning service from multiple vantage points, including commercial cloud infrastructure, and from dynamically selected source addresses.

To ensure CISA can perform this function effectively, each Federal agency, other than the Department of Defense and agencies in the Intelligence Community, shall:

- Ensure that CISA and agency security teams have points of contact on file with each other for rapid communication about any discovered vulnerabilities.
- In alignment with requirements of BOD 19-02, *Vulnerability Remediation Requirements* for Internet-Accessible Systems, regularly provide CISA a complete list of the agency's internet-accessible Federal information systems and related addressing information, 46 including static internet protocol (IP) addresses for external websites, servers, and other access points, and Domain Name Service (DNS) names for dynamically provisioned systems 47 within 5 business days of making any changes (acquiring new assets or releasing the assets to the provider to reassign).
- Provide CISA with notice of changes or updates to IP ranges within 5 business days of making any changes (acquiring new assets or releasing the assets to the provider to reassign).by emailing vulnerability@cisa.dhs.gov.

46 CISA is not limited to the addresses and systems provided on this list when conducting its vulnerability scanning.
 47 The term "dynamically provisioned system" refers to systems which are virtually hosted and operated from

[&]quot;The term "dynamically provisioned system" refers to systems which are virtually hosted and operated from multiple sites, such that network traffic to the systems is distributed across multiple, discrete IP ranges or autonomous system numbers (ASNs).

Facilitating Information Sharing

To ensure that agencies can identify, detect, and respond to emerging malicious-actor tactics, techniques, and procedures (TTPs), all agencies must ensure that, at a minimum, the CIO and the CISO have Top Secret Sensitive Compartmented Information (TS-SCI) access. The TS-SCI clearance designation is necessary to view classified malicious-actor TTPs.

Agencies experiencing challenges in attaining the required clearances for CIO and CISO officials should contact OMB for assistance in determining how best to ensure that these officials are cleared to perform required functions and duties and fully participate in interagency information sharing. Agencies shall use the CyberScope application to report on the access of these users.