Congress of the United States House of Representatives

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

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July 19, 2016

Mr. Shaun Donovan Director Office of Management and Budget 725 17th Street, N.W. Washington, DC 20503

Dear Mr. Donovan,

Over the past year, the Committee on Science, Space, and Technology has held several cybersecurity hearings in response to federal data breaches, notably those that occurred at the Office of Personnel Management (OPM), the Internal Revenue Service (IRS) and the Federal Deposit Insurance Corporation (FDIC). The hearings have afforded the Committee opportunities to review agencies' compliance with federal information security standards and guidelines and to identify and understand reasons for inconsistencies in their respective cybersecurity postures.

A recently released U.S. Government Accountability Office (GAO) report accentuates the Committee's concerns.¹ The report reviewed security controls of federal agencies' high impact systems, and according to GAO, "the 18 agencies having high-impact systems identified cyber attacks from 'nations' as the most serious and most frequently-occurring threat to the security of their systems."² The report further elaborates that nations, "including nation-state, state-sponsored, and state-sanctioned programs use cyber tools as part of their information-gathering and espionage activities. In addition, several nations are aggressively working to develop information warfare doctrine, programs, and capabilities."³

High impact systems are defined as systems that warrant increased security because they "hold sensitive information, the loss of which could cause individuals, the government, or the nation catastrophic harm." GAO selected four agencies with high impact systems for further review, including the Office of Personnel Management. The GAO report notes that the four

¹ GAO-16-501, "Agencies Need to Improve Controls over Selected High-Impact Systems," May 2016, available at: http://www.gao.gov/assets/680/677293.pdf; (hereinafter referred to as GAO Report).

² Ibid.

³ Ibid.

⁴ Ibid.

agencies selected for additional review "had not always effectively implemented access controls. These control weaknesses included those protecting system boundaries, identifying and authenticating users, authorizing access needed to perform job duties, and auditing and monitoring system activities."⁵

The identification of foreign nations as one of the most serious cyber threats to agencies underscores concerns that were raised after last year's OPM breach over the potential access to OPM's sensitive data by foreign nationals. According to news reports at the time, it appears that some of OPM's contractors may have given "foreign governments direct access to data long before the recent reported breaches." In one instance, an "administrator for the project 'was in Argentina and his co-worker was physically located in the [People's Republic of China]. Both had direct access to every row of data in every database: they were root." Additionally, a different team working on the database was led by two employees with passports from the People's Republic of China. In other words, an agency that identifies foreign nations as the source of the most serious and frequently occurring threat, either failed to realize that foreign nationals had access to its database, or knew it and failed to correct the situation.

The National Institute of Standards and Technology (NIST) provides federal agencies with standards and guidelines on personnel security, including the following minimum security requirement to protect "the confidentiality, integrity, and availability of federal information systems and the information processed, stored, and transmitted by those systems"⁹:

Personnel Security (PS): Organizations must: (i) ensure that individuals occupying positions of responsibility within organizations (including third-party service providers) are trustworthy and meet established security criteria for those positions; (ii) ensure that organizational information and information systems are protected during and after personnel actions such as terminations and transfers; and (iii) employ formal sanctions for personnel failing to comply with organizational security policies and procedures. ¹⁰

In addition to this standard, NIST provides the following guidance:

Supplemental Guidance: This control enhancement denies individuals who lack appropriate security clearances (i.e., individuals who do not possess security clearances or possess security clearances at a lower level than required) or who are not U.S. citizens, visual and electronic access to any classified information, Controlled Unclassified Information (CUI), or any other sensitive information contained on

⁵ Ibid

⁶ Sean Gallagher, *Encryption "Would Not Have Helped" At OPM, Says DHS Official*, ARSTechnica, June 16, 2015, available at: http://arstechnica.com/security/2015/06/encryption-would-not-have-helped-at-opm-says-dhs-official.

⁷ Ibid.

⁸ Ibid.

⁹ NIST Federal Information Processing Standards Publication 200, "Minimum Security Requirements for Federal Information and Information Systems," March 2006, available at: http://csrc.nist.gov/publications/fips/fips200/FIPS-200-final-march.pdf.

¹⁰ Ibid.

organizational information systems. Procedures for the use of maintenance personnel can be documented in security plans for the information systems. ¹¹

NIST defines sensitive information as "information where the loss, misuse, or unauthorized access or modification could adversely affect the national interest or the conduct of federal programs, or the privacy to which individuals are entitled under 5 U.S.C. Section 552a (the Privacy Act)." Further, an October 2015 OMB memorandum provides a definition for major information security incidents or 'major incidents' that involves multiple factors including Controlled Unclassified Information (CUI) Privacy which refers to confidentiality of personal information or personally identifiable information (PII). These definitions would apply to the OPM data breach which led to the unauthorized access of individuals' "name, Social Security number, address, date and place of birth, residency, educational, and employment history, personal foreign travel history, information about immediate family as well as business and personal acquaintances, and other information used to conduct and adjudicate [one's] background investigation." ¹⁴

More than a year after the attack, OPM's approach to cybersecurity continues to raise questions. For example, the GAO report identifies pushback from OPM staff to some of the recommendations it made in the report, specifically relating to systems owned and operated by contractors. According to OPM, "it approaches security through contractor oversight" for such systems. But as GAO explains in its report, the Federal Information Security Modernization Act of 2014 (FISMA 2014) requires each agency to "ensure security for information and systems maintained by or on behalf of the agency, including systems used or operated by a contractor or other organization on behalf of the agency." It is OPM's responsibility to ensure that all contractors have in place the appropriate security controls to protect its information and information systems.

The OMB Director is required to oversee agency compliance with FISMA 2014 requirements, including "to enforce accountability for compliance with such requirements." The October 2015 memorandum notes that the OMB Cyber and National Security Unit (OMB Cyber) was created in FY 2015 and completed "double the number of agency CyberStat Review Sessions (CyberStats) compared to the previous fiscal year. CyberStats are evidence-based meetings led by OMB to ensure agencies are accountable for their cybersecurity posture, while at

Memo).

¹¹ NIST Special Publication 800-53, Revision 4, "Security and Privacy Controls for Federal Information Systems and Organizations," April 2013 (includes updates as of January 22, 2015), available at: http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-53r4.pdf.

¹² Ibid.

OMB Memorandum M-16-03, "Fiscal Year 2015-2016 Guidance on Federal Information Security and Privacy Management Requirements," October 30, 2015, available at: https://www.whitehouse.gov/sites/default/files/omb/memoranda/2016/m-16-03.pdf; (hereinafter referred to as OMB

¹⁴ OPM sample notification letter after cyber breach, available at: https://www.opm.gov/cybersecurity/final-verification.pdf.

¹⁵ See supra, note 1, GAO Report.

¹⁶ Ibid

¹⁷ Public Law 113-283, December 18, 2014, available at: https://www.congress.gov/113/plaws/publ283/PLAW-113publ283.pdf.

the same time assisting them in developing targeted, tactical actions to deliver desired results." The memorandum also notes that "as part of the Cybersecurity Sprint, OMB established a team to lead a 30-day review of the Federal Government's cybersecurity policies, procedures, and practices." ¹⁹

As set forth in House Rule X, the Committee on Science, Space, and Technology has jurisdiction over NIST which develops cybersecurity standards and guidelines to support the implementation of and compliance with FISMA 2014. In light of OMB's statutory responsibility and actions described in its memorandum, I would appreciate your response to the following questions and document requests by August 5, 2016:

- 1. Was OMB aware that foreign nationals may have had access to OPM systems and data prior to last year's data breach being made public? If so, what action did you or your staff take? If no action was taken, please explain why not.
- 2. The GAO report referenced in this letter indicates that OPM does not implement to GAO's satisfaction certain responsibilities under FISMA 2014, as indicated by OPM's comment about the security of systems owned and operated by contractors. What actions have you or your staff taken since the GAO report was made public?
- 3. Has OMB conducted CyberStat Review Sessions with OPM either prior to or after OPM announced its data breach last year? If so, what were the results of the CyberStats and what conclusions did OMB reach relative to OPM's cybersecurity posture? If no CyberStats were conducted, please explain why not?
- 4. Did OMB staff meet with OPM staff as part of the Cybersecurity Sprint? If so, what was the result of the meetings and what conclusions did OMB reach relative to OPM's cybersecurity posture? If no such meetings occurred, please explain why not?
- 5. What guidance does OMB provide to agencies that relate specifically to foreign nationals and agencies' information security and how does OMB ensure compliance with any such guidance?
- 6. To better understand the sufficiency of any personnel security guidance OMB may offer agencies, please provide the following information:
 - All personnel security guidance for employees within OMB, including guidance for OMB contractors and foreign nationals;
 - All documents and communications regarding foreign nationals or foreign governments having unauthorized access to OMB information or information systems as a result of a data breach or cyber-attack;
 - All OMB personnel security guidance for federal agencies, including guidance for contractors and foreign nationals;

¹⁸ See *supra*, note 13, OMB Memo.

¹⁹ Ibid.

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- All documents and communications regarding foreign nationals or foreign governments having unauthorized access to information or information systems of other federal agencies as a result of a data breach or cyber-attack; and
- All documents and communications between OMB and OPM not covered by the above document requests regarding unauthorized access to OPM's information or information systems as a result of a data breach or cyber-attack.

When producing documents to the Committee, please deliver production sets to the Majority Staff in Room 2321 of the Rayburn House Office Building and the Minority Staff in Room 394 of the Ford House Office Building. The Committee prefers, if possible, to receive all documents in electronic format.

If you have any questions about this request, please contact Raj Bharwani or Sarah Jorgenson of the Committee Staff at 202-225-6371. Thank you for your attention to this matter.

Sincerely,

Lamar Smith Chairman

cc: The Honorable Eddie Bernice Johnson, Ranking Member
Dr. Willie E. May, Director, National Institute of Standards and Technology